Pertaining to the Department of the Interior, Office of Surface Mining Reclamation and Enforcement

Environmental Impact Statement Regarding Stream Protection Rule

Materials Submitted to Committee on Natural Resources U.S. House of Representatives

Submitted by
Polu Kai Service, LLC
137 North Washington Street
Suite 300
Falls Church, VA
22046

April 15, 2011

POLU KAI SERVICES

April 15, 2011

The Honorable Doc Hastings
Chairman, Committee on Natural Resources
U.S. House of Representatives
1324 Longworth HOB
Washington, D.C. 20515
ATTN: Tim Charters

Re: Information to Congress
Preliminary Draft Environmental Impact Statement (EIS)
Stream Protection Rule (SPR)

Dear Mr. Chairman:

Polu Kai Services, LLC (PKS) is pleased to provide the information you requested in your correspondence dated April 1, 2011. PKS has organized the information under four sections in the order outlined in the correspondence. The content for each section is as follows:

Tab 1 – Documents and communication relating to concerns, discussions, comments or questions regarding the quality of PKS's or any of its subcontractor's work from May 1, 2010 to the present

Tab 2 – Any and all documents and communication relating to the economic impact or potential job loss estimates or figures from October 1, 2010 to the present

Tab 3 – A list of all individuals or entities including their titles and telephone and mailing contact information receiving chapters of the draft EIS provided by PKS or the DOI and the date on which the draft chapters of the EIS were received

Tab 4 – Copies of any and all agreements to maintain confidentiality including "gag" or suppression orders or agreements and related conditions associated with such orders or agreements.

PKS has, following this letter, included a table of contents outlining the documentation provided under each Tab. Each Tab is further divided into subsections containing paper copies of electronic mails, meeting minutes, correspondence between PKS and OSM as well as electronic copies of the deliverables provided to OSM as required by the Scope of Work (SOW) . PKS has inserted a color 8"x11" page to facilitate identifying where subsections start and end.

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Please contact us if you wish to discuss the contents of the documentation provided or if additional information is required. You may contact Mr. Sean P. Jensen at 703-533-0039 (office) or 703 499-2842 (cellular) or Mr. Jose J. Sosa at 813-749-8624 (office) or 813-846-3676 (cellular).

Respectfully Submitted,

Sean P. Jensen
President

Jose J. Sosa, PE, CIH, CGC
Executive Vice-President

Attachments

Cc: office files

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- Minutes of Kick-off meeting
- Copies of Electronic Correspondence
- CDs containing:
    - Preliminary Draft Environmental Impact Statement
    - Project Management Plan
    - Public Involvement Plan – Phase I
    - Scoping Report
    - Initial Working Drafts of Chapter 1-4
    - Comments on Initial Working Drafts of Chapters 1-4
- OSM Cure Letter dated February 8, 2011
- PKS Response to Cure Letter with Enclosures dated February 23, 2011

Tab 2

- Minutes of Face to Face Meetings in Lexington, July 2010
- Email records between PKS team and OSM addressing economic and RIA discussions, which provide background for the analysis of the process used
- CDs containing:
    - Draft Regulatory Impact Analysis, as of February 23, 2011
    - Chapter 4 economic sections from PDEIS

  Resources Materials and Studies items relevant to economic assessment Resources Materials and Studies items relevant to economic assessment
- Minutes of Face to Face Atlanta, GA September, 2010, August 2010 and Washington DC February, 2011

Tab 3

- List of submittals with dates, recipients, contact information

Tab 4

- OSM/PKS contract sections describing limitations on release of information
- Final contract release document
- SOW

WS400003
Kick-off Meeting, Part I

Nancy	Welcome
Glenda Owens	Introductions of OSM personnel -- Lai-Tai, John Craynon, Bill Winters, Nancy S, Sterling Rideout, unknown (4.00 min approx)
Various	Introductions (Randy, Jose, Cynthia, John Maxwell, Dave Bell, John Morgan, Joe Zaluski, Steve Gardner, Rick Newsome, Josh Jenkins, Ann Shortelle
Glenda Owens	***(8:00)*** Thank-you. Well I'm pleased that I heard a few of you use our acronym SMCRA and you have years of experience working, you've worked with Walter ??
	Unintelligible then laughter
Glenda Owens	***(8:20)*** But anyway, I'm very pleased to hear that you have experience not only in mining engineering and biology and hydrology because those are going to be extremely important issues as we go through the development of the EIS. But, also with SMCRA and the surface mining requirements and principles and regulations. That's going to be extremely important as well. I'm sure that you've heard that what started out to be an attempt to do a regulation to revise what we had formerly called our Stream Buffer Zone Rule as a protection from the areas of the streams from the mining has expanded and we're taking on a much more comprehensive and holistic approach as to this rulemaking. I don't know how much of the background that you have but in 2008 a, OSM promulgated, as I said, what was known as a stream buffer zone rule, it had a narrower focus. When the new administration came in, and I think that rule became effective in 2009, January 2009. When the new administration came in, as one of the reviews of regulations that had recently been promulgated; well, two things happened. First of all, the regulation, the stream buffer zone regulation, two environmental groups challenged that rule so there's a challenge in the District Court. ***(9:58)*** We've entered into a settlement agreement on that litigation. We're not going to defend that rule because a decision was made that we wanted to re-promulgate, revise that rule and so right now we have, that litigation is stayed while we do the actual re-promulgation. But we're under some time constraints here and that's where the interesting part of this endeavor comes in. As a part of that settlement agreement, we have agreed to try to get a proposed rule out in February 2011 and you don't even to think too hard to realize that you have less than a year to get that rule promulgated. Now, that means we have even less time to get the EIS drafted because the basis of what we're going to do in that rule is our EIS we got to get that bad boy done. So, as I said, we have some time constraints here which I'm sure you all are aware of, and we have lots of issues because this is a, I'm also assuming that you've seen the concept paper for the regulation. So you know the extent and the comprehensive nature of what we are proposing to do and the work that we're going to need, the support that we're going to need, in the development of the EIS. There will be more, I guess we're going to get into more specific discussions here today. Today looks like it's more a matter of contractual discussions, and I see there is outline for division of the project, and I guess the project is the EIS project. So, I'm going to leave that to the project managers and contractual folks to do. I just want to express my sincere appreciation for your being there. This has been, we've been trying to get this team pulled together and move forward on this EIS or several months. One of the things that I don't know, if you haven't heard but you will

hear over the next today or tomorrow, is that we also have some cooperating agencies that are going to be working with us on this EIS. We have EPA that wants to be a cooperating agency. We have a couple of states that have already indicated that they want to be cooperating agencies. And so this meeting is for us to establish the kinds of expectations that we'll have on both sides. It's going to be a two-way street. That's the only way we're going to be able to get through this in a timely manner. To get everything done that needs to be done. We are, not withstanding the fact that EPA is a cooperating agency, we are the lead agency. Now, one of the things that we did ask our cooperating agencies and another, there are a couple of other agencies that will be assisting us as well. The Corps of Engineers and, let me just back up for one minute, one of the things that is driving this as well as the litigation is the memorandum of understanding that the Secretary of Interior, the Administrator of EPA and the Deputy Assistant something-or-other form the Corps, Deputy Administrator of Civil Works, I didn't mean to diminish their position. But anyway, those three have signed onto a Memorandum of Understanding in which each of the three agencies make certain commitments, short term commitments. And we're on target with those in the longer term. And actually with getting the stream buffer zone rule amended, or at least getting some guidelines out immediately, was one of the shorter term commitments that we made. And we actually have some immediate protective measures that we put out in the interim while we get the rule re-promulgated. So we're on track with that as well. The longer term commitment is this rulemaking and because EPA and the Corps are signatories on that MOU they have more of an involvement than they otherwise would and they normally would and also in our statute there is a provision that says that any regulations that we promulgate that have Clean Water Act, air, or water quality implications have to be signed off on by the EPA. And I can tell you that EPA is taking that very seriously. And, so we're going to be walking, working and walking with them hopefully, I don't want to say lock-step, but we'll be walking down the same path and hopefully we'll be going in the same direction and we'll be moving together as quickly as we can and making sure that we don't, that we do all that has to be done. So I say all that to say there are a lot of players in this endeavor and so that's, that's always a challenge. A lot of cooks in the kitchen here. So we got to make sure that we keep the stew brewing and that we get this dish ready on time.

(15:43) So, I'm not sure there's much more I need to say cause you need to talk about what it is that you'll be doing and the timelines and how you're going to set everything up. As I said, our Director had hoped to be here to welcome you and give you a little bit of overview and give you his perspective of where things are and he is very, very much involved in this rule, the development of this rule, he is, I don't know if you're aware of it, but he's actually been going around all over the country doing stakeholder outreach meetings so that on the concepts that we actually put out. So, he's had an awful lot of feedback and interaction with the various groups. We, we fully expect to be watching every move we make on this rulemaking and we will be waiting with baited breath to file any lawsuit that comes, that, we know this rule is going to be challenged, there's no doubt about that. So we need to have an EIS that's going to support what the rule does. We want as defensible rule as is possible for any number of reasons. First of all, we need this rule. We need this comprehensive approach to protecting streams. And we also need to put together good rules that are going to withstand judicial challenge because otherwise this effort will have been for naught. And, this is a pretty long, long, protracted and expensive endeavor for it to have all have been for naught. So, it's got to be a sustainable action. We're going to depend on you to give us what we need in the EIS so that we can do a rule that's going to do what

	it needs to do. And I think our Director will be in to speak to you also when he gets here, just to welcome you and to let you know how important this is to him as well. It's important to us as a Bureau, our Assistant Secretary, and our Secretary, who as I said was the signatory on our MOU. This is a high priority for him as well. We have every interest, not only at OSM, but as I said, at the Assistant Secretary level and at the Secretary's level to make sure that we do this correctly, do it right , do it on time. And so, welcome to the team.
Jose Sosa	(18:15) I think it's very critical for us to, and that's something that we've been kicking around now for several weeks, and we have said prior to coming into the meeting, we got together. And, it's very critical that we understand division and understand division of that rule because obviously the EIS will basically support, our findings will support, what that rule says and good, bad, or indifferent, we got to have a platform, we have to have a baseline of what it is that you want to achieve with this rule, holistic comprehensively, country-wide mining activities which is very, very ambitious. But, we need to understand, and the team needs to understand, so like we were talking about we can define what box we got to build for you. You know, we don't want to be out there building a skyscraper if we only need to buy and build a five story building and it's very critical (unintelligible other) yeah, so, so these couple of days, I'm hoping that it will actually set and define, you know, get us to understand what the rule is, get an understanding of what parameters and so on and so forth. And understanding again that if you have that true commitment from the EPA, from the Corps and even some of the states. Because like we were talking during the day, you know a lot of the states deal with their own Clean Water Act regs, they regulate a lot of these parameters. So we need to understand, is this going to be a federal action that is going to take over and displace the state mandate on some of mining activities either Appalachian or other locations. So we really have to understand the nuts and bolts of what it is that you want to accomplish and how this thing is going to get done. So we can be as effective as we possibly can.
Glenda	***(20:08)*** Yes, those are things you do need to understand and the next couple of days, those, we'll lay that out for you. Short answer - no we're not taking over from the states. We are providing oversight for the states. We're going to set the federal minimum states will expected to....
Randy Sosa	Above and beyond.
Glenda	Yes, they'll be able, they'll be expected to adopt regulations, once we get our regs down. They'll be expected to adopt regs that are no less effective. And that's why a couple of the states have actually expressed an interest in being cooperating agencies. Because they understand how this is going to work as well. Fish and Wildlife Service has also expressed an interest in being a cooperating agency. There's a lot of interest in what we're doing because it is so comprehensive and because it goes beyond just a buffer zone. We're expanding the, one of the things we are proposing to do is to change the definition of streams to include form and function. Which is an expansion. But they'll, our team will get more into that, some details. I just wanted to give you an overview since the Director was not here. I hadn't really planned to because I thought he'd be back, but, he'll probably still want to come in and say something to you. When he gets in and we're expecting him, probably around 3 o'clock or so. And I can see from the schedule you'll still be plugging away. So he'll be back then. And we'll come back down probably tomorrow some time just to see how things are going and if there are any questions you have of us. So again, welcome, welcome, we're happy that

	you're here. And we're glad to get this EIS under way. So thank-you, and, (unintelligible)
John Craynon	*(22:29)* ***Before*** we get into the contractual matters, I'll talk a little about the project. As Glenda indicated this rulemaking is going to be (unintelligible) there are a number of areas that we're focusing on (unintelligible) if I miss anything Bill you can jump in. I sat through the Director's meetings 14 times, stakeholder outreach meetings, so I think I got (unintelligible). 14 times over the course of a month the Director, we met with a number of groups across the country and I was the only one that was at every meeting Bill. (unintelligible) The first concept that's really a part of the rulemaking is, relates to collecting appropriate baseline data. Really focusing on looking at what's in the streams prior to mining, chemically, physically, biologically. And expanding what's currently in our regulatory program, add a lot more detail. So, that's one area that we are focusing on in the rule. The second one is, in the surface mining act there is a provision that we have to protect the hydrologic balance from material, prevent material damage to the hydrologic balance off the permit and minimize the impacts on the permit. Did I get that right Mr. Hydro? I'm a mining engineer, so I may not use the water terms correctly. But for the first time we are going to be composing, putting a federal definition of material damage that is really going to focus on the function of the stream so we'll have a biologic component to define what material damage is. As a part of that concept we are also going to include, we anticipate including something that focuses on establishment of an action threshold, corrective action threshold that, for example, if a particular parameter is the stream is considered important as far as material damage goes and you see a trend in that parameter that's moving toward material damage would occur, it would be a threshold where the operator, the permittee would have to take a corrective action to prevent material damage from actually occurring. This again is a new regulatory concept for us. It's a trigger point that would require the operator to do something different. And would examine what's going on in the watershed that may causing that parameter to increase. The third area is monitoring, right? In addition to collecting more baseline data to characterize what's there, we're going to expand the required monitoring on, within the watersheds affected by the mining operation. So not only on the permit, but also at the point downstream that relates to the cumulative hydrologic impact analysis that the SMCRA regulatory authority (unintelligible). That focus really of material damage and of monitoring and so on is to ensure that you're not; your mining operation is not causing material damage. You have to have some way of determining what area is impacted by not just this particular permit but by other existing mining operations, by past mining operations, and by reasonably anticipated future mining in that area. The regulatory authority takes the information submitted by the permit applicant and prepares this cumulative hydrologic impact analysis. And that is an area, again by saying that, by creating this definition of material damage, by requiring additional monitoring, there will be more information to determine if that's going on. (unintelligible) Did I muddy the water?
Bill Winters	*(26:47)* No. The only thing you can add (unintelligible) might as well add here. We're talking about cumulative some states release the monitoring (unintelligible) whenever they want.

John Craynon	*(35:08)* In the case where you have variances from the requirements for AOC, that would be true mountaintop removal mining where the statute, the regulatory program had a couple of provisions that allow for the waiver of the requirement to return the mining site to approximate original contour. One is for steep slope mining sites, the other is for mountaintop removal which is defined as where you take the entire coal seam, or seams, from one outcrop to the other and you mine the entire mountain or ridge. Those are very rare, actually, over the last several years. Where there are variances, we want to make sure that there's legitimate post-mining land uses in place. For example, if you say you're going to create an industrial park on this flat land that you've created by not returning it to approximate original contour there needs to be contracts in place or at least the zoning, etcetera in place to indicate that that is actually a legitimate post-mining land use and not just a sham that you created. Where the land has been forested prior to mining, we're also going to include is this rule an encouragement, the details are still being worked out, for reforestation of previously forested areas. Preference for use of native species, not just of trees but the other biologic species that may be on the site, the understory, the brush and the shrubs and so on that stay on the forest (unintelligible). Next thing that we're going to include in this regulatory package is a codification of our 1997 acid mine drainage policy. To basically require financial guarantees for long term pollutional discharge, regardless of whether it's related to acid mine drainage or any other pollutional discharge. Right now, as I said, that's a policy statement so we think by putting it in the regulations that's better (unintelligible) notice of what's understood there and it expands it to include issues like if, for example, let's pick something out of the air like selenium. When you have a discharge of selenium from the site and that's going to be a long term pollutional discharge, then you provide some sort of financial mechanism to ensure that that can be treated before discharging on the site.
Various	(Unintelligible)
John Craynon	*(38:18)* The, as far as, on the, when you have a fill on the site, and actually any time you're impacting the stream, one of the goals that the Director has in this rulemaking is ensuring that all the pertinent provisions of the surface mining act are being implemented. And, one he feels that through the years has not been, and we do have an opportunity here, is when you effect fish, wildlife and related environmental values that the statute actually indicates that we should protect and enhance, where possible, minimize the impacts, and enhance where possible, so where you have fills on a site and anytime affected streams there's going to be real focus on ensuring that you enhance the fish, wildlife, and related environmental resources. So, if you're putting the fill in one stream, and you have an opportunity to do an enhancement on another stream reach on the permit then we're looking for requirements that you'd be doing that as well. Permit coordination, yes. Another area we expect to address in this is a requirement that the permitting aspects under SMCRA and the permitting aspects of the Clean Water Act be coordinated to the greatest degree possible. We don't know exactly how to do that in rule, we can't obligate the EPA, the Fish and Wildlife Service, the Army Corps of Engineers or anybody to do anything over our regulatory program. But we can create a framework, I think, to ensure better permit coordination.
John Morgan	(Unintelligible) Stream delineation.
John Craynon	*(40:04)* The definition of streams, that's the last part. Thank-you, John.

Various	(unintelligible)
John Craynon	We are looking at redefining streams. Right now our definitions are based on flow and place of intermittent , based on area watershed of one square mile or greater. We're considering changing those definitions to include a biologic component. And, this I can actually do verbatim. Something along the lines of what's in the Pennsylvania program, which defines intermittent streams as the water course will define better bank in a substrate indicative of flowing water that contains two or more macroinvertibrate species visible by the naked eye which require water to complete all of their life cycle. Water for part of the year, to complete all of their life cycle. And then, a perennial stream is the same except for they require water the entire year to complete their life cycle. So, that sort of definition but we're not wedded to that exact word. That's the kind of thing that we have in mind. And then, for ephemeral of course. Did I miss anything else, Bill? Dennis, did I miss anything in the regulatory?
Various	Unintelligible
Joe Zaluski	***(41:42)*** I got a question on the permit coordination part. Is this for ADCs that issue permits for mines or those (unintelligible) are both these covered?
John Craynon	I think the the intention is to cover both. In part, because of the role of the Fish and Wildlife Service Endangered Act, Species Act, coordination and so on. It's not like there's a permit there, but there is a coordination. They actually have the ability to be involved in Clean Water Act permitting and SMCRA permitting, so I think we definitely want them (unintelligible). I think we'd encourage that.
	Alternative bonding, sedimentation ponds,

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Thursday, June 03, 2010 12:31 PM
To: Jose Sosa
Cc: Sloanhoffer, Nancy E.; Craynon, John
Subject: Kick-off meeting documents
Attachments: Summary of Stream Protection Measures 04-08-10 v3.docx; Draft Concepts for EIS alternatives 06-02-10 MY.xlsx; EPA comments on SPR concepts 04-16-10.pdf; NOI as published in FR 04-30-10 (2).pdf; Outreach Feedback v2.docx

Importance: High

Hi Jose,

Attached for your review are documents that we will speak of during the kick-off meeting. If you have any questions, please call me at 305-788-7011.

Thanks,

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Summary of Comments on NOI for SPR EIS
6/7/2010

OSM received 25 sets of comments on the notice of intent (NOI) to prepare an EIS on a stream protection rulemaking (SPR). The summary below is organized by "sector" (i.e., citizens and environmental groups, industry, government) and by topic. Comments unrelated to EIS scoping but tied to the rulemaking are grouped together at the end. Where the comments were more general or directed to the rulemaking concepts, they were made more pertinent to the scope of the EIS, as appropriate. The specific commenter is identified in parenthesis at the end of the comment summary.

Citizens and Environmental Groups

General

OSM must follow science (ACLC).
Lack of capacity of regulatory authorities to implement program should be addressed. (ACLC).
EIS should consider impacts on and adequacy of state budgets to administer new rules. (ACLC)
Alternatives should include restoring the 1983 SBZ rule. (ELPC)
Alternatives should include revision of 2008 rule to include additional requirements for states to evaluate and protect streams impacted by coal mining. (ELPC)
Congress should provide adequate funding for completion of the EIS. (ISC)
The EIS should evaluate past mine reclamation projects and their environmental results. (ISC)
Western hydrologic issues should be explicitly considered as they are much different from eastern issues. (EP)
The EIS should examine the information gathered from the "over thirty years of permitting, inspecting, and collecting data on regulated coal mining" to ground it in "experience rather than prediction." (EP)
The EIS should address issues of watershed scale in relation to permit acreage disturbed. (SOCM)
The EIS should look at funding and enforcement of SMCRA rules. (SOCM)
The EIS should take a look at "real enforcement costs" and 100% cost recovery. (SOCM)
The EIS should take a hard look at environmental justice issues, particularly as they relate to mountaintop mining and valley fills. (SOCM)
The EIS should discuss current allowances for "in lieu" mitigation. (SOCM)
The EIS should discuss inclusion of mitigation plans in the permit to allow for public comment. (SOCM)
The EIS should address the issues related to coal mining in Alaska given the huge resource there. (TFA)
The EIS should address the threats coal mining in Alaska poses to subsistence, commercial, and recreational fisheries. (TFA)

The EIS should examine the threat coal mining poses to Alaska's coastal and arctic environments. (TFA)
The EIS should consider the Chuitna Coal Project as a case study for potential impacts in Alaska. (TFA)
The EIS "must consider alternatives that will protect biological communities, ecological function, quality and quantity of surface- and groundwater, and ensure that exceptions and variances do no undermine the intended projections." (TFA)
The EIS must consider the cumulative consequences of the "recovery, transport, sale and subsequent combustion of billions of tons of coal." (TFA)
The EIS should consider how hydrology and restoration of the hydrologic balance should be considered by inspectors throughout the process of mining and reclamation. (WORC)
There may be a need for another NOI that specifies the alternatives being considered more explicitly. (KRC)
The EIS should examine including timber removal in advance of mining as a part of "surface coal operations." (KRC)
The EIS should examine permitting and bonding of mitigation areas. (KRC)

Interagency Coordination

Coordinated permit review should be examined. (ACLC)
The EIS should address explicit guidance on interagency coordination. (ELPC)
The EIS should discuss a requirement that the SMCRA regulatory authority coordinate with Clean Water Act permitting activities to the extent practicable. (SOCM)

Citizen Involvement

EIS alternatives should address opportunities for citizen involvement in permit review process. (ACLC)
The EIS should discuss ways for earlier public involvement in the application and permitting process. (SOCM)
The EIS process should involve citizens most impacted by coal mining. (CCC)

Baseline and Monitoring Data

Capacity for states to assess the data must be examined. (ACLC)
Data quality assurance protocols should be examined. (ACLC)
The adequacy and accuracy of baseline data collection must be addressed. (ELPC)
National standards for education and experience for personnel to be involved in data review should be addressed. (ACLC)
The EIS should examine the option to not issue permits in the absence of complete data. (SELC)
The EIS should examine broad monitoring provisions to carry out the environmental protection purposes of SMCRA. (SELC)
The EIS should assess the need for more extensive and specific permit application requirements and baseline data. (SOCM)

The EIS should assess the need for more extensive and specific monitoring data through all phases of mining, up to the establishment of the post-mining land use. (SOCM)
The EIS should examine the sharability of data

CHIA

EIS should discuss how CHIAs should be done. (ACLC)
The EIS should consider the hydrologic consequences of longwall mining as a part of the CHIA issues being examined. (ELPC)
The EIS should examine minimum standards for preparation of a CHIA. (ISC)
The EIS should include an examination of the impact of haul roads and increased traffic as a part of all reasonably foreseeable impacts analysis as a part of CHIAs. (SELC)
The EIS should examine past CHIAs to see if they have been effective predictors of the cumulative hydrologic impacts. (WORC)
The EIS should examine whether basin-wide (e.g., Powder River Basin) CHIAs are more appropriate ways of determining hydrologic impacts. (WORC)
The EIS should examine how data for existing and anticipated mining should be used in making permitting decisions. (KRC)
The EIS should look at geologic data allowing information to be "speciated by strata". (KRC)

Material Damage

The EIS should consider whether a single nationwide definition of material damage is appropriate. (ELPC)
The EIS should consider incorporating numerical water quality standards into the definition of material damage. (SELC)
The EIS should assess the definition of material damage. (SOCM)
The EIS should include a review of "how various states have defined material damage, what problems have arisen with material damage, how enforcement problems with material damage have been dealt with on the ground, and how the various OSM field offices have dealt with these problems through oversight, inspections and enforcement." (WORC)
The EIS should examine a full spectrum of methods and parameters for characterizing material damage, including compliance with water quality standards, as a part of developing a specific, enforceable standard. (KRC)
The EIS should examine the use of reference streams as a part of defining material damage. (KRC)

Corrective Action Thresholds

Requirements for data frequency, timeliness, adequacy and reliability should be addressed. (ACLC)
Cessation of operations for violation of corrective action standards should be addressed. (ACLC)

The EIS should evaluate the environmental impacts of establishing corrective action thresholds. (ELPC)
The impact of leaving the establishment of corrective action thresholds to state regulatory authorities should be addressed. (ELPC)
The EIS should examine whether mandatory corrective action thresholds should be established nationally by OSM. (ELPC)
The EIS should assess a provision for corrective action thresholds based on monitoring data. (SOCM)

Mining In, Through or Near Streams

Unambiguous "bright line" stream buffer zone should be examined as a regulatory alternative to the comprehensive approach proposed by OSM. (ACLC)
The EIS should examine whether mining through or under headwater streams should be allowed (ELPC)
The EIS should address a buffer zone as a means of protecting the "holistic functioning" of streams. (ISC)
The EIS should take a "hard look" at regulations governing mining activities in or near streams, including a buffer zone rule as an alternative. (SOCM)
The EIS should examine the re-establishment of the 1983 SBZ rule. (WORC)

Stream Restoration

"The EIS needs to consider all scientific evidence of successful functional stream replacement, including scientific evidence that identifies the conditions under which stream replacement is not possible." (ACLC)
The EIS should identify areas where scientific studies have not demonstrated that stream restoration is possible. (ACLC)
The EIS should not rely on studies in one region or condition as a basis for asserting that stream restoration is possible in another region or condition. (ACLC)
THE EIS should examine changes to the bond release process as a means of ensuring that operators restore streams. (WORC)
THE EIS should look at bonding systems and limit bond release until the hydrologic balance is restored. (KRC)

Bonding for Long-term Pollution Problems

The EIS should address the incorporation of the AMD policy guidance into regulations. (ACLC)
The timing of bond releases for stream restoration should be examined. (ACLC)
The EIS should consider whether a mandatory bond release process and schedule is appropriate. (ACLC)
The EIS should discuss the codification of the AMD policy statement. (SOCM)

Backfilling, Grading, Excess Spoil, and AOC

The EIS should examine the impacts of longwall mining and coal waste impoundments on AOC. (ELPC)
The EIS should consider more stringent requirements for AOC and better enforcement of those requirements. (ISC)
"The EIS should revisit backfilling and grading rules, excess spoil rules, and AOC restoration requirements to incorporate landform restoration principles and reduce discharges of total dissolved solids." (SOCM)
The EIS should examine including valley fills in AOC. (SOCM)
The EIS should examine prohibiting mines with high mining ratios. (SOCM)
The EIS should evaluate different fill construction techniques, fill locations, addition of elevation to the definition of AOC, elevation of the fill deck and enhanced contemporaneous reclamation requirements. (KRC)
The EIS should look at the limits on alternative post-mining land uses in detail. (KRC)
Reforestation

The EIS should evaluate requirements to restore a balanced representative blend of premining "riparian species native to the affected watershed." (ELPC)
The EIS should address monitoring of reforestation over time to ensure success. (ISC)
The EIS should consider requirements for reforestation of previously wooded areas. (SOCM)
The EIS should look at how much land was forested pre-mining on a state-by-state basis, the current vegetation on those lands, and the proposed methods of reforestation. (WORC)
The EIS should address ongoing research related to mine land reforestation. (WORC)

Protection of Stream Biologic Communities

The EIS should examine new policies for protection of rare, threatened and endangered species. (SELC)

Stream Definitions

The EIS should "take a hard look at stream classification systems and suggest new definitions on which waters of the U.S. determinations are made. (SOCM)
The EIS should consider damage done from previous mining activity as a part of defining streams. (KRC)

Industry

General

The EIS must recognize and address regional differences and settings where coal mining occurs. (BHP)
The EIS must be based on good science. (NMA)

The EIS should involve experienced experts in evaluating the impacts of regulatory alternatives. (NRP)
The scope of the EIS is extremely broad given the diversity of the U.S. Regional differences must be considered. (Oxbow)
The scope of the EIS must be limited to SMCRA issues related to stream protection. (Peabody)
The EIS should consider whether national, regional or state level performance standards are most appropriate. (Peabody)
The EIS should have an alternative which limits changes to the six Appalachian states with mountaintop mining. (Peabody)
The "no-action" alternative should have a sub-alternative allowing for the issuance of new guidance documents for implementation of existing rules. (Peabody)
The EIS should fully address the economic impact of permitting delays caused by new regulatory requirements. (WMA)
The EIS should address the focus of the rule on intermittent and perennial streams only. (WMA)

Interagency Coordination

The EIS should examine the potential for duplication of effort. (Peabody)
The EIS should examine the necessity for coordination. (WMA)

Baseline and Monitoring Data

The EIS should address the exclusion of ephemeral streams from the requirement to collect biological assessments or monitoring. (BHP)
Regional differences must be considered with regard to baseline data collection. (Oxbow)
The EIS should help establish the purpose and need for additional data. (Peabody
The EIS should examine whether these requirements should be established on a state-by-state basis. (Peabody)
The EIS should address the limitations on duration of monitoring to ensure trending toward equilibrium to reflect western water issues. (WMA)

Material Damage

The EIS should help establish the need for a definition of material damage. (Peabody, WMA)

Corrective Action Thresholds

The EIS must recognize differences in western ground water regimes in establishing thresholds. (BHP)
The EIS should examine the statutory authority for corrective action thresholds. (WMA)

Mining In, Through or Near Streams

The EIS should consider whether sequencing requirements take into account regional differences. (BHP)
The EIS must consider the implications of a "sequencing" concept. (Peabody)
The EIS must consider whether restoration to the premining state of the stream is the best outcome. (Peabody)
The EIS should evaluate the practicality of a sequencing requirement, including the cost, safety and environmental implications. (WMA)

Stream Restoration

The EIS must address the requirements for restoration of impaired streams. (BHP)
The EIS must examine the need for full-cost bonding for stream restoration in light of current reclamation bonds. (BHP, WMA)

Backfilling, Grading, Excess Spoil, and AOC

The EIS should address potential conflicts between geomorphic reclamation and strict adherence to existing AOC rules. (BHP)
The EIS should examine alternatives for new fill construction requirements. (Peabody)

Stream Definitions

The EIS must address the problems with the current definition of "intermittent stream". (BHP)
The EIS must address how the biological component will be added to the definition of each type of stream. (BHP)
The EIS should examine the potential for a biological component in ephemeral drainages. (WMA)

Government

General

The EIS should consider the impact on NPS units and the surrounding towns and villages. (NRGNR)
The EIS must address the impact of the new rules on Tribally-owned coal and the potential for exchanges for coal left unmineable under the new regulations. (Crow)
The EIS must consider regional differences and options for regional rulemaking. (NDPSC, IMCC)
The EIS should evaluate the impacts of provisions on all streams nationally. (VDGIF)
The EIS must consider the resource implications for the states. (IMCC)
The EIS should establish the science behind the alternatives. (IMCC)

Interagency Coordination

The EIS should examine all opportunities for coordination. (FWS)
The EIS should address timeframes for interagency review. (IMCC)

Baseline and Monitoring Data

The EIS should examine how criteria should be used to define resources deserving of special protection. (FWS)
The EIS should consider the costs of providing this data. (UDNR)
The EIS should evaluate the data necessary to characterize ephemeral drainages. (IMCC, UDNR)
The EIS should address the duplication of effort for collection of biological data under a SMCRA program. (WVDEP)
The EIS should address right of entry and access concerns for gathering of baseline data and monitoring. (IMCC)
The EIS should address the issue of consistency of requirements among the states. (IMCC)

Material Damage

The EIS should examine methods for establishment of thresholds. (FWS)
THE EIS should consider alternatives for material damage that include guidance to regulatory authorities. (UDNR)
The EIS should consider states with approved definitions of material damage. (WVDEP)
The EIS should examine conflicts with the CWA. (IMCC)

Corrective Action Thresholds

The EIS must address how thresholds will be established. (WVDEP)

Mining In, Through or Near Streams

The EIS should examine requirements for a stream restoration plan. (FWS)
The EIS should address the geographic scope of required impact analyses. (FWS)
The EIS should address the inherent differences between stream types. (UDNR)
The EIS should address mining through the recharge zone of streams, which often includes coal seams. (WVDEP)

Stream Restoration

The EIS should address the impact of new bonding requirements for stream restoration on state programs. (UDNR)
The EIS should address concerns over the practicality of the sequencing concept. (IMCC)
The EIS should address practical concerns about restoration of streams that will be impacted multiple times. (IMCC)
The EIS should address the potential for interim benchmarks for stream restoration. (IMCC)
The EIS must address the mechanisms for bonding for stream restoration. (IMCC)

Bonding for Long-term Pollution Problems

The EIS should examine the statutory support for codification of these provisions and their currency. (WVDEP)

Backfilling, Grading, Excess Spoil, and AOC

The EIS should consider the impacts of restrictions on alternative post-mining land uses. (WVDEP, IMCC)
The EIS should examine any necessary changes to SMCRA to implement these provisions. (WVDEP)
The EIS should address how changes to AOC requirements will affect WV's compliance with Federal court orders. (WVDEP)
The EIS should address issues with fill construction and stability. (IMCC)

Reforestation

The EIS should address the applicability of new provisions in the West. (UDNR)
The EIS should address the takings implications of new restrictions on landowner rights to determine post-mining land uses. (WVDEP)

Stream Definitions

The EIS should discuss the types of biological communities in a stream with regard to definitions. (FWS)
The EIS should address the implications of changing the stream definitions. (WVDEP)

Miscellaneous Comments

The EIS should be dropped and OSM should issue rules pertaining only to "high-elevation area mining" and address improvidently issued permits. (EP)
The rulemaking and EIS are unwarranted as existing rules are all that are needed. (NMA)
OSM did not demonstrate the need for this new rulemaking. (OCA)
The rulemaking exceeds OSM's authority under SMCRA. (OCA)
The period for comment was too short. (OCA)
Additional stream protection rules are unnecessary in the West. (WMA)
A national rulemaking is not warranted. (NDPSC, IMCC)
OSM should consider guidance on areas of proposed action that are not included in rulemaking. (UDNR)
No statutory support for national rulemaking which will fundamentally change the way coal is mined. (WVDEP)
The rulemaking and EIS timeframes are unrealistic. (WVDEP)
Concern over why OSM is undertaking the rulemaking. (IMCC)
OSM should consider other options for stream protection. (IMCC)
The rulemaking should not impede restoration of productivity to mid-western croplands. (ISPFT)

List of Commenters

ACLC – Appalachian Citizens' Law Center
BHP – BHP Billiton
CCC – Citizens' Coal Council
Crow – Crow Tribe Executive Branch
ELPC – Environmental Law & Policy Center
EP – Ellen Pfister
FWS – U.S. Fish and Wildlife Service
IMCC – Interstate Mining Compact Commission
ISC – Illinois Sierra Club Mining Issues Committee
ISPFT – Indiana Soils/Prime Farmland Team
KRC – Kentucky Resource Council
NDPSC – North Dakota Public Service Commission
NMA – National Mining Association
NRP – Natural Resource Partners L.P.
OCA – Ohio Coal Association
Oxbow – Oxbow Mining LLC
Peabody – Peabody Energy
NRGNR – New River Gorge National River (National Park Service)
SELC – Southern Environmental Law Center
SOCM – Statewide Organizing for Community eMpowerment
TFA – Trustees for Alaska
UDNR – Utah Department of Natural Resources, Division of Oil, Gas & Mining
VGIF – Virginia Department of Game and Inland Fisheries
WMA – Wyoming Mining Association
WORC – Western Organization of Resource Councils
WVDEP – West Virginia Department of Environmental Protection, Division of Mining & Reclamation

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Wednesday, June 09, 2010 10:08 AM
To: dbell@plexsci.com
Cc: Jose Sosa
Subject: FW: Revised draft of summary of comments on NOI for the SPR EIS
Attachments: Summary of Comments on NOI for SPR EIS.6-7.docx

Importance: High

From: Craynon, John
Sent: Monday, June 07, 2010 1:00 PM
To: Craynon, John; BilBao, Li-Tai S.; Uranowski, Lois J.; Winters, William R. "Bill"; Rice, Dennis
Cc: Pizarchik, Joseph G; Owens, Glenda H.; Rideout, Sterling; DeVito, Andy; Boyd, Khalia A.
Subject: Revised draft of summary of comments on NOI for the SPR EIS

Attached is my revised draft of comments on the NOI.

John R. Craynon, P.E.
Chief, Division of Regulatory Support
Office of Surface Mining Reclamation and Enforcement
1951 Constitution Ave, NW MS-202
Washington, DC 20240
(202) 208-2866
(202) 617-5002 cell
(202) 219-3276 fax

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Wednesday, June 09, 2010 5:29 PM
To: dbell@plexsci.com
Cc: Jose Sosa
Subject: FW: RIA deadline correction

Dave,

Can we input a week before the 10/22 date that Dennis gives for the surname process to begin? See below.

Please let me know. When will I see the draft schedule?

Thanks,

L-T

From: BilBao, Li-Tai S.
Sent: Wednesday, June 09, 2010 5:28 PM
To: Rice, Dennis
Subject: RE: RIA deadline correction

It will. We should have the final ready a week before the 10/22 date. Thanks!

From: Rice, Dennis
Sent: Wednesday, June 09, 2010 5:26 PM
To: BilBao, Li-Tai S.
Subject: RE: RIA deadline correction

You can pick whatever date in October you think is appropriate, keeping in mind that the rule is scheduled to enter surname Oct. 22. The draft that we get in September should contain sufficient data for us to complete the procedural determinations in the preamble.

From: BilBao, Li-Tai S.
Sent: Wednesday, June 09, 2010 4:41 PM
To: Rice, Dennis
Subject: RE: RIA deadline correction

We had originally slated a draft on 9/24 but we never had a final date. I am reluctant to change the draft date so please provide a final date in Oct.

From: Rice, Dennis
Sent: Wednesday, June 09, 2010 4:10 PM
To: BilBao, Li-Tai S.
Subject: RIA deadline correction

After talking with Andy, I think we should have the RIA no later than Sept. 15, with a drop-dead date of Oct. 1 (but that would allow only 3 weeks for all internal review and incorporation of relevant information into the rule preamble). Andy explained that we need the RIA to complete some of the procedural determinations in the proposed rule, especially E.O. 12866.

Dennis G. Rice
Division of Regulatory Support
Office: 202-208-2829
Fax: 202-219-3276

Jose Sosa

From:	BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent:	Wednesday, June 09, 2010 6:13 PM
To:	dbell@plexsci.com; Jose Sosa
Cc:	Sloanhoffer, Nancy E.; Winters, William R. "Bill"; Uranowski, Lois J.; Craynon, John; BilBao, Li-Tai S.; Rice, Dennis; DeVito, Andy; Mali, Peter L.; Boyd, Khalia A.
Subject:	Subject Matter Experts (SME)
Importance:	High

- Hydrology, hydrogeology, Aquatic Biology: Bill Winters, (865) 545-4103 x170 bwinters@osmre.gov
- Civil & Environmental Engineering: Lois Uranowski, 412-937-2805 luranowski@osmre.gov
- Mining Engineering: John Craynon, 202-208-2866 jcraynon@osmre.gov
- NEPA, EJ, Economic Analysis: L. Bilbao 202-208-2895 lbilbao@osmre.gov
- Rule: Dennis Rice, (202) 208-2829 drice@osmre.gov
- Federal Register: Andy DeVito, 202-208-2701 adevito@osmre.gov
- Communications/ Public Affairs: Peter Mali, 202-208-2566 pmali@osmre.gov
- Admin Record: Kahlia Boyd, 202-208-2823 kboyd@osmre.gov

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Thursday, June 10, 2010 7:25 PM
To: dbell@plexsci.com
Cc: Jose Sosa
Subject: FW: SPR draft rule text
Attachments: Proposed Stream Protection Rule Text 06-10-10 cln.docx; Proposed Rule Text 05-25-10 drice rlx.docx; Proposed Rule Text 06-10-10 w chg from 05-25 in rlx.docx

Importance: High

Li-Tai Siktu Bilbao
1951 Constitution Avenue, NW
SEP - MS 203
Washington, DC 20240
Phone: (202)208-2805

From: Rice, Dennis
Sent: Thursday, June 10, 2010 7:09 PM
To: BilBao, Li-Tai S.
Subject: SPR draft rule text

Li-Tai,

In response to your request for draft rule text for the contractor, I am sending you three documents.

One (06-10-10.cln) is a clean version of how pertinent sections of our rules in 30 CFR Chapter VII would read if the current draft rule text were adopted unchanged.

The second (05-25-10 drice rlx) uses track changes mode to display the changes I initially made in the rule text.

The third (06-10-10 w chg from 05-25 in rlx) uses track changes mode to display the changes that I made in a clean version of the 05-25 document in response to the assorted comments that I received on that version.

I tried several different methods of merging the second and third documents to create a single combined document displaying all changes from the existing rule language, but I was unsuccessful in those attempts.

I may make another attempt in the latter part of next week, but I am now out of the office until June 16.

Dennis

Dennis G. Rice
Division of Regulatory Support
Office: 202-208-2829
Fax: 202-219-3276

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Friday, June 11, 2010 9:01 AM
To: Jose Sosa
Cc: Sloanhoffer, Nancy E.
Subject: Funding

Importance: High

Jose,

Please get the cost for the additional scoping meeting and add-on the same number of Public Meetings so that we can make the request for extra funds now. Also, please have all of this and the FY burn rates to me by COB today- if possible.

Thanks.

L

Li-Tai Siku Bilbao
1951 Constitution Avenue, NW
SIB - MS 203
Washington, DC 20240
Phone: (202)208-2805

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Friday, June 11, 2010 1:00 PM
To: Jose Sosa
Cc: Uranowski, Lois J.; Winters, William R. "Bill"
Subject: SharePoint Access

Importance: High

FULL Rights
Lois Uranowski luranowski@osmre.gov
Bill Winters bwinters@osmre.gov
Li-Tai Bilbao lbilbao@osmre.gov

Full Access (Read/ Edit)
Joseph Pizarchik Jpizarchik@osmre.gov
John Craynon jcraynon@osmre.gov
Sterling Rideout srideout@osmre.gov
Nancy Sloanhoffer nsloanhoffer@osmre.gov
Glenda Owens gowens@osmre.gov
Maria Mitchell mmitchell@osmre.gov
Arielle Avishai aavishai@osmre.gov
Cheryl Sylvester csylvester@osmre.gov
Tom Bovard tbovard@osmre.gov

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Jason Stoltz jstoltz@osmre.gov
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Marcelo Calle mcalle@osmre.gov
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Al Klein aklein@osmre.gov
Rick Holbrook rholbrrok@osmre.gov
Peter Mali pmali@osmre.gov
Chris Holmes cholmes@osmre.gov

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Monday, June 14, 2010 4:51 PM
To: Craynon, John; Winters, William R. "Bill"; Uranowski, Lois J.; Mali, Peter L.; David Bell
Cc: Jose Sosa; Sloanhoffer, Nancy E.
Subject: Meeting to discuss Open House Issues

Importance: High

Sorry for the short notice but we need to have a meeting on the development of the open house material and the Public Involvement Plan. Our options on Tuesday are anytime between 8 AM and 11AM EST. Please let me know your preference (cc everyone on this mailing).

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Tuesday, June 15, 2010 9:29 AM
To: David Bell
Cc: Jose Sosa; Uranowski, Lois J.; Winters, William R. "Bill"; Craynon, John
Subject: FW: EIS Contractor Questions

Importance: High

From: Calhoun, Roger W.
Sent: Tuesday, June 15, 2010 9:22 AM
To: Rideout, Sterling; BilBao, Li-Tai S.
Cc: Shope, Thomas D. "Tom"; Buckley, Richard W. "Rick"
Subject: EIS Contractor Questions

See below for our best guesses:

Roger Calhoun

Subject: EIS Scoping Meeting - Contractor questions

Good Evening all,

As part of the EIS for the Stream Protection rule, you have already been contacted by PS (Andy DeVito or Li-Tai) so that OSM can obtain information on the venue and location for scoping meetings. Although we have identified the locations, there is additional information that is requested from the contractor (PKS). Please answer the following questions below and be prepared to provide PKS with responses below. I have answered a few questions below.

Here are the additional questions the Contractor is requesting:

- What is the level of interest in this Stream Protection Rule in the FO's area? This is an Agency priority that has national implications.
Interest in West Virginia will be significant. Tensions and interests in all Federal activities related to surface mining is extremely high right now. We would also expect both WV meetings to draw crowds from the surrounding States. Organizations have chartered buses for some Federal hearings related to surface mining.

- Does the FO have a mailing list of interested parties?
The Charleston Field Office has a list of 99 stakeholder groups. We have email addresses for many of these. But as noted above, these are national meetings and we suggest the interested parties' notification would include the stakeholder lists in surrounding States.

- What date(s) are best for each site? Were you able to change Beckley from 15 July to 19-30 July?

Maybe- The Beckley Convention Center has openings later in the month but someone needs to finalize the schedule. <u>These venues cannot hold a range of dates open for us so someone needs to work in actual dates and make real obligations.</u> We have not heard back yet from the facility in Morgantown but intend to cancel the tentative July 16 date.

- How many people does the FO expect to attend the open house?

It could be as high as 1,000. Each Federal hearing related to any surface mining issues (400 OSM stream buffer zone hearing, 800 Corps Nationwide 21 rule, 1000 or more EPA's Spruce mine denial) has been steadily getting larger to hit the 1,000 mark. We could have less interest but should plan for large crowds while hoping for smaller ones more spread out.

- What do they think is the peak time for attendees (e.g., based on date, shift changes, interest, etc.)?

Historically, when we have tried the open house style meetings, 90 % of the people arrived around 6:00 PM.

- Is each facility that the FO identified on the matrix capable of handling that number of people? This is a question of whether the facility is large enough or even too large. Peter Mali expressed a concern that we not get too large since that could encourage group gatherings/protests.

The West Virginia venues suggested are large enough to handle 1,000 people standing. We believe having space indoors to do some organization will be safer than leaving angry crowds outside in the heat or rain waiting at the door for their turn. Therefore we don't believe the facility can be too large. We're not sure how you will run an open house style meeting when large crowds show up at once but maybe with several sections of a room you can keep them moving or waiting in a controlled fashion.

- Does the FO believe that protests are likely? By whom? Regarding what issue(s)?

Protests are likely by both sides. Environmental groups may bring their "thousands of crosses display" for each stream buried. Miners have sometimes arrived less organized but still carrying signs. Thus far demonstrations at Federal events have not resulted in property damage.

- Does the FO believe security is necessary? At a minimum, we (Plexus) will contact the local police department and alert them. We will also inquire as to hiring extra police support for crowd and traffic control, as necessary.

We recommend a strong security force both within the facility and the parking area. While the different groups have never threatened any of the moderators or federal employees at previous events, there have been several incidents of contact and serious word exchanges outside the meeting room. There are unemployed miners who blame the Federal regulatory community on job loss and while not organized they can raise tensions in individual situations. Security in ensuring people can safely travel to and from their vehicles is a major concern. In Morgantown, where we may have to rely on buses from the large parking lot to the building we would recommend a security officer on each bus.

- Are there other issues that the FO is aware of that might come up at the open house, even though not directly related to the Stream Protection Rule?

Any issue related to surface mining is likely to come up. It is common for individuals to bring up issues such as blasting, truck traffic, dust control, etc. at any event related to the surface mining program.

- Will FO personnel attend the open house?

We will have someone at the event.

- Will the FO (or OSM) provide a spokesman, who can respond to the media? This is an area we will need to discuss with Peter and ensure we have a scripted message. A scripted message will be prepared by Communication and PS.

The Charleston Field Office is prepared to do whatever is asked with proper coaching as to what to say. However, depending on the dates selected we may or may not have managers trained in communication available.

PLEASE NOTE THIS IS NECESSARY TO PREPARE THE ADDITIONAL FUNDING REQUEST.

NOTE: OSM have identified the following locations for the scoping meetings:

- Morgantown, WV,
- Beckley, WV,
- Hazard, KY
- Evansville, IN
- Farmington, NM
- Gillette, WY
- Fairfield, TX
- Carbondale, IL
- Birmingham, AL

If you have any questions, please contact Li-Tai Bilbao. Thanks.

Sterling Rideout
Assistant Director - Program Support Directorate
Office of Surface Mining
202-208-4264
202-219-0253 (fax)

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Friday, June 18, 2010 9:53 AM
To: Jose Sosa; dbell@plexsci.com
Cc: Craynon, John; Uranowski, Lois J.; Winters, William R. "Bill"; Rideout, Sterling; Rice, Dennis; Sloanhoffer, Nancy E.
Subject: OSM Weekly EIS Meeting

Importance: High

Jose and Dave,

Every week we conduct a weekly EIS update meeting to go over issues and to better assist our planning efforts. We would like to invite you to participate in these meetings as we feel it will benefit all of us. Please advise.

Thanks,

Li-Tai Sikiu Bilbao
1951 Constitution Avenue, NW
SIB - MS 203
Washington, DC 20240
Phone: (202)208-2805

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Friday, June 18, 2010 1:01 PM
To: Winters, William R. "Bill"; Craynon, John; Uranowski, Lois J.
Cc: Jose Sosa
Subject: Let me know if you have any issues with the distribution of work

Importance: High

Task Assignments and Costing for MTM-VF EIS

Task			ECSI	MACTEC
Mining	ECSI	MORGAN – QA	x	
Surface & Groundwater Hydrology & Water Quality	ECSI	MORGAN – QA	x	
Geomorphology & Fluvial Processes	ECSI	MORGAN – QA	x	
Land Use Management: regulation, plans & zoning	ECSI		x	
Water Resource Planning	MACTEC			x
Topography	MORGAN	ECSI - QA		
Mineral Resources	MORGAN			
Geology & Seismicity	ECSI	MORGAN – QA	x	
Air Quality & Meterology	MACTEC			x
Radioactive & Chemical Contaminant Transport	ECSI		x	
Soil Science	ECSI		x	
Wetland Management	MACTEC			x
Paleontology, Archaeology & Cultural Resources	MACTEC	(including Section 106 Consultation)		x
Occupational & Public Health & Safety	MACTEC			x
Visual Resources	ECSI		x	
Environmental Justice	MACTEC			x
Modeling, Statistical Analysis & Risk Assessment	ECSI		x	
GIS	ECSI		x	
Terrestrial & Aquatic Ecology	MACTEC			x
Endangered Species Biology	MACTEC	(including Section 7 Consultation)		x
Utility & Infrastructure Design (OTHER THAN ECSI/E&E)	MACTEC			x
Noise	MACTEC			x
Socioeconomics	MACTEC			x
Recreational Landscape Architecture	ECSI		x	
Adaptive Management	ECSI		x	
Aquatic Biology	MACTEC			x
Direct Costs	all		x	x
RIA	MACTEC	MORGAN – QA		x
Production of DEIS &FEIS	PKS & PLEXUS			

Li-Tai Sikiu Bilbao
1951 Constitution Avenue, NW
SIR - MS 203
Washington, DC 20240
Phone: (202)208-3895

From: Winters, William R. "Bill"
Sent: Friday, June 18, 2010 11:52 AM
To: BilBao, Li-Tai S.
Subject: RE: OSM Weekly EIS Meeting

No attachment

From: BilBao, Li-Tai S.
Sent: Friday, June 18, 2010 11:51 AM
To: Winters, William R. "Bill"; Uranowski, Lois J.; Craynon, John
Subject: FW: OSM Weekly EIS Meeting

Here's the division of duties for the contractor. Let me know if something is not ok with you now.
Li-Tai Sikiu Bilbao
1951 Constitution Avenue, NW
SIR - MS 203
Washington, DC 20240
Phone: (202)208-3895

From: Jose Sosa [jose@polukaiservices.com]
Sent: Friday, June 18, 2010 10:05 AM
To: BilBao, Li-Tai S.
Cc: John Maxwell; Randy Sosa
Subject: RE: OSM Weekly EIS Meeting

Error! Filename not specified.

Please take a look at how we broke the areas of responsibilities. I welcome your input before I finalize the subcontract agreements.

Jose

From: BilBao, Li-Tai S. [mailto:lbilbao@osmre.gov]
Sent: Friday, June 18, 2010 9:59 AM
To: Jose Sosa; dbell@plexscl.com
Cc: Craynon, John; Uranowski, Lois J.; Winters, William R. "Bill"; Rideout, Sterling; Rice, Dennis; Sloanhoffer, Nancy E.
Subject: RE: OSM Weekly EIS Meeting

I am unclear - are we invited to attend your meetings, as well? Our meetings are held on Wednesdays at 10 AM, will that be ok for you?
Li-Tai Sikiu Bilbao
1951 Constitution Avenue, NW
SIR - MS 203
Washington, DC 20240
Phone: (202)208-3895

From: Jose Sosa [jose@polukaiservices.com]
Sent: Friday, June 18, 2010 9:55 AM
To: BilBao, Li-Tai S.; dbell@plexsci.com
Cc: Craynon, John; Uranowski, Lois J.; Winters, William R. "Bill"; Rideout, Sterling; Rice, Dennis; Sloanhoffer, Nancy E.
Subject: RE: OSM Weekly EIS Meeting

We are having our at 10AM (in 5 minutes). I think the success of the project is going to hinge on outstanding communication among all individuals involved.

From: BilBao, LI-Tai S. [mailto:lbilbao@osmre.gov]
Sent: Friday, June 18, 2010 9:53 AM
To: Jose Sosa; dbell@plexsci.com
Cc: Craynon, John; Uranowski, Lois J.; Winters, William R. "Bill"; Rideout, Sterling; Rice, Dennis; Sloanhoffer, Nancy E.
Subject: OSM Weekly EIS Meeting
Importance: High

Jose and Dave,

Every week we conduct a weekly EIS update meeting to go over issues and to better assist our planning efforts. We would like to invite you to participate in these meetings as we feel it will benefit all of us. Please advise.

Thanks,

Li-Tai Siktu Bilbao
1951 Constitution Avenue, NW
SIR MS 203
Washington, DC 20240
Phone: (202)208-2805

Jose Sosa

From:	BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent:	Friday, June 18, 2010 4:11 PM
To:	Sloanhoffer, Nancy E.; Mali, Peter L.
Cc:	Holmes, Christopher J; Craynon, John
Subject:	RE: Revised Text of tweet language (with real URL for NOI in FR) Word Count 138 with spaces
Importance:	High

OSM revises NOI for Stream Protection Rule EIS to announce possible alternatives and cities for public scoping. http://tinyurl.com/2v6xk7m

Li-Tai Sikiu Bilbao
1951 Constitution Avenue, NW
SIR - MS 203
Washington, DC 20240
Phone: (202)208-2805

From: Sloanhoffer, Nancy E.
Sent: Friday, June 18, 2010 3:29 PM
To: Mali, Peter L.; BilBao, Li-Tai S.
Cc: Holmes, Christopher J
Subject: RE: Revised Text of tweet language (with real URL for NOI in FR)

More to come, LiTai on her way back from a dr appt. and will email you a response with the knowledge of 140 characters including spaces. From our conversation, I know she wants the public comment out, but she will rework it and get back to you in about 30 minutes. Nancy

---

From: Mali, Peter L.
Sent: Friday, June 18, 2010 1:23 PM
To: BilBao, Li-Tai S.; Sloanhoffer, Nancy E.
Cc: Holmes, Christopher J
Subject: RE: Revised Text of tweet language (with real URL for NOI in FR)

Thanks, Nancy.

Li-Tai, how does it look?

Thanks,

Peter

Peter Mali
Communications Chief
Office of Surface Mining Reclamation and Enforcement
1951 Constitution Avenue, NW
Washington, DC 20240
Desk: (202) 208-2566
Cell: (202) 536-7351

From: Sloanhoffer, Nancy E.
Sent: Friday, June 18, 2010 3:06 PM

To: Mali, Peter L.
Cc: BilBao, Li-Tai S.
Subject: RE: Revised Text of tweet language (with real URL for NOI in FR)

I am a go with the tweet language.

From: Mali, Peter L.
Sent: Friday, June 18, 2010 12:43 PM
To: BilBao, Li-Tai S.; Sloanhoffer, Nancy E.
Cc: Williams, LaShonne P.; Holmes, Christopher J
Subject: Revised Text of tweet language (with real URL for NOI in FR)

Li-Tai:

I incorporated your suggestions to greatest extent possible. Please review a new draft tweet on today's NOI:

OSM announces open houses for public comment, Environmental Impact Statement scoping for Stream Protection Rule. http://tinyurl.com/2b5yfyh

The primary limiting factor is that a tweet must be really brief: it cannot be more than 140 characters. The above tweet is 139 characters, or one short of the maximum.

I'd love to send this tweet out by COB today, so please let me know as soon as possible if each of you are comfortable with sending the above message via Twitter.

Thanks for your time,

Peter Mali
Communications Chief
Office of Surface Mining Reclamation and Enforcement
1951 Constitution Avenue, NW
Washington, DC 20240
Desk: (202) 208-2566
Cell: (202) 536-7351

From: Holmes, Christopher J
Sent: Friday, June 18, 2010 2:33 PM
To: Mali, Peter L.
Subject: final tweet copy with REAL release tinyurl

Chris Holmes
Public Affairs Specialist
U.S. Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Tel. (202) 208-7941
Fax (202) 501-0549
cholmes@osmre.gov

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Monday, June 21, 2010 1:23 PM
To: dbell@plexsci.com
Cc: Jose Sosa; Craynon, John; Sloanhoffer, Nancy E.; Winters, William R. "Bill"; Uranowski, Lois J.
Subject: Draft PIP

Hi Dave,

My comments are as follow:
> 2nd Paragraph, 1st sentence, page 1. I would suggest reqording to *"A critical first step in this process is the identification of those with an interest in teh project.*
> 3rd bullet page 1 - Public Meetings are not part of Part 1 - Scoping. I understand that it becomes part of the other phase. Since we are developing a future PIP for the other phase why don't we leave this out of this part. I'd like to standardize documents as you suggested with the appropriate language being used to convey the same message.

Li-Tai Sikiu Bilbao
1951 Constitution Avenue, NW
SIR - MS 203
Washington, DC 20240
Phone: (202) 208-2805

From: BilBao, Li-Tai S.
To: BilBao, Li-Tai S.; dbell@plexsci.com
Cc: Jose Sosa; Craynon, John; Sloanhoffer, Nancy E.; Winters, William R. "Bill"; Uranowski, Lois J.
Subject: RE: Draft PIP
Date: Monday, June 21, 2010 1:31:15 PM
Importance: High

Sorry for sending this out without finalizaing comments...

From: BilBao, Li-Tai S.
Sent: Monday, June 21, 2010 1:23 PM
To: dbell@plexsci.com
Cc: jose@polukaiservices.com; Craynon, John; Sloanhoffer, Nancy E.; Winters, William R. "Bill"; Uranowski, Lois J.
Subject: Draft PIP

Hi Dave,

My comments are as follow:
> 2nd Paragraph, 1st sentence, page 1. I would suggest reqording to *" A critical first step in this process is the identification of those with an interest in teh project.*
> 3rd bullet page 1 - Public Meetings are not part of Part 1 - Scoping. I understand that it becomes part of the other phase. Since we are developing a future PIP for the other phase why don't we leave this out of this part. I'd like to standardize documents as you suggested with the appropriate language being used to convey the same message.
> My title throughout the document should be changed to COTR or COR (page 1 and 3). Add "EIS Proejct Manager" to John Craynon after all the other things in his title.
> Correct spelling Andy DeVito
> Both Andy and Dennis are Regulatory Analysts but I don't think they should be mentioned in this document.
> On page 2, I would include the comments of the 2008 SBZ rulle which is what has prompted this whole action but I would like your opinion on the matter.
> I didn't see any of the attachements. Am I missing something?
> In the last section project website, are you referring to the SharePoint site? If so, simply state that.
> Under Project Website last paragraph, I am hesitant to put that we will establish a link from our homepage. I'm not opposed to the idea, it's just that it has to go through clearance and I would rather it not be on paper.

Other than these comments, I think it is an excellent PIP!

Li-Tai Siklu Bilbao

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From: Uranowski, Lois J.
To: David Bell
Subject: FW: DRAFT PIP
Date: Tuesday, June 22, 2010 1:45:19 PM

Here were my comments- I sent them to Li Tai as per her email.

Lois J. Uranowski P.E.
Chief, Ecological Services and Technology Transfer Branch
Technical Support Division
Office of Surface Mining
3 Parkway Center
Pittsburgh, PA 15220
412 937 2805
luranowski@osmre.gov

From: Uranowski, Lois J.
Sent: Monday, June 21, 2010 11:19 AM
To: BilBao, Li-Tai S.; Winters, William R. "Bill"; Craynon, John
Subject: RE: DRAFT PIP

1. Lois Uranowski, Chief, Branch of Ecological Services and Technology Transfer Branch
2. The OSM Team -are all these folks on that team? So there are 2 OSM EIS teams? What I call the OSM Core team (Li-Tai, John, Bill and me) and this other expanded team for the PIP only?
3. I assume that every comment will be recorded somewhere, even the hand written ones.
4. I really liked the idea of having an initial station describing the EIS process in general.

No other questions. Looks like all the things we discussed last week.

Lois J. Uranowski P.E.
Chief, Ecological Services and Technology Transfer Branch
Technical Support Division
Office of Surface Mining
3 Parkway Center
Pittsburgh, PA 15220
412 937 2805
luranowski@osmre.gov

From: BilBao, Li-Tai S.
Sent: Saturday, June 19, 2010 8:52 AM
To: Winters, William R. "Bill"; Uranowski, Lois J.; Craynon, John; Mali, Peter L.
Cc: Sloanhoffer, Nancy E.
Subject: FW: DRAFT PIP
Importance: High

Attached, please find the draft Public Involvement Plan (PIP) Phase I scoping. Please review and send me things by COB Monday - sooner if you can.
Li-Tai Siku Bilbao

From: David Bell [dbell@plexsci.com]
Sent: Friday, June 18, 2010 7:03 PM
To: BilBao, Li-Tai S.
Cc: jose@polukaiservices.com; 'Randy Sosa'; 'John Maxwell'
Subject: DRAFT PIP

Li-Tai:
Attached is a **DRAFT PIP** for the Scoping portion of the public engagement, per our discussions earlier. I'm working on the attachments and will provide as they are completed. Please send me any comments as you think of them and I will address.
Also, I'd like to get a clean picture of the OSM logo (or whatever you would like to use to "brand" the public materials – DOI logo??). Should I talk to Peter directly about that?
Dave
<<...>>
David E. Bell
Vice President
Regulatory, Safety, and Strategic Consulting
Plexus Scientific Corporation
4501 Ford Avenue
Suite 1200
Alexandria, VA 22302
(703) 845-5602 (direct)
(703) 820-3339 (office)
(703) 845-8568 (fax)
(703) 774-6578 (cell)

From:	BilBao, Li-Tai S.
To:	dbell@plexsci.com
Cc:	Jose Sosa; Winters, William R. "Bill"
Subject:	FW: DRAFT PIP
Date:	Tuesday, June 22, 2010 4:49:51 PM
Importance:	High

I am forwarding Bill's PIP comments. My bad, I thought you were on the to list.
Li-Tai Sikiu Bilbao

From: Winters, William R. "Bill"
Sent: Monday, June 21, 2010 7:28 AM
To: BilBao, Li-Tai S.; Uranowski, Lois J.; Craynon, John; Mali, Peter L.
Cc: Sloanhoffer, Nancy E.
Subject: RE: DRAFT PIP

Here are my comments:

1. My title (pg 1): chief, Technical Branch, Knoxville Field Office
2. Id Stakeholders: I think we should contact all those folks that commented on the ANPR and NOI, not the 2008 rule
3. Public scoping open houses: format of open houses – do we only accept comments or are we allowed to dialogue/answer questions? I would state overtly either way.
4. Public scoping open houses: PIP stations, Principal elements – I assume these descriptions of the elements are what we did last week?
5. Project website: PKS to set up website for project – is this a public facing website (i.e. public can view, comment, etc) or is this the Sharepoint site, used only by OSM/PKS?

Overall a very good job.

From: BilBao, Li-Tai S.
Sent: Saturday, June 19, 2010 8:52 AM
To: Winters, William R. "Bill"; Uranowski, Lois J.; Craynon, John; Mali, Peter L.
Cc: Sloanhoffer, Nancy E.
Subject: FW: DRAFT PIP
Importance: High

Attached, please find the draft Public Involvement Plan (PIP) Phase I scoping. Please review and send me things by COB Monday - sooner if you can.
Li-Tai Sikiu Bilbao

From: David Bell [dbell@plexsci.com]
Sent: Friday, June 18, 2010 7:03 PM
To: BilBao, Li-Tai S.
Cc: jose@polukaiservices.com; 'Randy Sosa'; 'John Maxwell'
Subject: DRAFT PIP

Li-Tai:
Attached is a **DRAFT PIP** for the Scoping portion of the public engagement, per our discussions earlier. I'm working on the attachments and will provide as they are completed. Please send me any comments as you think of them and I will address.
Also, I'd like to get a clean picture of the OSM logo (or whatever you would like to use to "brand" the public materials – DOI logo??). Should I talk to Peter directly about that?
Dave
<<...>>
David E. Bell
Vice President
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(703) 820-3339 (office)
(703) 845-8568 (fax)
(703) 774-6578 (cell)

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Wednesday, June 23, 2010 2:18 PM
To: dbell@plexsci.com
Cc: Jose Sosa; Craynon, John; Uranowski, Lois J.; Winters, William R. "Bill"; John Maxwell
Subject: Purpose and Needs Statement
Attachments: CAS 6-11-10 commts--04-29-10 Need and purpose statement.docx

Importance: High

Attached, please find our revised Purpose and Needs Statement.

Li-Tai Silvia Bilbao

Physical Scientist

Office of Surface Mining - Headquarters
1951 Constitution Avenue, NW
SIB-MS 202
Washington, DC 20240
Phone: (202) 208-2895
Fax: (202)219-3276

"For Official Use Only – Deliberative Process Material"

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Friday, June 25, 2010 1:32 PM
To: Shope, Thomas D. "Tom"; Rideout, Sterling
Cc: Rieger, George J.; Craynon, John
Subject: RE: Open Houses to Take Public Comments - Stream protection

We are finalizing contracts with the venues at the prescribed locations. I will forward our most recent list by COB on Monday, June 28th, if not sooner.

Very Respectfully,

Li-Tai Silvia Bilbao

Office of Surface Mining - Headquarters
1951 Constitution Avenue, NW
SIB-MS 202
Washington, DC 20240
Phone: (202) 208-2895
Fax: (202)219-3276

"For Official Use Only – Deliberative Process Material"

From: Shope, Thomas D. "Tom"
Sent: Friday, June 25, 2010 1:16 PM
To: BilBao, Li-Tai S.; Rideout, Sterling
Cc: Rieger, George J.
Subject: Fw: Open Houses to Take Public Comments - Stream protection

Please see George's request below. . .

Thomas D. Shope
Regional Director, Appalachian Region

From: Rieger, George J.
To: Holmes, Christopher J; Mali, Peter L.
Cc: Shope, Thomas D. "Tom"
Sent: Fri Jun 25 10:46:12 2010
Subject: Open Houses to Take Public Comments - Stream protection

Does OSM have schedule or plan for location date time for these open house sessions?
Information needed to convey to Pennsylvania citizens groups at public outreach meeting on June 28,2010

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Monday, June 28, 2010 5:09 PM
To: Jose Sosa
Subject: RE: Estimated Level of Effort through September 30, 2010

And the distribution of the remaining balance on each of the options? I think you were going to fax this to me.

From: Jose Sosa [mailto:jose@polukaiservices.com]
Sent: Monday, June 28, 2010 3:44 PM
To: BilBao, Li-Tai S.
Subject: FW: Estimated Level of Effort through September 30, 2010

From: Jose Sosa
Sent: Monday, June 28, 2010 1:49 PM
To: 'BilBao, Li-Tai S.'; Sloanhoffer, Nancy E.
Cc: John Maxwell; Randy Sosa
Subject: Estimated Level of Effort through September 30, 2010

Nancy/Li-Tai:

The PKS Team has estimated the level effort, from the Notice to Proceed through the end of September, to be in around $1.5M. As you know, OSM had originally obligated $1M with the award.

PKS respectfully requests that an additional $500K be obligated to ensure that the proper level of effort required from the consultants be maintained in the first three critical months of the project for the preparation of the EIS associated with the proposed new rule for stream protection.

Your consideration to this matter is greatly appreciated.

Sincerely,

Jose J. Sosa, PE, CIH
Project Manager

"For Official Use Only – Deliberative Process Material"

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Monday, June 28, 2010 8:20 PM
To: Jose Sosa
Cc: Rice, Dennis; Craynon, John; Uranowski, Lois J.; Winters, William R. "Bill"
Subject: FW: Consolidated track changes version of SPR text
Attachments: Consolidated SPR rule text 06-28-10 rlx.docx

Importance: High

Jose,

Please forward the consolidated version of the SPR text to the sub-contractors. Let me know if there are any issues. Dennis has done an outstanding job of merging everything so there shouldn't be an issue with the comments that came out regarding the links of elements in the SPR text and the alternatives.

I know our call is for next week but if we can organize a pre-meeting TELCON prior to that it would be great. I still want to hold our scheduled TELCON for July the 6th. Please let me know if you can accomodate my request.

Thank you.

Li-Tai Sikiu Bilbao
1951 Constitution Avenue, NW
SPR - MS 203
Washington, DC 20240
Phone: (202)208-2805

From: Rice, Dennis
Sent: Monday, June 28, 2010 8:08 PM
To: BilBao, LI-Tai S.; Craynon, John; Bovard, Tom; Sylvester, Cheryl; Uranowski, Lois J.; Winters, William R. "Bill"
Cc: Loges, Brian W.; Payne, Harry J.; Yellowman, Mychal
Subject: Consolidated track changes version of SPR text

At long last, attached is a consolidated version of the May 25 and June 10 track changes versions of the rule changes showing all changes to date.

Dennis G. Rice
Division of Regulatory Support
Office: 202-208-2829
Fax: 202-219-3276

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Tuesday, June 29, 2010 10:31 AM
To: Shortelle, Ann
Cc: Jose Sosa; John Maxwell
Subject: FW: RIA for the SBZ EIS
Attachments: Surname-RFA analysis 10-21-08 cln.doc

From: Payne, Harry J.
Sent: Tuesday, June 29, 2010 10:04 AM
To: BilBao, Li-Tai S.; Uranowski, Lois J.
Subject: FW: RIA for the SBZ EIS

Here is the RFA that I previously sent you for the 2008 rule – note the RFA is not the RIA – see Andy's note below.

From: DeVito, Andy
Sent: Tuesday, June 29, 2010 9:38 AM
To: Payne, Harry J.
Subject: RE: RIA for the SBZ EIS

Harry,

Nancy did some work on the RIA but I think the final product came from Dave Hartos. Dennis tells me that we relied heavily on your small business analysis. What we have can be found in the final rule in the procedural section and in the final EIS in the economic analysis section.

From: Payne, Harry J.
Sent: Tuesday, June 29, 2010 9:03 AM
To: DeVito, Andy
Subject: FW: RIA for the SBZ EIS

Andy – do you recall who did the RIA for the 2008 buffer zone rule – I did the RFA-SBA analysis and I seem to recall that someone in HQ was going to do the RIA (Nancy Broderick perhaps?) ... in any event if you know apparently we need to it for the on-going efforts – thanks – Harry.

From: Uranowski, Lois J.
Sent: Monday, June 28, 2010 9:35 AM
To: Payne, Harry J.
Cc: BilBao, Li-Tai S.
Subject: RIA for the SBZ EIS

Do you have the final RIA for the SBZ EIS? Can you send both Li-Tai and me it please? I appreciate it,
Lois

Lois J. Uranowski P.E.
Chief, Ecological Services and Technology Transfer Branch
Technical Support Division
Office of Surface Mining
3 Parkway Center

Pittsburgh, PA 15220
412 937 2805
luranowski@osmre.gov

C. Regulatory Flexibility Act.

The Department of the Interior certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). The revisions are expected to have only minimal adverse economic impact on the regulated industry, including small entities. Further, the rule will produce no adverse effects on competition, employment, investment, productivity, innovation, or the ability of United States enterprises to compete with foreign-based enterprises in domestic or export markets. This determination is based upon the following analysis:

Baseline of small coal mining entities

The Small Business Administration (SBA) uses the North American Industry Classification System Codes (NAICS) to establish size standards for small businesses in the coal mining industry. The NAICS classification for the coal mining industry is code 2121. Subsets of this sector include Bituminous Coal and Lignite Surface Mining (code 212111), Bituminous Coal Underground Mining (code 212112), and Anthracite Mining (code 212113).

The size standard established for each of these categories is 500 or fewer employees for each business concern and associated affiliates. SBA considers business concerns to be affiliates when one concern "controls or has the power to control the other, or a third party or parties controls or has the power to control both."

The U.S. Census Bureau maintains statistics related to business employment, payroll and employment size categories for each NAICS description. Census Bureau data for 2005 show a total of 735 coal-mining firms employing a total of 74,260 persons. Of those firms, 672 had fewer than 500 employees. Those firms employed a total of 22,809 persons.

Data available from MSHA and the Energy Information Administration indicate that in 2006, there were 806 coal-mining firms employing a total of 81,891 persons and producing a total of 1,162,750,000 tons of coal. Within that total, there were 775 coal-mining firms with fewer than 500 employees. Those firms employed a total of 28,749 persons and produced a total of 247,400,000 tons of coal.

Thus, MSHA data indicate that in 2006 small coal-mining firms comprised 96 percent of the total number of coal-mining firms in the United States. Those firms employed 35 percent of the total number of persons engaged in coal mining nationwide and produced 21 percent of the nation's coal.

Baseline of potentially affected entities

The principal change that could impact small coal mining firms is the requirement to minimize the volume of excess spoil generated at a particular mine site. Kentucky, Virginia, West Virginia, and Tennessee account for 98.6 percent of the total number of excess spoil fills approved nationwide in permits issued between October 2001 and June 2005. Thus, the baseline of potentially impacted entities has been limited to the coal-producing region of central Appalachia, which includes eastern Kentucky, Virginia, southern West Virginia, and Tennessee.

According to MSHA data, there were 389 coal-mining firms with fewer than 500 employees operating in central Appalachia in 2006. That number is approximately 23 percent of the total number of small coal-mining firms in the United States. The following data summarize coal production and employment in central Appalachia:

Total coal production: 236,127,000 tons

Gross revenue from coal production: $11,275,064,250 (average price: $47.75 per ton)

Coal-mining firms with fewer than 500 employees: 389

Coal produced by those firms: 87,447,368 tons

Gross revenue from those firms: $4,175,611,822 (average price: $47.75 per ton)

Section 507(c) of SMCRA provides that an operator does not qualify for the small operator assistance program if the total annual production at all locations attributed to that operator exceeds 300,000 tons. We determined that 325 of the 389 firms within central Appalachia that MSHA identified as small entities produced less than 300,000 tons of coal per year.

Number of potentially affected entities

According to MSHA data, in 2006 the 389 small coal-mining entities in central Appalachia operated a total of 765 mines, as shown in this table:

State	Number of small coal-mining entities	Number of mines operated by small entities	Percent of total number of mines operated by small entities in central Appalachia
Kentucky	224	397	51
Tennessee	10	35	5
Virginia	52	107	14
West Virginia	103	226	30
Totals	389	765	100

We conducted an evaluation of permits issued in West Virginia between October 2001 and June 2005 to determine the number of stream miles impacted by excess spoil and coal mine waste fills permitted during that time. We used a sample of 110 of the 270 permits issued in West Virginia during that period. The sample included 28 permits for underground mining operations and 82 permits for surface mines and other types of mining-related operations regulated under SMCRA. A review of that data indicated that 4 percent (4) of all permits had refuse disposal facilities, 29 percent (24) of the permits for surface mines had excess spoil fills, and 4 percent (1) of the permits for underground mines had an excess spoil fill.

To collect information on excess spoil, we conducted an evaluation of 92 new permits issued in Kentucky during 2006. The data indicate that 64 percent of small surface mining operations have permits authorizing construction of excess spoil fills. Those fills will generate 32 percent of the total projected volume of fill material to be produced by surface mines in Kentucky. In

addition, 67 percent of the small underground operations have permits authorizing construction of excess spoil fills. Those fills will generate 91 percent of the total projected volume of fill material to be produced by underground mines in Kentucky.

Extrapolating the data from the reviews of permits in Kentucky and West Virginia to all mines operated by small entities in central Appalachia, we estimate that the rule will impact 191 of the 389 small coal-mining entities in central Appalachia, based on the assumption that 64% (143) of the small entities in Kentucky will construct excess spoil fills and that 29% (48) of the small entities in West Virginia, Virginia, and Tennessee will do so.

Economic Impact on Potentially Affected Entities

We do not believe there will be any significant economic impact upon small entities. Only two new types of compliance costs would affect operators of coal mines: costs of an alternatives analysis for disposal of coal mine waste and/or excess spoil; and costs of minimizing the volume of excess spoil to the extent possible. It is not possible to quantify compliance costs for all potentially affected small entities because each mine site is unique and the operational costs of complying with the rule will vary.

Under the final rule, an operator must design and construct a mine to minimize both the volume of excess spoil created and the adverse impacts of excess spoil fills and coal mine waste disposal facilities on fish, wildlife, and related environmental values. Whenever a permit application proposes to place excess spoil or coal mine waste in or within 100 feet of a perennial or intermittent stream, the final rule requires the permit applicant to identify a range of reasonably

possible alternatives and select the alternative with the least overall adverse impact on fish, wildlife, and related environmental values. In determining whether an alternative is reasonable, the applicant must consider cost, logistics, and the availability of technology.

Based on discussions with mining consultants, developing the alternatives analysis for the permit application will cost between $10,000 and $15,000 per permit. However, most operators will incur little to no additional cost to provide the alternatives analysis because the Corps of Engineers usually requires a similar analysis to satisfy Clean Water Act requirements.

With respect to operational costs, Section IV of a draft environmental impact statement[1] issued in 2003 by the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, OSM, and the West Virginia Department of Environmental Protection contains the following discussion of fill minimization costs:

> Fill minimization may increase operational costs to the mining operator because spoil that must be returned to the mine site has higher handling costs than the current practice of end-dump valley fill construction. *** While not a direct comparison, and somewhat dated, the regulatory analysis that we used for the permanent program regulations indicated that placing spoil in lifts versus end-dumping to build valley fills added 17 cents/ton to the cost of mining coal in central Appalachia.

The same document estimates the cost of compliance with a West Virginia Department of Environmental Protection policy intended to minimize the volume of excess spoil at 50 cents to one dollar for each cubic yard of spoil that, as a result of the policy, is retained on the mined-out

---

[1] "Mountaintop Mining/Valley Fills in Appalachia Draft Programmatic Environmental Impact Statement" (EPA 9-03-R-00013, EPA Region 3, June 2003).

area rather than placed in an excess spoil fill. We will use the West Virginia estimate as the cost of compliance with the fill minimization provisions of this final rule. However, some of those costs are offset by reduced mitigation expenses under other state and federal laws because compliance with the policy typically results in substantially reducing the length of stream segments impacted.

We have analyzed the impact on eastern Kentucky small coal mine operators in more detail because more data is available from that state. We estimate that coal mines operated by the 143 small coal-mining entities in Kentucky with excess spoil fills will generate 32 percent (114,514,880 cubic yards) of the 357,829,000 cubic yards of excess spoil approved in all surface mine permits issued in 2006 in Kentucky. If we assume that the requirement to minimize the placement of spoil outside the mined-out area would require small entities to reduce the volume of excess spoil fills by 25 percent, then those entities will have to retain approximately 28,628,720 additional cubic yards within the mined out area for the permits that they received in 2006. Further assuming that the unit cost for placing this amount of excess spoil within the mined-out area would be the same as in West Virginia (50 cents to one dollar per cubic yard), the total cost of this placement to small coal-mining entities in Kentucky will range from $14 million to $28 million, or an average of $98,000 to $196,000 per small entity with excess spoil.

We do not have sufficient data to perform a similar calculation for small coal-mining entities in the other three states. However, we can use the average cost per small entity with excess spoil in Kentucky to project a reasonable range of costs for small coal-mining entities in the remaining central Appalachian states. Specifically, the 48 potentially impacted small entities in Tennessee,

Virginia, and West Virginia could incur an additional cost of $4.7 million to $9.4 million. Combining the projections for the 143 small entities in Kentucky and the 48 small entities in other states results in an estimated total cost ranging between $18.7 million and $37.4 million for all 191 small entities projected to be impacted.

In the aggregate, the 224 small coal-mining entities in eastern Kentucky produced 41,587,096 tons of coal in 2006. At an average price of $47.75 per ton, the gross revenue from that production equals $1,985,783,800, with $1,270,901,653 of that amount attributable to the 64% (143) of the small entities that we project will be impacted by this rule. Thus, the estimated cost of compliance with the requirement to minimize the placement of spoil outside the mined-out area is projected to range from 1.1 percent to 2.2 percent of the gross revenue for the 143 potentially impacted eastern Kentucky small coal-mining entities.

At the same average price of $47.75 per ton, gross revenue in 2006 for the other 165 small coal-mining entities in central Appalachia equals $2,985,783,834, of which $635,050,116 is attributable to the 29% (48) of those entities that we project will be impacted by this rule. Therefore, at an average price of $47.75 per ton, gross revenue in 2006 totals $1,905,951,769 for the 191 central Appalachian small entities that we project will be impacted by this rule.

Extrapolating this data to the central Appalachian region as a whole, we estimate the cost of compliance will range between $18.7 million and $37.4 million, which translates to a range of 0.98 percent to 1.9 percent of the total gross revenue ($1,905,951,769) generated by potentially impacted small coal-mining entities in central Appalachia. This estimate is based on the

assumption that only 48 (29%) of the 165 small coal-mining entities in Tennessee, Virginia, and West Virginia produce excess spoil, while 64% (143) of the 224 Kentucky small coal-mining entities do so.

All regulatory authorities in central Appalachia have already implemented policies to minimize the volume of excess spoil placed outside the mined-out area, which means that, based on surveys conducted under the Paperwork Reduction Act, we expect that operators will incur no significant additional costs to implement these regulatory changes.

We received no comments on the proposed rule from small municipalities (those with 50,000 or fewer residents) or local public entities such as water authorities. We anticipate that the final rule will not have any significant impact on those entities because, as discussed in the final environmental impact statement (EIS) for this rulemaking, we do not expect that the rule will either increase or decrease mining activities, either nationwide or in central Appalachia. Pages IV-165 and IV-166 of the final EIS discuss the lack of impact of this rule on the economy of the coal mining regions.

Burden/Usage Estimates for New Excess Spoil-Stream Buffer Zone Rule
From Paperwork Reduction Act Supporting Statements

Stream-Channel Diversions (30 CFR 816/817.43)

We estimate that approximately half of all new permits and major revisions involve stream-channel diversions, which means that state and federal regulatory authorities approve approximately 280 stream-channel diversions each year, of which 270 are in states with primacy. Based on our experience with the similar findings required under the existing stream buffer zone rules in 30 CFR 816/817.57(a) and information supplied by the respondents listed in item 8, we estimate that the regulatory authority will need an average of 5 hours to prepare the finding required under revised 30 CFR 816/817.43(b)(1). Therefore, we estimate that the annual information collection burden on the 24 state regulatory authorities under the new final rule will total **1,350 hours** (270 applications for stream-channel diversions per year x 5 hours per finding per diversion). The new final rule moves the burden associated with the regulatory findings required for stream-channel diversions from 30 CFR 816/817.57 to this section.

Preparation by a qualified registered professional engineer of certified design and construction reports for each stream-channel diversion under 30 CFR 816/817.43(b)(5) will require an average of 16 hours. Each stream-channel diversion requires two certification reports, one for the design and one for the construction. *In addition, the new final rule requires design and certification reports for stream-channel restorations. Based on our experience, we estimate that approximately 10% of the stream-channel diversions will be removed in favor of stream-channel restorations.*

Slurry impoundments and refuse piles for surface mines [30 CFR 780.25(d)]

We estimate that the new requirements for applications proposing to dispose of coal mine waste in refuse piles or impoundments located in or within 100 feet of a perennial or intermittent stream will apply to approximately 5% (11) of the 221 permit applications that state regulatory authorities receive each year.

Slurry impoundments and refuse piles for underground mines [30 CFR 784.16(d)]

According to our FY 2006 annual oversight evaluation reports, we and the states issued 62 new permits for underground mines during that year (61 by the states and one by us), all of which must include the information required by this section. Based on our experience, we estimate that each application for an underground mine permit will include one refuse pile, in part because our 1983 rule revisions classify underground development waste as coal mine waste (refuse). Prior

consultations with industry representatives indicate that each applicant will need 16 hours to prepare the information required by 30 CFR 784.16 for siltation structures, impoundments, and refuse piles for each permit application. This unit burden includes the burden for design certifications for refuse piles previously assigned to 30 CFR 817.81.

This burden does not include collecting the new information that the final rule requires for applications proposing to dispose of coal mine waste in refuse piles or impoundments located in or within 100 feet of a perennial or intermittent stream. However, the persons listed in item 8 indicated that permit applicants are already preparing and submitting similar information under regulations and guidance implementing sections 401 and 404 of the Clean Water Act. Therefore, we are not including any burden hours for the new requirements for permit applicants for those facilities.

Surface mining activities in or near perennial or intermittent streams (30 CFR 780.28)

The final rule removes the requirement in existing 30 CFR 816.57(a) that the regulatory authority make certain findings before approving waivers from the prohibition on surface mining activities that would disturb land within 100 feet of an intermittent or perennial stream. New section 780.28 establishes permit application requirements that apply to all proposed disturbances in or within 100 feet of a perennial or intermittent stream. In general, the applicant must demonstrate that: (1) it is not reasonably possible to avoid disturbing the stream or its buffer zone; and (2) the activities would meet the statutory requirements for sediment control and protection of fish, wildlife, and related environmental values to the extent possible using the best technology currently available. Section 780.28 also requires that the regulatory authority make findings that the applicant has made the required demonstration in a satisfactory manner.

Therefore, the burden previously imposed on permit applicants and regulatory authorities under 30 CFR 816.57 for stream buffer zones moves to new section 780.28. Based on responses from the persons listed in item 8, we estimate that the new requirements in section 780.28 will impose a unit burden equal to that formerly imposed under 30 CFR 816.57.

According to data collected for our FY 2007 annual oversight evaluation reports, we and the states issued 225 new permits for surface mines during that year (221 by the states and 4 by us). Based on the information provided by the persons listed in item 8, we estimate that 60% (135) of those permits will include activities in or within 100 feet of a perennial or intermittent stream and therefore must include the information required by this section. On the same basis, we estimate that the information also will be needed for an equal number (135) of permit revisions and amendments, and that each applicant will need 10 hours to prepare the information required by section 780.28.

Underground mining surface activities in or near perennial or intermittent streams (30 CFR 784.28)

New section 784.28 removes the requirement that the regulatory authority make certain findings before approving waivers from the prohibition on disturbances within 100 feet of an intermittent or perennial stream that previously appeared in 30 CFR 817.57(a). Instead, section 784.28 establishes permit application requirements that apply to all proposed disturbances in or within 100 feet of a perennial or intermittent stream. In general, the applicant would need to demonstrate that: (1) it is not reasonably possible to avoid disturbing the stream or its buffer zone; and (2) the activities would meet the statutory requirements for sediment control and protection of fish, wildlife, and related environmental values to the extent possible using the best technology currently available. Section 784.28 also requires that the regulatory authority make findings that the applicant has made the required demonstration in a satisfactory manner.

The burden previously imposed on permit applicants and regulatory authorities under 30 CFR 817.57 thus moves to the burden for section 784.28. Based on responses from the persons in item 8, we estimate that the new requirements in section 784.28 will impose a unit burden equal to that currently imposed under 30 CFR 817.57.

According to our FY 2006 annual oversight evaluation reports, we and the states issued 62 new permits for underground mines during that year (61 by the states and one by us). Based on the information provided by the persons listed in item 8, we estimate that 70% (43) of those permits will include activities in or within 100 feet of perennial or intermittent streams and therefore must include the information required by this section. On the same basis, we anticipate that the information also will be needed for a number of permit revisions equal to 10% (6) of the total number of permits issued. We estimate that each applicant will need 10 hours to prepare the information required by 30 CFR 784.28. Therefore, the total annual burden to permit applicants for compliance with this section would be **490 hours** (49 new permit and permit revision applications with activities in streams or buffer zones x 10 hours per application).

Excess spoil from surface mines (30 CFR 780.35)

We are revising 30 CFR 780.35 (a)(1) and (2) to require that all proposed mining operations be designed to minimize the creation of excess spoil and that the cumulative volume of all excess spoil fills be no greater than the volume needed to contain the amount of excess spoil to be generated. Based on responses from the persons in item 8, we estimate that these requirements will add one hour to the burden for permit applicants and one hour to the burden for regulatory authorities to review permit applications.

Paragraph (a)(3) of the revised rule also requires that operations be designed to avoid placement of excess spoil in perennial and intermittent streams and their buffer zones to the extent possible. When avoidance is not possible, the applicant must demonstrate that there is no reasonably possible alternative. In that case, each applicant proposing to dispose of excess spoil must identify a reasonable range of reasonably possible alternatives with respect to the size, configuration, number, and location of fills, evaluate their environmental impacts, and select the alternative with the least overall adverse impact on fish, wildlife, and related environmental values. The persons listed in item 8 indicate that these new requirements will not add to the burden for the permit applicant because substantially similar information is already being collected and provided under a different law—sections 401 and 404 of the Clean Water Act. However, on average, the state regulatory authority respondents listed in item 8 estimate that review of the new material submitted in the permit application will add 6 hours to the burden of the regulatory authority for each application that includes disposal of excess spoil.

According to studies that we and the states completed in connection with earlier rulemaking efforts, more than 98% of all excess spoil fills are located in Kentucky, Virginia, and West Virginia. Using data provided by the persons listed in item 8, Kentucky reports that in 2006 it issued 77 permitting actions (new permits, revisions, and amendments) involving excess spoil fills on surface mines, while West Virginia reports issuing an average of 45 such actions annually in recent years. According to our FY 2006 annual oversight evaluation reports, Virginia and West Virginia issued nearly equal numbers of permits for surface mines in FY 2006, so we will use the same numbers for Virginia as West Virginia; i.e., we estimate that Virginia also issues an average of 45 permitting actions each year involving excess spoil fills on surface mines. We also estimate that a total of 3 permitting actions in other states (including 2 by OSM in Tennessee) will involve excess spoil fills on surface mines. Using these numbers, we estimate that we and the states will issue an average of 170 permitting actions (new permits, amendments, and major revisions) per year approving excess spoil fills on surface mines (77 in Kentucky + 45 in West Virginia + 45 in Virginia + 3 in other states).

Consultations with the industry representatives listed in item 8 indicate that each applicant will need 26 hours to prepare the information required by 30 CFR 780.35, exclusive of the new information required by the Excess Spoil final rule. (As a point of reference to explain the difference in unit burden hours from the corresponding underground mine permitting rules at 30 CFR 784.19, Kentucky data show that each permitting action includes an average of three excess spoil fills, with the vast majority of excess spoil fills located on surface mines.) As discussed above, the new requirements at (a)(1) and (2) would add one hour to that burden, exclusive of the information that applicants are already preparing and submitting under a different law (the Clean Water Act). Consequently, a permit applicant would need a total of 27 hours to collect the information required under section 780.35, as revised by the new final rule. Therefore, we estimate that the total annual burden to permit applicants for compliance with this section will be **4,590 hours** (170 applications with excess spoil fills x 27 hours per application).

Excess spoil from underground mines (30 CFR 784.19)

As part of the new final rule, we are revising 30 CFR 784.19(a)(1) and (2) to require that all proposed mining operations be designed to minimize the creation of excess spoil and that the cumulative volume of all excess spoil fills be no greater than the volume needed to contain the amount of excess spoil to be generated. Based on responses from the persons listed in item 8, we estimate that these requirements will add one hour to the burden for permit applicants and one hour to the burden for regulatory authorities to review permit applications.

Paragraph (a)(3) of section 784.19, as revised by the final rule, requires that operations be designed to avoid placement of excess spoil in perennial and intermittent streams and their buffer zones to the extent possible. When avoidance is not possible, the applicant must demonstrate that there is no reasonably possible alternative. In that case, each applicant proposing to dispose of excess spoil must identify a reasonable range of reasonably possible alternatives with respect to the size, configuration, number, and location of fills, evaluate their environmental impacts, and select the alternative with the least overall adverse impact on fish, wildlife, and related environmental values. The persons listed in item 8 indicate that these new requirements will not add to the burden for the permit applicant because substantially similar information is already being collected and provided under a different law—sections 401 and 404 of the Clean Water Act. However, the state regulatory authority respondents in item 8 estimate that regulatory authority review of the new material submitted in the permit application would add 6 hours to the burden of the regulatory authority for each application that includes disposal of excess spoil.

According to our FY 2006 annual oversight evaluation reports, we and the states issued 62 new permits for underground mines during that year (61 by the states and one by us), of which we estimate that 75% (47) will include an excess spoil fill and therefore must include the information required by this section. Prior consultations with industry representatives indicate that each applicant will need 8 hours to prepare the information required by 30 CFR 784.19, exclusive of the new information required by the new final rule. As discussed above, the new requirements in the final rule will add one hour to that burden, exclusive of the information that applicants are already preparing and submitting under a different law (the Clean Water Act). Consequently, a permit applicant will need a total of 9 hours to collect the information required under 30 CFR 784.19, as revised by the final rule. Therefore, the total annual burden to permit applicants for compliance with this section is **423 hours** (47 applications x 9 hours per application).

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Wednesday, June 30, 2010 1:40 PM
To: Joe Zaluski
Cc: Jose Sosa; Rice, Dennis; Craynon, John; 'David Bell'
Subject: RE: Redline and Alternatives

I believe everything is within the contractual framework. We only provided references to the SBZ and MT EISs as part of the SOW. So are we ready to table this and move on?

From: Joe Zaluski [mailto:jzaluski@engrservices.com]
Sent: Wednesday, June 30, 2010 1:24 PM
To: BilBao, Li-Tai S.
Cc: 'jose@polukaiservices.com'; Rice, Dennis; Craynon, John; 'David Bell'
Subject: RE: Redline and Alternatives

No problem. Just wanted to make sure that all the areas are covered by the contract. We are hard at work.

Joe Zaluski
Executive Vice-President
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From: BilBao, Li-Tai S. [mailto:lbilbao@osmre.gov]
Sent: Wednesday, June 30, 2010 1:19 PM
To: Joe Zaluski
Cc: 'jose@polukaiservices.com'; Rice, Dennis; Craynon, John; 'David Bell'
Subject: RE: Redline and Alternatives

Hi Joe,

Is there a problem? Please let me know. I think we covered the plus elements during our kick-off meeting earlier this month.

Li-Tai Silviu Bilbao

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1951 Constitution Avenue, NW
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From: Joe Zaluski [mailto:jzaluski@engrservices.com]
Sent: Wednesday, June 30, 2010 1:11 PM
To: BilBao, Li-Tai S.
Cc: 'jose@polukaiservices.com'; Rice, Dennis; Craynon, John; 'David Bell'
Subject: RE: Redline and Alternatives

Li-Tai – Dennis is correct. I am referring to the Agreement. The Agreement at page 3, paragraph #1, references the 2008 SZ rule. I believe that all sides thought that to be the document governing the scope of the new rulemaking effort. Between the outreach meetings and the redline rule, it is obvious that the new effort will cover many more subjects than that covered by the 2008 SBZ. I make no judgment here. I'm only stating what I believe the parties to the lawsuits (and the Court) thought they were agreeing to. They certainly will get a rule covering the scope of the 2008 SBZ plus. I could be wrong (its happened before).

Thanks.

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From: BilBao, Li-Tai S. [mailto:lbilbao@osmre.gov]
Sent: Wednesday, June 30, 2010 12:57 PM
To: jzaluski@engrservices.com
Cc: jose@polukaiservices.com; Rice, Dennis; Craynon, John
Subject: FW: Redline and Alternatives

Joe,

Joe,

Please read Dennis' response below. Can you clarify your concerns?

Thanks,

Li-Tai Silvia Bilbao

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From: Rice, Dennis
Sent: Wednesday, June 30, 2010 11:18 AM
To: BilBao, Li-Tai S.
Cc: Craynon, John
Subject: RE: Redline and Alternatives

Li-Tai,

In an email below, Joe Zaluski expresses concern that the proposed rule text "exceeds that which is being required by the Federal Court's Order." I'm not clear as to what he means because I am not aware of any federal court order. Perhaps he is referring to the March 19, 2010 settlement agreement (attached), but while that document establishes a timeline for our rulemaking, it does not establish content requirements for the rulemaking.

Dennis

From: BilBao, Li-Tai S.
Sent: Friday, June 25, 2010 11:41 AM
To: Rice, Dennis
Cc: Craynon, John; Winters, William R. "Bill"; Uranowski, Lois J.
Subject: FW: Redline and Alternatives
Importance: High

From: Jose Sosa [mailto:jose@polukaiservices.com]
Sent: Friday, June 25, 2010 11:38 AM
To: BilBao, Li-Tai S.
Subject: FW: Redline and Alternatives

fyi

From: Joe Zaluski [mailto:jzaluski@engrservices.com]
Sent: Friday, June 25, 2010 11:24 AM
To: Jose Sosa
Cc: '"BELL, DAVID E."'; '"BOURDEAU, JONATHAN"'; '"BURCHETT, JOHN"'; '"Draper, Jamie & Terry"'; '"GARDNER, STEVE"'; '"JENKINS, JOSH"'; '"MAHAN, JEFF"'; John Maxwell; '"MORGAN, JOHN"'; '"Mynear, Doug and Jennifer"'; '"SHORTELLE, ANN"'
Subject: Redline and Alternatives

Jose – it is imperative that we receive from OSM some assurance that the redlined proposed rule that we have is a comparison against existing law and not just against some prior draft. A proper redline will greatly assist the entire team. There is no sense in analyzing a change to a proposed change to a proposed change. We need to be looking at the proposed language as compared to what is currently on the books. The redline(s) that we have on Share Point have some indicators that raise this question. Please obtain OSM's assurance that we have the correct redlined document.

There is also some concern that the proposed rule exceeds that which is being required by the Federal Court's Order. That issue ties to the next – Alternatives.

Second, we need from OSM the Alternatives that are to be reviewed. The Alternatives seem to be a work in progress and that is not helpful to the Team. The clearest example is that the Alternatives in the current (new) NOI differ from the RFP and the SOW that are the basis for the Team's work. I know that the entire Team is concerned about this issue. I am certain that Plexus will communicate to you on this matter as well. As you know, they are preparing for the Scoping Meetings and are presenting the Alternatives through the posters. Those Alternatives differ from those in the RFP.

Finally, ECSI and Morgan, on behalf of the Team, would like to compare the redline against the RFP and SOW, but cannot do that with any certainty until we get some assurance that we have the redline we requested.

Thank you.

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in error, please notify us immediately and arrange for the destruction or you may return this electronic mail to us.

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Tuesday, July 20, 2010 12:29 AM
To: David Bell
Cc: Jose Sosa; Randy Sosa; John Maxwell; 'Jackie Cain'; Pizarchik, Joseph G; Owens, Glenda H.; Sloanhoffer, Nancy E.
Subject: RE: Carbondale Open House

Dave,

Thanks for the great work you are doing out there. Kindly send daily updates so that we can inform the Director and the Deputy Director.

Take it easy and be well.

L

From: David Bell [mailto:dbell@plexsci.com]
Sent: Monday, July 19, 2010 11:36 PM
To: BilBao, Li-Tai S.
Cc: jose@polukaiservices.com; 'Randy Sosa'; 'John Maxwell'; 'Jackie Cain'
Subject: Carbondale Open House
Importance: High

FYI. We had 34 attendees, most at the beginning. The last sign-in was around 4:30, and the last person left around 6:15. Lighter turnout than the 50-100 estimated. A handful of industry, a few "private citizens," and several from the Sierra Club. As far as we can tell at the moment, we didn't have anyone from the coal worker segment. At one point, I'd say we had around 20 people. All calm; no protests; no incidents.

Off to Evansville tomorrow.

Dave

David E. Bell

Vice President

Regulatory, Safety, and Strategic Consulting

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Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Thursday, July 22, 2010 9:27 PM
To: David Bell
Cc: Jose Sosa; Randy Sosa; John Maxwell; Rideout, Sterling
Subject: RE: News Media Attends Birmingham Open House

Thank you for the great work you are doing.

Li-Tai Siktu Bilbao
1951 Constitution Avenue, NW
SIR - MS 205
Washington, DC 20240
Phone: (202)208-2895

From: David Bell [dbell@plexsci.com]
Sent: Thursday, July 22, 2010 8:39 PM
To: BilBao, Li-Tai S.
Cc: 'Jose Sosa'; 'Randy Sosa'; 'John Maxwell'; Rideout, Sterling
Subject: News Media Attends Birmingham Open House

Li-Tai:
CBS Channel 42 News, WIAT, just left the Birmingham Open House. They shot a couple of minutes of video, including about 15 seconds of Sterling on camera, along with shots of various posters. Sterling spoke extemporaneously to the first 3 paragraphs of the Media Statement. We also gave them a copy of the Comment Form, pointing out the ways in which the public can comment. They also took a copy of the NEPA process handout, which summarizes what we're doing and where we are in the process. I think the latter will be used by the anchors to fill in info.
Unfortunately, we had no members of the public here at the time. Thus far, we've had 22 people – industry, private citizens, EPA Region IV person, environmental group members.
The two CBS 42 News folks were Marlin Price, photographer, and Chris Womack, assistant. Marlin said the piece will air tonight on the 10pm news. It will be available on their website at cbs42.com, but I'm not sure how quickly they are posted. I had the impression it would be posted fairly quickly.
Dave

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Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Friday, July 23, 2010 6:56 AM
To: David Bell
Cc: Jose Sosa; John Maxwell; Randy Sosa; 'Jackie Cain'; rfatz@plexsci.com
Subject: RE: Recap of Birmingham Open House

Thanks, Dave. Excellent Job!

Li-Tai Siku Bilbao
1951 Constitution Avenue, NW
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Phone: (202) 208-2895

From: David Bell [dbell@plexsci.com]
Sent: Friday, July 23, 2010 2:00 AM
To: BilBao, Li-Tai S.
Cc: 'Jose Sosa'; 'John Maxwell'; 'Randy Sosa'; 'Jackie Cain'; rfatz@plexsci.com
Subject: Recap of Birmingham Open House

We had 20 attendees at the Birmingham Open House, short of the estimate of 100. It was uneventful. We had 5 private citizens, 5 people associated with a citizens' groups, 2 rep from EPA IV, and 1 state government. 1 OSM person also signed in. Three people provided oral comments. Most attendees came between 3 and 5, with some here as early as 2:30. No one showed up after 6:30.
Next is Hazard on 7/26. I anticipate the attendance pattern will change.
Dav

David E. Bell
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(703) 774-6578 (cell)

Jose Sosa

From: BilBao, Li-Tai S. [lbilbao@osmre.gov]
Sent: Monday, July 26, 2010 1:50 PM
To: Jose Sosa
Cc: Sloanhoffer, Nancy E.
Subject: FW: Termination
Attachments: Document.pdf

Importance: High

Jose,

I have requested and been granted to be moved from this project. I have attached the COTR project termination memorandum issued by the Contracting Officer, Ms. Nancy Sloanhoffer. The new COTR is Stephanie Varvell and she will be on board by tomorrow. I will do another introductory e-mail with her cc'd. There will be a one week transition period so you would need to cc her and me on everything. Beginning next week, she will be in charge of everything.

Thank you.

Li-Tai Sikiu Bilbao
Physical Scientist

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"For Official Use Only - Deliberative Process Material"

United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
Division of Administration
1951 Constitution Ave
South Interior Building
Washington, DC 20240

Memorandum

To: Ms. Li-Tai Bilbao

From: Ms. Nancy E. Sloanhoffer, Contracting Officer

Subject: Termination of Appointment as Contracting Officer's Representative (COR) for Contract # SP10PC00060

Your appointment as Contracting Officer's Representative contained in memorandum of appointment dated June 7, 2010 is hereby terminated effective July 26, 2010.

7/26/10
Date

Nancy E. Sloanhoffer, Contracting Officer

Receipt of this Termination of Appointment is acknowledged by the undersigned.

7/26/10
Date

Li-Tai Bilbao

cc: Polu Kai Services, LLC (PKS)

From: BilBao, Li-Tai S.
To: David Bell
Subject: RE: Summary of Beckley Open House
Date: Wednesday, July 28, 2010 5:50:17 AM

Thanks, Dave. Excellent job.
Li-Tai Sikiu Bilbao

From: David Bell [dbell@plexsci.com]
Sent: Tuesday, July 27, 2010 10:36 PM
To: BilBao, Li-Tai S.; Craynon, John
Cc: 'Jackie Cain'; 'Jose Sosa'; 'Randy Sosa'; 'John Maxwell'; 'David Bell'; Uranowski, Lois J.; Calhoun, Roger W.; rfatz@plexsci.com
Subject: RE: Summary of Beckley Open House

We had 46 attendees at an uneventful Beckley Open House in the following groups:

- Industry 18
- Environmental Grp 3
- Government (Natl Park Svc) 1
- Private Citizen 18
- Media (TV(2), NPR, AP, Nwspr) 5
- U.S. Senator Office (Rockefeller) 1

We had 5 reps from media – 2 local TV stations (WVBA (NBC) and WVNS); 1 radio (NPR); 1 newspaper (Beckley Register Herald); 1 wire (AP). Media showed up between 2:30 and 3:00. Both TV media were probably trying to make the 6pm news. AP stayed for a couple of hours, probably writing the story while there.

The turnout was light, fewer than the 500-1000 anticipated. Most attendees arrived between 3-5; no one came in after 7:30.

We had 4 local, off-duty police officers on site the whole evening. There were no incidents inside or in the parking lots. Next are Morgantown (28th) and Gillette (29th).

Dave

David E. Bell
Vice President
Regulatory, Safety, and Strategic Consulting
Plexus Scientific Corporation
4501 Ford Avenue
Suite 1200
Alexandria, VA 22302
(703) 845-5602 (direct)
(703) 820-3339 (office)
(703) 845-8568 (fax)
(703) 774-6578 (cell)

From: Sloanhoffer, Nancy E.
To: David Bell
Subject: RE: Scoping Meetings
Date: Monday, August 09, 2010 3:35:08 PM

The CD was unfortunate. I could not open either, I tried prior to sending. Chris said it was due to the fact that I did not have that program. I told him that concerned me, but that the comments would also be up loaded on SharePoint by the end of the day. I never went into to SharePoint the next day to check. So in reality we/OSM/the Govt handed the information to you late..... by about a week, right?

From: David Bell [mailto:dbell@plexsci.com]
Sent: Monday, August 09, 2010 3:19 PM
To: Sloanhoffer, Nancy E.
Cc: 'Jose Sosa'; 'Randy Sosa'; 'John Maxwell'; 'Mike Stanwood'; Craynon, John
Subject: RE: Scoping Meetings

"For Official Use Only – Deliberative Process Material"

Hi, Nancy.
I think it's unlikely it will be delivered early. On Friday, 7/30, Chris Holmes informed me that the agency had received 23,000 email comments. Up to that point, I had been told that none had been received. While I thought that highly unusual, I took the response at face value. In contrast, we received 453 comments at the 9 nine scoping open houses. As I think I mentioned to you in Morgantown, at that time, I thought I would be able to accelerate the report based on the relatively small number, but now with 23,000+ comments to review, that's no longer likely.

Chris FedEx'd a CD with the comments, and it was waiting for me on 8/5 when I returned from the Purpose & Need/Alternatives discussion in Lexington. Unfortunately, the file could not be accessed, and the CD had to be re-burned. I drove down to OSM and did a curbside hand-off with Chris Thursday afternoon. While most comments appear to be sign-ons to form letters, each email must be opened and assessed to ensure it doesn't raise new issues or offer new information. That process is simply time consuming. John Craynon also mentioned then that the agency was copying the comments received via surface mail and courier, and would be sending those along too. I have not seen those yet, and intend to follow up with John on the status.

In response to your subsequent email regarding obtaining a draft report for advance review, I will do my best. I should have a better feel over the next week or so, as I am able to compile and organize the comments according to subject area. I suggest I update you and the team on progress/prognosis at the 8/17 meeting. How does that sound?
Dave

David E. Bell
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(703) 774-6578 (cell)

From: Sloanhoffer, Nancy E. [mailto:nsloanhoffer@osmre.gov]
Sent: Monday, August 09, 2010 2:59 PM
To: dbell@plexsci.com
Subject: Scoping Meetings

Do you think we will be getting the final report on time, or perhaps a little early.

From: Sloanhoffer, Nancy E.
To: David Bell
Subject: RE: Status of Mailed-in Comments
Date: Sunday, August 15, 2010 8:48:51 PM

Thank you and sorry for the delays. Nancy

From: David Bell [mailto:dbell@plexsci.com]
Sent: Friday, August 13, 2010 9:30 PM
To: Sloanhoffer, Nancy E.
Subject: RE: Status of Mailed-in Comments

Hi, Nancy.
I met John at Pentagon City at 6pm tonight and picked up a packet with a CD and what appears to be one comment with enclosures (it was submitted on the form we distributed at the Open Houses). I will open the CD tonight/this weekend and print the contents at the office on Monday (we need to do that to sort amongst the various issues). There are no envelopes or other indication of when the comments were received, so I cannot comment on whether they were received within or after the comment period officially ended. John did mention that some comments were postmarked by the deadline, but delayed in delivery by the government irradiation process. We'll continue to work toward our schedule deadlines, and will raise our concerns through PKS at the appropriate time, if necessary. We appreciate your understanding of the challenges for everyone, given this very aggressive schedule.
Have a nice weekend!
Dave

David E. Bell
Vice President
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(703) 845-5602 (direct)
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(703) 845-8568 (fax)
(703) 774-6578 (cell)

From: Sloanhoffer, Nancy E. [mailto:nsloanhoffer@osmre.gov]
Sent: Friday, August 13, 2010 8:14 PM
To: David Bell
Subject: RE: Status of Mailed-in Comments

Did you receive the written comments today? Please document the dates of the receipt of the comments. I want to make sure OSM does not pressure you to meet a date that is unrealistic given OSM's delay on turning over the comments. Nancy

From: David Bell [dbell@plexsci.com]
Sent: Friday, August 13, 2010 10:14 AM
To: Craynon, John
Cc: 'Jose Sosa'; 'Randy Sosa'; 'Mike Stanwood'; 'John Maxwell'; Varvell, Stephanie L.; Sloanhoffer, Nancy E.
Subject: Status of Mailed-in Comments

John:
Just checking on the status of the comments OSM received by mail/courier. Will they be available today? Do we need to arrange a curbside hand-off? Thanks.
Dave
David E. Bell
Vice President
Regulatory, Safety, and Strategic Consulting
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(703) 845-8568 (fax)
(703) 774-6578 (cell)

From: Uranowski, Lois J.
To: David Bell
Subject: DRAFT Scoping Report
Date: Tuesday, August 31, 2010 2:01:11 PM
Importance: High

You have done a great job on this, keeping to task and dates. I do appreciate your efforts and hard work.

Lois J. Uranowski P.E.
Chief, Ecological Services and Technology Transfer Branch
Technical Support Division
Office of Surface Mining
3 Parkway Center
Pittsburgh, PA 15220
412 937 2805
luranowski@osmre.gov

From: Craynon, John
Sent: Tuesday, August 31, 2010 7:55 AM
To: Winters, William R. "Bill"; Uranowski, Lois J.; Rice, Dennis; Varvell, Stephanie L.; Sloanhoffer, Nancy E.
Subject: Fw: DRAFT Scoping Report
Importance: High

Fyi

From: David Bell <dbell@plexsci.com>
To: Craynon, John
Cc: 'John Maxwell' <JMaxwell@polukaiservices.com>; 'Jose Sosa' <jose@polukaiservices.com>; 'Randy Sosa' <Randy@polukaiservices.com>; 'Mike Stanwood' <r.m.stanwood@gmail.com>
Sent: Mon Aug 30 22:12:32 2010
Subject: DRAFT Scoping Report

John:

Attached is our draft Scoping Report. While I might tweak the text a bit, the main things that need to be added are the Appendixes, which contain some of the administrative backup. I believe this contains the statistical and substantive elements that are most relevant in the short term. I will finalize and plan to deliver both hard and electronic versions (on CD) of the final Report. The CD will also consolidate the electronic media that we have to date.

Dave

<<...>>

David E. Bell

Vice President

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United States Department of the Interior

OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT
Washington, D.C. 20240

February 8, 2011

Mr. José J. Sosa
Executive Vice President
Polu Kai Services, LLC
6911 Pistol Range Road, Suite 101E
Tampa, Florida 33635

Subject: Cure Notice for Contract Number S10PC00060 with Polu Kai Services, LLC, Environmental Impact Statement and Regulatory Impact Analysis for Proposed Stream Protection Rule.

Dear Mr. Sosa:

This letter is notice that the Office of Surface Mining Reclamation and Enforcement (OSM or the Government) considers Polu Kai Services, LLC's (PKS) failure to deliver working draft chapters of the Environmental Impact Statement (EIS) and Regulatory Impact Analysis (RIA) that meet the requirements of the contract to endanger performance of the subject contract to such a degree that the entire EIS project is in jeopardy. Unless PKS submits a Preliminary Draft EIS and RIA that cures the deficiencies identified and meets the requirements of the SOW by February 23, 2011, the Government may elect to terminate for default under the terms and conditions of Section I, 52.249-8 of this contract.

Throughout this process, OSM provided voluminous comments to PKS that document many of the deficiencies in working draft chapters 1 through 4 of the EIS, and with the December 2010 draft RIA prepared by PKS. In addition to these prior written comments, attached is a list of examples that further illustrate the deficiencies identified by OSM staff. This list and the prior written comment provided to PKS, which are incorporated by reference here, is intended to be representative of deficiencies and is not all-inclusive. OSM will evaluate the February 23, 2011, deliverables against the requirements set forth in the contract.

In responding to this cure notice you are required to tell the Contracting Officer what actions you will take to remedy your performance - specifically, (1) how PKS will fully implement the requirements for the EIS which are set out in the contract; (2) how PKS plans to bring into conformance the preliminary Draft EIS and RIA in light of the failure of the working draft chapters and the draft RIA to meet contract performance standards; and (3) how PKS will prevent any similar reoccurrence of deficient performance. It is your responsibility to correct your performance to meet the requirements of the contract and cure these deficiencies no later

than February 23, 2011. Failure to correct performance may result in the termination of the contract.

Please acknowledge receipt of this notice in writing within 24 hours of receipt. If you have any questions or concerns regarding this cure notice letter, please do not hesitate to call me. I can be contacted at (202-208-2902) or via email at nsloanhoffer@osmre.gov.

Respectfully,

Nancy E. Sloanhoffer
Contracting Officer

Cc: US Small Business Administration
409 3rd Street, SW
Washington, DC 20416

Attachment

ATTACHMENT

I. Environmental Impact Statement (SOW 2.0 Background)

The SOW for the preparation of the EIS provides: "The EISs and the processes for their preparation must be consistent with and meet all requirements of NEPA and implementing CEQ regulations (hereafter referred to as the CEQ regulations) and guidance. These requirements are referred to collectively hereafter as the federal NEPA requirements, or simply NEPA. Contractor data collection, analysis, and documentation will identify and evaluate all relevant impacts, conditions, and issues associated with the proposed action, and the alternatives in accordance with NEPA."

According to page 7 of the PKS technical proposal submitted in response to the SOW under the heading *Expert Knowledge of Environmental Impact Statement Development Process and this Statement of Work* states, "This NEPA analysis and documentation applies to a proposed federal rule .... NEPA established a requirement for federal decision makers to fully understand the environmental ramifications of their decisions and include this knowledge, along with traditional economic and technical (and political) considerations, into the trade-off analysis and comparisons associated with sound decisions." The working draft EIS chapters fail to provide the information required by the SOW, do not comply with NEPA, and are not acceptable. In order to cure the deficiencies, PKS must submit a Preliminary Draft EIS which meets the requirements of the SOW. OSM provided detailed comments to PKS on each of the working draft EIS chapters, which identify deficiencies and inaccuracies in those chapters. The following are examples of some of the fundamental deficiencies that OSM's comments identified in the working draft Chapters 3 and 4 of the EIS:

- **Misrepresentation of regulations. (SOW A, 3.2 F and J (2)(e))**

Working draft chapters 3 and 4 fail to accurately characterize relevant provisions of the Surface Mining Control and Reclamation Act of 1977 (SMCRA) and current regulations at 30 C.F.R. Chapter VII. We are particularly concerned about numerous errors regarding the 2008 Stream Buffer Zone Rule, 30 C.F.R. Parts 780, 784, 816, and 817; the Advance Notice of Proposed Rulemaking (ANPR) for the proposed Stream Protection Rule (SPR), 74 Fed. Reg. 62664 (November 20, 2009); and statutory requirements relating to "material damage." 30 U.S.C. § 1260(b)(3), which are found throughout draft EIS chapters. The draft EIS is fundamentally flawed because the draft impact assessment relies on these mischaracterizations and erroneous interpretations of SMCRA, 30 C.F.R. Chapter VII, and OSM's preferred alternative.

- **Baseline condition. (SOW A, 3.2 J (1))**

Working draft chapter 4 of the EIS fails to use 30 C.F.R. Chapter VII in its entirety as the baseline for all comparisons of the impacts of action alternatives. Further, draft chapter 4 inappropriately relies on 2008 coal production data, the highest coal production ever in the

history of the US, as the basis for drawing conclusions, thereby failing to account for the impact of supply and demand economics.

- **No description of current mining and reclamation regulations and practice. (SOW A, 3.2 C)**

The EIS fails to contain a description of the current regulatory structure and practice for each of the major elements in the EIS under all alternatives.

- **Inconsistent level of detail across regions. (SOW A, 3.2 D and J (2)(d))**

Working draft chapter 4 of the EIS fails to provide an appropriate level of detail in evaluating impacts for all coal regions and the analysis of impacts of the proposed action is skewed to focus disproportionately on one region (i.e., the Appalachian Basin).

- **Impact Analysis. (SOW A, 3.2 D and G)**

A crucial shortcoming of working draft chapter 4 is that the draft does not include an adequate analysis of the environmental impacts of key aspects of the action alternatives. Instead, it effectively focuses on the impacts of different levels of coal production, as a surrogate for analysis of environmental impacts of key aspects. As a result, the EIS fails to provide the most fundamental and important type of analysis required under NEPA. By the same token, while some discussion of costs and other impacts on mining operations may be appropriate, it belongs in a discussion of socio-economic impacts, and not in the primary discussion of environmental impacts.

Another critical shortcoming of working draft chapter 4 is that the draft does not provide a comparative discussion of the most important impacts of each key element of each alternative, so that a decision maker can decide whether to retain, reject, or modify particular elements when acting on the rulemaking. The most important impacts would include any important costs and benefits that should be considered. For example, draft chapter 4 does not provide sufficient information to enable a decision maker to determine the costs of the key elements of the preferred alternative or any other alternative. And the lack of this information renders the EIS useless for purposes of assessing and perhaps modifying the alternatives.

The draft EIS fails to include or reference a cost-benefit analysis of the probable costs of the proposed rulemaking, and a monetized benefit equivalent, to evaluate the overall net impact of the rulemaking. It is OSM's understanding that an underpinning of the impact analysis in the

draft EIS is the Appendix –I. to the RIA which contained "placeholder" cost data intended to be illustrative of the methodology only and should not have formed the basis of all cost and impact assumptions in chapter 4.

The EIS working draft chapter 4 lacks an analysis of the increased compliance cost on the coal equilibrium supply and demand model and fails to explain the impacts of the price increase on important model outputs such as jobs, electricity supply and demand, and other important impacts.

- **Environmental Impact Assessment. (SOW A, 3.2 J)**

The EIS working draft chapter 4 fails to provide the underlying assumptions and calculations to support the 'Expert Elicitation' process used to arrive at the impact metric; it fails to provide the assumptions and thresholds used in the metrics that quantify the impact of the various alternatives in each of the coal regions; and it fails to thoroughly vet all variables and provide clear foundational support in the numerical analysis.

- **Cumulative impacts analysis. (SOW A, 3.2 J (4)(r))**

The EIS fails to include a cumulative impact analysis for impacts on ground water or an explanation of why an analysis is not needed or provided; the cumulative impact tables fail to provide a more complete, summarized description of the cumulative impacts; and the cumulative impact tables fail to differentiate by regions. The lack of adequate cumulative impact analysis is one of the more frequently cited serious shortcomings for an EIS under NEPA, and it is crucial to provide sufficient analysis of such impacts.

- **Coal production shifts. (SOW A, 3.2 D and J)**

Working draft chapter 4 of the EIS fails to consider the fact that anthracite coal production in the Appalachian Region cannot be "offset" by bituminous coal production in the western US and that therefore offsets for metallurgical coal production impacts may not be achievable under the assumptions used for coal production shifts.

- **Production shift methodology. (SOW A, 3.2 D and J)**

The EIS fails to include an analysis using a numeric method to support the production shift model and associated conclusions drawn in chapter 4.7 and discussed throughout chapter 4.

II. Regulatory Impact Analysis (SOW Section A, 3.2 H and J)

The EIS shall contain a Regulatory Impact Analysis (RIA) with cost-benefit data that fulfills the requirements of sections 6(a)(3) (B) and (C) of Executive Order 12866, 40 CFR 1502.23, OMB Circular A-4 and the Regulatory Flexibility Act (5 U.S.C.601) and provides documentary support for the analysis. The document submitted by PKS in December 2010, fails to comply with the requirements referenced in the SOW.

In order to cure the deficiencies, PKS must submit a revised RIA which meets the requirements of the SOW, and at a minimum:

- Discusses in conceptual terms how the economic analysis is approached, how costs and benefits are estimated, and how they are evaluated for this analysis;

- Discusses the need for the regulation, specifically addressing the extent to which market failures or information asymmetries are present. Discusses the necessity for the rule with regard to the conditions that indicate that a regulatory approach is appropriate;

- Corrects the numbers in Appendix-L to the RIA that were only intended to serve as "placeholders" to illustrate the cost impacts of the Stream Protection Rule (SPR) and that PKS later erroneously retained in its cost/benefit analysis;

- Includes a side-by-side table to facilitate a comparison among costs and benefits of three alternatives compared to conditions under OSM's 1983 rules (attributed to be zero): costs and benefits of the baseline 2008 rule, the most environmentally protective alternative, and the proposed regulation;

- Includes a side-by-side table to facilitate a comparison between the status quo and the proposed regulation;

- Discusses the methods and models used in the analysis in addition to providing the data sources;

- Includes a section on distributional issues related to coal production ;

- Clearly distinguishes between economic benefits and costs, transfer payments, and economic impacts; PKS was repeatedly warned *that impact analysis should not be the primary tool used for the regulatory impact analysis* and that reliance on the IMPLAN economic model was inappropriate for a cost/benefit analysis;

- Clearly states that the goal of the analysis is to evaluate net economic benefits from a national perspective;

- Defines the regulatory base line against which the net benefits will be evaluated;

- Defines the period of analysis and justifies the selection of this period;

- Discusses the anticipated pattern of implementation over time and how this might impact the accrual of the benefits and costs over time;

- Defines cost categories and explains how all costs were derived (e.g., compliance costs, OSM administrative costs, foregone production, increased electricity costs to consumers);

- Defines the benefit categories (e.g., water quality improvements, recreation benefits, health/safety, and visibility/noise reductions);

- Explains specifically how the regulation would be anticipated to affect each type of benefit in physical/biological terms and discusses how these effects might be monetized;

- Includes avoided costs as a measure of benefits and a justification for this approach and discounts costs and monetized benefits to the present; and

- Focuses on the net economic benefits to the nation rather than by region.

POLU KAI SERVICES

February 23, 2011

Nancy E. Sloanhoffer
Contracting Officer
United States Department of Interior
Office of Surface Mining Reclamation and Enforcement
Washington, D.C. 20240

Re: Cure Notice for Contract No. S10PC00060 with Polu Kai Services, LLC, Environmental Impact Statement and Regulatory Impact Analysis for Proposed Stream Protection Rule.

Dear Ms. Sloanhoffer:

1. Introduction

This letter responds to the U.S. Department of the Interior, Office of Surface Mining Reclamation and Enforcement's ("OSM") Cure Notice dated February 8, 2011 under Contract No. S10PC00060 ("Contract") with Polu Kai Services ("PKS").

PKS has attached a detailed response to each of the alleged deficiencies noted in OSM's Cure Notice with supporting exhibits. We have also submitted a Preliminary Draft Environmental Impact Statement ("PDEIS") and Draft Regulatory Impact Analysis ("RIA"). Those documents are incorporated herein and made a part of PKS' response to the Cure Notice.

A common theme throughout the PKS' detailed response attached hereto is that many of the alleged "deficiencies" in OSM's Cure Notice require PKS to re-perform work that was previously completed pursuant to specific OSM directives and approvals. Whether driven by political pressures or other reasons, OSM's departure from prior directives and approvals alters PKS's methodology in developing the PDEIS and draft RIA. This clearly cannot form the basis of a termination for default. Instead, this entitles PKS to schedule and monetary relief to the extent PKS must reanalyze and rewrite prior chapter segments.

The revised PDEIS and draft RIA address some of OSM's comments. Other areas that could not be completed today are not considered deficiencies. Rather, they are considered constructive changes since PKS must redo otherwise acceptable chapter segments, perform additional studies inconsistent with prior OSM directives and engage in other activities not contemplated by the parties' prior mutual understandings. PKS's response includes a work plan to address such items.

Polu Kai Services, LLC
Corporate Headquarters
137 North Washington Street, Suite 300, Falls Church, Virginia 22046
Phone (703)533-0039 Fax (703) 533-0442

PKS invites OSM to meet and discuss its work plan contained in the enclosed PKS response to the Cure Notice. At that time, the parties can agree on a realistic schedule to perform the additional tasks necessary to address OSM's comments in the Cure Notice, and where appropriate, to discuss appropriate monetary and schedule relief to PKS.

2. Discussion of Termination for Default Criteria

When terminating a contract for default, the Contracting Officer must consider all of the factors noted at FAR 49.402-3(f), namely:

1. The terms of the contract and applicable laws and regulations;
2. The specific failure of the contractor and the excuses for the failure;
3. The availability of the supplies or services from other sources;
4. The urgency of the need for the services and the time period to obtain them from other sources, as compared to the time the delinquent contractor can complete the work;
5. The effect of a termination for default on the ability of the contractor to liquidate guaranteed loans, progress payments, or advance payments;
6. The degree of essentiality of the contractor in the Government acquisition program; and
7. Any other pertinent facts and circumstances.

(FAR 49.402-3(f))

Consideration of the above factors may not be a "pro forma check off of [the FAR] factors," but is instead "an active and reasoned consideration of available and sometimes contradictory information." Appeal of Fraya S.E., 02-2 BCA ¶52,222. Courts and boards have ruled it an abuse of discretion where a contracting officer default terminates a contract without considering the above FAR factors. Appeal of Walsky Construction Co., ASBCA No. 41,541, 94-2 BCA ¶ 26,698. See also, e.g., Appeal of ABS Baumaschinenvertrieb, Gmbh, ASBCA No. 48,207, 00-2 BCA ¶31,090 (contracting officer's default determination fatally flawed because there was no evidence that she consider all of the factors); Rowe Inc. v. GSA, GSBCA No. 14,211, 01-2 BCA ¶31,630 (contracting officer must actually consider all FAR factors prior to termination for default).

PKS maintains that the OSM cannot meet the criteria for terminating a contract under FAR 49.402-3(f) for the reasons discussed next.

3. **OSM Cannot Terminate the Contract since the Alleged Deficiencies are not PKS's Responsibility or Fault.**

The PKS Team has been very frustrated with the direction and approval process of OSM, beginning with the kickoff meeting. At that time, PKS discovered that OSM did not intend to conduct any public scoping meetings, as required by the National Environmental Policy Act ("NEPA"). OSM later changed its mind and decided to hold scoping open houses in nine (9) locations across the U.S. within the same highly compressed schedule it had set forth without such meetings.

Because public input from the scoping sessions is intended to inform the EIS process, the development of a set of alternatives for analysis in the EIS was delayed three (3) months until the scoping process was completed. Even then, OSM failed for weeks thereafter to provide a clean and final version of the alternatives, a critical and indispensible predicate for the EIS analysis to proceed. OSM finally turned to the PKS Team to accomplish this task, but continued to drag out the process with changes to the approach and to the specific alternatives. Although approved in December 2010, we learned only a couple of weeks ago, after months of analysis, that OSM wanted to change the alternatives yet again.

These two examples demonstrate a lack of understanding of the NEPA process that have added severe delays and put the PKS Team in position where it was impossible to meet the already extremely aggressive schedule.

High turnover rates of OSM's Project Leaders and COTRs compounded these delays. The project has had two (2) OSM project leaders and two (2) COTRs in nine (9) months. This high turnover rate in OSM leadership and internal disputes within OSM staff has caused confusion regarding the methodologies, assumptions, and datasets to be used in developing the EIS. Indeed, parts of the Cure Notice itself are inconsistent with prior OSM directives and approvals.

When organizing the process and preparing the substance of the PDEIS and draft RIA, the PKS Team relied upon extensive comments from OSM staff and direction by OSM's Project Managers and COTRs. Yet, a majority of the alleged "deficiencies" listed in the Cure Notice are inconsistent with OSM's previous directions and approvals. They cannot, and do not, establish a basis for terminating the Contract for default.

The following OSM comments[1] in the Cure Notice illustrate this:

[1] This list of OSM comments is not exhaustive. PKS's response to the alleged deficiencies enclosed herein cites other instances where OSM has deviated from its prior directives or approvals.

- OSM alleges that it was wrong for PKS to rely upon 2008 EIA coal production data. OSM previously approved the use of that static data and a steady state thermal assumption, however. OSM now believes that use of a dynamic baseline using 2010 EIA data and a changing thermal output are appropriate. Both represent significant changes in an analytical approach that OSM approved months ago, and are not an indication that PKS's work is deficient.

- OSM states that draft Chapter 4 does not account for the availability/non-availability of transportation to allow western coal production to make up for a decreased production in the east, the potentially higher electricity costs to consumers caused by the increased cost of coal production, and the impacts on model outputs such as jobs and electricity supply/demand. As more fully discussed in the enclosed PKS response to the Cure Notice, OSM ignores the fact that it specifically instructed the PKS Team not to consider any outside factors in its analysis, including these factors which the PKS Team raised specifically.

- OSM alleges that the PDEIS does not accurately cite applicable regulations and contains errors regarding the statutory requirements relating to material damage. At no time during OSM's review of Chapters 3 and 4 did it provide any comments about perceived misperceptions of the cited legal requirements, and it is unclear from the Cure Notice precisely which provisions are in question.

- OSM alleges that Chapter 4 does not adequately address environmental impacts associated with each of the alternatives. This chapter analysis was performed pursuant to methodologies OSM had agreed to. In particular, PKS developed a grouping of resource areas when evaluating environmental impacts on water, land, and other elements. This was done in direct concert with OSM personnel embedded in the PKS team. By receiving real-time comments from embedded OSM personnel, PKS was able to facilitate the selection of the appropriate methodologies to be used. OSM's broad claim in the Cure Notice that Chapter 4 fails to address environmental impacts is contrary to its previous comments.

- PKS disagrees that a monetized cost-benefit analysis is required in this EIS. OSM's directive to monetize environmental costs or benefits separate from the RIA is therefore a change in direction.

Accordingly, when applying the FAR factors for a termination for default, the Contracting Officer cannot, in good faith, terminate the Contract since many of the so-called deficiencies in the Cure Notice are not the fault or responsibility of PKS.

4. **The OSM Cannot Justify a Termination for Default Given the Time it Would Take Another Contractor to Complete the Work.**

Apart from the fact that PKS is entitled to more time to perform additional tasks, it is equally clear that OSM cannot justify terminating the Contract for default given the time it would take another contractor to complete the work. (FAR 49.402(f)(4)). The agency abuses its discretion if it does not fully consider the time and cost to re-procure under this factor, as compared with remaining with the delinquent contractor. Brandywine Prosthetic-Orthotic, VABCA No. 3441, 93-1, BCA ¶25,250; Appeal of JamCo Constructors Inc, VABCA Nos. 3516T and 327, 94-1 BCA ¶26,405.

With the work completed to date, and the time it would take to re-procure the remaining work of this contract, it would be imprudent for OSM to find another contractor to complete the project. In fact, it is unlikely that OSM could find another contractor who can do better than PKS. The PKS Team is comprised of subject matter experts, who were specifically identified and accepted by OSM because of their expertise. These SMEs collectively bring hundreds of years of in depth working knowledge of and experience with these regulations and their requirements.

Moreover, a replacement prime contractor would be faced with a learning curve; would have to guarantee all prior completed work; and would have to negotiate the remaining work staying within a specific budget. Once this long process is accomplished, the prime would then have to negotiate the subcontractor agreements. With these tasks, coupled with the remaining work to be completed, PKS believes the OSM cannot justify terminating the contract given the much longer amount of time it would take another prime contractor to complete the work.

5. **A Default Termination Will Negatively Impact PKS's Ability to Pay Guaranteed Loans with the Government.**

PKS is a small disadvantage business. If OSM terminates the Contract for default and improperly seeks reprocurement costs, this could have a devastating impact on PKS and its subcontractors. Their business reputations and ability to procure other Government contract would be immediately and negatively impacted. PKS submits that this is yet another independent and legitimate basis against terminating the contract for default.

6. **OSM Must Revise the Completion Date Based on a Realistic Estimate of How Long it Will Realistically Take PKS to Complete the Work.**

A termination for default is improper where the contractor can establish that the delay in completion of the work arises from unforeseeable causes beyond the contractor's control and fault. (FAR 52.249-8(c)) In this regard, PKS and its subcontractors have, and will continue to, experience delays because of OSM's shifting directions on how to develop and finalize Chapters 1-4 of the draft PDEIS.

OSM cannot insist on an unrealistic date of February 23, 2011 to complete all of the tasks required by the Cure Notice, particularly those that are inconsistent with OSM's prior directives and approvals. PKS is prepared to meet with the OSM to re-establish a new completion date that realistically accounts for the work to be completed. This is the only reasonable course of action OSM can take at this time. This schedule will be predicated upon the full cooperation of the all parties, including OSM, so that the work can be completed with minimal further delays.

7. **Conclusion**

OSM does not have the right to terminate the Contract for default. This harsh remedy is not available here since among other reasons (1) OSM's alleged "deficiencies" are not deficiencies at all, but rather requests to reanalyze and rewrite work performed pursuant to prior OSM directives and approvals; (2) PKS has encountered excusable delays due to OSM's shifting directions and withdrawal of prior approvals; (3) the PKS Team continues to work; (4) it would take another contractor considerably longer to complete the work; and (5) a termination for default will adversely impact a service disabled, veteran owned and small disadvantaged business.

PKS therefore respectfully requests that the OSM withdraw its threat of termination and allow PKS to continue performance under a mutually agreeable schedule and budget. PKS reserves the right to supplement this response to the OSM's Cure Notice, if necessary. PKS also reserves all rights to claim additional time and money associated with OSM directives that require extra work.

POLU KAI SERVICES

I look forward to amicably resolving this matter with OSM.

Sincerely,

Jose J. Sosa
Executive Vice-President

cc: ECSI, LLC
Mactec Engineering and Consulting, Inc.
Manfredonia Law Offices, LLC
Morgan Worldwide Consultants, Inc.
Plexus Scientific Corporation
U.S. Small Business Administration

ENCL.: PKS Response to OSM's Allegations of Deficiencies in Cure Notice with Supporting Documents

PDEIS & RIA deliverable

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ENCLOSURE

PKS DETAILED RESPONSE TO OSM CURE NOTICE

PKS Responses and Work Plan to Address Alleged Deficiencies of the Working Draft Chapters

INTRODUCTION

The purposes of these Responses and our proposed Work Plan are to respond to the alleged deficiencies set forth in the February 8, 2011 Cure Notice and to outline actions that the PKS Team proposes to address those deficiencies and move forward with the project. Some of the items listed in the cure notice attachment were raised in comments to the first working draft of Chapter 4, and they are being addressed as part of the continuing work on that chapter. Other items in the cure notice attachment were first raised during our face-to-face meeting in Washington, DC on February 1, 2011, and are contrary to OSM's previous guidance and approved processes and approaches. Where we are able to make changes consistent with previously approved guidance and commented on sections of the draft documents, we are proposing to do so. In other cases, particularly those involving new directions from OSM, we are proposing a path forward to incorporate those changes in a subsequent draft document, subject to approval of necessary scope, time, and budget changes.

The constant change of direction, change in assumptions, withdrawal of approvals, change in data sets, etc. has resulted in *de facto* change orders or contract modifications without going through the formal process. A secondary effect of these changes has been to frustrate coordination among the contractors and to exhaust contract budgets for services rendered.

We are aware that changes will be necessary based on the new directions being provided and current OSM positions. The document being submitted on February 23rd, however, will not reflect changes in Chapters 1, 2, and 3, which were submitted to OSM in September and October, commented on by OSM in October to December, and have long been revised for incorporation into the PDEIS. The time remaining for this submission is too short to make additional changes. As a result, those chapters may not reflect OSM's current thinking as raised during our February 1st meeting in Washington, DC; by the OSM Rule Team's prioritized list; or during our meetings on February 10th -11th in Lexington, KY. Nonetheless, we are proposing in this Work Plan our intent to annotate the document with notes indicating where certain changes would be made or are required based on OSM's new instructions. This Work Plan also indicates how the PKS Team would approach such additional work as an expansion of scope and subject to additional time and funding.

I. Environmental Impact Statement (SOW 2.0 Background)

OSM Criticisim:

The working draft EIS chapters fail to provide the information required by the SOW, do not comply with NEPA, and are not acceptable. In order to cure the deficiencies, PKS must submit a Preliminary Draft EIS which meets the requirements of the SOW. OSM provided detailed comments to PKS on each of the working draft EIS chapters, which identify deficiencies and inaccuracies in those chapters.

PKS Response:

The allegation is overbroad, unsupported, and untrue. PKS has submitted the *first working draft* of four chapters of the Stream Protection Rule EIS, each of which complies with the SOW, NEPA, and OSM direction as it was then discussed, provided, and approved. Each element of the SOW has been addressed, at least to the extent that it makes sense to do so in the EIS or was not otherwise countermanded during discussions with OSM personnel. For example, one SOW requirement (see SOW 3.2H) is not "contained" in the EIS because it is not appropriate to do so – the RIA is a separate document that supports the rulemaking. None of the bulleted subparagraphs under this heading detail a specific violation of NEPA requirements, but rather indicate a change in approach or disagreement or misunderstanding on the level of analysis provided, required, or desired.

It is noteworthy that many of the alleged "deficiencies" are the direct result of discussions with OSM team members and specific direction given by OSM's Project Managers and CORs, further discussion and evidence of which are provided in those sections. An EIS generally is evaluated from two perspectives: procedural and substantive. The PKS Team has received extensive guidance and direction from OSM staff on both the EIS process and substance. Much of the recent OSM guidance, particularly that provided since February 1, 2011, is contrary to that previous guidance. It is simply not possible to "undo" our previous work to date and change directions on EIS perspective, content, and approaches without implications to effort and timing.

Regarding procedural factors, we have successfully completed all required EIS process steps assigned to our team to date. There are no EIS procedural issues from a contractor responsibility perspective. Regarding substantive factors, we have produced all required first drafts of the first four EIS chapters, as required in our scope of work. We are in the process of preparing other required draft chapters and preparing revised chapters of the EIS per OSM comments and direction. Again, all materials submitted to date are *first working drafts* based on available

information, OSM direction, and our assessment at the time of drafting. They were never intended to, nor could they be considered, final.

PKS Work Plan:

The PKS Team will continue to work with OSM EIS and Rule Teams to identify and address changes that are necessary to reflect OSM's current approach. In doing so, we will identify those areas specifically that were completed per OSM's previous guidance and that now require revision based on new OSM guidance.

1. **Representation of Regulations (SOW A, 3.2 F and J(2)(e))**

OSM Criticisim:

Working draft chapters 3 and 4 fail to accurately characterize relevant provisions of the Surface Mining Control and Reclamation Act of 1977 (SMCRA) and current regulations at 30 CFR Chapter VII. We are particularly concerned about numerous errors regarding the 2008 Stream Buffer Zone Rule; 30 CFR Parts 780, 784, 816, and 817; the Advance Notice of Proposed Rulemaking (ANPR) for the proposed Stream Protection Rule (SPR), 74 Fed. Reg. 62664 (November 20, 2009); and statutory requirements relating to "material damage," 30 U.S.C. § 1260(b)(3), which are found throughout draft EIS chapters. The draft EIS is fundamentally flawed because the draft impact assessment relies on these mischaracterizations and erroneous interpretations of SMCRA, 30 CFR Chapter VII, and OSM's preferred alternative.

PKS Response:

The PKS Team is comprised of subject matter experts, who were specifically identified and accepted by the agency because of their expertise. These SMEs collectively bring hundreds of years of in depth working knowledge of and experience with these regulations and their requirements. PKS disagrees that it has misrepresented or mischaracterized any of the cited references. Because the allegation fails to identify specific instances of misrepresentation or mischaracterization, PKS is unable to respond more specifically. With respect to the specific comment regarding "material damage," we do note that the agency's representatives previously provided guidance and interpretation of the impact of the propose rule's provisions on "material damage" that is inconsistent with their most recent interpretation.

PKS Work Plan:

We have incorporated OSM's written comments to Chapters 3 and 4, which we assume would have included identification of any perceived misrepresentation of the cited references. The PKS

Team will continue to work with OSM EIS and Rule Teams to identify and address changes (including those related to material damage) that are necessary to reflect OSM's current approach or address perceived misrepresentations that were not identified in its previous written comments to Chapters 3 and 4. With the addition of the Rule Team perspective, this wholly integrated OSM-PKS team approach proved effective last week during our joint meeting at the OSM's regional offices in Lexington, KY. We will identify those areas specifically that were completed per OSM's previous guidance and that now require revision based on new OSM guidance.

2. **Baseline Condition (SOW A, 3.2 J(1))**

OSM Criticisim:

Working draft chapter 4 of the EIS fails to use 30 CFR Chapter VII in its entirety as the baseline for all comparisons of the impacts of action alternatives. Further, draft chapter 4 inappropriately relies on 2008 coal production data, the highest coal production ever in the history of the US, as the basis for drawing conclusions, thereby failing to account for the impact of supply and demand economies.

PKS Response:

The allegation that Chapter 4 fails to use 30 CFR Chapter VII as the baseline for comparison is too general and unspecific to comment on. The SOW requires that the analysis of alternatives be set against the base alternative of "no action." We have done so. We have also included comparisons of the alternative with each other where doing so was appropriate. The latter comparison was suggested in the development of Chapter 2 and seemed appropriate to carry forward into Chapter 4.

Regarding the alleged improper use of 2008 EIA coal production data, OSM directed the PKS Team to use such data. The circumstances surrounding this one point are instructive about this whole process and the impact of the agency's changing directions.
After considerable discussion, by email dated 12/20/10, the COR (Ms. Varvell) forwarded the Project Manager's (Mr. Craynon) confirmation of the methodology for establishing the baseline for coal production shifts. ***(Attachment 1, Email from Stephanie Varvell to John Maxwell dated 12/20/10).*** This email state in pertinent part that:

> "John: I just spoke with John Craynon. He asked me to send a note to you confirming the methodology as described ...."

> Mr. Maxwell's email to which Stephanie is referring (and providing John Craynon's confirmation/approval) states:
> "... As a primary assumption for this impact analysis we all agreed (PKS/OSM team) that we should treat the US coal supply as a steady state; specifically we should maintain the US coal production at the 2008 level, as defined by the EIA (but adjusted for energy content). Anything more complex would be unmanageable."

The 2008 data underpin the analysis in Chapter 4 and the RIA. The PKS Team relied on the approval provided by the Project Manager and COR in expending the time and budget to produce the first working draft of Chapter 4 and the draft RIA. OSM first indicated their concern with the use of 2008 data when news of the potential adverse impacts on jobs in Appalachia was leaked to the public and press, ostensibly by one of the cooperating agencies.

At our meeting on February 1st, OSM representatives suggested that the data should be changed to include any impacts that might be expected from implementation of the 2008 Stream Buffer Zone Rule (SBZ), a rule adopted by the Bush Administration in December 2008, repudiated by the Obama Administration in January 2009, and now subject to significant modification by the current rulemaking effort that is the object of this EIS. Due to litigation and this rulemaking effort, the 2008 SBZ has not been implemented (except perhaps in Tennessee). Although the regulatory impact analysis accompanying publication of the SBZ concluded that "the rule will not have an annual effect of $100 million or more on the economy.... it will not adversely affect in a material way the economy, productivity, completion, jobs, the environment, public health or safety, or state, local, or tribal governments or communities," we were asked to consider its impact on coal production as if it had been implemented fully. The PKS team reserves its judgment that the impact and benefit conclusions set forth in the 2008 SBZ EIS are accurate and should be accepted in any future analysis.

On February 6th, John Morgan, PKS Team member suggested using 2010 data as published by the Energy Information Administration (EIA), an agency in the Department of Energy ***(Attachment 2, Email dated 2/6/11 from J. Morgan and cc'd to OSM).*** Instead of extrapolating data on a steady state energy production as previously agreed and approved, we proposed to adopt a dynamic baseline to analyze production impacts that would take into account trends and regulatory influences already occurring in the industry. We proposed to use these data as the baseline and then identify additional production shifts that would occur under each alternative. On Tuesday morning, Mr. Winters, the newly assigned Project Manager, indicated "I like the dynamic idea a lot. It addresses a number of issues missing from the 2008 model method." ***(Attachment 3, Email dated 2/8/11 from B. Winters to PKS).***

On February 8th, PKS received Mr. Winters' "prioritized list" of actions necessary to address the OSM Rule Team's concerns with Chapter 4. ***(Attachment 4, Email dated 2/8/11 from B. Winters to PKS).*** Regarding the use of the 2008 data, Mr. Winters states, "It is also strongly suggested to use an average coal production tonnage rate to account for market fluctuations over the past 2-3 years. Using 2008 data, the highest coal production ever in the history of the US, as

the basis for drawing conclusion may miss the impact of supply and demand economics on production." This was the first time a "strong suggestion" to use an average of coal production data over a multi-year period had been put forth, but more to the point, it directly refuted or ignored the guidance provided on 12/20/11, 2/1/11, and earlier on 2/8/11. In subsequent discussions with OSM in Lexington, KY on February 10th and 11th, it appears the analysis using dynamic baseline contained in the 2010 EIA data is preferred. The PKS team does not necessarily agree with OSM's conclusion characterizing the 2008 EIA data as an anomaly, and this warrants further discussion.

In addition, discussions in the last two weeks suggest OSM has now reversed its previous direction on maintaining a national thermal balance during implementation. Further discussions with OSM now suggest that PKS select typical mines from each region to be analyzed and extrapolated for impacts and benefits, which are to be used in conjunction with the analysis of the 2010 dynamic baseline data. This is a significant change and reversal of previous direction and will markedly impact many sections of this EIS.

Finally, the recent instruction from Mr. Winters to selected members of the PKS team) that the implementation timeline is now changed to 8.5 years from 12 years will also have a demonstrable impact on the analysis and therefore on the EIS generally. ***(Attachment 5, Email dated 2/18/11 from B. Winters to PKS)***

Given the indictment of use of the 2008 data and conflicting and varying guidance and direction, the PKS Team is awaiting OSM's written decision on which methodology and data to use for the baseline so that the analysis of alternatives required in Chapter 4 can proceed.

PKS Work Plan:

The PKS Team will review its work to ensure that the alternatives are analyzed in comparison to Alternative 1, the No Action Alternative, and strengthen that analysis where appropriate.

With respect to which baseline data to use for analysis of coal production impacts, the PKS Team will discuss and work with the OSM EIS and Rule Teams to identify and formulate a plan for collecting, analyzing, and describing the impacts to coal production occasioned by each of the alternatives. While we believe that use of the dynamic baseline analysis and 2010 EIA data will address OSM's concerns with use of the 2008 data, any such approach must be first be approved by OSM's key decision makers and reflected in an appropriate modification to PKS's contract. Such an effort represents an addition to the scope of this project inasmuch as OSM approved the previous guidance and methodology, and the PKS Team conducted the analysis in compliance therewith. Further work in a new direction would required additional time and budget.

3. **Description of current mining and reclamation regulations and practice. (SOW A, 3.2 C)**

OSM Criticisim:

The EIS fails to contain a description of the current regulatory structure and practice for each of the major elements in the EIS under all alternatives.

PKS Response:

Chapter 2 contains a description of the No Action Alternative, which represents the current regulations under consideration. This Chapter was also approved by OSM. Chapter 3 contains a thorough description of current mining practices and was approved by OSM. Chapter 3 also contains an abbreviated regulatory environment section based on direction provided by the OSM Project Manager at our September 21, 2010 meeting in Atlanta. Per OSM direction, PKS incorporated by reference the extensive regulatory discussion from the 2008 EIS and updated it with key regulatory events that occurred since the 2008 EIS was prepared. OSM provided no additional comments on this section during review in October/November.

PKS Work Plan:

The PKS Team will continue to work with OSM EIS and Rule Teams to identify and address changes that are necessary to reflect OSM's current approach. We will identify those areas specifically that were completed per OSM's previous guidance and that now require revision based on new OSM guidance.

4. **Level of Detail Across Regions. (SOW A, 3.2 D and J(2)(d))**

OSM Criticisim:

Working draft chapter 4 of the EIS fails to provide an appropriate level of detail in evaluating impacts for all coal regions and the analysis of impacts of the proposed action is skewed to focus disproportionately on one region (i.e., the Appalachian Basin).

PKS Response:

As OSM has observed in the 2008 SBZ and in the draft Rule, and we can confirm, most of the research and studies concerning the impacts of mining have been conducted in the Appalachian Basin. In some instances, information and studies have not been developed for other regions, e.g., ephemeral streams (OSM also confirmed the unavailability of ephemeral stream data). This

will also affect the cost – benefit discussion for each of the alternatives, resource areas, and regions. As we observed during our February 10th and 11th meetings in Lexington, the cost – benefit analysis varies by region depending on the provision.

PKS Work Plan:

As discussed recently, the PKS Team proposes to identify specifically in the discussion for certain regions the unavailability or lack of information on particular discussion points. We will ensure the criteria set forth in CEQ Regulations (Section 1502.22(b)) are addressed. The expanded discussion of relative cost – benefits will also note regional variances. The PKS Team proposes to expand the Alternatives 2 and 5 matrixes developed and discussed during the Lexington meeting.

5. **Impact Analysis (SOW A, 3.2 D and G)**

The Alleged Deficiencies under this heading have been separated by paragraph for ease of discussion.

OSM Criticism:

A crucial shortcoming of working draft chapter 4 is that the draft does not include an adequate analysis of the environmental impacts of key aspects of the action alternatives. Instead, it effectively focuses on the impacts of different levels of coal production, as a surrogate for analysis of environmental impacts of key aspects. As a result, the EIS fails to provide the most fundamental and important type of analysis required under NEPA. By the same token, while some discussion of costs and other impacts on mining operations may be appropriate, it belongs in a discussion of socio-economic impacts, and not in the primary discussion of environmental impacts.

PKS Response:

PKS disagrees that it has failed to address environmental impacts associated with each of the alternatives. The Chapter 4 analysis was conducted consistent with agreed methodologies. The current grouping of resource areas, developed in November in concert with OSM's "embedded" team members, was designed to facilitate this analysis. In addition to grouping the elements into seven resource areas, each was then analyzed in the context of water, land, and other elements.

PKS and OSM also agreed on an analytical framework for identifying mining related impacts. As reflected in the email dated 12/20/10, PKS sought and received OSM approval of the following:

> "Based on the projected production shifts resulting from the Alternatives we have defined the need to use certain key metric and the metrics agreed upon are:
>
> - Tons of production by region and by mining type
> - Stream length (perennial and intermittent) per ton of coal mined by region
> - Acre disturbed per ton of coal mined by region and by mining type
> - Tons of coal per permit by region and by mining type
> - Employment per ton of coal mined by region and by mining type
>
> "We believe that these are all of the relevant metric and that they are adequate to provide a reasonable disclosure of potential impacts in Chapter #4."

PKS Work Plan:

The PKS Team proposes to expand the discussion of environmental benefits associated with various resource areas. During our February 1st, 10th, and 11th meetings, the PKS and OSM Teams discussed various specific benefits (starting with OSM's list of 20) and an analytical approach that assists in identifying environmental effects that may not have been captured previously. In addition to incorporating changes in response to comments provided on January 28th, and in light of recent discussions, the PKS Team will identify both avoided impacts due to coal production shifts, as well as the environmental benefits and impacts resulting from changes in mining practices to comply with the new regulations. We would also expand the discussion in the methodology section to describe both perspectives and their relevance to the analysis.

OSM Criticism:

Another critical shortcoming of working draft chapter 4 is that the draft does not provide a comparative discussion of the most important impacts of each key element of each alternative, so that a decision maker can decide whether to retain, reject, or modify particular elements when action on the rulemaking. The most important impacts would include any important costs and benefits that should be considered. For example, draft chapter 4 does not provide sufficient information to enable a decision maker to determining the costs of the key elements of the preferred alternative or any other alternative. And the lack of this information renders the EIS useless for purposes of assessing and perhaps modifying the alternatives.

PKS Response:

Each alternative is described and summarized in Chapter 2 of the EIS. The Chapter 2 description includes a comparison to the No Action Alternative, as well as to the other alternatives. As currently structured, Chapter 2 includes a fold-out matrix comparison of each of the elements associated with all five alternatives. As required by the SOW, PKS provided sections as they were completed. Because of the disjunctive review process for these *first working drafts* of each chapter, this aide was not available to reviewers of the working draft of Chapter 4 (unless they retained it from their review of Chapter 2).

PKS Work Plan:

PKS proposes to include a transition and introductory section for each alternative and each resource area, summarizing any major benefits or adverse impacts.

OSM Criticisim:

The draft EIS fails to include or reference a cost-benefit analysis of the probable costs of the proposed rulemaking, and a monetized benefit equivalent, to evaluate the overall net impact of the rulemaking. It is OSM's understanding that an underpinning of the impact analysis in the draft EIS is the Appendix –L to the RIA which contained "placeholder" cost data intended to be illustrative of the methodology only and should not have formed the basis of all cost and impact assumptions in chapter 4.

PKS Response:

PKS disagrees that a monetized cost – benefit analysis is required in this EIS. CEQ Regulations (Section 1502.23) indicate that where a cost – benefit analysis is relevant, it shall be incorporated by reference or appended to the EIS. In this case, the RIA is the appropriate vehicle for identifying the overall net impact of the rulemaking, and we intend to refer to it in the EIS, but not append it to the EIS. Section 1502.23 also states that "the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost – benefit analysis and *should not be* when there are important qualitative considerations" (emphasis added). While we will reference the RIA, it does not provide the balanced analysis of all alternatives that is required in the EIS. The RIA provides a limited cost – benefit analysis of three of the five alternatives (Alternatives 1 (no action), 2, and 5 (the preferred alternative)). The omission of any analysis in the RIA of Alternative s3 and 4 would create an unacceptable imbalance in the EIS analysis. Additionally, a monetized approach might overshadow important qualitative considerations.

PKS Work Plan:

PKS proposes to expand the cost – benefit analysis in the EIS to include additional discussion of benefits associated with avoided impacts due to coal production shifts, as well as the environmental benefits and impacts resulting from changes in mining practices, as noted previously. This discussion would entail qualitative factors with quantification where available and appropriate. We propose to reference the RIA in this EIS and to ensure that the conclusions drawn in the EIS are consistent with those of the RIA.

OSM Criticism:

The EIS working draft chapter 4 lacks an analysis of the increased compliance cost on the coal equilibrium supply and demand model and fails to explain the impacts of the price increase on important model outputs such as jobs, electricity supply and demand, and other important impacts.

PKS Response:

The PKS Team was specifically instructed not to consider any outside factors whatsoever in its analysis. Upon specific inquiry, the OSM Project Manager instructed the PKS Team not to consider electricity supply and demand, transportation, greenhouse gases, infrastructure, or the ability to produce and transport coal from other regions of the country to make up for production shifts, etc. At our February 1st meeting, we were told OSM was discussing whether the impacts from greenhouse gas emissions should now be included in this EIS. As of this response, we have not received further guidance. The PKS Team is now being unfairly criticized for doing what the agency directed only a few months ago. Any change in this instruction amounts to a re-start of our analysis and would require additional time and budget to accomplish.

6. **Environmental Impact Assessment (SOW A, 3.2 J)**

OSM Criticism:

The EIS working draft chapter 4 fails to provide the underlying assumptions and calculations to support the 'Expert Elicitation' process used to arrive at the impact metric; it fails to provide the assumptions and thresholds used in the metrics that quantify the impact of the various alternatives in each of the coal regions; and it fails; to thoroughly vet all variables and provide clear foundational support in the numerical analysis.

PKS Response:

As previously discussed in detail under the Baseline Condition heading, OSM approved the production shift methodology approach by email from Stephanie Varvell dated December 20,

2010. In the weeks preceding, the PKS Team discussed the production shift methodology extensively with OSM. It was repeatedly explained to the OSM representatives that the impact analysis was based on the SME's assessment of the effect that the implementation of each of the alternatives would have on coal production at each one of the seven analyzed regions. It was also explained that, out of the 11 elements contained in the analysis matrix, five (5) were considered as having a performance impact, i.e., affecting the baseline production levels, namely, (a) Material Damage definition, (b) Activities In or Near Streams, (c) Mining Through Streams, (d) Surface Configuration and Fills, and (e) AOC Exceptions. We explained further that the expert panel had informally elicited those impacts and, therefore, there was no "numerical model" to be presented, since the magnitude of those impacts was not calculated but rather estimated based on the experts' knowledge of the industry, mining methods, and coal producing regions.

It is worth noting that, although the Scope of Work requires verification of data with coal industry representatives, on November 2, 2010, OSM provided written instructions that the industry was not to be surveyed or polled. That fact alone adversely impacted the verification of the analysis. In addition, and once again, our SMEs were instructed not to consider other factors that may be causing a shift of current production, such as the recent actions of the EPA and the U.S. Army Corps of Engineers.

At the February 1, 2011 meeting in Washington, DC, OSM also mentioned that the expert elicitation discussion failed to identify the SMEs or their qualifications. As noted at that time, Chapter 6 identifies "preparers and contributors" to the EIS and our intent is to identify these experts in that chapter. Again, the disjunctive review process appears to have contributed to some confusion.

PKS Work Plan:

Chapter 6 will identify the SMEs involved in the elicitation process, and a cross reference will be inserted in the Chapter 4 text.

The shift in methodology and baseline data to a dynamic model using 2010 EIA data will address the criticism noted above. The PKS Team, however, would implement any such shift only upon an explicit and specific approval by OSM, along with appropriate scope, time, and budget changes. It would also be appropriate to establish milestones that OSM would sign off on as the analysis progresses. As noted previously, this new approach amounts to a "do-over" of work performed pursuant to a methodology and baseline that OSM approved prior to implementation. We have delivered the requested analysis using those vetted and approved assumptions, and have expended our budgeted time and funding doing so. We do not dispute OSM's prerogative to

change its mind or seek other approaches, but this shift in methodology or baseline data amounts to a change order warranting a new scope, time, and funding.

7. Cumulative Impacts Analysis (SOW A, 3.2 J(4)(r))

OSM Criticism:

The EIS fails to include a cumulative impact analysis for impacts on groundwater or an explanation of why an analysis is not needed or provided; the cumulative impact tables fail to provide a more complete, summarized description of the cumulative impacts; and the cumulative impact tables fail to differentiate by regions. The lack of adequate cumulative impact analysis is one of the more frequently cited serious shortcomings for an EIS under NEPA, and it is crucial to provide sufficient analysis of such impacts.

PKS Response:

During the Lexington meetings (November 16-17, 2010), PKS was given specific direction by John Craynon and David Hartos on how to approach cumulative impacts. That direction centered on using the context, approach, and data/information from the OSM 2008 SBZ EIS as the basis for the SPR EIS cumulative impacts analysis. Upon discussion during those meetings, it was clear that the cumulative impacts issues for both EISs were similar, and Messrs. Hartos and Craynon felt comfortable with the 2008 SBZ EIS approach. PKS confirm this in an email to Mr. Craynon. ***(Attachment 6, Email dated 12/10/2011 from J. Maxwell to John Caynon)*** This approach was consistent with scope of work guidance to use existing information to the maximum extent possible.

The cumulative impacts section, as prepared for the first working draft Chapter 4 submittal, followed that OSM direction precisely. Using the 2008 SBZ analysis as a basis, we cleaned up and expanded the tables, provided additional context, and presented conclusions about cumulative impacts (which were not included in the 2008 SBZ EIS). The section currently provides a reasonable assessment of potential cumulative impacts and issues given the OSM direction and available information for a programmatic-level EIS.

Overall, we have followed the specific guidance given to us by OSM staff, and the discussion on cumulative impacts is relevant, meaningful, and complies with CEQ intent and content requirements. Since the cumulative impacts analysis follows the 2008 SBZ EIS approach closely, if the SPR cumulative impact analysis were judged to be deficient, then the 2008 SBZ EIS cumulative impacts analysis would also have to be judged deficient. OSM did not provide any other information, data, or context that would have affected the cumulative impacts analysis as prepared. If OSM now has other specific information to include or other specific guidance, it

should bring that specific information forward to supplement the analysis.

PKS Work Plan:

PKS will add groundwater flow as a cumulative impact topic and provide more regional context for cumulative impacts in the revised PDEIS version, along with other OSM comments as directed by John Craynon. We will also provide additional text on the importance of the Clean Water Act requirements that affect cumulative impacts context and conclusions.

8. **Coal Production Shifts. (SOW A, 3.2 D and J)**

OSM Criticism:

Working draft chapter 4 of the EIS fails to consider the fact that anthracite coal production in the Appalachian Region cannot be "offset" by bituminous coal production in the western US and that therefore offsets for metallurgical coal production impacts may not be achievable under the assumptions used for coal production shifts.

PKS Response:

OSM's comment concerning anthracite and metallurgical coal production is quite interesting. Anthracite is a very minor tonnage and does not markedly affect the analysis.

PKS Work Plan:

PKS will review this comment in more detail and make appropriate edits to the analysis. Metallurgical coal production will be reexamined in the production shift analysis.

9. **Production shift methodology. (SOW A, 3.2 D and J)**

OSM Criticism:

The EIS fails to include an analysis using a numeric method to support the production shift model and associated conclusions drawn in chapter 4.7 and discussed throughout chapter 4.

PKS Response:

Please refer to the discussion in the sections entitled "Baseline Condition" and "Environmental Impact Assessment."

PKS Work Plan:

Please refer to the discussion in the sections entitled "Baseline Condition" and "Environmental Impact Assessment."

II. Regulatory Impact Analysis (SOW Section A, 3.2 H and J)

OSM Criticism:

The EIS shall contain a Regulatory Impact Analysis (RIA) with cost-benefit data that fulfills the requirements of sections 6(a)(3) (B) and (C) of Executive Order 12866, 40 CFR 1502.23, OMB Circular A-4 and the Regulatory Flexibility Act (5 U.S.C. 601) and provides documentary support for the analysis. The document submitted by PKS in December 2010, fails to comply with the requirements referenced in the SOW.
In order to cure the deficiencies, PKS must submit a revised RIA which meets the requirements of the SOW and at a minimum:

- *Discusses in conceptual terms how the economic analysis is approached, how costs and benefits are estimated, and how they are evaluated for this analysis;*
- *Discusses the need for the regulation, specifically addressing the extent to which market failures or information asymmetries are present. Discusses the necessity for the rule with regard to conditions that indicate that a regulatory approach is appropriate;*
- *Corrects the numbers in Appendix-L to the RIA that were only intended to serve as "placeholders" to illustrate the cost impacts of the Stream Protection Rule (SPR) and that PK later erroneously retained in its cost/benefit analysis;*
- *Includes a side-by-side table to facilitate a comparison among costs and benefits of three alternatives compared to conditions under OSM's 1983 rules (attributed to be zero); costs and benefits of the baseline 2008 rule, the most environmentally protective alternative, and the proposed regulation;*
- *Includes a side-by-side table to facilitate a comparison between the status quo and the proposed regulation;*
- *Discusses the methods and models used in the analysis in addition to providing the data sources;*
- *Includes a section on distributional issues related to coal production;*
- *Clearly distinguishes between economic benefits and costs, transfer payments, and economic impacts; PKS was repeatedly water that impact analysis should not be the primary tool used for the regulatory impact analysis and that reliance on the IMPLAN economic model was inappropriate for a cost/benefit analysis;*
- *Clearly state that the goal of the analysis is to evaluate net economic benefits from a national perspective;*

- *Defines the regulatory baseline against which the net benefits will be evaluated;*
- *Defines the period of analysis and justifies the selection of this period;*
- *Discusses the anticipated pattern of implementation over time and how this might impact the accrual of the benefits and costs over time;*
- *Defines cost categories and explains how all costs were derived (e.g., compliance costs, OSM administrative costs, foregone production, increased electricity costs to consumers);*
- *Defines the benefit categories (e.g., water quality improvements, recreation benefits, health/safety, and visibility/noise reductions);*
- *Explains specifically how the regulation would be anticipated to affect each type of benefit in physical/biological terms and discusses how these effects might be monetized;*
- *Includes avoided costs as a measure of benefits and a justification for this approach and discount costs and monetized benefits to the present; and*
- *Focuses on the net economic benefits to the nation rather that by region.*

PKS Response:

Although the SOW states that the EIS will "contain" an RIA, it is inappropriate to do so, and we have been proceeding with a separate RIA that will support the rulemaking. OSM has approved this course of action. PKS asserts that the document submitted in December 2010 was a work in progress that requires additional data and input from the agency.

The PKS Team has attempted to work and collaborate with OSM on RIA development since the inception of the project in June 2010. ***(Attachment 7, Email dated 7/1/10 from D. Iannone to J. Jenkens)***. The PKS Team made inquiries to OSM on July 1, 2010 requesting specific information on the proposed rule and information on the RIA. The PKS Team was provided a 9-page text on the Regulatory Flexibility Act analysis pertaining to the 2008 EIS. The PKS Team submitted a draft RIA outline to OSM on July 6, 2010 and requested concurrence or a recommendation of an alternative approach. ***(Attachment 8, Email dated 7/6/10 from J. Jenkins to PKS)***. In that outline, the PKS Team proposed to use IMPLAN to model the costs and benefits of the proposed rule. A key understanding giving shape to the modeling methodology was that the RIA gives "primary" attention to the economic impacts of the proposed SPR on the coal mining industry and coal-producing areas, including some coal counties, the 26 coal-mining states, and multi-state coal-mining regions. In light of this, the use of an input-output model IMPLAN would allow the study to be done in a consistent manner across the identified coal-mining areas and the industry itself. Furthermore, because OSM had not yet developed its alternatives, the PKS Team's proposed outline indicated that the RIA would evaluate only the proposed rule, with focus on the various coal producing regions. No comments were received from OSM.

The PKS Team notified OSM and the PKS Team at the July 14, 2010 face-to-face meeting in Lexington, Kentucky that certain elements were needed to develop an Office of Management and Budget (OMB)-compliant RIA. These elements were not available because OSM had not yet settled on its EIS alternatives, and therefore much work was required on the SPR alternatives development (exclusive of the RIA itself) to meet a September 2010 draft RIA submittal. Specifically, the elements needed were the preferred alternative and alternative regulatory approaches. Because the preferred alternative and alternative regulatory approaches were not known at that time, any rigorous attempts to develop impacts, costs, benefits, and subsequently a cost-benefit analysis could not be started. Upon notification of this shortfall, OSM indicated at the July meeting that the RIA would be designated "conceptual" and this Conceptual RIA draft would be due on October 18, 2010. OSM indicated that a modification to the contract would be issued. No modification was ever issued to reflect the changes in approach. OSM's technical lead, Project Manager, COR, and CO were in attendance at the meeting. ***(Attachment 9, OSM EIS Meeting Minutes dated 7/14/10).***

The PKS Team sent an email to OSM's EIS technical lead, the current OSM COR, and OSM technical staff on July 30, 2010 briefly memorializing the discussion of the directive to complete a "Conceptual RIA." ***(Attachment 10, Email dated 7/30/10 from B. Winters to PKS).*** The email also included the draft outline of the Conceptual RIA. No comments were received from OSM. On August 4, 2010 the PKS Team had a teleconference with the OSM technical lead regarding the RIA. In that conversation, the OSM lead indicated that the study would define the mining industry from the operator/permittee standpoint and not include transportation, energy, and other industries that use coal. In addition, OSM's technical lead indicated that the RIA outline was in line with his expectations. ***(Attachment 11, Telephone Records dated 8/4/10).***

The PKS Team proceeded with the development of the Conceptual RIA to meet the October 2010 submittal date using available funds. Placeholder costs developed by the PKS Team were used in the submittal. With the absence of any impacts development, benefits were not quantified or monetized and the submittal acknowledged that benefits would be addressed in the Final RIA with the final rule. Information regarding industry was provided, as well as Small Business requirements outlined in the Regulatory Flexibility Act.

Alternatives development between OSM and the PKS Team continued into September, with additional modifications by OSM being made through early December 2010. The schedule for delivering the Conceptual RIA was maintained at October 2010. However, because the elements of the alternatives were not completed, the overall impacts and benefits could not be addressed in the Conceptual RIA submitted on October 18, 2010. Furthermore, from what was known of the preferred alternative, assistance from the National Mining Association (NMA) was requested ***(Attachment 12, Email dated 8/3/10 from D. Iannone to B. Frisby).*** However, we were

directed by OSM not to provide NMA with specific information on the proposed rule that NMA requested in return for their assistance in developing costs. We interviewed representatives from TECO Coal, International Coal, and mining academic researchers at the Colorado School of Mines and Virginia Tech to develop some guiding assumptions about how to assess the possible cost impacts of the proposed rule on the geographic areas identified above. In addition, we reviewed earlier EIS and RIA studies, and the academic literature on coal mining environmental costs as a basis for making "working" assumptions about the cost impacts of the rule. Representatives from USEPA were also contacted to provide estimated costs and the replies received indicated that information would be mine-specific.

Upon review of the October 18, 2010 Conceptual RIA, OSM provided comments on the Conceptual RIA, and raised questions as to why a "Conceptual" RIA was developed. We explained that the conceptual approach had been adopted because information needed for an RIA that fully complied with all elements of Sections 6(a)(3)(B) and (C) of Executive Order 12866, 40 CFR 1502.23, OMB Circular A-4, and the Regulatory Flexibility Act (5 U.S.C.601), which included a cost-benefit analysis, could not be developed based on the information then available. For the first time, OSM indicated that the Conceptual RIA submittal would not meet requirements for an RIA that could be submitted to OMB with the Rule.

OSM requested that specific information not in the October 18, 2010 submittal be provided by early December 2010. The PKS Team continued to address OSM comments to the Conceptual RIA in November and December 2010. OSM advised that Alternative 1 (the No Action Alternative) would be used as the least environmentally stringent alternative and Alternative 2 would represent the most environmentally stringent alternative. It was agreed we would use a revised cost analysis by the PKS Team when available to provide some perspective of the economic impacts of the rule under these two other alternatives. OSM was informed this analysis would be very limited. OSM provided the PKS Team with selected summary tables identifying the essential RIA information that OMB would require of OSM to move the proposed rule along. In reviewing the tables, the PKS Team informed OSM that many of the items in the OMB tables could not be quantified or monetized because of lack of data. OSM advised the PKS Team to proceed and provide at least descriptive text discussing possible costs and benefits where quantitative and monetary data could not be provided.

A Conceptual RIA Summary was submitted on December 13, 2010. Draft impacts of stream lengths and acreages were quantified on November 22, 2010 by the team and were used to provide qualitative discussion in the December 13, 2010 Conceptual RIA Summary submittal. Benefits were discussed in the form of protection of streams and acreage, but were not quantified or monetized. Additional information regarding small entity impacts was added and information was delivered in tabular form. OSM provided additional comments and information and the Summary was updated on December 23, 2010.

The PKS Team discussed benefits on a January 5, 2011 call with OSM and the DOI Office of Policy Analysis (OPA) economist (Ben Simon). Mr. Simon was apparently not aware of OSM's previous direction to produce a "Conceptual RIA," and he provided comments indicating that the document required inclusion of significantly more information before it could be submitted to OMB. For reason unknown to PKS, neither OPA nor Mr. Simon had previously been engaged in discussions regarding the RIA. The PKS Team proposed that cost avoidance approach to monetize benefits (based on the revised metrics) would be done by quantifying the cost savings from not reclaiming land or remediating streams. OSM requested that we look at other means, such as contingent valuation and benefits transfer, to monetize benefits. The PKS Team was given authorization to talk directly with Mr. Simon to explore how best to proceed in responding to his comments.

Based on the January 5, 2011 call and an email from Andy DeVito of OSM and Mr. Simon, the PKS Team began synthesizing the comments in preparation for a January 31, 2011 submittal and began development of a revised work plan. On January 6, 2011, however, OSM directed the PKS Team was then directed to stop work, but to be available to answer questions. ***(Attachment 13, Email dated 1/6/11 from J. Maxwell to S. Varvell).***

On January 11, 2011, the PKS Team received notification that OSM would travel to Atlanta to meet on benefits analysis for the RIA. On January 19, 2011 the PKS Team received a telephone call from PKS to inquire if the Conceptual RIA submittal would be ready on or before February 1, 2011. The PKS Team indicated it would not, as OSM had directed the team to previously stand down on January 6, 2011. The visit to Atlanta was subsequently canceled by OSM. Furthermore, OSM indicated that the mining costs developed by Morgan Worldwide would require changes.

On January 24, 2011, the PKS Team participated in a conference call with Mr. Simon, who provided additional information regarding OMB requirements. Mr. Simon indicated that the IMPLAN modeling would be useful in the RIA, but not as the basis for a cost benefit analysis. On a separate call with OSM, on January 24, 2011, the PKS Team indicated that based on information requested by Mr. Simon, the effort to complete the RIA would require approximately 6 weeks, and the PKS Team offered a date of March 11, 2011 to submit the RIA, if it was given permission to proceed by February 1, 2011.

On January 25, 2011 OSM asked the PKS Team to provide a revised work plan on how the RIA would be modified and developed. The PKS Team provided OSM the draft outline and work plan on January 26, 2011, with clarifications provided on January 27, 2011. PKS asked the COR on January 28, 2011 if OSM agreed to proceed with the revised work plan and was directed by OSM not to proceed until after the February 1, 2011 face to face meeting at OSM's headquarters

(Attachment 14, Email dated 1/28/11 from S. Varvell to PKS). We left the February 1st meeting with no clear direction to re-start work.

On February 3, 2011 in a teleconference with OSM, the PKS Team reminded OSM of the January 24, 2011 teleconference where we indicated that the RIA development following the revised work plan could be delivered in March 2011. OSM did not respond to this date. On February 4, 2011, OSM indicated in an email that a March 11, 2011 RIA delivery date was not acceptable and that the RIA delivery was required on or before February 23, 2011. Despite the numerous discussions and meetings, OSM has never previously demanded the RIA be delivered by February 23, 2011. As a result of OSM's required delivery date and because of the various changes OSM has requested including a dynamic production shift analysis in lieu of the existing production shift analysis, the PKS Team will annotate the document with notes indicating where certain changes would be made or are required based on OSM's new instructions.

PKS Work Plan

PKS is proposing the following structure and content for the RIA. We believe this addresses each of the bullets reflected in the Cure Notice under this heading. We will continue to work with OSM and Mr. Simon to identify and address changes that are necessary to reflect OSM's current approach. We will identify those areas specifically that were completed per OSM's previous guidance and that now require revision based on new OSM guidance.

Regulatory Impact Analysis
REVISED OUTLINE
February 23, 2011

Abstract
a. One page summary.

Chapter 1 Introduction and Purpose
a. Introduction
   i. Describe the contents of this document
b. Net Benefit/Cost Analysis Purpose
   i. This is a required statement by OMB

Chapter 2 Necessity of the Stream Protection Rule and the RIA
a. Major Rule Elements
b. Rationale Based on Intended Environmental Improvements
c. Existing Regulatory Baseline Assessment
d. Alternative Regulatory Approaches Discussion
e. Economic Justification for the Rule

[NOTE: The RIA includes an assessment of three alternatives:
a. Baseline Conditions (Alternative 1)

b. Most environmentally stringent Alternative (Alternative 2); and
c. Proposed rule (Alternative 5)

Descriptions of each alternative will be pulled from the EIS. There would be some modification and text edits.]

[NOTE: This is covered in the initial October 18, 2010 Conceptual RIA submittal and expanded further in the December 13, 2010 Summary update. The external market failure of the existing regulations has been introduced in the EIS, but would require additional input from OSM on why existing regulations are inadequate or not enforced for the RIA.]

Chapter 3 Methodology

a. Definition of Economic Costs, Benefits, Transfers, and Impacts
b. Major Assumptions (Those drawn from EIS and those specific to RIA)
c. Analysis Period and Expected Benefit and Cost Accrual
d. Caveats (What can and cannot be quantified and monetized)
e. Primary Data Sources and Methods of Analysis
    i. Cost-Benefit Analysis Approach
        1. Costs Associated with Rule and How Analyzed
        2. Benefits Associated with Rule and How Analyzed
    ii. Supporting Analysis (Coal Industry Analysis, EIS inputs, OSM Information Cost Burden Analysis, IMPLAN modeling, other)

[NOTE: The existing RFA Small Business Impact exists and may be used with little update needed. Impacts to children (Environmental Justice issue) are addressed in the EIS and can be lifted from there.]

[NOTE: Two approaches are outlined in OMB Circular A-4: benefit-cost analysis (BCA) and cost-effectiveness analysis (CEA). The CEA will not be developed because of the many undefined variables related to the rule.]

Chapter 4 Economic and Coal Mining Industry Overview

a. Baseline Coal Mining Situation (Production, Demand, Key Trends)
    i. Highlights of the Coal Mining Industry Analysis in October RIA Appendix + Highlights of Baseline Production from Mining Engineers' Analysis
b. Baseline Economic Situation
    i. EIS Socioeconomic Data
        1. Employment
        2. Personal Income
        3. Others
    ii. IMPLAN Baseline Analysis (Coal Regions)
        1. Economic Output Impacts
        2. Employment Impacts
        3. Direct Impacts (Within Coal Industry)
        4. Indirect Impacts (Within Supplier and Market Industries)
        5. Induced Impacts (Payroll Spending Related Impacts)
c. Baseline Environmental Considerations (from EIS)
d. Benefits
e. Costs

f. Transfers
g. Other Effects (RFA/Small Business Impacts, Tribal Impacts, Royalties, Others)
h. Net Benefit or Cost

[NOTE: In this Chapter 4, we will analyze the Baseline (Alternative 1) conditions.

[NOTE: Distributional effects – i.e. impact of the action across the population and economy – has been included in the RIA and further fleshed out in the Section 4 Socioeconomics section of the EIS (focus is on population). Certain aspects of the economy - e.g. the energy industry and the transportation industry will need to be introduced and discussed as these elements were previously determined by OSM not to be evaluated.]

Chapter 5 Analysis of Rule Alternatives

a. Alternative 5 (Proposed Rule)
   i. Benefits
   ii. Costs
   iii. Transfers
   iv. Other Effects (RFA/Small Business Impacts, Tribal Impacts, Royalties, Others)
   v. Net Benefit or Cost
b. Alternative 2 (Most Stringent)
   i. Benefits
   ii. Costs
   iii. Transfers
   iv. Other Effects (RFA/Small Business Impacts, Tribal Impacts, Royalties, Others)
   v. Net Benefit or Cost

[NOTE: Cost element of the three alternatives will be discussed and quantified and monetized with available data. PKS will acquire these costs, and the assumptions will be clearly defined. Quantifying benefits will be introduced.

Information on the "willingness to pay" or "willingness to accept" will not be captured from industry and experts. We have stream miles and acres; we would develop a value based on restoration and/or preservation for different metrics such as water quality, etc. and would develop a suite of values, including potentially CO_2 sequestration. We will identify available peer reviewed values for water quality, forestry, and recreation, used by USDA.

Benefits provided by OSM would be presented with some discussion; however costs would be rolled up into the overall stream and acreage costs (above).

Available data from the Energy Information Association (EIA), National Mining Association (NMA) and several state agencies, the EIS impacts section, and available industry costs will be used.

Ancillary impacts and benefits will be included. Information on Occupational and Public Safety and Health and socioeconomics, environmental justice and transportation from the EIS will be included.

Benefits and costs that are difficult to quantity will be addressed such as the cost of fatalities.

An Information Burden Cost Analysis that quantifies and monetizes government administrative costs and savings has been performed by OSM and will be included.

Uncertainty would be discussed but not quantified.]

Chapter 6 **Summary**[1]

a. Comparing three alternatives in terms of costs, benefits, and net (Side-by-Side Table).
b. Other summarizing points

[NOTE: This would be revised with an emphasis on identifying the net benefits of the rule.]

Chapter 7 **References**

a. EIS
b. Other Supporting Analyses
c. Previous Studies/Literature

Appendixes

a. Appendix 1 (Regional Production Shift, Land Acreage, and Stream Mile Analysis by Mining Engineering Team)
b. Appendix 2 (Mining Costs Updated Analysis)
c. Appendix 3 (Other Key Data and Analysis)

Where we have incomplete data, we will take what is available and extrapolate. No data development will be expected from OSM other than what they have previously provided in the Information Burden Cost Analysis.

The proposed RIA outline addresses elements in OMB Circular A-4 and allows use much of existing information already developed. No additional IMPLAN modeling would be performed and would not be necessary for the Draft rule. Existing IMPLAN outputs would be used for addressing baseline conditions.

RIA Timeline:

The PKS Team is proposing a Work Plan timeline that would result in delivery of the revised RIA six (6) weeks following the *later of* approval of the RIA Work Plan or completion of the coal production shift analysis based on the dynamic methodology currently under discussion, but not yet approved for implementation. Thereafter, we anticipate two (2) face-to-face meetings between MACTEC and OSM would occur at a location to be determined (presumably OSM HQs, Atlanta, or Lexington), the first to occur within two weeks of approval of the Work Plan and the second to occur approximately two weeks after receipt of the revised coal production analysis. Six weeks is needed to meet, get agreement on benefits, fully extract and process existing information provided in three previous submittals and the EIS, add new information, and

[1] The overall summary of results of the cost-benefit analysis will use the required 3% and 7% discount factors to bring the numbers to present value.

develop information based on the revised metrics. OSM's expectations appeared to change in late October 2010 after the initial submittal; however, we have only had since mid/late December to revise the RIA from a less conceptual approach to an analysis that would comply with OMB Circular A-4. We had already delivered the Conceptual RIA by then and a summary based on information we collected abiding by OSM's schedule. Since we were told to stop work the first week of January, we have not proceeded with attempting to monetize any other benefits. Six weeks will allow us submittal of one concise document that has been thoroughly vetted the by PKS Team. There will still be conceptual information in it, e.g., "downstream" effects to the electric industry and carbon sequestration with no quantification or monetization.

(Email from Stephanie Varvell to John Maxwell dated 12/20/10 at 12:02pm)

Attachment 1

jmm@manfredonialaw.com

Sent:	Monday, December 20, 2010 12:02 PM
To:	John Maxwell; Craynon, John; Sloanhoffer, Nancy E.; Rideout, Sterling
Cc:	(spr@engrservices.com); Caroline Bari; David Bell; Doug Mynear; Edmundo Laporte; J Steven Gardner; Jaque Mitchell; Jeff Baird; Jenkins, Josh; jmahan@plexsci.com; jmorgan@morganworldwide.com; Joe Zaluski; Jose Sosa; Kathy Kelly; Liz Edmondson; Mike Stanwood; Randy Sosa; Shortelle, Ann; Singer, Robert
Subject:	RE: Confirmation of EIS Analysis Methodology

John,
I just spoke with John Craynon. He asked me to send a note to you confirming the methodology as described. He does not understand the source of the concern regarding Alt. 5 and the rule language. I hope that the conversation you had this morning with Bill, Lois and Dennis has cleared that up.

From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Friday, December 17, 2010 4:29 PM
To: Varvell, Stephanie L.; Craynon, John; Sloanhoffer, Nancy E.
Cc: (spr@engrservices.com); Caroline Bari; David Bell; Doug Mynear; Edmundo Laporte; J Steven Gardner; Jaque Mitchell; Jeff Baird; Jenkins, Josh; jmahan@plexsci.com; jmorgan@morganworldwide.com; Joe Zaluski; John Maxwell; Jose Sosa; Kathy Kelly; Liz Edmondson; Mike Stanwood; Randy Sosa; Shortelle, Ann; Singer, Robert
Subject: Confirmation of EIS Analysis Methodology

The EIS team has been discussing over the last couple of months the need for a clear understanding of the appropriate method to define the effect of each of the alternatives (as represented by the defined elements), and as a way to transition from Chapter #3 to Chapter #4.

As a primary assumption for this impact analysis we all agreed (PKS/OSM team) that we should treat the US coal supply as a steady state; specifically we should maintain the US coal production at the 2008 level, as defined by the EIA (but adjusted for energy content). Anything more complex would be unmanageable.

It was also recognized that Alternative #2 would not meet this primary assumption, as the most restrictive alternative precluded the production to meet the target production. Based on the projected production shifts resulting from the Alternatives we have defined the need to use certain key metrics and the metrics agreed upon are:

- Tons of production by region and by mining type
- Stream length (perennial and intermittent) per ton of coal mined by region
- Acre disturbed per ton of coal mined by region and by mining type
- Tons of coal per permit by region and by mining type
- Employment per ton of coal mined by region and by mining type

We believe that these are all of the relevant metrics and that they are adequate to provide a reasonable disclosure of potential impacts in Chapter #4. We also are working under the assumption that the potential changes from the alternatives would occur over a period of 12-15 years (possibly more) for full effect, and that the impacts defined would reflect full implementation.

We are also still concerned about potential inconsistencies between the proposed rule language and Chapter 2 text. Some of the assessment team is concerned that the rule language (as represented in Alternative 5) is inconsistent with the October 15 redline version of the Rule. If the current version of Chapter 2 Alternative 5 supersedes the October 15 redline version, we would like confirmation as such.

We need written agreement that OSMRE is in concurrence with the above metrics and approach using the production shifts as a basis for impacts. Also, a call to verify our direction would be appreciated to alleviate any misunderstandings at your earliest convenience.

I apologize that this seems to be a recurring theme, but with the current schedule, we feel it necessary to have confirmation.

Thank you.

PKS POLU KAI SERVICES

John R. Maxwell
Senior Environmental Scientist
Polu Kai Services
352.258.1045

"For Official Use Only – Deliberative Process Material"

(Email dated 2/6/11 from John Morgan and cc'd to OSM)

Attachment 2

jmm@manfredonialaw.com

Sent:	Sunday, February 06, 2011 4:49 PM
To:	Jose Sosa; J. Steven Gardner; John Maxwell; Mike Stanwood; Jenkins, Josh; dbell@plexsci.com
Cc:	bwinters@osmre.gov; dshawley@osmre.gov; svarvell@osmre.gov; Liz Edmondson
Subject:	Coal Production Forecast

As we have all discussed on numerous occasions we have agreed to use the coal production shifts as a means to evaluate some of the impacts and benefits of the proposed rule (Alternative 5) and the other 3 alternatives under review. Also recognizing that the alternatives will have other benefits that are independent of any production shift.
The difficulty of using the 2008 production as the base is becoming apparent, as it does not recognize trends that are already occurring due to the industry's own decisions plus the effects of the 2008 SBZ and the changes in the implementation of the CWA. The other issue is that the implementation of any of the alternatives will occur over time and any fixed production analysis has to be limited to a snapshot after full implementation (say 10 to 15 years).
As a solution to these problems I think that we should consider changing from a static model to a dynamic model. There is a very good basis for this dynamic modeling, specifically the long term coal forecast produced by the EIA. Their most recent forecast was published in December 2010.
I recommend that we use this model as our base and then identify what additional production shifts will occur due to each alternative and the key elements I each alternative that will affect production. Based on these shifts the metrics, such as disturbed acres and stream miles plus employment, can be calculated.
I know this is a big change so late in the day, but I think it might provide a solution to some of the challenges that have been identified over the last couple of weeks.
In addition we should use EIA data whenever possible for items such as mine productivity, seam thickness and heat content as they are a recognized source.
Maybe we can try and get consensus on this tomorrow morning, as we need a quick decision if we are to include this approach into Ch4.
John

John S L Morgan
Office 859 259 0959
Cell 859 991 1414

(Email from Bill Winters to PKS dated 2/8/11)

Attachment 3

jmm@manfredonialaw.com

From: Jose Sosa <jose@polukaiservices.com>
Sent: Tuesday, February 08, 2011 12:55 PM
To: John Maxwell; Jenkins, Josh; jmorgan@morganworldwide.com; Joe Zaluski; 'J Steven Gardner'; 'Jeff Baird'; Randy Sosa; r.m.stanwood@gmail.com; dbell@plexsci.com; Caroline Bari; Shortelle, Ann; 'Doug Mynear'; 'Liz Edmondson'; Edmundo Laporte
Subject: FW: Strategy to address Comments & Concerns
Attachments: High Priority EIS Items-chap 4_consolidated.docx; High Priority EIS Items-chap 3 _summary.docx

fyi

From: Winters, William R. "Bill" [mailto:bwinters@osmre.gov]
Sent: Tuesday, February 08, 2011 12:29 PM
To: Jose Sosa
Cc: Shawley, Dianne M; Varvell, Stephanie L.
Subject: RE: Strategy to address Comments & Concerns

Hi Jose,

Find attached the high priority list we discussed last week.

Thanks.

From: Jose Sosa [jose@polukaiservices.com]
Sent: Monday, February 07, 2011 8:30 PM
To: Winters, William R. "Bill"; Sloanhoffer, Nancy E.; Varvell, Stephanie L.; Shawley, Dianne M
Cc: John Maxwell; Randy Sosa; Mike Stanwood; Jenkins, Josh; jmorgan@morganworldwide.com; 'J Steven Gardner'; Joe Zaluski; David Bell
Subject: Strategy to address Comments & Concerns

All:

Attached you will find the methodology to address the broad concerns about the content of the working drafts submitted to date as well as the individual comments provided by OSM to our team.

Please compare to your assessment of the working drafts. We hope to reconcile your assessment with ours to ensure that comments and concerns about the content of the working drafts are address through the delivery of the PDEIS and then the DEIS.

We welcome your input and ideas about working together to improve the working documents and provide a DEIS that meets or exceeds your expectations.

Jose

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- **Misrepresentation of regulations.** A thorough understanding of the entirety of 30 CFR and the proposed regulations for the SPR has been a common theme throughout the EIS. For example, excess spoil fills and refuse impoundments/fills have been discussed with respect to Approximate Original Contour. The provisions of AOC and AOC variances have not been adequately or properly described.
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- **No description of the current mining and reclamation practice.** The EIS should contain a description of the current regulatory structure and practice for each of the major elements in the EIS under alternative 1 (e.g., topographic and fluvial reconstruction). It was assumed that this discussion would occur somewhere in the EIS but is not evident. This discussion will help clarify the distinction between pre-SMCRA practices, current mining Regulations, and current mining practices. The distinction between the three items is blurred in many instances and needs reconciled before the EIS can be considered acceptable.

- **Misrepresentation of regions or regional practice.** State agencies and regulatory professionals are reviewing this document. As such, the document must contain accurate statements about regional practice or regional statistics.

- **Inconsistent level of detail across regions.** This EIS evaluates impacts on a proposed action that apply nationally. For this reason, the level of detail provided for all coal regions should be the same and not appear to be skewed to any one region (e.g. Appalachian Basin). The EIS Team has discussed this issue with the consultants and a preliminary draft of the reorganized Chapter 3 is forthcoming soon and should alleviate the inconsistency.

    - In various places in Chapter 3, there was confusion or inconsistency as to what states were going to be included in the study area (sec. 3.0.2) and what states ultimately would not. For example, data presented in a table for a certain region might not include all the states identified as being in the study area. The contractor needs ensure that all states identified as belonging to a study area are included in the various regional discussions and tables or provide an explanation why areas or states were left out.

(Email from Bill Winters to PKS dated 2/8/11)

Attachment 4

jmm@manfredonialaw.com

Sent:	Tuesday, February 08, 2011 12:55 PM
To:	John Maxwell; Jenkins, Josh; jmorgan@morganworldwide.com; Joe Zaluski; 'J Steven Gardner'; 'Jeff Baird'; Randy Sosa; 'r.m.stanwood@gmail.com'; 'dbell@plexsci.com'; Caroline Bari; Shortelle, Ann; 'Doug Mynear'; 'Liz Edmondson'; Edmundo Laporte
Subject:	FW: Strategy to address Comments & Concerns
Attachments:	High Priority EIS Items-chap 4_consolidated.docx; High Priority EIS Items-chap 3 _summary.docx

fyi

From: Winters, William R. "Bill" [mailto:bwinters@osmre.gov]
Sent: Tuesday, February 08, 2011 12:29 PM
To: Jose Sosa
Cc: Shawley, Dianne M; Varvell, Stephanie L.
Subject: RE: Strategy to address Comments & Concerns

Hi Jose,

Find attached the high priority list we discussed last week.

Thanks.

From: Jose Sosa [jose@polukaiservices.com]
Sent: Monday, February 07, 2011 8:30 PM
To: Winters, William R. "Bill"; Sloanhoffer, Nancy E.; Varvell, Stephanie L.; Shawley, Dianne M
Cc: John Maxwell; Randy Sosa; Mike Stanwood; Jenkins, Josh; jmorgan@morganworldwide.com; 'J Steven Gardner'; Joe Zaluski; David Bell
Subject: Strategy to address Comments & Concerns

All:

Attached you will find the methodology to address the broad concerns about the content of the working drafts submitted to date as well as the individual comments provided by OSM to our team.

Please compare to your assessment of the working drafts. We hope to reconcile your assessment with ours to ensure that comments and concerns about the content of the working drafts are address through the delivery of the PDEIS and then the DEIS.

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    - The description of visual resources in this chapter is lacking. For example, in the Appalachian Region, the author provided very little description of the existing / affected environment for this topic. Please provide additional description of the existing visual resources, the extent to which pre-SMCRA mining has affected the existing visual resource environment, and the affect SMCRA implementation has had on the existing environment.
    - There needs to be better explanation of the grouping of the elements, "land, water and other". As a suggestion, chapter 3 should be organized so that the reader is familiar with the format by chapter 4. In chapter 4, adding a brief rationale of the groups and provide a reference for the reader back to the chapter 3 grouping would benefit the reader greatly. In the grouping scenario, biology will need to be considered in the context of both the Clean Water Act and SMCRA as the definition of material damage has linked the two Acts to some degree. This EIS needs to include a much stronger discussion of biological impacts and benefits of this rulemaking.

- **Misrepresentation of regulations.** A thorough understanding of the entirety of 30 CFR and the proposed regulations for the SPR has been a common theme throughout the EIS. For example, excess spoil fills and refuse impoundments/fills have been discussed with respect to Approximate Original Contour. The provisions of AOC and AOC variances have not been adequately or properly described.
    - OSM and the Contractor agreed that the term "mountaintop mining" would not be used in this document. Since this term was coined in the 2004 EIS, the use of this term has created a great deal of confusion. The entire document should be searched and this term should be revised to reflect the specific type mining being referred to as per SMCRA (e.g. mountaintop removal, steep slope, contour, etc.).

- **No description of the current mining and reclamation practice.** The EIS should contain a description of the current regulatory structure and practice for each of the major elements in the EIS under alternative 1 (e.g., topographic and fluvial reconstruction). It was assumed that this discussion would occur somewhere in the EIS but is not evident. This discussion will help clarify the distinction between pre-SMCRA practices, current mining Regulations, and current mining practices. The distinction between the three items is blurred in many instances and needs reconciled before the EIS can be considered acceptable.

- **Misrepresentation of regions or regional practice.** State agencies and regulatory professionals are reviewing this document. As such, the document must contain accurate statements about regional practice or regional statistics.

- **Inconsistent level of detail across regions.** This EIS evaluates impacts on a proposed action that apply nationally. For this reason, the level of detail provided for all coal regions should be the same and not appear to be skewed to any one region (e.g. Appalachian Basin). The EIS Team has discussed this issue with the consultants and a preliminary draft of the reorganized Chapter 3 is forthcoming soon and should alleviate the inconsistency.

    - In various places in Chapter 3, there was confusion or inconsistency as to what states were going to be included in the study area (sec. 3.0.2) and what states ultimately would not. For example, data presented in a table for a certain region might not include all the states identified as being in the study area. The contractor needs ensure that all states identified as belonging to a study area are included in the various regional discussions and tables or provide an explanation why areas or states were left out.

(Email from Bill Winters to PKS dated 2/18/11)

Attachment 5

jmm@manfredonialaw.com

Sent:	Friday, February 18, 2011 2:23 PM
To:	John Maxwell
Cc:	John Morgan ; Steve Gardner ; Shawley, Dianne M
Subject:	Implementation Timeline
Attachments:	Implementation of Stream Protection Rule.docx

Hi folks,

Find attached the implementation timeline we discussed last week. Sorry for the delay but we had several key folks out sick this week.

Thanks.

Implementation of Stream Protection Rule

If adopted in final form, the stream protection rule would take effect 60 days after publication in states with federal programs and on Indian lands. Implementation in states with approved regulatory programs would take considerably more time. We would first notify those states under 30 CFR 732.17 that we have determined that they must amend their programs to remain no less effective than the revised federal rules. The states would respond by submitting either a proposed program amendment or, more likely, a description of amendments to be proposed together with a schedule for submission of the proposed amendments and a timetable for enactment. To avoid unnecessary disruption of state programs, we generally accept schedules under which states would prepare and submit proposed amendments only after the completion of litigation of the new federal rule at the appellate level. This process can easily take 5 or more years.

Implementation Timeline

Federal Program States and Indian lands

- Rule takes effect 60 days after publication in the Federal Register.
- Permit applications approved after that date must comply with the rule.
- Existing operations would have to comply with new performance standards no later than the time of permit renewal (within 5 years).

Primacy States

- OSM will send Part 732 notifications to all states 90 days after publication of the final rule in the Federal Register. The notifications would require the states to amend their programs to be no less effective than the revised federal rules.
- Within 60 days of receipt of a Part 732 notification, the state must submit either a proposed program amendment or an action plan with a timeline for submission of such an amendment.
- Because the rule will likely be challenged in court, we anticipate that states will submit timelines providing for submission of proposed program amendments only after litigation is concluded, which we estimate will take 5 years.
- We anticipate that states will take 18 months to develop program amendments after the conclusion of litigation.
- OSM review and approval of state program amendments will take 7 months after submission.
- We anticipate that states will put the approved program amendments into effect within an average of one year from date of approval (up to 2 years in states with legislatures that do not meet every year).

- Total Elapsed Time: 102 months (8.5 years)

- Permit applications approved after that date must comply with the amended state programs.
- Existing operations would have to comply with new performance standards no later than the time of permit renewal (within 5 years).

(Email dated 12/10/2011 from J. Maxwell to John Caynon)

Attachment 6

jmm@manfredonialaw.com

Sent:	Friday, December 10, 2010 6:09 PM
To:	'Craynon, John'
Cc:	Jose Sosa; Mike Stanwood; Caroline Bari; David Bell
Subject:	Cumulative Impacts

John,
I want to confirm that we will be using the 2008 EIS major source of information and approach to the cumulative analysis for the current EIS. Mike Stanwood indicated that you had discussed this with him in the last Lexington meeting. You might pass that around your team and get a consensus and/or input for the analysis.
Thanks,
John

POLU KAI SERVICES

John R. Maxwell
Senior Environmental Scientist
Polu Kai Services
352.258.1045

"For Official Use Only – Deliberative Process Material"

(Email dated 7/1/10 from D. Iannone to J. Jenkens)

Attachment 7

Jenkins, Josh

From: Donald Iannone [diannone@ix.netcom.com]
Sent: Thursday, July 01, 2010 6:41 PM
To: Jenkins, Josh
Cc: Will Burns; Michael C. Carroll
Subject: Phone Conversation with Dennis Rice, OSM

Josh,

This email summarizes my short conversation this afternoon with Dennis Rice in the Office of Surface Mining (OSM). Hopefully this is not problematic for you and others.

1. My primary reason for calling Mr. Rice was to see if he could suggest a comparable RIA that would inform our work for MACTEC. He could not suggest one that directly relates to this study. In the absence of a comparable study, we talked about some related issues, which are summarized below.
2. He was very willing to talk and share his ideas on the project.
3. He acknowledged the very short timeframe for completing the RIA, and said a best faith effort is expected that is based on best available information. He appreciated my desire to find a sound technical approach to the work.
4. He said from his standpoint it would be very hard to predict the actual impact of the stream rules because of the lack of data out there and the short timeframe involved. He said an informed perspective of costs and benefits was desired.
5. I asked him about OSM's interest in geographic area level of detail. He said his interest would be in the major coal-producing regions, and regions with large reserves where no mining was currently underway. Major coal regions in this case refers to those cited in the 2008 EIS, which you provided me. He said that Alaska should be included in this RIA.
6. We talked about the pros and cons of an analysis of all 193 counties in the 25 states versus an analysis of a sample of counties or clusters of counties within either states or the major coal regions. He suggested that an analysis of all 193 counties would not be practical or feasible. His suggestion was to extrapolate from the sample to the larger population of counties.
7. I asked his thoughts on whether mining companies would be willing to share potential compliance cost impacts and cost estimates with us. He said it is worth a try, but they may not want to do this. He suggested that we start by talking with the National Mining Association.
8. I asked if OSM had a list of possible compliance cost variables (types of costs) that could be created by the stream rules. He was not aware of such a list, but offered to ask around.
9. We talked about OMB and its view of RIAs related to Surface Coal. He mentioned the Central Appalachia study, and he said that OMB was not just interested in the national impacts, but also the local impacts, or those impacts on the Central Appalachian region. This is the Hill and Associates study. He suggested that Jim Laity in OBM might be a good contact person for more information and perspective on RIAs. I will not proceed with that contact until you advice me on this step.
10. The types of questions of interest to Dennis Rice are:
    1. Impact of the rules on the national economy in terms of whether coal availability of the price of certain types of coals would be affected to a significant extent.

2. Another issue he mentioned was whether the rules would make it much harder or even impossible to mine certain types of coal in certain coal producing regions.

3. How the rules potentially impact the economies of the major coal regions.

11. Finally, we talked about possible legal challenges to the RIA, which he sees as unlikely. He said such challenges were more likely in the case of the EIS and its economic content. I asked him if RIA results could be used in an EIS' economic analysis, and he said they could be. In this sense, the RIA content could have legal exposure.

Hopefully this summary is helpful to you. Thank you.

(Email dated 7/6/10 from J. Jenkins to PKS).

Attachment 8

Jenkins, Josh

From: John Maxwell [JMaxwell@polukaiservices.com]
Sent: Tuesday, February 08, 2011 11:05 AM
To: Jenkins, Josh; Jose Sosa
Subject: FW: Draft RIA Outline - Proposed Stream Protection Rules
Attachments: 762010Surface Coal Stream Rules RIA Report Outline (2).docx

Josh,
I looked in my email files and could not find a reply from Li-Tai. Did you receive one? If not, then we didn't receive one stating the approach was unacceptable.
John

From: Jenkins, Josh [mailto:JLJENKINS@mactec.com]
Sent: Tuesday, July 06, 2010 7:56 AM
To: BilBao, Li-Tai S.
Cc: Jose Sosa; 'David Bell'; 'Doug Mynear'; 'J. Steven Gardner'; Jaque Mitchell; 'jburchett@morganworldwide.com'; Joe Zaluski; John Maxwell; 'John Morgan'; Randy Sosa; Shortelle, Ann
Subject: Draft RIA Outline - Proposed Stream Protection Rules

Li-Tai- Attached is a draft outline of the RIA that we propose to follow.

We are proposing to use IMPLAN at this time to model the economic conditions of select counties – approximately 63 total, or roughly 1/3 of the coal producing counties, to provide a broad overview of the potential economic impacts.

Please let me know if you concur with this outline and modeling approach or if there is an alternative approach you would prefer.

Thank you.

Joshua L. Jenkins | Project Manager/Senior Geologist
MACTEC Engineering and Consulting, Inc. | Atlanta, Georgia
Phone 770.421.3412 | **Mobile** 770.833.6429 | **Fax** 770.421.3486
Email jljenkins@mactec.com | **Web** www.mactec.com

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Surface Coal Mining Stream Protection Rule-Making Regulatory Impact Analysis
Proposed Report Outline

Purpose

This document presents our initial ideas on an outline for the Stream Protection Rule-Making RIA. We welcome your comments and questions to strengthen the final outline.

Outline

I. **Cover Page**

II. **Abstract**

III. **Executive Summary**
- A. Major Findings
- B. Conclusions

IV. **Table of Contents**

V. **List of Figures, Tables and Charts**

VI. **Introduction**
- A. Federal Action (Describes the essence of the new stream protection rules)
- B. Purpose and Need (Describes the purpose of this RIA and why it is needed in understanding the major economic costs and benefits of the proposed rules on key stakeholders.)
- C. Organization of this Document (Describes the major elements of the report and its intended flow.)
- D. Economic Issues Raised during Scoping (Summarizes the major economic issues passed along to us from the July public meetings.)
- E. Review of Earlier Studies
- F. Scope of Analysis and Methodology
  - Scope of the Analysis (Describes the main components of the analysis in terms of issues and impacts.)
  - Methodology (Describes the methodology (analytic tools, data, research techniques used) to complete the analysis.

VII. **Overview of the U.S. Coal Mining Industry**
- Definition of the Industry
- Key Industry Trends and Issues (This would include regulations affecting the industry.)
- Coal Production Segment (Supply-Side)
- Coal Markets Segment (Demand-Side)

VIII. **Economic Geography Overview** (Identifies the major coal regions analyzed in the study, with states in each area identified)

A. General Study Area and Major Coal Regions (Includes a national map showing the major coal regions and the states and counties that relate to them. For each region, a brief profile of the coal-mining industry found there and key economic trends will be identified.)
B. Northern Rocky Mountains and Great Plains
C. The Appalachian Basin
D. The Colorado Plateau
E. The Illinois Basin
F. The Gulf Coast
G. Alaska

IX. Economic Cost and Benefit Analysis

A. (For each region, the impacts (costs and benefits) of the proposed rules would be analyzed and discussed, emphasis on states. Key impact issues would be discussed in detail.)
A. Northern Rocky Mountains and Great Plains
C. The Appalachian Basin
D. The Colorado Plateau
E. The Illinois Basin
F. The Gulf Coast
G. Alaska

X. Overall Findings and Conclusions

XI. References

XII. Glossary

XIII. Appendices (Supporting data and analyses, model documentation)

Modeling strategy -

Top 5 coal-producing counties (based upon total annual production volume) in each of the 5 major coal-producing regions: 25 counties.

+ 5 medium-sized coal-producing counties in each of the 5 major coal-producing regions: 15 counties. The selected counties would be those with a high economic dependence upon coal industry activities as measured by coal mining's location quotient (LQ) value and its percent of total employment. The LQ is a measure of an area's share of an industry – or the concentration – of an industry as compared to the industry's US share. An LQ of one indicates that an area (a county for example) has its share of activity and will likely be importing or paying lower-than-average wages. An LQ of greater than one shows that an area has more than its share of activity, is highly competitive, and is likely to be exporting more than it imports, and may have higher than average wages.

+ 3 small-sized coal-producing counties that depend to a high degree economically on the coal industry: 15 counties. Again, this dependence would be defined by the location quotient value and percent of total employment.

- 1 county in Alaska to ensure its coverage in the study
- 7 counties with major coal reserves that are not being currently mined

(OSM Meeting Minutes dated 7/14/10).

Attachment 9

OSM EIS Meeting Minutes
Lexington, Kentucky

7/14/10

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1. Posters

Posters are intended to present info introduced in NOI; therefore, each posted will display a proposed alternative (as presented in the NOI) and one photo. Information sheets will be located at each station with the poster contents and an additional paragraph of information not found on the poster.

A Code of Conduct will be placed at each entrance.

Dave Bell (Plexus) reviewed the final poster format and contents with the team. Posters will be laminated paper with Velcro backing. Additional display items (foam board, easels) will be decided on at each venue.

2. Draft Rulemaking Concept Document

- Focus on NEPA process instead of "proposed rule" (new term to replace "proposed rule" is "rulemaking concept document")
- OMS has spoken to solicitors and is treating the rulemaking concept document (RCD) as a draft thought piece. The RCD does not pre-dispose the agency's position. For OSM purposes, in the EIS process the concept document is just a discussion object between OMS, EPA, the Corps of Engineers, CEQ, Fish & Wildlife and does not lock the agency into a particular course.
- A disclaimer will be placed on all pages of the RCD to clarify that this is a pre-decisional working document not intended to influence the NEPA process. OSM will distribute an updated RDC (w/ disclaimer) to involved agencies and contractors.
- The input from public meetings will significantly impact the concepts presented in the NOI and discussed in the RCD
- OSM is committed to following the NEPA process in its entirety and this process and the resulting EIS will ultimately determine the final rule

3. Public Meetings

A webinar was conducted to regarding the expectations and procedures for the public meetings being held from July 19 -29, 2010. Webinar attendees:

Andy Wills	Mychal Yellowman	Joy Seberstine	Brian Loges
Peter Mali	Sterling Rideout	Jeffrey Hoss	Richard Calhoun
Russ Miller	Paul Clark	Phil DT	Jackie Cain
Chris Holmes	Paul Ehret	Brian Rogers	Peter NLN
Deb Moses	Jeff Guillespy	Mitch Rollings	Janet Nixon
Jeff Hostleton			

- Open house event staff was confirmed. Additional attendees:

Carbondale, Evansville	Fairfield, TX	Hazard, KY
Brian Loges	Mitch Rowens	Chris Holmes
Paul Ehret	Lonnie Taylor	Joe Black
Joy Seberstine (Carbondale only)		Gail Smith
Chris Holmes (Evansville only)		
Russ Miller (Evansville only)		

Beckley, WV	Farmington, NM	Morgantown
Chris Holmes	Justin Hunt	Chris Holmes
Roger Calhoun	Barry Smith	Roger Calhoun

Gillette
Harv Glow
Jeff Fleshman

- Format: Informal. Posters and fact sheets will be displayed. Public comment forms and a court stenographer will be available. No formal presentation or verbal public statements. Contractor event staff will be present to assist the public in documenting their comments.

- Media inquiries: – If a comment is requested by the media, the senior OSM representative on site will present a prepared statement. A copy of the statement will not be provided to the media

- Questions: A Q&A sheet is available for answering general questions. Questions not on the Q&A sheet should not be answered (e.g. "Is that a concern for you? I invite you to provide

your comments and concerns by …"). (*Note*: The Q&A sheet will not be distributed to the public or media)

- Security: At all locations, local law enforcement was notified of the meetings. Additional on-site security is arranged for four sites. State police will also be notified. OSM will notify the Federal Marshalls of the public meetings.

- Dress code: Business casual. No agency or company logos are to be displayed.

4. Public Comments

2010 commenting period closes 7/31/10.
Comments to be organized by 8/31/10 and summarized for team.
OSM confirmed that ANPR comments have already been incorporated in rulemaking concept document by OSM

5. Regulatory Impact Analysis

The RIA is currently scheduled such that a version is to be submitted before DEIS. It was proposed to submit the RIA after DEIS is approved.

OMS must resolve conflict between the timing of the RIA and the proposed rule. Therefore, it was agreed to submit a conceptual (draft) RIA prior to the DEIS, to accommodate the internal OSM processes.

Final RIA will be prepared after evaluation of the public comments and development of the DEIS.

SOW listed the generation of one RIA. Therefore, must get a cost proposal to decide if there is the money to do the both a 'conceptual' and 'final' RIA. A formal request will be made to OSM for additional funding to cover production of conceptual and final RIAs.

Use a multiplier in RIA to account for the trickle-down effects of any proposed alternative on other industry (multiplier of 5)

6. Current Timeline

NOI
Public scoping (4/30 – 6/1 & 6/18 – 7/30)
Preliminary Draft EIS (11/19/10)
Publish NOA of DEIS for public comment (2/4/11)
Public meeting on DEIS (March, April 2011)
Publish NOA of FEIS (11/11)
Publish NOA of ROD (12/20/11)

7. Refining Alternatives

Contractors will get up to speed on rulemaking concept document origins and contents. Then schedule a team meeting with the original OSM developers to refine RCD alternatives prior to August 31.

OSM personnel involved in the development of RCD:

Mike Ellerman
Bill Winters
John Craynon
Cheryl Sylvester
Brian Loges
Harry Payne
Mychal Yellowman
Louis Uranowski
Dennis Rice

8. Miscellaneous

- John Craynon will post study regarding coalmining on
- Li-Tai will forward DOPAA text
- Status of cooperating agencies: Positive response - Wyoming, Montana, Alabama, WV, Kentucky; possible - Virginia, Ohio, New Mexico, Colorado; Fish and Wildlife; EPA. COE hesitant due to resource commitments. Reviewing agencies – John Craynon compiling list.
- Li-Tai will provide USACE contacts after she gets info on what specialties are needed. Richard Warner (professor) can provide contacts for EPA. OSM librarian can pull studies once she knows what look up.

- Documents requiring review will be submitted pdf, and comments will be made using the reviewing and commenting tools available in pdf.

- Team members were asked to review the SharePoint organizational structure and offer suggestions on how to track documents with regard to which team member(s) have read and/or reviewed the various documents.

- Team members will go through Jaque Mitchell (@polukaiservices.com) to place documents on SharePoint. Each team member is responsible for identifying the proper folder for storage and communicating this information to Jaque.

(Email dated 7/30/10 from B. Winters to PKS)

Attachment 10

Jenkins, Josh

From: Jenkins, Josh
Sent: Friday, July 30, 2010 12:39 PM
To: Jose Sosa
Cc: 'svarvell@osmre.gov'; 'Craynon, John'; 'Uranowski, Lois J.'; 'Winters, William R. "Bill"'; Shortelle, Ann
Subject: Conceptual RIA
Attachments: 762010Surface Coal Stream Rules RIA Report Outline (2).docx

Jose – Just wanted to pass this draft outline back to you for what was developed for the Conceptual RIA earlier this month. As we discussed in Lexington on July 13, MACTEC is now developing a Conceptual RIA at this point for the proposed rule and a Final RIA for final rule will be completed under a separate scope.

Our original schedule was for a draft RIA delivery in September, 2010 and Final in October 2010. Based on discussions in Lexington on the alternatives development for Monday and Tuesday next week, I propose that the draft Conceptual RIA be delivered October 8, with the final Conceptual RIA delivered October 29.

Please advise if this is acceptable.

Thanks

Joshua L. Jenkins | Project Manager/Senior Geologist
MACTEC Engineering and Consulting, Inc. | Atlanta, Georgia
Phone 770.421.3412 | **Mobile** 770.833.6429 | **Fax** 770.421.3486
Email jljenkins@mactec.com | **Web** www.mactec.com

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Proposed Conceptual Report Outline

Purpose

This document presents our initial ideas on an outline for the Stream Protection Rule-Making RIA. We welcome your comments and questions to strengthen the final outline.

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   C. The Appalachian Basin
   D. The Colorado Plateau
   E. The Illinois Basin
   F. The Gulf Coast
   G. Alaska

IX. **Economic Cost and Benefit Analysis**
   A. (For each region, the impacts (costs and benefits) of the proposed rules would be analyzed and discussed, regulatory flexibility act, small business concerns, with emphasis on states. Key impact issues would be discussed in detail.)
   A. Northern Rocky Mountains and Great Plains
   C. The Appalachian Basin
   D. The Colorado Plateau
   E. The Illinois Basin
   F. The Gulf Coast
   G. Alaska

X. **Overall Findings and Conclusions**

XI. **References**

XII. **Glossary**

XIII. **Appendices (Supporting data and analyses, model documentation)**

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- Top 5 coal-producing counties (based upon total annual production volume) in each of the 5 major coal-producing regions: **25 counties.**
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- 1 county in Alaska to ensure its coverage in the study.
- 7 counties with major coal reserves that are not being currently mined.

(Telephone Records dated 8/4/10).

Attachment 11

Jenkins, Josh

From: Jenkins, Josh
Sent: Monday, August 09, 2010 4:01 PM
To: Jose Sosa; 'John Maxwell'; Mike Stanwood; 'J. Steven Gardner'; 'John Morgan'; 'David Bell'; Shortelle, Ann
Cc: McWilliams, Alycia; Jaque Mitchell
Subject: Telephone log - John Craynon OSM
Attachments: 08042010 Craynon conversation .pdf

All - for files

Joshua L. Jenkins | Project Manager/Senior Geologist
MACTEC Engineering and Consulting, Inc. | Atlanta, Georgia
Phone 770.421.3412 | **Mobile** 770.833.6429 | **Fax** 770.421.3486
Email jljenkins@mactec.com | **Web** www.mactec.com

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TELEPHONE RECORD

DATE 08/04/2010	TIME 1300	TALKED WITH - John Craynon	
PROJECT/FILE NUMBER 6122100201		TITLE - Chief, Division of Regulatory Support	
PROJECT NAME EIS for Proposed Stream Protection Rule		COMPANY - OSM	
MACTEC REPRESENTATIVE WHO PLACED CALL Josh Jenkins, Don Iannone subcontractor		STREET ADDRESS	
PHONE CALL XX ~~MEETING~~		CITY/STATE/ZIP	
MEETING LOCATION Via Phone		PHONE	FAX

SUBJECT/PURPOSE OF CALL ~~OR VISIT~~: General Info for Regulatory Impact Analysis With Don Iannone – Subcontractor to MACTEC.

DISCUSSED/NOTES: Mr. Craynon reviewed likely cost drivers such as proposed baseline sampling changes, compliance with corrective action thresholds, more frequent compliance monitoring, biological conditions monitoring, and mining through streams.

Mr. Craynon indicated that there may be costing data available from Infomine and other sources such as Marshall Miller and Associates. Don and Josh followed up with a call to Steve Gardner to discuss. Steve indicated that EOSI has this type of data for mining in the Appalachian and Illinois basins.

He also explained that the RIA review process will include OSM review and then the document will be sent on to OMB, USEPA, USFWS, and USACE.
He said that before we survey NMA members, he would clear our conversations with OSM council because there may a concern about sharing pre-decisional information. He indicated that state mining associations, larger mining companies may be able to provide additional information.
He indicated that the study would define the mining industry from the standpoint of the operator/permittee and not include transportation, energy or other industries that use coal.

He said that based on his cursory review, the outline for the RIA sent in earlier this summer is in line with his expectations.

ACTION REQUIRED: None FOLLOW-UP CALL: YES NO XX

ROUTE TO	SIGNATURE JL Jenkins

(Email dated 8/3/10 from D. Iannone to B. Frisby)

Attachment 12

Jenkins, Josh

From: Donald Iannone [diannone@ix.netcom.com]
Sent: Tuesday, August 03, 2010 4:52 PM
To: Frisby,Bradford
Cc: Jenkins, Josh; Will Burns
Subject: Re: Status of Our Request for Assistance

Bradford,

Thank you for your time today.

I appreciate NMA's interest in assisting us with this Concept RIA study.

Hopefully OSM will provide us with more specific direction soon on a "preferred alternative." It is an evolutionary process, as you know. This direction will be vital to developing an effective survey of NMA's coal mining members. I will be back in touch with you as soon as I hear something.

Finally, thank you for sharing the attached information documents.

Regards,

Don Iannone

On Aug 3, 2010, at 4:40 PM, Frisby,Bradford wrote:

Don,

Here is the OSM-EPA-Corps MOU that I mentioned that lays out the Administration's policy toward coal mining in the East. I do not believe an economic analysis would be complete under NEPA without a cumulative analysis of the comprehensive and coordinated actions being taken by EPA, the Corps, and OSM pursuant to the MOU. See also a trade press article about the economic impacts based on just one of the actions from the MOU ("EPA mountaintop decision clouds future of new mines, production in Appalachia").

Also attached is a copy of NMA's comments to OSM on the stream protection rule.

Regards,

Bradford Frisby, NMA

-----Original Message-----
From: Donald Iannone [mailto:diannone@ix.netcom.com]
Sent: Monday, August 02, 2010 7:52 PM
To: Frisby,Bradford
Cc: Josh Jenkins
Subject: Status of Our Request for Assistance

Hi Bradford,

Can you please provide us with an update on our request for assistance with respect to the Regulatory Impact Analysis (RIA) for OSM's new stream protection rule?

Is there a time tomorrow I can call you to discuss this matter?

Thanks so much.

Don Iannone

Cell: 440-668-1686

<2009-06-10 Final MOU Logos Sigs.pdf><NMA SPR NOI cmts final.PDF><EPA moratorium choking investment in Appalachia.pdf>

Jenkins, Josh

From: diannone@ix.netcom.com
Sent: Wednesday, August 04, 2010 7:00 AM
To: Jenkins, Josh
Subject: Re: agency contacts

Josh,

Good conversation with Bradford Frisby at NMA yesterday. They want to help us if they can.

They will only do the survey if we can give them specific information on OSM's Preferred Stream Rule. They will not ask their coal members to participate in a general idea gathering survey because they do not feel it would be productive.

That raises the question of whether OSM will soon be able to provide this specificity. What do you think?

Industry cooperation in estimating the costs of the Rule is essential. And yes I know this is a concept RIA on a draft Rule.

Thanks.

Talk to you and John at 1 pm today. That is eastern time...correct?

Don
Sent from my Verizon Wireless BlackBerry

From: "Jenkins, Josh" <JLJENKINS@mactec.com>
Date: Tue, 3 Aug 2010 23:26:31 -0400
To: Dudley, Judith<JLDUDLEY@mactec.com>; diannone@ix.netcom.com<diannone@ix.netcom.com>; Flock, Elaine<ELFLOCK@mactec.com>
Cc: Shortelle, Ann<ABSHORTELLE@mactec.com>; McWilliams, Alycia<AWMCWILLIAMS@mactec.com>
Subject: agency contacts

All - per OSM, the following is a list of contacts for USEPA, USFWS, and US Army Corps of Engineers that have been engaged with OSM on the proposed stream protection rule EIS:

USEPA - Elaine Suriano - suriano.elaine@epamail.epa.gov - (202) 564-7162
USFWS - Christy Johnson - christy_johnsonhughes@fws.gov - (703) 358-1922
USACE - Desiree Hann - desiree.l.hann@usace.army.mil - no number given

Any questions you have should be directed through them and they will direct you to appropriate resources within their agencies. Please indicate that you are working with OSM on the EIS for the proposed rule change and copy me on your correspondence with them. If you have a phone conversation, please document the conversation and send to my attention.

Don- please contact Ms. Suriano with any questions you may have for USEPA - she is expected to direct you to appropriate resources within that agency.
Judy/Elaine - OSM is expecting a HQ-HQ section 7 consultation even though USFWS is a cooperating agency, however, OSM expects us to verify with Christy Johnson that this is the case. We are expected to draft the letter to put on OSM letterhead.

Alycia - please distribute info and put in centric.

thanks

Jenkins, Josh

From: Frisby,Bradford [BFrisby@nma.org]
Sent: Thursday, August 05, 2010 11:43 AM
To: Donald Iannone
Cc: Jenkins, Josh
Subject: RE: OSM Stream Protection Rule RIA Survey

Okay, thank you for getting back to me.

-----Original Message-----
From: Donald Iannone [mailto:diannone@ix.netcom.com]
Sent: Thursday, August 05, 2010 11:38 AM
To: Frisby,Bradford
Cc: Josh Jenkins
Subject: OSM Stream Protection Rule RIA Survey

Hi Bradford,

We do not know yet what we can share with NMA about the proposed stream rule. We spoke with John Craynon at OSM about this issue yesterday, who said he knows you quite well.

As soon as we get more information, we will share that with you.

Hopefully this will all work out. We need NMA's help with this survey.

Thank you.

Don Iannone

Cell: 440-668-1686

(Email dated 1/6/11 from J. Maxwell to S. Varvell)

Attachment 13

Jenkins, Josh

From: John Maxwell [JMaxwell@polukaiservices.com]
Sent: Thursday, January 06, 2011 4:47 PM
To: Varvell, Stephanie L.
Cc: Sloanhoffer, Nancy E.; Craynon, John; Jose Sosa; Jenkins, Josh; dlannone@lx.netcom.com; Mike Stanwood; Shortelle, Ann
Subject: RE: RIA

Stephanie,

We will stop work on the RIA until further notice and when the RIA content has been decided. Let us know when a meeting is needed and we will attend.

Do you have a feel for how this will affect the RIA schedule?

Thank you,

John

From: Varvell, Stephanie L. [mailto:svarvell@osmre.gov]
Sent: Thursday, January 06, 2011 4:38 PM
To: John Maxwell
Cc: Sloanhoffer, Nancy E.; Craynon, John
Subject: RIA

John,

Based on the directions I've received there is really nothing to be further done on the RIA at this time. We need to confirm what is acceptable to OMB and our chain of command. We will have follow-up questions. We can have a meeting tomorrow if you want but I would suggest it would be premature.

Stephanie Varvell
Project Manager/
Contracting Officer's Representative
Contract # S10PC00060
859-260-3925

(Email dated 1/28/11 from S. Varvell to PKS)

Attachment 14

Jenkins, Josh

From: Jose Sosa [jose@polukaiservices.com]
Sent: Friday, January 28, 2011 11:54 AM
To: Jenkins, Josh; John Morgan
Cc: John Maxwell; Randy Sosa; Mike Stanwood
Subject: FW: RIA Workplan

fyi

From: Varvell, Stephanie L. [mailto:svarvell@osmre.gov]
Sent: Friday, January 28, 2011 11:52 AM
To: Jose Sosa; Sloanhoffer, Nancy E.
Cc: John Maxwell; Randy Sosa; Mike Stanwood; Caroline Bari
Subject: RE: RIA Workplan

Jose,
I've been instructed to ask for a delay in starting any work until after our meeting with you on Tuesday.

From: Jose Sosa [mailto:jose@polukaiservices.com]
Sent: Friday, January 28, 2011 10:28 AM
To: Varvell, Stephanie L.; Sloanhoffer, Nancy E.
Cc: John Maxwell; Randy Sosa; Mike Stanwood; Caroline Bari
Subject: RIA Workplan

Nancy/Stephanie:

Have you technical staff had an opportunity to review the work plan to finalize the RIA? MACTEC and Morgan are looking at a start date of February 1, 2011 with a completion/delivery of deliverable on March 11, 2011.

Please let us know as soon as possible.

Jose

OSM EIS Meeting Minutes
Lexington, Kentucky

7/14/10

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1. Posters

Posters are intended to present info introduced in NOI; therefore, each posted will display a proposed alternative (as presented in the NOI) and one photo. Information sheets will be located at each station with the poster contents and an additional paragraph of information not found on the poster.

A Code of Conduct will be placed at each entrance.

Dave Bell (Plexus) reviewed the final poster format and contents with the team. Posters will be laminated paper with Velcro backing. Additional display items (foam board, easels) will be decided on at each venue.

2. Draft Rulemaking Concept Document

- Focus on NEPA process instead of "proposed rule" (new term to replace "proposed rule" is "rulemaking concept document")

- OMS has spoken to solicitors and is treating the rulemaking concept document (RCD) as a draft thought piece. The RCD does not pre-dispose the agency's position. For OSM purposes, in the EIS process the concept document is just a discussion object between OMS, EPA, the Corps of Engineers, CEQ, Fish & Wildlife and does not lock the agency into a particular course.

- A disclaimer will be placed on all pages of the RCD to clarify that this is a pre-decisional working document not intended to influence the NEPA process. OSM will distribute an updated RDC (w/ disclaimer) to involved agencies and contractors.

- The input from public meetings will significantly impact the concepts presented in the NOI and discussed in the RCD

- OSM is committed to following the NEPA process in its entirety and this process and the resulting EIS will ultimately determine the final rule

3. Public Meetings

A webinar was conducted to regarding the expectations and procedures for the public meetings being held from July 19 -29, 2010. Webinar attendees:

Andy Wills	Mychal Yellowman	Joy Seberstine	Brian Loges
Peter Mali	Sterling Rideout	Jeffrey Hoss	Richard Calhoun
Russ Miller	Paul Clark	Phil DT	Jackie Cain
Chris Holmes	Paul Ehret	Brian Rogers	Peter NLN
Deb Moses	Jeff Guillespy	Mitch Rollings	Janet Nixon
Jeff Hostleton			

- Open house event staff was confirmed. Additional attendees:

Carbondale, Evansville	Fairfield, TX	Hazard, KY
Brian Loges	Mitch Rowens	Chris Holmes
Paul Ehret	Lonnie Taylor	Joe Black
Joy Seberstine (Carbondale only)		Gail Smith
Chris Holmes (Evansville only)		
Russ Miller (Evansville only)		

Beckley, WV	Farmington, NM	Morgantown
Chris Holmes	Justin Hunt	Chris Holmes
Roger Calhoun	Barry Smith	Roger Calhoun

Gillette
Harv Glow
Jeff Fleshman

- Format: Informal. Posters and fact sheets will be displayed. Public comment forms and a court stenographer will be available. No formal presentation or verbal public statements. Contractor event staff will be present to assist the public in documenting their comments.

- Media inquiries: – If a comment is requested by the media, the senior OSM representative on site will present a prepared statement. A copy of the statement will not be provided to the media

- Questions: A Q&A sheet is available for answering general questions. Questions not on the Q&A sheet should not be answered (e.g. "Is that a concern for you? I invite you to provide

your comments and concerns by ..."). (*Note*: The Q&A sheet will not be distributed to the public or media)

- Security: At all locations, local law enforcement was notified of the meetings. Additional on-site security is arranged for four sites. State police will also be notified. OSM will notify the Federal Marshalls of the public meetings.

- Dress code: Business casual. No agency or company logos are to be displayed.

4. Public Comments

2010 commenting period closes 7/31/10.
Comments to be organized by 8/31/10 and summarized for team.
OSM confirmed that ANPR comments have already been incorporated in rulemaking concept document by OSM

5. Regulatory Impact Analysis

The RIA is currently scheduled such that a version is to be submitted before DEIS. It was proposed to submit the RIA after DEIS is approved.

OMS must resolve conflict between the timing of the RIA and the proposed rule. Therefore, it was agreed to submit a conceptual (draft) RIA prior to the DEIS, to accommodate the internal OSM processes.

Final RIA will be prepared after evaluation of the public comments and development of the DEIS.

SOW listed the generation of one RIA. Therefore, must get a cost proposal to decide if there is the money to do the both a 'conceptual' and 'final' RIA. A formal request will be made to OSM for additional funding to cover production of conceptual and final RIAs.

Use a multiplier in RIA to account for the trickle-down effects of any proposed alternative on other industry (multiplier of 5)

6. Current Timeline

NOI
Public scoping (4/30 – 6/1 & 6/18 – 7/30)
Preliminary Draft EIS (11/19/10)
Publish NOA of DEIS for public comment (2/4/11)
Public meeting on DEIS (March, April 2011)
Publish NOA of FEIS (11/11)
Publish NOA of ROD (12/20/11)

7. Refining Alternatives

Contractors will get up to speed on rulemaking concept document origins and contents. Then schedule a team meeting with the original OSM developers to refine RCD alternatives prior to August 31.

OSM personnel involved in the development of RCD:

Mike Ellerman
Bill Winters
John Craynon
Cheryl Sylvester
Brian Loges
Harry Payne
Mychal Yellowman
Louis Uranowski
Dennis Rice

8. Miscellaneous

- John Craynon will post study regarding coalmining on
- Li-Tai will forward DOPAA text
- Status of cooperating agencies: Positive response - Wyoming, Montana, Alabama, WV, Kentucky; possible - Virginia, Ohio, New Mexico, Colorado; Fish and Wildlife; EPA. COE hesitant due to resource commitments. Reviewing agencies – John Craynon compiling list.
- Li-Tai will provide USACE contacts after she gets info on what specialties are needed. Richard Warner (professor) can provide contacts for EPA. OSM librarian can pull studies once she knows what look up.

- Documents requiring review will be submitted pdf, and comments will be made using the reviewing and commenting tools available in pdf.

- Team members were asked to review the SharePoint organizational structure and offer suggestions on how to track documents with regard to which team member(s) have read and/or reviewed the various documents.

- Team members will go through Jaque Mitchell (jaque@polukaiservices.com) to place documents on SharePoint. Each team member is responsible for identifying the proper folder for storage and communicating this information to Jaque.

From:	Craynon, John
To:	John Maxwell; Jose Sosa
Cc:	Coker, Jeffrey A. "Jeff"
Subject:	FW: Consolidated Comments on the RIA From A. DeVito
Date:	Monday, November 01, 2010 7:06:16 PM
Attachments:	image001.png image003.png

From: DeVito, Andy
Sent: Thursday, October 28, 2010 11:12 AM
To: Craynon, John; Coker, Jeffrey A. "Jeff"
Subject: Consolidated Comments on the RIA From A. DeVito

John,

I've consolidated all of my comments on the RIA into this one document in order to make it easier to send them to the contractor. Please disregard previous email comments on the RIA. Thanks

Comment #1

When a rule reaches the 100 million per year threshold, section 6(a)(3)(C) of E.O. 12866 requires us to do a cost/benefit analysis of the proposed action and of "potentially effective and reasonably feasible alternatives to the planned regulation . . . ." Circular A-4 at page 2 states that "(a) good regulatory analysis should include the following three basic elements: (1) a statement of the need for the proposed action, (2) an examination of alternative approaches, and (3) an evaluation of the benefits and costs—quantitative and qualitative—of the proposed action and the main alternatives identified by the analysis.

As I read section 6.1 of the RIA (page 74), it appears that the three scenarios analyzed are based on different compliance cost assumptions for the SPR but no analysis has been performed for "reasonably feasible alternatives" as required.

Comment # 2

I found the RIA difficult to understand in terms of total costs and benefits. I was hoping to find the following table in the document. It comes from OMB Circular A-4 (page 47) and sets out the format for stating costs and benefits in and easily readable format.

OMB #: Agency/Program Office:
Rule Title:
RIN#: Date:

Category	*Primary Estimate*	*Minimum Estimate*	*Maximum Estimate*	*Source Citation (RIA, preamble, etc.)*
BENEFITS				
monetized benefits				
Annualized quantified, but unmonetized, benefits				
unquantified) benefits				
COSTS				
Annualized monetized costs				
Annualized quantified, but unmonetized, costs				
Qualitative (unquantified) costs				
TRANSFERS				
Annualized monetized transfers: "on budget"				
from whom to whom?				
Annualized monetized transfers: "off-budget"				
From whom to whom?				
Category	*Effects*			*Source Citation (RIA, preamble, etc.)*
Effects on State, local, and or tribal governments				
Effects on small businesses				
Effects on wages				
Effects on growth				

Comment #2

Table ES-6 of the RIA states that the change caused by scenario one is $1,357,128,953 and by scenario three -$1,482,605,203. If I divide either of those numbers by 12 which I assume is the time span of the study (2008-2020), I come up with an annual effect of at least 100 million per year, which makes the rule economically significant. If the rule is economically significant, I have to fill out the following OMB ROCIS table and if the table isn't filled out, I can't transmit the rule and to OMB for review. Below is the ROCIS table. Please note that I'm required to add discount information at 3 and 7 percent as discussed in OMB Circular A-4. We need that kind of information if the rule is economically significant.

Economic Data

Working Version of Costs and Benefits Statement

Category	Primary Estimate	Low Estimate	High Estimate	[illegible]	[illegible]
Benefits Edit					
Annualized Monetized Benefits/year				2%	
				3%	
Annualized Quantified				2%	
				1%	
Quantitative					
Costs Edit					
Annualized Monetized Benefits/year				2%	
				1%	
Annualized Quantified				2%	
				1%	
Quantitative					
Transfers Edit					
Fiscal Annualized Monetized Benefits/year				2%	
				1%	
From/To	From		To		
Other Annualized Monetized Benefits/year				2%	
				1%	
From/To	From		To		
Effects Edit					
State, Local, and/or Tribal Governments					
Small Businesses					
Wages					
Growth					

Comment #3

With regard to small entities, the RIA, at ES-11, states that approximately 98% of coal mining firms are small entities but then goes on to state that no definitive conclusions regarding the small business impacts can be made at this time. It reads as if we don't know what the rule will do to 98% of the coal mining firms other than 5 generalized bullet items listed in the RIA. That seems a little weak to me. The comment you'll probably get from the coal industry and the Small Business Administration is that you shouldn't be doing a rulemaking if you don't know what the rule's impacts are going to be on 98% of the industry. Shouldn't we operate under the assumption that the proposed rule is pretty close to what the final rule will be and therefore provide something close to preliminary definitive conclusions.

Comment #4

I agree with a comment previously submitted by Dennis R. More care needs to be taken when labeling the tables. For example, Table 6-9 (page 64) provides data on tax revenue losses resulting from the SPR, but the time frame covered is left unstated. I assume it's from 2008-2020, but that's not stated in the table or in the narrative

Comment #5

On page 85 of the RIA, under the discussion of Stream Miles Protected, it's stated that "a considerable amount of money could be saved by not having to restore streams directly and indirectly damaged . . . ." I was under the impression that there is an obligation to restore the streams that are not permanently buried and that this would be a cost of doing business for the coal operator. Are these "avoided costs" properly considered a monetized benefit for the rulemaking since they most likely result from the operator being unable to mine rather than a reduction in operating costs? Shouldn't the value of protecting streams be considered a benefit that can be quantified in terms of miles of streams protected but not monetized because we can't put a value on such things as the recreational use of the streams, avoided flood abatement costs, etc.? The following is from Circular A-4 at page 27.

a. Benefits and Costs that are Difficult to Monetize

You should monetize quantitative estimates whenever possible. Use sound and defensible values or procedures to monetize benefits and costs, and ensure that key analytical assumptions are defensible. If monetization is impossible, explain why and present all available quantitative information. For example, if you can quantify but cannot monetize increases in water quality and fish populations resulting from water quality regulation, you can describe benefits in terms of stream miles of improved water quality for boaters and increases in game fish populations for anglers. You should describe the timing and likelihood of such effects and avoid double-counting of benefits when estimates of monetized and physical effects are mixed in the same analysis.

b. Benefits and Costs that are Difficult to Quantify

If you are not able to quantify the effects, you should present any relevant quantitative information along with a description of the unquantified effects, such as ecological gains, improvements in quality of life, and aesthetic beauty. You should provide a discussion of the strengths and limitations of the qualitative information. This should include information on the key reason(s) why they cannot be quantified. In one instance, you may know with certainty the magnitude of a risk to which a substantial, but unknown, number of individuals are exposed. In another instance, the existence of a risk may be based on highly speculative assumptions, and the magnitude of the risk may be unknown.

In the 2008 final EIS for the Stream Buffer Zone Rule, at page IV-145 The following was stated:

The estimated length of streams directly impacted from mining in central Appalachian coal fields from 1992 to 2002 based on permit information was 1,208 miles (2.05 % of streams in central Appalachian coal fields). It is estimated that if this rate would continue for ten years, 4.1 % of the streams in Appalachia would be directly impacted. (EPA 2003, p.IV.B-1) The miles of stream directly impacted by excess spoil fills for permits issued between 1985 and 2001 is 724 miles, which is approximately 1.2 percent of the streams in central Appalachia. If valley fills construction continues at this rate, an additional 724 miles of headwater stream would be buried in 17 years or by 2018. [Id., p IV.B-2]

Do we have any information like that in the new EIS that can be used in the RIA to give some sort of indication of the miles of streams that potentially could be affected in some way by the SPR?

From: Jenkins, Josh
To: Varvell, Stephanie L.; John Maxwell; diannone@lx.netcom.com; Shortelle, Ann
Subject: RIA
Date: Thursday, November 04, 2010 4:22:22 PM

Hi Stephanie – I asked Don Iannone to look into comments received from OSM for tomorrows call. Below is his reply. We can use this and the comments received from OSM as talking points tomorrow. Please forward on to the appropriate folks as necessary.

Thanks.

General Responses

1. **Our Commitment**: From the start, we have been committed to serve both MACTEC and OSM in the best way possible given the information, time, and budget resources available to us. We remain committed to helping OSM achieve its overall rulemaking objective. To uphold this commitment moving forward, we will need more direct help from OSM in addressing many of its comments. These assistance needs are described in this memorandum.

2. **Rulemaking Requirements and Work Process**: Typically, an RIA is prepared on a final rule, and it follows an EIS. This was not the case with this RIA, which was prepared in advance of the EIS at OSM's request to move its rulemaking process forward. Several of the technical issues raised in OSM comments, such as measurement of stream miles to be protected by the rule, are issues that must be addressed first in the EIS and then in the RIA. Also, the analysis of the economic benefits of the rule from an environmental protection and natural resource management standpoint hinge on the identification and quantification of these benefits in an environmental sense in the EIS. We recognize the need for an improved identification and measurement of the economic benefits of the rule, but our ability to quantify these benefits to any significant degree is not possible given the information and time available to us at this stage. Comments offered by both Cheryl Sylvester and Andy DeVito point to these types of issues.

3. **Conceptual Nature of the RIA**: This is a "conceptual" RIA, which analyzes the economic impacts of the "proposed" Stream Protection Rule (SPR). The many uncertainties associated with the rule have both limited and complicated our ability to produce a more exact measurement of the economic costs and benefits of the proposed rule. Many of the questions and comments offered by OSM cannot be addressed definitively in the RIA document until the EIS has been completed and a "final" rule exists. We are confident that the RIA prepared on the final rule, which will have the benefit of the information and knowledge produced by the EIS, will be better able to estimate the economic costs and benefits of the rule. As a final point in this regard, it is not reasonable to view this conceptual RIA as the equivalent of a RIA on a final rule. This is at best an "interim" analysis providing best available information on the economic impacts of the SPR.

4. **Scope**: We were asked to undertake an RIA that was narrowly focused on an analysis of the

economic impacts of the proposed rule on the coal mining industry and coal mining areas. Our document was developed in response to that scope. We did the best we could with the very limited information available to us in a very limited timeframe. We worked extremely hard to be responsive to both MACTEC and OSM's prescribed deadlines. The scope of this conceptual RIA does not include many of the typical components of a "complete" RIA, as described in Andy DeVito's comments.

5. **Data and Assumptions:** We encountered several significant obstacles in our work effort, principally those related to scant hard data and information about the economic costs and benefits of the various elements of the proposed rule. In the absence of this hard data and information, we made "as reasonable as possible" assumptions to guide on economic modeling work. Many of Harry Payne's comments about the assumptions used in modeling Scenario One relate to the assumptions and analysis provided to us by John Morgan from Morgan Worldwide. We believe John Morgan provided a defensible methodology for the modeling work, given where the rulemaking process stands at this point.

Specific Responses

1. John Craynon's Submissions:

    a. We will review the various reports sent to us by John. Some we have read and others we have not. Where appropriate we will add references and some discussion of them in the revised RIA document.

2. Cheryl Sylvester's Comments:

    a. We will rewrite the executive summary and attempt to address the issues raised.
        i. OSM's assistance will be needed in helping us articulate the environmental and economic benefits of the rule. Does OSM have data we might use in estimating these benefits?
        ii. We will also need OSM's assistance in formulating reasonable assumptions that help us to allocate the estimated $1.4 billion economic impact across a defined future timeframe. How does OSM foresee the rule's implementation and application over the next decade? Can this vision provide guidance to us in allocating these economic impacts over time?
        iii. We will improve the table and text to reflect the time periods for which impacts are estimated/projected.
        iv. Changes made in the executive summary will be carried through to other parts of the RIA document.

3. Harry Payne's Comments:

    a. We have no more detailed data or analysis on the assumptions and calculations prepared by team members in Appendix L of the RIA. The assumptions and numbers developed by the team were considered reasonable. We do not see a strategy at this

time for producing better cost estimates. Given the vast differences in operating conditions and mining economics across coal mines and coal mining areas, it is extremely difficult to estimate rule compliance costs across the U.S.

b. We will see if there is an improved way to handle the tax impact issues raised. Again, many of the defining factors, such as impacts of the rule on coal production in the coal-producing regions, must be analyzed before more precise tax impact numbers can be produced. It is one thing to analyze the tax impacts of the coal mining industry as it exists today in a single state, and it is quite another to analyze the tax impacts of a "proposed" rule on 25 coal-producing states. A detailed analysis of these tax impacts could easily have taken the time and budget allotted to the conceptual RIA.

c. We would agree with Harry Payne's point about the "true" benefits and costs of the coal mining industry. We will cite the studies he shared with us and add some text discussing these issues. An improved measurement of the economic costs and benefits of the final SPR will be possible in the final RIA.

d. We will reference and discuss the key findings of the two cost studies provided by Harry in the revised RIA document.

4. Andy DeVito's Comments:

a. As mentioned earlier, a number of the comments offered refer to a more traditional and complete RIA. The scope of this conceptual RIA is much more limited. A detailed and robust analysis of the rule's economic costs and benefits will be possible when the EIS has been completed and the final rule exists. Simply put, we did the best we could with the information and resources available to us.

b. We will attempt to use the tables provided to us in Andy's comments. For the reasons cited earlier, hard numbers, especially on economic benefits, are unlikely in the conceptual RIA. We can try to work with the tables and provide what is possible to Andy. We will need a great deal of help from OSM in filling in many of the cells in the tables. We are strongest with cost impact data. Benefit impact data is very limited and only qualitative n nature. We have no information or data on transfers.

c. We will attempt to expand upon the small business impact analysis of the RIA. We are open to OSM's ideas on how to approach this. We will look at the U.S. Census County Business Pattern data to identify the number of small mines that may be impacted by the SPR.

d. Finally, we will endeavor to add more qualitative information pointing to the economic benefits of the rule. As noted, there are often significant limitations to this qualitative information.

5. Response to Dennis Rice's Comments:

a. We will clarify the timeframe issue raised by Dennis and echoed by other OSM reviewers. Once again, we will need OSM's help in breaking down the $1.4 billion impact over the next decade.

b. The correction in Table ES-10 will be made.

c. We will find an improved way to label the tables relative to the negative impact numbers.

d. We do not see a defensible way at this point in time to estimate changes in coal production by region or mining method. The team attempted a "back of the envelope" estimate of possible regional shifts. This is a very complex issue for which no supporting data exists and is still being fleshed out by the EIS process. We suggest that for the final RIA the Delphi Technique be used to create a consensus outlook on regional production shifts and mining method shifts related to the rule. The Delphi Technique is a consensus building technique used widely in forecasting future industry and economic conditions. This technique has been used extensively by automotive industry experts to develop a consensus outlook on production by product, market and underlying technology base. The technique could help in developing a future outlook and reasonable assumptions in various areas related to the final RIA.

e. Both Dennis Rice and Andy DeVito have raised issues about the analysis of other "alternatives." Because of the conceptual nature and because the alternatives were not developed we examined just one rule alternative: the proposed preferred rule. We have included three possible scenarios and a baseline analysis in the conceptual RIA. Given information, time and budget, additional modeling or in depth analysis of alternatives is not likely possible at this time. It is not even clear that the effort is worthwhile given the conceptual nature of this RIA.

Next Steps

1. We have a conference call scheduled for this Friday at 10:00 AM to discuss the OSM comments on the RIA document. In preparation for the call, we suggest that everyone read this memorandum outlining our responses to the OSM comments, and the most effective way to address these comments in a revised RIA document.

2. We are mindful of the rulemaking schedule, and will work to provide a revised RIA document in a reasonable amount of time. We see two schedule options reflecting different levels of effort. Both options assume that we can get the data and other inputs from OSM and other sources in a timely manner. These estimates are based upon our immediate review of the OSM comments. They may change in light of our Friday conference call.

    a. **Option 1**: Our rough guess is that we will need 2-3 days work by Don Iannone and Mike Carroll if the revisions do not require any major document changes or new

analysis. As far as a delivery date, the earliest delivery to MACTEC with the 2-3 day work effort would be end of business next Thursday, Nov 11.

b. **Option 2:** If more major changes are required, then we are looking at a 4-5-work day effort by both Don Iannone and Mike Carroll. If a 4-5 day work effort is required, then we are looking at delivery to MACTEC by end of business on Thursday, Nov 18.

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From: Jenkins, Josh
To: Varvell, Stephanie L.
Cc: Donald Iannone; "Rice, Dennis"; DeVito, Andy; Payne, Harry J.; Sylvester, Cheryl; Craynon, John; John Maxwell
Subject: RE: RIA information
Date: Monday, November 08, 2010 10:09:26 AM

Good Morning Stephanie – attached is the synopsis of Friday's calls. I have also spoke to John Maxwell of PKS and spoke to him about items' 4 and 6 below (the estimates on 4 will only follow after production estimates are developed). I am going to follow up with a separate email on those two items.

Action Steps on the RIA Based Upon November 5th Conference Call

Don Iannone and Donald T. Iannone & Associates (DTIA) will:

1. Talk at 1:30 pm today with Andy DeVito and Dennis Rice about a specific strategy to populate the OMB summary tables with best available data the conceptual RIA document, OSM, and other sources. (Update: This has been done!)
2. Work with OSM in giving definition to any additional alternatives to be included in the RIA, if required by OMB. DTIA and OSM will work together jointly to provide non-modeling information and analysis to characterize these other alternatives, if it is required. This work effort would rely to a very large extent on existing information and analysis. (Update: Andy DeVito and Dennis Rice spoke to OMB following this morning's call, and an analysis of alternatives is needed by OMB because the rule is considered economically significant. The alternatives to be included are: 1) proposed preferred rule (in the RIA now); 2) Least Cost and Least Stringent Alternative: the economic cost and benefit analysis from the 2008 rule will be used, which OSM will provide to DTIA for inclusion in the RIA; 3) Most Stringent and Costly Alternative, which is the Rule alternative with the greatest restrictions on longwall mining and gives consideration to ephemeral streams. No economic modeling would be performed on this alternative given cost and time. Instead the cost analysis by Morgan Worldwide and modeling for Scenario One would be adjusted to account for

the additional compliance costs relative to longwall mining limits and ephemeral stream inclusion. Andy DeVito and Dennis Rice believe this would be sufficient, if John Morgan can help us develop revised cost estimates for Elements 3, 4 and 5 in his analysis underlying the modeling of Scenario One in the RIA.

3. Work with OSM staff to allocate the $1.4 billion economic impact identified in Scenario One over a 12-year timeframe. DTIA will use OSM's estimated timeframe to accomplish this allocation. (Update: Andy DeVito and Dennis Rice do not believe this is necessary to meet the OMB requirements. We simply need to provide an estimated annualized monetized economic cost figure for the OMB submission).
4. Work with OSM to acquire/develop available quantitative and qualitative information about the possible economic benefits of the rule. The information on stream mile preservation/protection and mined and protected land acrage will be generated by other members of the EIS team. This information would be developed during the week of November 15th. Once available, it would be provided to DTIA for inclusion in the RIA. It is not expected that these economic benefits can be monetized in the conceptual RIA, but available quantitative data on these benefits (such as protected and preserved stream miles) will be included in the RIA. No economic modeling of this data is anticipated. (Update: Dennis Rice will provide us with a list of potential economic benefits of the rule., although he does not believe these benefits can be monetized at this time.)
5. Strengthen the small business impact analysis (RFA) section of the RIA using U.S. County Business Pattern data, data from the the 2008 rule RFA, and other readily available sources. If analyzed permit data can be provided to us by OSM, we will include it along with a write-up about its significance in the revised RIA document. (Update: The discussion with Andy DeVito and Dennis Rice helped to give focus to this work, which DTIA will be working on shortly)
6. OSM, Morgan Worldwide, and ECSI will meet in Lexington, KY next week (November 10-11) to develop estimates on expected shifts in coal mining production by region and mining method over the next 10-12 years. Along with that, coal production cost per ton estimates by region will be developed. If possible, these shifts will be defined over time (next 10-12

years). This information will be written up and provided to DTIA for inclusion and use in the RIA. No economic modeling of these data inputs is anticipated.

7. DTIA will proceed with the revision of the RIA document where possible while the data and write-ups in #4 and #6 are being developed by other team members.
8. Based upon today's discussion, no additional economic modeling related to the RIA is envisioned.

The schedule for completing this work is to start on those revisions that can be done now and then go to work on those revisions that depend upon the data inputs from $4 and $6 above is available. OSM has informed us it needs to submit the conceptual RIA to OMB by December 10th.

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From: Varvell, Stephanie L. [mailto:svarvell@osmre.gov]
Sent: Monday, November 08, 2010 9:33 AM
To: Jenkins, Josh
Subject: RIA information

Josh,

Were you able to communicate your RIA needs to the group meeting in Lexington? I will be asked about the status at a call this afternoon and would like to give some assurances that we have a plan that will allow for the rule to continue to go forward. Also, I believe Don had agreed to send out a synopsis of what type of deliverable we could expect. Could you relay the timeline to me and also when you believe you will deliver the final RIA? The last day I heard was sometime in January. The final delivery date is not on the most recent Gantt schedule.

Thanks,

Stephanie Varvell
Project Manager/
Contracting Officer's Representative
Contract # S10PC00060
859-260-3925

From: Jenkins, Josh
To: Craynon, John; John Maxwell; J. Steven Gardner; John Morgan
Cc: Liz Edmondson; Joe Zaluski; Winters, William R. "Bill"
Subject: RE: RIA (Corrected)
Date: Thursday, November 11, 2010 10:02:06 AM

Call in number is wrong

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From: Craynon, John [mailto:jcraynon@osmre.gov]
Sent: Thursday, November 11, 2010 10:00 AM
To: John Maxwell; J. Steven Gardner; Jenkins, Josh; John Morgan
Cc: Liz Edmondson; Joe Zaluski; Winters, William R. "Bill"
Subject: FW: RIA (Corrected)

FYI

From: Rice, Dennis
Sent: Monday, November 08, 2010 9:22 AM
To: Donald Iannone
Cc: DeVito, Andy; Craynon, John; Sylvester, Cheryl; Shawley, Dianne M; Rideout, Sterling; Varvell, Stephanie L.; Winters, William R. "Bill"; Uranowski, Lois J.; Payne, Harry J.
Subject: FW: RIA (Corrected)

Don,

In the last sentence of the fifth paragraph, I should have said that my estimate is that the multiplier likely would be 200-400% of the preferred option costs for these elements.

Dennis

From: Rice, Dennis
Sent: Friday, November 05, 2010 8:57 PM
To: 'Donald Iannone'
Cc: DeVito, Andy; Varvell, Stephanie L.; Craynon, John; Sylvester, Cheryl
Subject: RE: RIA

Don,

Thanks for sending me the info that you found on the EIA website regarding company size and production. Interesting that two companies account for 31% of all coal mined in the U.S.

To sum up our earlier calls today (Friday, Nov. 5), OMB has confirmed that the RIA must be completed at the proposed rule stage to inform rulemaking decisions and to provide an opportunity for the public to comment on it. If data are not available on the costs to industry, we

need to estimate them and allow commenters to provide corrective data after the proposed rule is published.

OMB stated that we should consider this rule to be economically significant without regard to whether it would meet the annual $100 million cost threshold. This decision means that the RIA must include a baseline and three options. As stated on page 16 of OMB Circular A-4: "]Y]ou generally should analyze at least three options: the preferred option; a more stringent option that achieves additional benefits (and presumably costs more) beyond those realized by the preferred option; and a less stringent option that costs less (and presumably generates fewer benefits) than the preferred option."

We believe that those options would be the preferred alternative in the EIS (preferred option), the environmentally most protective alternative in the EIS (more stringent option), and the no-action alternative in the EIS, which assumes implementation of the 2008 excess spoil-stream buffer zone rule (less stringent option). The baseline to which these options must be compared would be the status quo, in which the states have not yet adopted or implemented the 2008 rule.

The existing draft RIA includes cost estimates for the preferred option only. Cost estimates for the less stringent option can be found in Parts IX.A. and C. of the preamble to the 2008 rule at 73 FR 75865-75868 (December 12, 2008). You stated that it would not be possible to model the more stringent option. Therefore, we suggested that the starting point for determining the cost of this option be the cost of the preferred option. The primary added costs of the more stringent option would result from the protection of ephemeral streams. Mining operations currently disturb ephemeral streams much more frequently than perennial or intermittent streams. For surface mines, the additional cost of this option could reasonably be estimated by applying a multiplier for Elements 4 and 5 of the model used to determine the costs of the preferred option. The size of the multiplier should be determined after discussions with Morgan Worldwide and the Lexington attendees, but I expect that the multiplier likely would be in the range of 100-400% of the costs of these elements for the preferred option.

While I stated on the conference calls that the major impact of the more stringent option for underground mines would be the prohibition on mining that would subside ephemeral streams, I no longer believe that would necessarily be the case. Ephemeral drainages would continue to exist in subsided areas and, unlike perennial and intermittent streams, subsidence would not adversely impact either their form or function, which is to transport water after precipitation events. Consequently, there would be no additional costs for underground mines over and above those discussed in the preceding paragraph for surface mines.

Section 6(a)(3)(C)(i) of Executive Order 12866 requires "[a]n assessment, including the underlying analysis, of benefits anticipated from the regulatory action (such as, but not limited to, the promotion of the efficient functioning of the economy and private markets, the enhancement of health and safety, the protection of the natural environment, and the elimination or reduction of discrimination or bias) together with, to the extent feasible, a quantification of those benefits."

The benefits of the stream protection rule would be fewer miles of stream destroyed, improved

From: John Maxwell
To: Mike Stanwood
Subject: FW: Request for Soil Section Modifications
Date: Thursday, December 09, 2010 1:54:00 PM
Attachments: image001.png

Here is the thread.

From: John Maxwell
Sent: Thursday, December 09, 2010 12:21 PM
To: 'Singer, Robert'; Mynear, Doug
Cc: Jose Sosa; Mike Stanwood
Subject: RE: Request for Soil Section Modifications

Thanks Bob, that gives us something to chew on. My understanding of the soils discussion in the EIS is that the soil resource impacts from coal mining would be similar for all of the alternatives and that we would address them separately from the 5 alternative discussions. What sort of impacts would we be addressing for soils? What level of detail or discussion should we provide in the EIS?

From: Singer, Robert [mailto:RSinger@ene.com]
Sent: Thursday, December 09, 2010 12:10 PM
To: John Maxwell; Mynear, Doug
Cc: Jose Sosa; Mike Stanwood
Subject: RE: Request for Soil Section Modifications

Here is the Comment:

Some of Ecological Subregions and Associations cover areas that have never been mined for coal and economically/technologically will never be mined for coal (example: Flint Hills – KS). It is recommended that we focus on the soil resources that could be impacted by coal mining. This can be accomplished by overlaying economically viable coal reserves (USGS National Coal Assessment Program, Luppens et al) over the soil associations to have a better idea of potential impacts to soil resources. Luppens and others (Gary McIntosh past OSM TIPSter) in the USGS National Coal Assessment Program have developed some very nice GIS programs and tools for this type of work. (Joseph)

We have been in touch with the authors of this database and although the data do exist, they are not consolidated and it will take about 80 hours of work to develop this map of soils in the coal fields (as opposed to the general description of soils in the regions that we've provided and that parallels the discussion in the Appalachian PEIS.

Robert Singer, Ph.D
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Celebrating 40 Years of Green Solutions

From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Thursday, December 09, 2010 11:25 AM
To: Mynear, Doug
Cc: Singer, Robert; Jose Sosa; Mike Stanwood
Subject: RE: Request for Soil Section Modifications

Did the comment explain why the edits are needed? Does the original meet the criteria outlined in the SOW? If we have provided the material specified in the SOW, then we can't make the significant change raised by OSM's comment. Was it an OSM or other agency comment? Does the material that we provided sufficiently support the rest of the EIS document?

If we provided what was originally requested and OSM wants to provide the input we might be able to substitute.

From: Doug Mynear [mailto:dmynear@engrservices.com]
Sent: Thursday, December 09, 2010 11:06 AM
To: John Maxwell
Cc: 'Singer, Robert'
Subject: FW: Request for Soil Section Modifications

John,

Please see the email below pertaining to additional work that would be required if we address all of the comments on the Soils section. We didn't get a chance to discuss this subject during last Friday's teleconference, but we still need a decision from Craynon regarding whether we can drop the comments.

Douglas K. Mynear, P.E., LEED AP
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From: Doug Mynear [mailto:dmynear@engrservices.com]
Sent: Friday, December 03, 2010 9:19 AM
To: 'John Maxwell'
Cc: 'Singer, Robert'; 'Gardner, J. S.'; 'Baird, Jeff'
Subject: Request for Soil Section Modifications

John,

I have been alerted that some of the Chapter 3 comments on the Soils section (No.'s 1 & 6) will necessitate significant additional work, if we fully comply with all of the reviewer's requests. I have attached a cost estimate from E&E to incorporate these changes.

I have discussed this with Bob Singer and we feel that spending a lot of additional time and money on refining the soils data from the eco-region areas to the coal reserve areas would be futile, since the decision has already been made that the Soils section will be explained away in the introduction of chapter 4 since any impacts to the soils will be minimal.

I would like to suggest that you present this appeal to John Craynon to drop comments 1 & 6 from consideration.

Douglas K. Mynear, P.E., LEED AP
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From:	Joe Zaluski
To:	jlienkins@mactec.com; Mike Stanwood; dbell@plexsci.com; jbourdeau@mactec.com; jburchett@morganworldwide.com; jdraper@engrservices.com; jscardner@engrservices.com; jmahan@plexsci.com; John Maxwell; jmorgan@morganworldwide.com; dmynear@engrservices.com; abshortelle@mactec.com; Jose Sosa; SPR@ENGRSERVICES.COM
Subject:	article that may of interest to you
Date:	Friday, December 10, 2010 7:34:25 AM

-----Original Message-----
From: JOE ZALUSKI <J.ZALUSKI@insightbb.com>
To: 'Joe Zaluski' <jzaluski@engrservices.com>
Date: 12/10/10 07:28

Steeper Declines Expected in Coal-Based Power

The State Journal - December 9, 2010

In 2009, coal generated fewer megawatt-hours of electricity in the U.S. than it did in 1996.

Natural gas generation more than doubled over the period.

In the electricity boom year of 2007, when coal edged out its previous best year of 2005 by two-tenths of a percent, gas increased by almost 10 percent.

The last time coal generated fully half of the nation's electricity -- a shorthand claim heard all the time -- was in 2003.

The fact is, coal's share of the generation mix is dropping steadily, while gas's climbs.

It's a trend with many drivers, and it's about to gain momentum.

Short-term Drivers

Everything supports gas's ascendancy over coal: Look at price.

Coal has long been both cheaper and more stably priced than gas. Coal still appears, on a per-British thermal unit, or heat content, basis, to be cheaper.

"Not after transportation," said Matt Preston, North American coal analyst for Wood Mackenzie.

Gas is being delivered to power plants at just over the price of Central Appalachian coal, Preston said -- the most expensive coal and the kind mined in southern West Virginia.

Factor in quick gas plant startup and shutdown time -- under an hour, compared with eight hours for a coal plant -- and that makes gas competitive with Central Appalachian coal, he said.

Gas is becoming cheaper still.

The U.S. Energy Information Administration announced Dec. 1 that U.S. gas reserves increased 11 percent in 2009 to the highest level since 1971. Based on

production estimates, the agency recently reduced its expectation for gas prices in 2011 by 22 cents per million Btu, to $4.76.

"Even three years ago, everybody was announcing new coal plants, and that's because we thought there was a gas shortage," Preston said. "In these short three years, we've decided there's plenty of gas. That changes all the economics."

At the same time, regulations are making coal more expensive.

That is well known to West Virginians, who followed the progress and death of cap-and-trade legislation to limit the climate-warming emissions that scientists attribute to coal.

But still in process is a spate of regulations from the U.S. Environmental Protection Agency: a crackdown on salinity downstream of Appalachian coal mines, a tightened air quality standard for ozone and an upcoming decision about whether to regulate coal combustion residues as hazardous waste.

All of it tends to make coal mines harder to permit and coal plants more expensive to run.

While Republicans have said they will block EPA's actions or cut off funding for them in the coming Congress, officials at major environmental organizations point out that action could be tricky politically.

"When faced with a vote between more pollution (and) protecting public health, public health will win," Joe Mendelson, director of global warming policy at the National Wildlife Federation, told POLITICO last week.

Wood Mackenzie's coal analysts estimate that the amount of coal for electric generation displaced by natural gas, nuclear and renewable sources will come to 30 million tons in 2010 out of about a billion tons used nationwide.

"It may not sound like much," Preston said -- but West Virginia take note: "It's highly concentrated in the Central Appalachian market. Some Northern Appalachian coal as well."

West Virginia coal, both northern and, especially, southern, saw a surge in the production of electricity in the strong economy of 2006 and 2007.

But the state cannot expect a rebound as the economy improves, in Preston's view.

Worse Later

So far and for a while longer, use of coal for electricity has been dropping in a short-term, reversible way.

"For the next couple years, it's going to be the price of gas versus the price of coal," Preston said. Utilities will use whichever is cheaper.

But the shift is about to become a lot harder to reverse.

"As people look forward and do long-range planning they're saying, 'I've got to spend hundreds of millions to keep my coal plant going, and it's not all that competitive against gas anymore -- let's just go with gas," Preston said.

Last December, for example, Progress Energy Carolinas announced plans to retire 11 coal-fired units, nearly 30 percent of its coal fleet, and to build

natural gas generation.

Minneapolis-based XCEL Energy Inc. approached regulators during the summer for authorization to close one coal-fired plant and to switch four units from coal to gas. The Tennessee Valley Authority unveiled plans in September that could idle coal plants and expand nuclear and gas generation. The list lengthened even this month, when Dominion Virginia Power proposed on Dec. 2 to shut down its small, 74-megawatt coal-fired plant at Bayard, W.Va., when it fires up a planned 1,300-MW gas-fired plant in Virginia in 2015.

Prestonpainted a stark picture.

As plants are retired and coal demand drops, it will become hard to keep idled mines open, he said. Miners will be let go, and mines will close.

Dire Forecast

"We in general project that coal's segment of the generation mix is going to drop considerably in the future," Preston said.

He expects a small but consistent demand for Appalachian coal outside the U.S.

Central Appalachiacurrently exports 5 million to 15 million tons of steam coal -- an amount he said could grow but will never replace the domestic market.

"The cost structure is the thing that is going to be most damaging to West Virginia steam coal (for electricity), both central and northern," he said. "Eventually it's going to be replaced by other fuels, either gas or cheaper coals."

Railroads, he said, will play a determining role: They have broad rate-setting leeway and could choose to support their Appalachian crews and Appalachian coal by keeping rates low or could, alternatively, favor other coals

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From:	Jenkins, Josh
To:	Varvell, Stephanie L.; DeVito, Andy; "Rice, Dennis"; Craynon, John; Payne, Harry J.
Cc:	Donald Iannone; Shortelle, Ann; John Maxwell
Subject:	Conceptual RIA Summary
Date:	Monday, December 13, 2010 12:04:42 PM
Attachments:	Conceptual Regulatory Impact Analysis Overall Summary 12-13-10.pdf

All – attached is the draft Conceptual RIA summary information. This is intended to provide updated information and assumptions in the Conceptual RIA for submittal to OMB based on comments received from OSM on the Draft Conceptual RIA. Information within this summary will be used to finalize the Conceptual RIA. We understand that OSM will review and get comments back to us later this week and we will affect changes on or before December 22.

If you have any questions, please let me know.

thanks

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From: Jenkins, Josh
To: John Maxwell
Cc: Jose Sosa; r.m.stanwood@gmail.com; Randy Sosa
Subject: RE: COMMENTS- 2010-12-13 SPR RIA summary
Date: Saturday, December 18, 2010 9:30:14 AM

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it is something to consider, especially for the final rule. at this point with the lack of precision and disagreement on the stream mileage and lack of ephemeral data we can only get a qualitative assessment in the time available to get to OMB. It is my understanding talking with folks other than Cheryl Sylvester at OSM, that this is the info that was needed for the draft rule.
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From: John Maxwell [jmaxwell@polukaiservices.com]
Sent: Saturday, December 18, 2010 8:08 AM
To: Jenkins, Josh
Cc: jose@polukaiservices.com; r.m.stanwood@gmail.com; Randy Sosa
Subject: RE: COMMENTS- 2010-12-13 SPR RIA summary

Rob Southwick of Southwick Associates has worked w/me on projects involving econonics of natural resources and recreation, and may be able to lend support. I'll check w/Jose on contacting. You might look up his website. I thought Bob was versed in this area.
John

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Sent via DROID on Verizon Wireless

-----Original message-----
From: "Jenkins, Josh" <JLJENKINS@mactec.com>
To: John Maxwell <JMaxwell@polukaiservices.com>
Cc: Jose Sosa <jose@polukaiservices.com>, 'Mike Stanwood' <r.m.stanwood@gmail.com>, Randy Sosa <Randy@PoluKaiServices.com>
Sent: Sat, Dec 18, 2010 12:44:33 GMT+00:00
Subject: RE: COMMENTS- 2010-12-13 SPR RIA summary

John- if you have any sources let us know. we have spoken to Andy DeVito of OSM of the approach before we sent this in, as he indicated that he was the one who was going to be submitting to OMB.
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From: John Maxwell [JMaxwell@polukaiservices.com]
Sent: Friday, December 17, 2010 5:19 PM
To: Jenkins, Josh
Cc: Jose Sosa; 'Mike Stanwood'; Randy Sosa
Subject: RE: COMMENTS- 2010-12-13 SPR RIA summary

Josh,
The comments sound reasonable to me, and repeat those that we received on the original submittal. I suspect that without significant effort, the positive impacts to ecological stream impacts, they would have to be qualitative. I have a source for potential quantitative input, but would have to determine

whether it would be in/out of scope. Something to discuss with Jose and Mike. At this point, quantitative analysis would not meet the OMB deadline. We can discuss after the call to Stephanie on Monday.

-----Original Message-----
From: Jenkins, Josh [mailto:JLJENKINS@mactec.com]
Sent: Friday, December 17, 2010 4:54 PM
To: Varvell, Stephanie L.; John Maxwell
Cc: diannone@ix.netcom.com
Subject: FW: COMMENTS- 2010-12-13 SPR RIA summary

Hi Stephanie - are you available for a brief call Monday morning the 20th? Please advise a time we can nail down an last issues on conceptual RIA.

Thanks.

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-----Original Message-----
From: Ehret, Paul [mailto:pehret@osmre.gov]
Sent: Friday, December 17, 2010 4:17 PM
To: Jenkins, Josh
Cc: Craynon, John; Coker, Jeffrey A. "Jeff"
Subject: Re: COMMENTS- 2010-12-13 SPR RIA summary

I talked to Andy and he indicated that he was not going to offer any comments. I did not speak to Dennis.

----- Original Message -----
From: Jenkins, Josh [mailto:JLJENKINS@mactec.com]
Sent: Friday, December 17, 2010 02:13 PM
To: Ehret, Paul
Subject: RE: COMMENTS- 2010-12-13 SPR RIA summary

Paul - thanks for sending these on - when will we be getting comments from Andy and Dennis?

Joshua L. Jenkins | Project Manager/Senior Geologist
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-----Original Message-----
From: Ehret, Paul [mailto:pehret@osmre.gov]
Sent: Friday, December 17, 2010 1:58 PM
To: Jenkins, Josh
Subject: FW: COMMENTS- 2010-12-13 SPR RIA summary

-----Original Message-----
From: Uranowski, Lois J.
Sent: Friday, December 17, 2010 6:31 AM
To: Calle, Marcelo; Ehret, Paul
Cc: Winters, William R. "Bill"

protection of the biological condition of streams, additional fish and wildlife habitat protection and enhancement (including preservation or restoration of riparian vegetation in a 300-foot buffer zone on each side of a perennial or intermittent stream), mandatory reforestation of lands that were previously forested or that would return to a forested state under conditions of natural succession, fewer and lesser adverse impacts on downstream water quality and groundwater both during and after mining and reclamation, and improved esthetics of reclaimed lands. I'm really not sure how to quantify these benefits.

Dennis

From: Donald Iannone [mailto:diannone@ix.netcom.com]
Sent: Friday, November 05, 2010 4:55 PM
To: DeVito, Andy
Cc: Rice, Dennis; Josh Jenkins
Subject: Largest Coal Producing Companies (2009) See Attached

From: John Maxwell
To: Jenkins, Josh
Cc: jcraynon@osmre.gov
Subject: RE: Basis for Addressing Chapter 4
Date: Thursday, November 11, 2010 7:38:09 PM

Josh,
Thanks for your input. We can discuss on our regular call tomorrow.
John

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Sent via DROID on Verizon Wireless

-----Original message-----

From: "Jenkins, Josh" <JLJENKINS@mactec.com>
To: John Maxwell <JMaxwell@polukaiservices.com>, " (spr@engrservices.com)" <spr@engrservices.com>, Caroline Bari <CBari@PoluKaiServices.com>, David Bell <dbell@plexsci.com>, Doug Mynear <dmynear@engrservices.com>, Edmundo Laporte <elaporte@engrservices.com>, J Steven Gardner <jsgardner@engrservices.com>, Jaque Mitchell <jaque@polukaiservices.com>, Jeff Baird <jbaird@engrservices.com>, "jmahan@plexsci.com" <jmahan@plexsci.com>, "jmorgan@morganworldwide.com" <jmorgan@morganworldwide.com>, Joe Zaluski <jzaluski@engrservices.com>, Jose Sosa <jose@polukaiservices.com>, Liz Edmondson <ledmondson@morganworldwide.com>, Mike Stanwood <r.m.stanwood@gmail.com>, Randy Sosa <Randy@PoluKaiServices.com>, "Shortelle, Ann" <ABSHORTELLE@mactec.com>, "Singer, Robert" <RSinger@ene.com>
Sent: Thu, Nov 11, 2010 22:30:14 GMT+00:00
Subject: RE: Basis for Addressing Chapter 4

Just my thoughts - We're back to evaluating elements instead of reasonable alternatives. It looks like a schedule and budget killer.

I think the energy would be better used explaining why the alternatives are reasonable and an explanation that the rule may ultimately change production location and costs which would drive where/how it is mined, which would drive where/how much coal is produced in a region, and depending on the region, how much stream mileage and land is impacted or saved. When Don and I called in today about the needs for the RIA, this is the info that we discussed would be needed to frame the potential economic impacts (even qualitatively) for OMB.

Under NEPA we just need to look at reasonable alternatives and there was a considerable effort to frame those. There will be considerable effort to frame the elements more so than done.

My take at the sections we're assigned:

From Terrestrial/Aquatic bio and special species status –

- where do amphibians go? Terrestrial or aquatic or both? If both, redundant.
- Coal regions still broken out and there is much more info published on Appalachia than other regions because of biodiversity, so analysis in some regions will be absent.
- Analysis is broken up in 3 areas and will take more time to document and complete.
- 4.3 looks like it could be spread between 4.1 and 4.2 and not called out separately – it has elements of land and water and the analyst and reader will need to address and review in context of both elements. e.g. revegetation and topsoil would be a mitigative measure to wildlife from impacts

From Socio and Env. Justice – I see the only way to measure what this rule would do is by how it could change where and how much coal is mined. Under this evaluation, we would be better off waiting until the analysis is complete on possible shifts in production. Time killer. Otherwise, I see us needing a $ value or some multiplier on each element with some rationale for that $ value or multiplier. This would somehow be converted to jobs or some percentage of a job gained/lost? This will make the analysis more complex and time consuming, more difficult to explain, and likely more difficult to understand.

From a safety standpoint, again production and where coal is mined that would convert to mining method will dictate safety issues. Other elements are nonplayers.

Overall, I think there would need to be a second tier of analysis to fold various elements altogether – who does this and when? Looks like another time killer.

I'm interested in hearing others thoughts.

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From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Thursday, November 11, 2010 2:32 PM
To: (spr@engrservices.com); Caroline Bari; David Bell; Doug Mynear; Edmundo Laporte; J Steven Gardner; Jaque Mitchell; Jeff Baird; Jenkins, Josh; jmahan@plexsci.com; jmorgan@morganworldwide.com; Joe Zaluski; John Maxwell; Jose Sosa; Liz Edmondson; Mike Stanwood; Randy Sosa; Shortelle, Ann; Singer, Robert
Subject: Basis for Addressing Chapter 4

All,

We, in Lexington, have reviewed our method of organizing and discussing elements. In order to simplify and avoid redundant text we have combined resources into water, land and other categories.

Attached is an outline starting with Coal resource regions (identified first by the Appalachian Basin and format to be carried forward for each basin), that OSM prefers to use rather than separated by alternative. This change is made to reflect the primary impacts of the rule (and alternatives) to the mining process which in turn effects the other resource areas.

We realize this change effects the current organization but will help to allow discussion of combined resource elements that are interrelated.

Please review and comment.

cid:image001.jpg@01C9E060.B291C670

John R. Maxwell
Senior Environmental Scientist
Polu Kai Services
352.258.1045

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From:	Jenkins, Josh
To:	Craynon, John; John Maxwell
Cc:	Jose Sosa; Donald Iannone; Shortelle, Ann; Varvell, Stephanie L.
Subject:	11/11/2010 - RIA discussion
Date:	Friday, November 12, 2010 11:46:50 AM
Attachments:	Week of October 10.mso

John Maxwell/John Craynon – on yesterday's call we understood that you agreed to:

Provide a reasoned outlook on shifts in regional coal production by tonnage over a time period of 2012 to 2022
The outlook on expected shifts in mining methods – underground vs. surface over same timeframe
Estimated change in coal production costs on tonnage by coal regions over same timeframe

John C. asked that if we get this by Thanksgiving can we meet our obligations for turning around the info to OSM for the Conceptual RIA, and Don indicated yes.

To estimate benefits for OMB, we also need estimated mileage of streams saved/impacted and the acreage conserved or mined by region. This element was not discussed yesterday, but we did request it previously on the 8th of October and is equally critical to get at same time. (See attached email).

If you have any questions, let me know.

Thank you.

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From: Jenkins, Josh
To: John Maxwell
Cc: Mike Stanwood
Subject: FW: Data Needs for Conceptual RIA
Date: Wednesday, December 01, 2010 4:29:08 PM

John FYI

Joshua L. Jenkins | Project Manager/Senior Geologist
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From: Donald Iannone [mailto:diannone@ix.netcom.com]
Sent: Wednesday, December 01, 2010 3:52 PM
To: Jenkins, Josh
Subject: Data Needs for Conceptual RIA

JOSh,

As a follow-up to our conference call this afternoon, here is a list of the data we need to complete the Conceptual RIA submission by OSM to OMB on December 10, 2010. We have explored a wide variety of sources for this data and it does not exist to the best of our knowledge in any published source or electronic database. We have had numerous conversations with OSM and many other sources about these data needs, and it appears that it does not exist in OSM, and we will need to produce it within the EIS consulting team. If the internal team cannot produce the data identified below on time, it may not be acceptable to OMB.

We have the production shift estimates for the 7 regions and mining methods. What we need next is a summary of the main findings and conclusions of this analysis. This is best done by those doing the analysis to reduce misinterpretation of the data. The same interpretation would be used in the EIS and the Conceptual RIA.

1. Current average cost of coal production data on a tonnage basis for each of the 7 coal-producing for both surface mining and underground mining in each region. That is how much does it cost now to produce a ton of coal in each of the 7 regions for both surface and underground mining.
2. Cost estimates on per ton produced basis for complaince with the SPR under Alternatives 2 and 5 (in the EIS) for each of the 7 coal regions for both underground and surface mining. That is how much will the production costs in #1 change with the adoption of Alt 2 and 5?
3. We need the same stream mile and land acreage data that you and others need for the EIS. No need to spell this out here since you have it covered. This data will be used to speak to the economic benefits of the rule in the Conceptual RIA.
4. Note -We expect to receive additional small business impact data from the US Dept. of Labor MSHA by tomorrow (Thursday).

Finally, we need OSM's concurrence on this data's suitability as soon as possible rather than waiting for a review of what we produce and deliver on Dec. 10th.

Don

From:	Mike Stanwood
To:	Shortelle, Ann
Cc:	John Maxwell; Jenkins, Josh; Doug Mynear; Donald Iannone; J Steven Gardner; Joe Zaluski; John Morgan; Liz Edmondson; Jose Sosa; Caroline Bari
Subject:	Re: review per "metrics needed" description for OSM
Date:	Thursday, December 02, 2010 10:10:58 AM

Ann, 2 quick things:

1) the vague statement re: streams was only placed in there because OSM seems to be stumped by what we want (John C apparently told Stephanie he "just doesn't know what we want") -- that's why they want this in writing. We wanted to open the door for them to tell us some other measure of streams or some other approach instead of continuing to wait for the perennial, intermittent and ephemeral breakdown. JOHN MAXWELL - make sure that we state that we still want perennial, intermittent and ephemeral stream breakdowns but are open to other ideas re: stream data.

2) I think you misinterpreted my statement about having regional production shift data -- ECSI et al is still working on the other alternative changes but my intent at the bottom was merely that OSM didn't need to get involved in production change data.

agree with your other statements re: moving ahead. if we need to have a placeholder(s) in the analysis, so be it (and it's looking that way). the "locking the hydrologists in a room" idea may be appropriate. thanks for your ideas

On Thu, Dec 2, 2010 at 4:12 AM, Shortelle, Ann <ABSHORTELLE@mactec.com> wrote:

> Thanks all. If we have coal production shifts for all alternatives (and regions and mining types) now – GREAT – let's get that out so the resource areas that can run with that, do! Great news!
>
> On Mike's list below – his first bullet on streams is a question for me....we need stream miles broken out by perennial, intermittent and ephemeral. If we are going to some other scheme – what is it, and is it readily relatable to the differences among the alternatives? I'm assuming someone on yesterday's call had an idea how this latter info could be quickly pulled together, but I'm not sure what it will be or how it will / could be used. So – not shooting that idea down, just, we need to flesh that out. Also, because streams are pivotal to this evaluation and rule change, we can't lump everything into stream miles w/o refinement of stream type (or perhaps another characteristic of streams that can then be related to stream class as suggested below) – we'll lose our ability to clearly differentiate among alternative Impacts and benefits.
>
> I have a few ideas (based primarily on long ago conversations with John Morgan and Bill Winters – so maybe no longer helpful) involving locking the hydrologists in a conf room w/ information and tools for a couple of days – but was not in on all the conversations about technique discussed at our Nov meeting. Both John and Bill have good (and defensible) ideas – if the bottleneck is regional mining impact info from one or more regions, we need to ID the data gap(s) and develop (with OSM) a credible

assumption/place holder to move forward. I'm sure we'll be in this position with regard to ephemeral stream quantification (estimation), at least. Comments on the draft may produce other information that can be incorporated into the final – that's fine. If no other information is forthcoming at that point, then our estimation remains of the basis of the comparative analysis in the programmatic EIS.

Thanks all! Ann

Ann B. Shortelle, Ph.D. | Vice President and Technical Manager
MACTEC Engineering and Consulting, Inc. | Newberry, Florida
Office 352-333-2623 | **Mobile** 352-682-3419 | **Fax** 352-333-6622
Email abshortelle@mactec.com | **Web** www.mactec.com

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From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Wednesday, December 01, 2010 9:27 PM
To: Jenkins, Josh; Shortelle, Ann; Doug Mynear; Donald Iannone; J Steven Gardner; Joe Zaluski; John Morgan; Liz Edmondson
Cc: Jose Sosa; Mike Stanwood; Caroline Bari
Subject: FW: review per "metrics needed" description for OSM

All,

In order for OSM to provide/request data from COE they need us to provide specific questions or metrics. After another brainstorm, Mike listed needs that are listed in the forwarded email below. Please note that there are some choices that we need to pin down. Please provide input so that we can send the request to OSM in the morning. If you see flaws or gaps, please provide the desired metrics that you, the assessors, need for your assessment.

Immediately below are comments from Don regarding RIA needs that we will incorporate into the list.

As a follow-up to our conference call this afternoon, here is a list of the data we need to complete the Conceptual RIA submission by OSM to OMB on December 10, 2010. We have explored a wide variety of sources for this data and it does not exist to the best of our knowledge in any published source or electronic database. We have had numerous conversations with OSM and many other sources about these data needs, and it appears that it does not exist in OSM, and we will need to produce it within the EIS consulting team. If the internal team cannot produce the data identified below on time, it may not be acceptable to

OMB.

We have the production shift estimates for the 7 regions and mining methods. What we need next is a summary of the main findings and conclusions of this analysis. This is best done by those doing the analysis to reduce misinterpretation of the data. The same interpretation would be used in the EIS and the Conceptual RIA.

1. Current average cost of coal production data on a tonnage basis for each of the 7 coal-producing for both surface mining and underground mining in each region. That is how much does it cost now to produce a ton of coal in each of the 7 regions for both surface and underground mining.
2. Cost estimates on per ton produced basis for compliance with the SPR under Alternatives 2 and 5 (in the EIS) for each of the 7 coal regions for both underground and surface mining. That is how much will the production costs in #1 change with the adoption of Alt 2 and 5?
3. We need the same stream mile and land acreage data that you and others need for the EIS. No need to spell this out here since you have it covered. This data will be used to speak to the economic benefits of the rule in the Conceptual RIA.
4. Note -We expect to receive additional small business impact data from the US Dept. of Labor MSHA by tomorrow (Thursday).

Finally, we need OSM's concurrence on this data's suitability as soon as possible rather than waiting for a review of what we produce and deliver on Dec. 10th.

Don

Thanks.

John

From: Mike Stanwood [mailto:r.m.stanwood@gmail.com]
Sent: Wednesday, December 01, 2010 3:36 PM
To: John Maxwell; Jenkins, Josh
Subject: review per "metrics needed" description for OSM

Environmental metrics needed for impact analysis:

1) Acreages affected by coal mining operations, by region (7 EIS regions), by type of mining (surface vs. underground):

- Choose among permitted acreages, or disturbed acreages, or some other representation of surface acreages as the basic parameter to measure.
- Calculate the total baseline (2008) acreage affected by coal mining, by region and by type of mining.

Using baseline (2008) production statistics, calculate an "acreage disturbed per coal mined" ratio, again by region and by type of mining (there could be as many as 14 ratios calculated (7 regions times 2 types of mines)
- Using projected coal mining production changes and the "acreage disturbed per coal mined" ratio, calculate the change in acreage affected (+ or -)

2) Stream miles affected by coal mining operations, by region (7 EIS regions), by type of mining (surface vs. underground):

- Choose between stream classification or other characteristic representing streams affected by coal mining to measure.
- Calculate the total baseline (2008) stream-miles affected (within permit area or beyond permit area?) by coal mining, by region and by type of mining.
- Using baseline (2008) production statistics, calculate an "stream-miles affected per coal mined" ratio, again by region and by type of mining (there could be as many as 14 ratios calculated (7 regions times 2 types of mines)
- Using projected coal mining production changes and the "stream-miles affected per coal mined" ratio, calculate the change in stream-miles affected (+ or -)

Please note: The contractor team has produced draft projected coal mining production changes by region and by type of mining.

--

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From: Jenkins, Josh
To: Varvell, Stephanie L.
Cc: John Maxwell
Subject: FW: Conceptual RIA Data Update
Date: Thursday, December 02, 2010 1:03:04 PM

FYI

Joshua L. Jenkins | Project Manager/Senior Geologist
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From: Donald Iannone [mailto:diannone@ix.netcom.com]
Sent: Thursday, December 02, 2010 1:01 PM
To: Dennis Rice; Andy DeVito; Harry J. Payne
Cc: Jenkins, Josh
Subject: Conceptual RIA Data Update

Gentlemen,

A brief update on the Conceptual RIA.

Josh Jenkins (MACTEC) and I just finished a conference call with John Morgan and John Maxwell about timing for John Morgan to produce updated "cost estimates" for the production shift data developed by the mining engineering group. We will be using John Morgan's analysis to fill out Scenario Two in the Conceptual RIA. The production shift analysis, as you know, includes Rule Alternatives 2 (most stringent) and 5 (preferred) in the EIS. We expect the current Scenarios One and Three in the Conceptual RIA document will remain the same in the updated report. John Morgan says he can have the cost estimates completed and to us by this weekend. Harry, John Morgan believes that this next round cost analysis will respond to your earlier questions about cost assumptions. In any case, this is the best we can do given the timetable and data.

The analysis of stream miles and land acreage is proceeding, but it is not clear at this time that this data will be available from the mining engineers to include in our December 10th submisison to you. Hopefully we will have something to include in our December 10th submission because of its importance in speaking to the economic benefits of the SPR. If the analysis is not available, we will include some discussion of these benefits, indicating the analysis is forthcoming.

We have all the data on small business impacts of the SPR and we will begin today to analyze it for inclusion in the RIA report. The last of the Department of Labor MHSA data arrived just an hour ago.

It is our understanding in talking with Josh and Stephanie that our approach to this RIA update will center on providing you with the essential "distilled" data and explanation that is needed in the OBM forms. The actual revisions to the full RIA document and appendices will be started after December 10th. On December 10th, we will provide OSM with filled in OBM tables and a narrative explaining the analysis. This submission will include what we have.

EIA is providing us with some longitudinal data on minemouth coal prices (not production costs) for the 14 regions they work with. Hopefully we can convert that data to the 7 regions which the EIS and RIA are using.

My recommendation is that we share our analysis in parts for your review and comment. In this way, we do not have to wait until December 10th to get your feedback. The small business impact analysis would be first. Some of this work will not be available until December 10th however.

Please let me know if you have any questions regarding this update.

Thank you.

Don Iannone

Cell: 440-668-1686

From:	Jenkins, Josh
To:	Varvell, Stephanie L.
Cc:	Craynon, John; Coker, Jeffrey A. "Jeff"; John Maxwell; Shortelle, Ann
Subject:	RE: Conceptual RIA Data Update
Date:	Thursday, December 02, 2010 1:38:13 PM
Attachments:	RE Letter of Cooperation Response - USACE.msg 20101201145511186.pdf

Stephanie – info from USACE has been requested from the team– see attached email - but at this time there has not been much movement. It may be useful to have a telecom, but it needs to happen tomorrow or Monday if we can get anything in for Conceptual RIA, and we would need to have ECSI/Morgan available and on also. There is some thinking that it may be available by the time draft Chapter 4 is submitted but I am not totally clear on that either.

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From: Varvell, Stephanie L. [mailto:svarvell@osmre.gov]
Sent: Thursday, December 02, 2010 1:10 PM
To: Jenkins, Josh
Cc: Craynon, John; Coker, Jeffrey A. "Jeff"
Subject: RE: Conceptual RIA Data Update

Josh,

Thank you for the update. Does this mean there will not be a request to attempt to obtain USACE information? Also, do you believe it would be useful to have a teleconference or Live Meeting teleconference prior to the due date to engage the team? I can arrange it if needed.

Stephanie
859-260-3925

From: Jenkins, Josh [mailto:JLJENKINS@mactec.com]
Sent: Thursday, December 02, 2010 1:03 PM
To: Varvell, Stephanie L.
Cc: 'John Maxwell'
Subject: FW: Conceptual RIA Data Update

FYI

Joshua L. Jenkins | Project Manager/Senior Geologist
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From: Donald Iannone [mailto:diannone@ix.netcom.com]

Sent: Thursday, December 02, 2010 1:01 PM
To: Dennis Rice; Andy DeVito; Harry J. Payne
Cc: Jenkins, Josh
Subject: Conceptual RIA Data Update

Gentlemen,

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Please let me know if you have any questions regarding this update.

Thank you.

Don Iannone

Cell: 440-668-1686

RE Letter of Cooperation Response - USACE

From: Winters, William R. "Bill" [bwinters@osmre.gov]
Sent: Thursday, December 02, 2010 7:33 AM
To: J. Steven Gardner; Jaque Mitchell; 'Bob Singer'; Caroline Bari; 'David Bell';
'Doug Mynear'; 'Jeff Baird'; Jenkins, Josh; 'Joe Zaluski'; John Maxwell; 'John Morgan'; Jose Sosa; 'Liz Edmiondson'; 'Mike Stanwood'; Randy Sosa; Shortelle, Ann
Cc: Craynon, John
Subject: RE: Letter of Cooperation Response - USACE

A couple of questions first:

1. Did you/John C/John M/ Jose call Meg yesterday to exactly understand what she has/doesn't have/or is ready to release?
2. Have the contractors put together a specific information/data request?

The reason for the questions is that there seems to be residual misunderstanding on the Corps part about what was asked of the Corps districts. I would start there.

From what I gathered from my conversation with Meg and other Corps folks, specific information related to mitigation success/standards/objectives is not recorded. I do believe they have stream miles impacted/mitigated but don't think they have this information readily available. They are a bit behind the curve in that respect.

-----Original Message-----
From: J. Steven Gardner [mailto:jsgardner@engrservices.com]
Sent: Wednesday, December 01, 2010 5:55 PM
To: 'Jaque Mitchell'; 'Bob Singer'; 'Caroline Bari'; 'David Bell'; 'Doug Mynear'; 'Jeff Baird'; 'Jenkins, Josh'; 'Joe Zaluski'; 'John Maxwell'; 'John Morgan'; 'Jose Sosa'; 'Liz Edmiondson'; 'Mike Stanwood'; 'Randy Sosa'; 'Shortelle, Ann'
Cc: Craynon, John; Winters, William R. "Bill"
Subject: RE: Letter of Cooperation Response - USACE

The letter and reports that were sent are not really connected. The one Cumulative Impact Assessment (CIA) was originally organized and prepared by ECSI for one HUC 8 watershed in EKY. While the experience we gained from this report helped provide the foundation for our methodology to analyze impacts, the raw data represented is only a fraction of the data that we had hoped would be available from the Corps nationwide.

I had spent many hours with the Corps trying to clarify that point, but apparently the additional information is buried in the 80,000 404 applications referred to in the letter from Ms. Gaffney-Smith.

John C and Bill, do you think this means there will be no more information on streams coming from the Corps?

Steve

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jsgardner@engrservices.com
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-----Original Message-----
From: Jaque Mitchell [mailto:jaque@polukaiservices.com]
Sent: Wednesday, December 01, 2010 3:36 PM
To: Bob Singer; Caroline Bari; David Bell; Doug Mynear; J. Steven Gardner; Jeff Baird; Jenkins, Josh; Joe Zaluski; John Maxwell; John Morgan; Jose Sosa; Liz Edmiondson; Mike Stanwood; Randy Sosa; Shortelle, Ann
Subject: FW: Letter of Cooperation Response - USACE

Team:

Attached is a letter from Margaret E Gaffney-Smith from the Department of the Army - USACE. She also sent reports that were prepared for our friends at ECSI, so I'm thinking we already have the information amongst us.

Because we have limited space on the SharePoint I'd rather not post documents we already have.

Please let me know if any of you disagree.

Thank you,
Jaque Mitchell
Polu Kai Services LLC

-----Original Message-----
From: Jaque [mailto:jaque@polukaiservices.com]
Sent: Wednesday, December 01, 2010 2:55 PM
To: Jaque Mitchell
Subject:

This E-mail was sent from "RNPEE1DC1" (Aficio MP C5000).

Scan Date: 12.01.2010 14:55:11 (-0500)

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Subject: FW: COMMENTS- 2010-12-13 SPR RIA summary

Sent these to Craynon and Coker but got an out of office email on both of them. Hence I am forwarding to you hoping you are in and know what to do with RIA comments.

Lois J.Uranowski PE
Chief, Ecological Services and Technology Transfer Branch Technical Support Division
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Pittsburgh, PA 15220
luranowski@osmre.gov
412 937 2805

-----Original Message-----
From: Sylvester, Cheryl
Sent: Friday, December 17, 2010 6:55 AM
To: Uranowski, Lois J.; Winters, William R. "Bill"; Shawley, Dianne M
Subject: FW: COMMENTS- 2010-12-13 SPR RIA summary

-----Original Message-----
From: cheryl sylvester [mailto:casylvester1@cox.net]
Sent: Thursday, December 16, 2010 4:21 PM
To: Craynon, John
Cc: Sylvester, Cheryl; Bovard, Tom; Thomas A. Bovard
Subject: COMMENTS- 2010-12-13 SPR RIA summary

Please see attached. As you'll note, I still have serious questions about the sufficiency of this RIA, as it's described in the RIA summary.

Message truncated

From: Winters, William R. "Bill"
To: John Maxwell
Cc: Uranowski, Lois J.; Payne, Harry J.
Subject: FW: Conceptual RIA Summary
Date: Monday, December 20, 2010 10:49:04 AM

FYI

This is not the sum total of comments but we need to understand where these numbers come from and what they represent.

From: Winters, William R. "Bill"
Sent: Wednesday, December 15, 2010 1:20 PM
To: Craynon, John
Cc: Sylvester, Cheryl; Bovard, Tom; Uranowski, Lois J.; Coker, Jeffrey A. "Jeff"; Means, Brent P.; Ehret, Paul; Calle, Marcelo; Payne, Harry J.
Subject: RE: Conceptual RIA Summary

Hi John,

I did a quick read of the RIA this AM.

A few questions:

1. IMPLAN model: What is this? I would dream up a couple paragraph explanation of what this model is, what elements are considered, and how data populates the model.
2. Table 2: Is this related to the 2008 SBZ rule? The costs laid out in the preceding paragraphs imply the 2008 SBZ. I would overtly state what Table 2 represents.
3. Table 3: Was this produced by the coal industry? We need to offer some reconciliation of the differences in economic output (81.5B vs 48.7B) although the language states "impact occurs in non-coal producing states". What does that mean?
4. Table 4: If I read this correct – the AR has the lion's share of economic output but lags behind the west in coal production. Is there some type of efficiency gained by mining coal in the west that the east doesn't incur?
5. Figure 1: The graph shows the impact of the economic decline in the US over the past 18-24 months. Should the analysis use the average trend in coal production vs the recent downturn-induced data (2005-2009 data)?
6. Table/Graph showing the trends in coal production over the past 20-30 years. This graph/table would set the baseline from which SRP impact prediction would stand out. The question remains – if production is shifting anyway, what is the impact of the SPR?
7. Analysis equations: We still need to understand how the numbers in Tables 8 – 15, especially all costs shown in Table 9, employment in table 11, cost/ton in table 12, etc
8. Table 14: An incredibly stupid question – but are we sure every ounce of coal will be sterilized under alternative 2 – even if we made all streams off limits? Operators are not allowed in streams in TN and they still mine coal; simply skip streams.
9. Table 15: Stream Mile Protection – is that all streams (Peren, Int, Ephem)? How was ft/ac derived?

In summary, I'm not opposed to the method but I think we need to understand how the numbers were derived and what they represent.

From: Craynon, John
Sent: Tuesday, December 14, 2010 1:06 PM
To: Owens, Glenda H.; Pizarchik, Joseph G; Rideout, Sterling
Cc: Sylvester, Cheryl; Bovard, Tom; Uranowski, Lois J.; Winters, William R. "Bill"; Coker, Jeffrey A. "Jeff"; Means, Brent P.; Ehret, Paul; Calle, Marcelo
Subject: FW: Conceptual RIA Summary

FYI and input. Please send me any comments you may have by Thursday, December 16.

From: Jenkins, Josh [mailto:JLJENKINS@mactec.com]
Sent: Monday, December 13, 2010 12:04 PM
To: Varvell, Stephanie L.; DeVito, Andy; Rice, Dennis; Craynon, John; Payne, Harry J.
Cc: Donald Iannone; Shortelle, Ann; John Maxwell
Subject: Conceptual RIA Summary

All – attached is the draft Conceptual RIA summary information. This is intended to provide updated information and assumptions in the Conceptual RIA for submittal to OMB based on comments received from OSM on the Draft Conceptual RIA. Information within this summary will be used to finalize the Conceptual RIA. We understand that OSM will review and get comments back to us later this week and we will affect changes on or before December 22.

If you have any questions, please let me know.

thanks

Joshua L. Jenkins | Project Manager/Senior Geologist
MACTEC Engineering and Consulting, Inc. | Atlanta, Georgia
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From:	Jeff Baird
To:	John Maxwell
Cc:	"Mynear, Doug"; "Zaluski, Joe"; "spr@engrservices.com"; Jose Sosa; Mike Stanwood; "John Morgan"; "Liz Edmondson"; "J. Steven Gardner"; "Edmundo Laporte"; "Jenkins, Josh"; "Shortelle, Ann"; "Singer, Robert"; "Mike Stanwood"
Subject:	RE: Confirmation of EIS Analysis Methodology
Date:	Monday, December 20, 2010 2:36:00 PM

John,

To confirm, ECSI understands that:

1. Most of the comments in the numbered list below pertain specifically to the RIA. We do, however, understand the need for consistency between the RIA and the EIS.
2. With the exception of some minor tweaks to the text of the Oct. 15 SPR, the October 15 version is the most current version and we should work from that. We understand that those tweaks pertain to elements which have no environmental impacts such as baseline data collection and monitoring requirements.
3. OSM agrees with and approves of our methodology for identifying the impacts of the Alternatives in Chapter 4 of the EIS.

Please confirm the above, or clarify if needed. Thanks.

Jeffrey C. Baird
Senior Project Coordinator
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jbaird@engrservices.com
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From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Monday, December 20, 2010 11:40 AM
To: Jeff Baird
Cc: 'Mynear, Doug'; 'Zaluski, Joe'; 'spr@engrservices.com'; Jose Sosa; Mike Stanwood; 'John Morgan'; 'Liz Edmondson'; 'J. Steven Gardner'; 'Edmundo Laporte'; Jenkins, Josh; Shortelle, Ann; Singer, Robert; 'Mike Stanwood'
Subject: RE: Confirmation of EIS Analysis Methodology

I just had a quick call to Stephanie, Bill W. and Lois. Questions were forwarded to John C. last week and apparently not forwarded to our team. They may help us get on the same page and clarify dialogue that we can discuss on a call later today. They have an internal call at 2:30 so that time slot is out for today. Possibly before or after.

OSM is of the opinion that the alternatives discussed and explained by John C. in Lex are current and are consistent with the Oct 15 redline. The PKS team can discuss prior to an OSM call if needed. I propose 1:00 this afternoon on the normal PKS conf number. I welcome suggestions.

The questions from OSM on the production shift methods are below:
A few questions:

1. IMPLAN model: What is this? I would dream up a couple paragraph explanation of what this model is, what elements are considered, and how data populates the model.
2. Table 2: Is this related to the 2008 SBZ rule? The costs laid out in the preceding paragraphs imply the 2008 SBZ. I would overtly state what Table 2 represents.
3. Table 3: Was this produced by the coal industry? We need to offer some reconciliation of the differences in economic output (81.5B vs 48.7B) although the language states "impact occurs in non-coal producing states". What does that mean?
4. Table 4: If I read this correct – the AR has the lion's share of economic output but lags behind the west in coal production. Is there some type of efficiency gained by mining coal in the west that the east doesn't incur?
5. Figure 1: The graph shows the impact of the economic decline in the US over the past 18-24 months. Should the analysis use the average trend in coal production vs the recent downturn-induced data (2005-2009 data)?
6. Table/Graph showing the trends in coal production over the past 20-30 years. This graph/table would set the baseline from which SRP impact prediction would stand out. The question remains – if production is shifting anyway, what is the impact of the SPR?
7. Analysis equations: We still need to understand how the numbers in Tables 8 – 15, especially all costs shown in Table 9, employment in table 11, cost/ton in table 12, etc
8. Table 14: An incredibly stupid question – but are we sure every ounce of coal will be sterilized under alternative 2 – even if we made all streams off limits? Operators are not allowed in streams in TN and they still mine coal; simply skip streams.
9. Table 15: Stream Mile Protection – is that all streams (Peren, Int, Ephem)? How was ft/ac derived?

In summary, I'm not opposed to the method but I think we need to understand how the numbers were derived and what they represent.

Thanks.

From: Jeff Baird [mailto:jbaird@engrservices.com]
Sent: Monday, December 20, 2010 11:12 AM
To: John Maxwell
Cc: 'Mynear, Doug'; 'Zaluski, Joe'; 'spr@engrservices.com'; Jose Sosa; Mike Stanwood; 'John Morgan'; 'Liz Edmondson'; 'J. Steven Gardner'; 'Edmundo Laporte'
Subject: RE: Confirmation of EIS Analysis Methodology

So are we having a meeting today? I am getting very concerned that we have had no confirmation on open items and the clock is ticking.

Jeffrey C. Baird
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From: J. Steven Gardner [mailto:jsgardner@engrservices.com]
Sent: Sunday, December 19, 2010 3:53 PM
To: 'John Maxwell'; 'Edmundo Laporte'
Cc: 'Mynear, Doug'; 'Jeff Baird'; 'Zaluski, Joe'; 'spr@engrservices.com'; 'Jose Sosa'; 'Mike Stanwood'
Subject: RE: Confirmation of EIS Analysis Methodology

John,

We still feel there are a few points below that need to be clarified in the email that was sent to OSM so there are no misunderstandings. See our notes below your last comments.

Steve

J. Steven Gardner, P.E.
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From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Friday, December 17, 2010 5:46 PM
To: Edmundo Laporte
Cc: 'J. Steven Gardner'; 'Mynear, Doug'; 'Jeff Baird'; 'Zaluski, Joe'; 'spr@engrservices.com'; Jose Sosa; Mike Stanwood
Subject: RE: Confirmation of EIS Analysis Methodology

From: Edmundo Laporte [mailto:elaporte@engrservices.com]
Sent: Friday, December 17, 2010 5:30 PM
To: John Maxwell
Cc: 'J. Steven Gardner'; 'Mynear, Doug'; 'Jeff Baird'; 'Zaluski, Joe'; 'spr@engrservices.com'
Subject: RE: Confirmation of EIS Analysis Methodology

John,

A few points of clarification that we feel necessary to send to OSM.

First, the last two bullets are not metrics that ECSI is providing. Is someone else doing this? This is a list provided by Morgan Worldwide. It was my assumption, possibly wrong, that ECSI and Morgan has been coordinating on the mining aspects of the EIS. If not, then I am at fault for coordinating.

> Again, these 2 items we were not aware of. In our Lexington breakout on the mining impacts subgroup, (Craynon, Stanwood, Gardner, Morgan, & Laporte) we understood there would be more coordination on the metrics to be provided. We have consistently said ECSI would only be providing tonnage impacts. If baseline data were made available on stream and acreages we could make estimated impacts, but it is not per ton of coal mined.

The second bullet should be clarified since the stream lengths calculated in the model are directly related to the affected surface area, not tonnage. Even though the final result may be similar, the way it is described in this bullet could be misleading. The estimated affected areas are a function of coal production levels and permitted areas. Same comment as above re: coordination.

> Believe this is just semantics; we are not doing Stream Length per ton of coal mined.

Concerning the inconsistencies in Chapter 2 Alternative 5, we should not say Chapter 2 supersedes the October 15th version of the rule. It is that the description of Alternative 5 does not fully reflect what is in the rule. The point we are trying to make is that we are using the rule and not Chapter 2 to analyze Alternative 5. My last indication of rule language for Alt. 5 is from comment and revision from John C. so I don't necessarily believe Oct. 15 to be current.

> This is perhaps the most important point to clarify with OSM. The very brief descriptions in Chapter 2 of Alternative 5 do not seem to fully capture the full degree of change in the Proposed Rule in what we understood to be the last version available to us, Oct. 15.

Also, please get official confirmation that the October 15th version of the proposed rule (redlined) is the most current. I indicated the potential for inconsistencies between Ch 2 and Oct 15 redline rule, so it should be clarified. Monday's meeting should provide clairification.

Thank you.

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From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Friday, December 17, 2010 4:29 PM
To: Varvell, Stephanie L.; Craynon, John; Sloanhoffer, Nancy E.
Cc: (spr@engrservices.com); Caroline Bari; David Bell; Doug Mynear; Edmundo Laporte; J Steven Gardner; Jaque Mitchell; Jeff Baird; Jenkins, Josh; jmahan@plexsci.com; jmorgan@morganworldwide.com; Joe Zaluski; John Maxwell; Jose Sosa; Kathy Kelly; Liz Edmondson; Mike Stanwood; Randy Sosa; Shortelle, Ann; Singer, Robert
Subject: Confirmation of EIS Analysis Methodology

The EIS team has been discussing over the last couple of months the need for a clear understanding of the appropriate method to define the effect of each of the alternatives (as represented by the defined elements), and as a way to transition from Chapter #3 to Chapter #4.

As a primary assumption for this impact analysis we all agreed (PKS/OSM team) that we should treat the US coal supply as a steady state; specifically we should maintain the US coal production at the 2008 level, as defined by the EIA (but adjusted for energy content). Anything more complex would be unmanageable.

It was also recognized that Alternative #2 would not meet this primary assumption, as the most restrictive alternative precluded the production to meet the target production. Based on the projected production shifts resulting from the Alternatives we have defined the need to use certain key metrics and the metrics agreed upon are:

- Tons of production by region and by mining type
- Stream length (perennial and intermittent) per ton of coal mined by region
- Acre disturbed per ton of coal mined by region and by mining type
- Tons of coal per permit by region and by mining type
- Employment per ton of coal mined by region and by mining type

We believe that these are all of the relevant metrics and that they are adequate to provide a reasonable disclosure of potential impacts in Chapter #4. We also are working under the assumption that the potential changes from the alternatives would occur over a period of 12-15 years (possibly more) for full effect, and that the impacts defined would reflect full implementation.

We are also still concerned about potential inconsistencies between the proposed rule language and Chapter 2 text. Some of the assessment team is concerned that the rule language (as represented in Alternative 5) is inconsistent with the October 15 redline version of the Rule. If the current version of Chapter 2 Alternative 5 supersedes the October 15 redline version, we would

like confirmation as such.

We need written agreement that OSMRE is in concurrence with the above metrics and approach using the production shifts as a basis for impacts. Also, a call to verify our direction would be appreciated to alleviate any misunderstandings at your earliest convenience.

I apologize that this seems to be a recurring theme, but with the current schedule, we feel it necessary to have confirmation.

Thank you.

POLU KAI SERVICES

John R. Maxwell
Senior Environmental Scientist
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352.258.1045

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From: Joe Zaluski
To: jljenkins@mactec.com; Mike Stanwood; dbell@plexsci.com; jbourdeau@mactec.com; jburchett@morganworldwide.com; jdraper@engrservices.com; jsgardner@engrservices.com; jmahan@plexsci.com; John Maxwell; jmorgan@morganworldwide.com; dmynear@engrservices.com; abshortelle@mactec.com; Jose Sosa; SPR@ENGRSERVICES.COM
Subject: Fw[2]: Coal News - Sunday, December 26, 2010
Date: Sunday, December 26, 2010 7:04:41 AM

read the artilce "Coal Compnaies Follow the Trail West"

-----Original Message-----
From: JOE ZALUSKI <J.ZALUSKI@insightbb.com>
To: 'Joe Zaluski' <jzaluski@engrservices.com>
Date: 12/26/10 06:59
Subject: FW: Coal News - Sunday, December 26, 2010

Joe Zaluski
j.zaluski@insightbb.com
859-312-4209 (cell)
859-223-5061 (home)

From:echafin [mailto:echafin@suddenlink.net]
Subject: Coal News - Sunday, December 26, 2010

Deeper could be safer for miners

BeckleyRegister-Herald - December 26, 2010

A West Virginia coal industry representative says reluctant regulators aren't allowing mining techniques that would reduce hazards for underground miners, but safety officials are skeptical about their motivation.

Chris Hamilton, vice president of the West Virginia Coal Association, said extended-face or deep-cut mining would allow operators to mine "remotely" and at a farther distance from the point of extraction. The continuous miner is a piece of machinery with a rotating drum and teeth that scrapes coal away from the seam.

Hamiltonsaid deep-cutting was much safer because of fewer machinery moves.

"(The operator) remains under a secured mine roof, out of harm's way and back from where methane gas and coal dust are liberated," Hamilton said.

"It is a technological advancement perfected by West Virginia miners and is a major contributor to the industry's improved mine safety performance record. This method of mining also cuts down on equipment moves and disruption associated with place-changing in underground mining operations."

Currently, the face operation of a mine is about 20 feet to 40 feet. The continuous miner, Hamilton said, is safely designed to operate at a maximum of 40 feet, but operators are having difficulty obtaining permits that would allow such deep cuts of coal.

"MSHA's de facto moratorium, or reluctance to approve new plans allowing extended-face mining, is inexplicable and nondefensible to competent mining and mine safety professionals," Hamilton said. "The clear safety advantages of utilizing extended-face, remote-controlled mining machines outweigh any remote or potential problem viewed by MSHA. MSHA's position on this issue causes hundreds, no, thousands, of West Virginia miners to be subjected to greater hazards on a daily basis."

However, MSHA representative Amy Louviere said there is no such "de facto moratorium."

"MSHA does not have a 'de facto moratorium' on approval of mine plans that permit extended or deep-cut mining," Louviere said. "The regulations do not directly address the depth of mining cuts. However, mine operators are required by regulation to submit plans for MSHA approval that specify how the mine operator will control the roof, how the mine will be ventilated and how the mine operator will control respirable dust. MSHA evaluates such plans submitted by the mine operator on a mine-by-mine basis."

She said MSHA officials examine each mine case-by-case because of each mine's unique geology, mining system, mine height, equipment used and other factors.

Allowing deeper cuts into the coal seam, Hamilton said, would mean the continuous miner and related equipment would be moved less. When the machines are moved, shuttle cars, roof bolters, scoops and other mining equipment are moved along with them.

"So every piece of equipment is moved twice as often and disruption to the underground operation is continuous. The majority, upward of 90 percent of the accidents involving continuous miners, have occurred during movement of the machine as opposed to mining coal with it," Hamilton said. "Forcing a

machine designed to mine 40 feet, every 20 feet, unnecessarily increases the risk and exposure to a known hazard for a prolonged period of time."

Louviere says safety is probably not the strongest motivator for mine companies who want to cut deeper.

"The use of extended cuts by mine operators is primarily based on the desire to increase production as opposed to increasing safety and health," Louviere said. "However, if the ventilation, methane, and dust control and roof control plans that incorporate extended cuts is implemented and maintained as specified in properly evaluated and approved plans, mines may perform extended cut mining while still providing an equivalent (according to the regulatory specifications) safe and healthy work environment for the miners."

Hamiltonadmits the increase in productivity would be "substantial," but is only a secondary consideration. He said tight regulation makes it difficult for mine companies to compete in regional and world markets.

"West Virginia's continued loss of markets is being exploited by expanding marketing opportunities in the Illinois and Wyoming basins and from the importation of coal from places like Colombia, Venezuela and Indonesia, which incidentally do not have either environmental or mine safety laws," Hamilton said.

He brought the issue to MSHA officials earlier this month during a hearing on a proposed respirable dust standard. There, he also talked about a similar "de facto" moratorium on the use of scrubbers as part of a mine's ventilation system.

Though the hearing was on another topic, he said he felt mining officials should know about other concerns of the coal companies he represents.

There, officials told him and other members of the coal community that there was no such moratorium on scrubbers.

Coal production has fallen by about 46 percent in the past decade. Estimates say about 339 million tons of coal will be mined in the United States in 2010. In 1990, national production reached a high of about 623 million tons.

Hamiltonsaid the industry is under attack by the Obama administration and federal agencies. Calling the entire energy agenda of the president "out-of-whack," Hamilton points to cap and trade legislation, actions by the Environmental Protection Agency and the Office of Surface Mining, and

widespread opposition to the process of mountaintop removal.

"The national agenda should have national security and energy independence at the top. They go hand in hand with one another," Hamilton said. "With those as priorities, then all that follows will be consistent and supportive of those shared goals, including a meaningful energy policy, coal-to-liquids reality, adequate mine production and combustion research and a view that recognizes and embraces natural resources as assets."

Restrictive policy, Hamilton said, has cost the state buying and spending power that would otherwise be channeled through miners.

"When the objective is to wean the country from coal, it stands to reason that all policies and programs that follow are regressive and restrictive," Hamilton said. "The result — immediate and devastating job losses, negative economic impact, extraordinarily high costs associated with transforming our basic energy grid and infrastructure, and overall higher energy costs."

Hohmann: Underground carbon capture up in the air

Charleston Gazette - December 25, 2010

CHARLESTON, W.Va. -- American Electric Power's plan to build a commercial-scale carbon capture and sequestration demonstration project at its Mountaineer power generating plant at New Haven has an uncertain future, said Charles Patton, Appalachian's president and chief operating officer.

State Public Service Commission Chairman Michael Albert asked Patton about the project earlier this month during a rate case hearing.

American Electric Power has been operating a carbon capture and sequestration project at the Mountaineer plant since late 2009. The project, which cost more than $100 million, is designed to capture 100,000 tons of carbon dioxide annually from the plant's flue gas stream and store it more than 7,000 feet underground.

This project is designed to help validate the effectiveness of Alstom's patented chilled ammonia process for carbon dioxide capture and the viability of storing the liquefied gas underground. The project will operate for up to five years.

Meanwhile, American Electric Power had been planning to build a $668 million, commercial-scale project at the Mountaineer plant. It would store 1.5 million tons of carbon dioxide a year 1.5 miles below the surface.

During a company presentation at the Governor's Energy Summit on Dec. 7,

American Electric Power said it hoped the project would start up in 2015. But the project is apparently too expensive unless Congress puts a price on carbon emissions. An effort to do that died earlier this year when the current Congress failed to pass so-called cap-and-trade legislation.
"Currently it is being observed -- we're evaluating the future of the project," Patton said at the Dec. 15 hearing.
"The reality is, without greenhouse gas legislation, it is a very costly process," he said. "We do believe the research is valuable. We believe solutions like carbon capture and storage should continue to be studied, developed, so when the opportunity does present itself and the economics are such, we are prepared to deploy. We're evaluating it right now. Its future is somewhat uncertain as far as its next phase."
Which raises the question: If carbon capture and sequestration is not the route to clean coal, what is?

Coal companies follow the trail west

PowderRiver Basinoutput has continued to climb, aided by rules that forced utilities to reduce emissions.
St. LouisPost-Dispatch - December 25, 2010
WRIGHT, WYO. - Toward the end of the 1990s, Arch Coal executives stared into a troubling future - the steady bleeding of market share from its Central Appalachian mines to rapidly growing rivals in Wyoming.
Arch chief executive Steven F. Leer soon reached a realization that would transform the company: Arch couldn't win. In Wyoming's Powder River Basin, other companies were feasting on strip mines, peddling more easily unearthed and cleaner-burning coal to an eager market. Meanwhile, Arch struggled in mountainous terrain to grow the company in a region about to peak.
"We decided if we weren't going to win the battle, we'd better well join them," he said. "We concluded that the PRB was going to continue to take market share, and it was the greatest energy resource in the United States, potentially the world."
In 1998, Arch bought Atlantic Richfield Co.'s western coal mines for $1.14 billion, growing the Creve Coeur-based company into the nation's second-largest coal producer. The maneuver paralleled a more gradual westward shift for the U.S. coal industry — a trend that continues today.
PowderRiver Basinoutput has continued to climb, aided by sweeping new

rules approved in 1990 that forced utilities to reduce emissions of acid rain-causing sulfur dioxide. Many Midwestern utilities — including Ameren Corp. in St. Louis — coveted western coal because its low sulfur content allowed them to avoid installing expensive pollution controls.

CHASING EASY COAL

Set between South Dakota's Black Hills and the Big Horn Mountains, the basin covers more than 20,000 square miles of northeast Wyoming and southeast Montana. Its rolling grasslands are dotted with sagebrush and teem with deer and antelope. Less obvious is a layer of coal, up to 100 feet thick in places, that underlies much of the land.

Executives at Arch and Peabody Energy Corp., the basin's two largest producers, say the biggest driver of demand is the decline in coal output in West Virginia and Kentucky, the epicenter of the coal mining business going back to the Industrial Revolution.

Simply put: The easy coal is gone. Remaining coal seams are thinning, hurting productivity and increasing costs. Meanwhile, federal regulators are ratcheting up mine inspections in the wake of the explosion that killed 29 workers at Massey Energy's Upper Big Branch mine. And the Obama administration is taking a hard line on the practice of mountaintop coal mining — a controversial practice that involves blasting off mountain peaks to expose coal seams and dumping leftover rock and dirt in surrounding valleys.

Arch, still one of the region's largest producers, predicts this year's output in Central Appalachia will be 60 million tons, or about 25 percent lower than 2008 levels.

REPEATING HISTORY?

No one questions the richness of the Powder River Basin reserves. Based on data in a 2008 study of the U.S. Geological Survey, the area contains 77 billion tons of coal that could be tapped with today's mining technology — or about 150 years supply at current levels of demand. "We haven't even scratched the surface of that deposit," said Ken Cochran, president of Arch's Thunder Basin Coal subsidiary.

But some critics question how much longer it will remain cheap, given increasingly higher costs of both mining and burning coal.

The price of Powder River Basin coal has risen about 50 percent this year. And operating costs in the basin have doubled since 2003, as prices for labor, fuel, commodities and explosives have risen. So, too, have royalty and tax payments to the state of Wyoming and federal government.

Another reason: Every ton of coal is a little harder to unearth than the last. Strip mining in the Powder River Basin began on the far eastern edge, where the coal seam outcropped from the ground. For every ton of coal extracted, early miners here had to move a cubic yard of dirt. As mining advanced westward, the coal layer dipped. Today, the average 'stripping ratio" requires

moving 3.5 yards of dirt for every ton of coal. In a few years it will be 4-to-1, or greater, raising costs.

The Big Dipper

Companies are combating the cost pressures with supersized equipment, capable of digging up coal far more efficiently.

Trucks used 40 years ago held 100 tons. Today, the trucks hold 300 or 400 tons.

Then there's the king of earthmoving machinery: the Ursa Major dragline at Arch's Black Thunder mine. At 15 million pounds, the so-called Big Dipper stands 240 feet tall and weighs as much as 150 Boeing 737s.

Miners are also increasingly using technology. At Peabody's North Antelope Rochelle mine, GPS-enabled equipment is choreographed from a central control room where employees in front of flashing screens watch tire pressure, brake temperature, speed, fuel and other metrics through wireless computer networks.

Logging all of this data on a fleet of heavy equipment may seems obsessive. But consider that a single tire on any of dozens of the company's 400-ton trucks costs $50,000.

Jeane Hull, a Peabody Energy vice president who oversees western U.S. operations, said the company isn't done squeezing out inefficiencies.

"I think there's a real misperception that we're a dinosaur industry that's outdated," she said. "We're nowhere close to hitting the wall on that."

MOVING TO MONTANA

Meanwhile, Arch and Peabody continue searching for coal's next frontier. For Peabody, the world's largest private-sector coal company, it could mean opportunities in the Xinjiang region of northwestern China, an area the size of Iran that's estimated to hold 2.2 trillion tons of coal. For Arch, it could be closer to home: Montana.

In two transactions in November 2009 and March, the company paid more than $150 million for rights to 18,000 acres in southeast Montana that hold an estimated 1.5 billion tons of coal.

In Montana, Leer sees the same coal quality sought by utilities, along with favorable geology that made the southern Powder River Basin so attractive decades earlier.

Arch faces numerous regulatory and logistical hurdles in Montana, too. But as sure as Leer was in 1998 about Arch's Wyoming bet, he's equally confident of reaping profits in Montana.

"If everything went perfectly, ... you could see the mine start to go into production in year five or six," he said. "Our expectation is that it could be very good timing."

The once and future king

St. LouisPost-Dispatch - December 26, 2010

WRIGHT, WYO. • Every minute, a machine at Peabody Energy Corp.'s North Antelope Rochelle mine scrapes an 80-foot wall of coal with a giant steel claw. With each swipe, the beast pivots and deposits a heap of black rock into a waiting truck.

From a distance, the yellow CAT looks like a Tonka toy. But it stands two stories tall, with 12-foot tires. On its side, a display resembling a basketball shot clock records the weight of each load.

This one reads 398 tons — enough to power a typical American household for 60 years.

That a single machine can extract decades' worth of energy underscores the scale of mining here in Powder River Basin, the source for 40 percent of the nation's coal and the fuel for 80 percent of Missouri's electricity. "We move in a day what some of the mines in the Midwest move in a month, or small Appalachian mines move in a year," boasts Jeane Hull, a Peabody group vice president who oversees the company's Western U.S. operations.

The breathtaking scope translates directly into the low costs that drive America's continuing addiction to coal-fired power — despite dire climate-change warnings and the growing chorus calling for clean fuels. At today's prices, it would take $60 in natural gas to produce the same energy as a $14 ton of Powder River Basin coal. Coal costs more to ship to market, but even if you tripled its price to account for rail transport to far-flung plants, it's still cheaper than raw natural gas — without adding in pipeline costs, said Steven F. Leer, chief executive of Creve Coeur-based Arch Coal Inc., the second-largest producer in the basin after St. Louis-based Peabody.

Arch and Peabody executives say that's not likely to change over the next decade, despite rising coal production costs, falling natural gas prices, the push for wind and solar power, and an alphabet soup of new environmental and safety restrictions.

Big Coal's expansion plans have prompted the Sierra Club and other environmentalists to use the courts and everything else in their power to stop them. They believe pollution rules and declining costs for alternatives will combine to erode coal's historic price edge. Bruce Nilles, chief of the Sierra Club's Beyond Coal campaign, confidently pronounces the "old days" of cheap coal "long gone."

The coal industry begs to differ. Indeed, companies such as Arch and Peabody are pushing more chips into the pot, betting big that demand for coal — particularly the premium variety mined here in the Powder River Basin — will continue to grow. That growth may come at the expense of other

coal producing regions, especially Central Appalachia. And utility executives concede that sweeping climate change legislation, if it ever passes, could make coal-fired energy prices spike.

But the industry has a backup plan that could create a whole new battlefield with environmentalists: exporting Wyoming's rich reserves to power-hungry countries such as China, where economists see the demand curve trending higher for years, if not decades, as billions of people seek to claw their way into the modern world.

The other fundamental question the opponents of coal struggle to answer: If not coal, what? No alternative energy source — or combination of sources — can yet provide enough power to fire the factories and cool the homes of a nation spoiled for decades by cheap electricity.

Robert Clayton, chairman of the five-member Missouri Public Service Commission, said coal will remain the workhorse fuel in the state for years to come.

"At the end of the day, the consumers want the lights on when they turn them on," he said. "And it's up to us to make sure the utilities have the power to do that."

DIGGING IN

Altogether, coal companies work a dozen mines in the Powder River Basin, clustered together in a narrow north-south strip near Gillette, Wyo., the self-proclaimed "Energy Capital of America." Peabody and Arch own five of them, including the two largest. Together, the two companies control more than 4 billion tons of basin reserves and last year accounted for more than half of the coal mined here.

Peabody, the world's largest private-sector coal miner, has a permit to dig into a new 800 million-ton block of coal just north of its flagship North Antelope Rochelle mine, which will produce more than 100 million tons of coal this year.

The new School Creek mine could be tapped as soon as next year. The company has said it will produce up to 35 million tons a year.

To outsiders, coal is coal. But School Creek represents the coal qualities sought by utilities — high energy content and low sulfur. Vic Svec, a Peabody senior vice president, discusses it with the reverence that a wine collector speaks about a prized vintage.

"This is a fantastic reserve block that will be developed," Svec said. "It's just a matter of timing."

Creve Coeur-based Arch is growing in other ways. A year ago, it paid rival Rio Tinto Plc $761 million for Jacobs Ranch, a sprawling mine that shares a border with its giant Black Thunder operation. The combination yielded the world's largest mining complex, producing a staggering 4 tons of coal per second.

CLIMATE FOR COAL

Big Coal executives have little doubt that the Powder River Basin output will continue to grow. But they can extract only what their customers — power producers, such Ameren Corp. in St. Louis — will buy. And the optimism in the coal fields stands in stark contrast to how some others, particularly regulators and environmentalists, view its future. The industry faces political threats on two fronts: a slew of new rules to curb pollution by existing plants and the longer-term prospect of climate change legislation.

The white-hot politics of climate change remain a wild card. Many climate scientists warn that nothing short of a drastic reduction in emissions of carbon dioxide and other heat-trapping gases will prevent the worst effects of global warming. And no single source puts off as much CO2 as coal-burning power plants.

Congressional Democrats failed to pass climate legislation last year, and the chance for such a measure dimmed considerably when Republicans grabbed control of the House last month. But the Obama administration is pursuing another avenue. Spurred by a landmark Supreme Court decision in 2007, the EPA has declared greenhouse gases a health threat. New EPA restrictions on new sources of CO2 will take effect Jan. 2 — making it nearly impossible to build or expand a coal-fired power plant. The agency on Wednesday said new rules affecting existing power plants could be issued in 2015 or 2016.

"I think it's safe to say that getting a coal plant built is going to be a high hurdle going forward," said Shawn Schukar, who oversees environmental compliance strategy at Ameren, one of the nation's most coal-heavy utilities.

POLLUTION CONTROL

While the carbon regulations only will affect the industry's ability to expand, the nation's 500 existing power plants must soon grapple with separate regulatory pressures on their bottom line: Air- and water-quality regulations expected to be phased in over the next several years. The EPA is developing new rules that would force power plant operators to curb all sorts of pollution — nitrogen oxides, ozone, sulfur dioxide, particulates, mercury. The agency is also considering regulating disposal of toxic coal ash, in the wake of the 2008 disaster in Tennessee, where a disposal pond wall collapsed, coating 300 acres with wet coal ash and polluting two rivers.

The Brattle Group of Cambridge, Mass., estimates new federal environmental regulations could shut down almost one in every five coal-fired power plants nationwide, reducing coal use by 15 percent in the next decade.

The coal industry believes such threats are overblown. Arch recently performed an internal analysis, examining the fate of every coal-fired boiler in the country. (The 500 or so plants collectively include about 1,000 boilers.) The company concluded that more than 400 of the least efficient — some of which date back to the 1940s — would likely be retired under new EPA regulations.

Even if all of those boilers shut down over the next decade — unlikely, says

Arch's Leer — it would only reduce annual coal burn by 118 million tons, or about 11 percent. That's because most of these inefficient plants often sat idle even in a good economy.

U.S. coal plants that escape the regulatory ax would, however, face costly retrofits, said Metin Celebi, a co-author of the Brattle report. The firm predicts that power producers might ultimately have to spend up to $180 billion on new pollution controls.

With the timing and severity of climate change legislation unclear, utility executives face a dilemma: Do they spend hundreds of millions of dollars to retrofit a coal-fired power plant when future political action could render it a white elephant? "If you make an investment and then slap on a high carbon tax," Schukar said, "it may make that investment look bad."

Of course, the EPA has already delayed some of the new rules. Many will be litigated for years. And the coal industry is spending millions of dollars lobbying Congress to fight every change. Peabody, for instance, sued the EPA, challenging its finding that greenhouse gases are a health threat. The company fought efforts in Colorado to switch four coal-burning power plants to natural gas. Peabody ultimately lost both challenges, but showed the will to tie up regulatory efforts in extended and expensive battles.

THE CAPACITY GAP

For all of the heat on King Coal, every other energy source faces its own vexing challenges. Wind, solar, natural gas and nuclear each face a different set of issues involving supply, capital investment, price or politics. Last year, coal-fired power accounted for nearly half of all electricity used in America; none of its opponents has yet offered any comprehensive plan to make up that gap, even with aggressive energy efficiency goals.

Renewable energy use is growing fast, propelled by state mandates and taxpayer-financed federal incentives. And while wind and the sun are free, turbines and solar farms remain expensive to build, especially compared to a coal-fired power plant that's already paid for, analysts say.

What's more, solar and wind farms can't generate power 24 hours a day, seven days a week, producing so-called baseload electricity. Wind farms in northwest Missouri, for instance, are available only about 25 percent of the time.

Nuclear power remains cheap to produce, but new plants could cost $10 billion or more, and Wall Street has so far been unwilling to make that bet — to say nothing of safety issues involving radioactive waste disposal that remain a political third rail.

The biggest threat to coal is cleaner-burning natural gas, specifically gas produced from shale rock. The Energy Information Administration, an arm of the U.S. Energy Department, this month more than doubled its estimate of technically recoverable natural gas reserves from shale. The flood of new supply and a weak U.S. economy has helped push down natural gas prices to

$4.08 per thousand cubic feet from a high of $14 in mid-2008.
Energy consultants Black & Veatch estimate natural gas, which will be used to power 21 percent of electricity in 2011, will see its market share grow to 40 percent by 2035 while coal's shrinks from 48 percent to 21 percent.
But the new gas boom faces environmental problems, too. The technique for pulling gas out of shale rock with high-pressuring water — called hydraulic fracturing, or fracking — has sparked a public backlash over contamination of groundwater and drinking water in nearby neighborhoods.
And some question the wisdom of making a long-term bet on natural gas — a fuel that Duke Energy Corp. CEO Jim Rogers referred to as the "crack cocaine" of the power industry. Utilities in the past have gotten hooked on cheap gas and made huge investments, only to see prices spike and plants idled.
Gas won't be stealing much market share from coal anytime soon, said Bill O'Grady, a longtime energy analyst and chief market strategist at Confluence Investment Management LLC.
"I'm skeptical that these gas companies can pull this stuff out of the ground as cheaply as the current market price says they can," he said.
Like it or not, analysts say, the nation's energy future will rely heavily on sprawling strip mines like North Antelope Rochelle — dusty moonscapes where supersized machines and explosives scoop, shovel and blast away 24 hours a day to keep the lights on hundreds of miles away.
Even if coal executives are overestimating U.S. demand, they know that customers in a larger, faster-growing energy market — Asia — will take up the slack.
Peabody and Arch are both studying opportunities to ship millions of tons to places such as China, Taiwan, South Korea and perhaps India. Such plans could simultaneously pave the way for growth in the Powder River Basin and further galvanize environmental opposition.
"Exporting coal is a line in the sand to us," said Sierra Club's Nilles. "Why on God's green Earth would we ever enable that?"

Many Want to Train For Mine Jobs

Wheeling News-Register - December 25, 2010
Response to a federally funded coal mining training program has been what it had been expected during this period of high unemployment and economic instability - overwhelming.
A large number of individuals have applied for the training program funded by American Electric Power through a $28,000 grant awarded the Belmont

County commissioners in collaboration with the Department of Jobs and Family Services and Belmont Technical College.
Michael Schlanz, manager of the Belmont County Connections office in Martins Ferry, said a total of 88 individuals who qualified for the program under the income eligible guidelines, had applied to take the training course. The grant specifies that a total of 40 individuals could qualify for training under the program.
"We have already selected the enrollees for the first class in January," explained Duane Pielech, director of the Belmont County DJFS. Pielech said 14 individuals have been screened and chosen for the first class.
"The class will have a total enrollment of 20 but the college is filling the rest of the class by integrating normal enrollment," Pielech explained.
A second class in January also will include 14 of those who applied under the grant program and the final 12 from the 40 eligible applicants will be included in a third class to be held at a later date. In each of those cases regular student enrollment will fill the classes to a maximum of 20 students.
Income guidelines for applicants ranged from $1,805 monthly for a single individual to $6,169 monthly for a family of eight. Those chosen for the classes must comply with drug-free workplace policy and they also may be subject to drug test screening.

Alaska coal creates demand, opposition

AnchorageDaily News - December 25, 2010
One of Alaska's major exports -- coal -- has been racking up record shipments over the past couple of years.
Coal developers buoyed by Asia's energy boom and soaring coal prices are contemplating even more expansion in Alaska.
Two new coal strip-mine proposals are under serious study in Southcentral Alaska. Also, the state's single coal producer, Healy-based Usibelli Coal Mine Inc., is weighing expansion.
The bigger of the proposed new mines, called the Chuitna project, would ratchet up the state's total coal exports from about 1 million tons per year to 12 million tons. Exporting coal from the mine, about 45 miles southwest of Anchorage, would require building a massive dock for ocean-going cargo ships on the west side of Cook Inlet.
Coal development plans are triggering an intense land-use debate in various parts of Southcentral, where some small communities are fearful about major

industrial expansion, particularly mining.
Deep-seated opposition in Chickaloon, for example, persuaded a Canadian company to abandon its coal exploration leases on 230,000 acres several years ago.
The debate is still raging over the two pending coal projects, Chuitna and Wishbone Hill, a small mine that could reopen north of
Palmer. The proposed mines have aroused local concerns about increased industrial traffic, reduced air quality and potential risk to Southcentral's salmon runs due to pollution and loss of habitat.
Chuitna and Wishbone Hill opponents have asked the state to declare the two locations as unsuitable for mining. The state rejected the Wishbone Hill petition, but the Chuitna petition is still pending.
Both mines remain under study with no final development plans published yet.

ASIAN BOOM

The United States has the second-biggest coal reserves in the world, after South Africa. Alaska contains half of the U.S. coal reserves, though relatively little of it is mined.
Alaska's coal remains largely untapped because most of the deposits scattered throughout the state are difficult to access by land or water, the coal is low grade or both.
The Asian boom is changing the economics of Alaska coal, possibly for decades to come.
Global demand for low-rank coal -- called so because it burns less efficiently -- is increasing. The low-rank coal from Usibelli's Healy coal leases and from Cook Inlet's massive Beluga coal field is less dirty in one respect: Burning it creates smaller amounts of sulfur dioxide, a noxious air pollutant.
But burning it still generates the carbon dioxide emissions implicated in global warming.
The price of coal exported to Asia -- a main destination for Alaska's coal for the past 25 years -- has more than doubled in the past five years. The United States exported 51 percent more coal in the first six months of this year than it did for the entire 2009.
Despite increased attempts to curb carbon dioxide emissions, and growing opposition to coal-fired power plants, Lower 48 and Alaska coal mines so far have had little trouble finding new customers overseas.

A NEW RECORD

In 1985, Usibelli began exporting low-grade coal from its Healy mine to South Korea. The company put the coal on trains to Seward, then the coal was loaded on ships. At the time, Usibelli says, it was the only company in the world shipping low-rank coal by sea.
This year, Usibelli, founded in the 1940s, exported about 1 million tons of coal via Seward to South Korea and Chile, where it is mainly used for power

generation. Usibelli expects to export slightly more in 2011.
This year was the second record-breaking export year in a row for Usibelli. While the company has seen a modest increase of 25 percent in coal exports over the past 15 years, tellingly, most of that growth happened in 2009 and 2010.
"We probably have opportunity for significantly more exports in the coming years," said Steve Denton, Usibelli's vice president for business development. "Do we have any major plans on the table right now? No, we don't. But we are going to look at what it would take to expand," he said.

DIZZYING GROWTH

China, the world's fastest growing major economy, has colossal coal reserves, but the country's energy consumption is growing so rapidly that last year China began importing more coal than it exports.
Usibelli doesn't see China as a likely customer, but the developers of the Chuitna mine do.
"The potential is there," said Dan Graham, the Anchorage-based project manager for PacRim Coal, the consortium seeking to develop the controversial mine. PacRim is owned by Dick Bass, the Lower 48 ski resort owner, and the Hunt Group, one of the world's largest privately-owned energy firms.
Chuitna opponents say the project is a classic example of trading a renewable resource -- salmon -- for a non-renewable, mined resource. PacRim is still working on its studies for the proposed mine, but opponents are decrying PacRim's idea of excavating some salmon-bearing waters within the coal deposit and creating new artificial habitat for the fish.
"If they can mine through a salmon stream here, this would just be the first (place)," said Dennis Gann, of Cook Inletkeeper, an environmental group fighting the mine.

EXPANSION IMPACTS

The increase in coal exports being contemplated in Alaska would have consequences throughout the Railbelt.
Here's a few of the impacts:
• If built, Usibelli's proposed Wishbone Hill mine would add 75 to 125 full-time jobs in the Mat Su for the five years while the mine is active.
• The Wishbone Hill mine likely would require a rail line expansion to carry the coal either to Port MacKenzie or to the existing coal terminal in Seward.
• If Usibelli takes additional steps to boost coal production from its Railbelt leases, the coal shipping terminal in downtown Seward could expand, potentially creating more economic benefits for the city but possibly increasing the amount of coal dust that blows off the terminal on windy days. Conservation groups are suing over the coal dust in Seward but a trial date has not been scheduled yet.
• If built, the proposed Chuitna mine could employ about 350 people and

create a new tax base for the Kenai Peninsula Borough and the state government.

• To move Chuitna coal to foreign ports, the mine's developers would need to build a 2-mile-long dock on the western shore of Cook Inlet capable of receiving large cargo ships. By some estimates, more than 100 ships would call at the dock each year.

More workers planned for Turk plant construction

About 250 to 300 jobs will be added after the first of the year at the construction site of a 600-megawatt, coal-fired power plant along the Red River in southwest Arkansas, according to an official from the parent company of plant builder Southwestern Electric Power Co.

About 1,600 workers are now engaged at the site near Fulton, where construction of the John W. Turk Power Plant is nearing the halfway mark, at 47 percent complete.

Despite legal battles between Turk supporters and opponents, the plant is expected to be online in October 2012 as a "merchant" plant, a designation that will bar SWEPCO from selling its power to Arkansas consumers but allow the company to sell the electricity it produces to other utilities.

SWEPCO estimates that, when Turk is in full production, it will have 109 full-time, permanent workers. About 22 have already been hired for management, turbine operation and chemistry work.

The number of construction employees is already greater than SWEPCO had estimated would be involved at peak construction. Close to half of them live within 50 miles of the plant.

After the first of the year and the new hires, the construction schedule will change, according to Robert Lovelace, project manager with American Electric Power, SWEPCO's parent company.

"We'll increase the night shift then, adding anywhere from 250 to 300," Lovelace said.

He said the night shift now operates with about 50 to 60 employees.

At the construction site, structures now stand where parts once sat like puzzle pieces waiting to be put together.

"When I came in 2008-2009, all the work at the site was just site prep," said Lovelace, who estimates about 4 percent of the plant is completed each month.

The main structure, 252 feet tall, houses the turbine, the pulverizer and the

boiler. Its lights can be seen at night from Interstate 30, with cooling towers nearby.

Turk's boiler will operate at a higher pressure and temperature to make steam more efficiently. The technology doesn't require as much coal to operate as a traditional coal-fired plant, thus reducing emissions. The cooling towers will circulate water to cool the steam and convert it back to liquid water.

Construction is expected to cost about $1.7 billion. Construction of transmission lines to take its electricity to customers could cost another $300 million.

Opponents of the plant say it is a threat to the environment. The Sierra Club, Audubon Arkansas, Hempstead County Hunting Club and others have sued to fight construction. A challenge to a permit issued by the U.S. Army Corps of Engineers allowing disposal of dredge or fill material on an 8-acre portion of the property is still pending in federal court.

Alaskaresource commissioner Sullivan plans 'engagement tour'

FAIRBANKS — Alaska holds more coal than every country but Russia, according to the Department of Natural Resources. The state's new resources commissioner said similar facts and figures will help the state understand its position in global and domestic markets.

Dan Sullivan, appointed to the post this fall, said Tuesday his department is compiling an inventory of Alaska's resource base to help administrators, business leaders and constituents gauge the "gargantuan" economic development opportunities in Alaska. He said the work will better prepare major stakeholders to work together and with potential investors.

"Not only are we the envy of most states with regard to natural resources, we're literally the envy of most countries," he said.

Sullivan discussed the work with constituent groups in Fairbanks at the start of an "engagement tour" across the state. He met Tuesday with groups focused on energy costs and on access to public lands. He said he will solicit perspective from interest groups, business leaders, environmental groups and others in cities and rural hubs.

Sullivan, Alaska's attorney general from the summer of 2009 until a Cabinet shuffle by Gov. Sean Parnell last month, met employees in Fairbanks this week. He said it is too early to outline major agendas but did say he is concerned with declining throughput in the trans-Alaska oil pipeline, given the oil industry's huge influence on the state's economy.

Fairbanksgroups urged Sullivan to consider Interior-specific needs as he takes over at the department. Borough Mayor Luke Hopkins said a proposed natural gas pipeline, long discussed but perpetually challenged, would carry the added benefit of helping Fairbanks address chronic air pollution problems. Mike Tinker, with an outdoors group, said many feel Sullivan's department inappropriately leans toward environmental protection and asked him to improve access to public land.

Sullivan said Parnell's proposed budget places heavy emphasis on resource development, proposing, for example, work on road access to hydrocarbon- and mineral-rich districts in the bush. The Legislature last year approved $8 million to start work on the "road to Umiat," for example, and transportation directors earlier this month said a second round of money would fund an environmental impact statement.

Taylorville may be clean coal's last stand in Illinois

The Southern - December 26, 2010

Bart Ford doesn't like the phrase "clean coal's last stand." He doesn't like comparing a coal plant to Gen. George Custer, who made his famous last stand at Little Bighorn.

But Ford thinks the general concept is correct. And he thinks if the state Senate does not approve the Taylorville Energy Center, a proposed coal-gasification plant in the town just outside Springfield, the future of clean coal in the state may go up in smoke.

"It's time for Illinois to make a decision," said Ford, a vice president for Tenaska, the company behind the TEC. "If the decision is that this isn't good for Illinois, I can't imagine another clean-coal project coming in to Illinois."

As a head of the project, Ford is understandably biased toward it. But several in Southern Illinois feel this project may be the best chance to advance clean-coal technologies in the state, which could benefit the region's coal business. Others, however, think there is no such thing as clean coal, or that the eventual cost to ratepayers will be far too high to justify such a plant.

About the plant

The purpose of the plant is to "gasify" coal -that is, take coal and turn it, essentially, into natural gas. Doing so is a much cleaner way to treat coal than what is currently done, as it has significantly lower emissions than they typical plant, and sequesters the carbon dioxide that is a byproduct of working with coal.

The emissions, Ford said, are "a fraction of what you would see with a coal plant."

Still, not all agree with that. The Sierra Club, one of the nation's top environmental activists groups, claims is there is no such thing as clean coal, and that any coal plant creates environmental risks that aren't worth the energy production.

The total estimated cost of the project is $3.5 billion, and if the Senate approves it next month, Tenaska hopes it will be up and operating by 2015.

Once complete, the energy produced and sold would be above market cost, because of the new technology being used.

As part of previous legislation, there is a cap on the rate increase that would affect residential and small-business users, and that increase would not take place until 2015. For the average residential user, the increase would likely be less than $2 a month, or about $20 per year.

For large-business customers, however, which make up a little more than half of the Illinois utility customer base, there is no cap. That has led to concerns about skyrocketing rates for them, to help make up for the additional costs.

In a cost analysis report of the TEC, the Illinois Commerce Commission raised such questions, and wasn't thrilled with its findings,

"The Commission concludes that the TEC facility features high costs to ratepayers with uncertain future benefits, and uncertainties that potentially add to already significant costs," the report said.

Tenaska officials disagree with that notion, however, saying there would be only a small increase to large commercial users.

In the Senate

When the state Senate reconvenes early in 2011, it will likely take up Senate Bill 2485, which would allow for the construction of the TEC. The bill made through the state House in November, but only after a couple of attempts to get the necessary 60 votes. It was eventually passed by a 63-50 vote.

Coal remains a big and important business in Southern Illinois, so, not surprisingly, local lawmakers have been proponents of the bill.

State Reps. Mike Bost, R-Murphysboro, John Bradley, D-Marion, Brandon Phelps, D-Harrisburg, and Dan Reitz, D-Steeleville, all voted in favor of SB2485, and local state Sens. Gary Forby, D-Benton, John O. Jones, R-Mount Vernon, and Dave Luechtefeld, R-Okawville, are expected to do the same.

"My concern is, coal needs to be part of the energy mix in Illinois,"

Luechtefeld said. "We have more coal than any two states put together, and the old type of coal-powered plant, there are probably not going to be any more of those built. Most of our coal, I'm afraid, is going to end up in China, and I would prefer for it to stay here, for those jobs to stay here."

Those lawmakers are joined in their support by several leaders at Southern Illinois University and its Coal Research Center in Carbondale. Glenn Poshard, president of SIU, and John Mead, director of the Coal Research Center, said they would like to see the bill passed, the plant built and the project create some research opportunities for the university.

"We're particularly versed in clean-coal research in respect to high-sulfur coal," Poshard said. "This project, in developing and implementing the tech there, would lend itself to our coal research program entirely.

"It will present to the university another major project out of which, I think, the university's research mission will benefit."

The high sulfur amount in Southern Illinois coal can be a problem for many current plants, which can't properly deal with it. But the gasification process that would be used at the TEC removes sulfur from the equation, making it ideal for Illinois coal.

"The good thing about gasification is, it solves the sulfur problem," Ford said. "If we can advance the cause of gasification, the disadvantage of Illinois coal is eliminated."

The future of coal

Tenaska, and supporters of its project, are hopeful that if approved, the TEC would merely become the first plant of its kind, and the technology could continue to be approved upon as more time passes.

They also feel it may be a necessity to keep coal as a viable energy option. Environmental concerns about current coal plants could lead to many of them shutting down in future years, as the amount of carbon dioxide that can be emitted by such plants is likely to be more heavily regulated.

"It's my expectation that we'll have changes, perhaps substantial changes, in the fleet of power plants in the coming decade, to meet emission requirements," Mead said.

Because of the reduced emissions created by gasification, supporters believe the TEC could provide a model for the future of coal. And despite the potential for higher costs, those supporters say Illinois needs to be at the forefront of coal technology.

"The management of CO2 is going to be extremely important for the future of coal development," Mead said. "This project will demonstrate and will operate those technologies. We need to be moving beyond the research and development stage, into commercial operations of those processes, worldwide.

"This kind of project ... offers such high-tech operations here in Illinois, which I think has a lot of benefits in terms of Illinois being a technology leader."

Coal barge still stuck

DETROIT, Dec. 26 (UPI) -- Crews trying to free a coal barge stuck in the mud near Detroit are hoping seven tugboats will be enough to do the trick, a U.S. Coast Guard spokesman said.
Five tugs couldn't budge the McKee Sons, a converted freighter with a 29,500-ton capacity, Saturday from where it's grounded in the Trenton Channel of the Detroit River, the Detroit Free Press reported.
Two more tugs were being called in from Cleveland to provide extra power when they go at it again Sunday.
"They're hoping to get 14 to 15,000 horsepower on it," after failing with the 10,000 horsepower of five tugs, Coast Guard Lt. Justin Westmiller told the Free Press.
The 780-foot barge was delivering coal from Toledo, Ohio, to a Detroit Edison generating plant in Trenton when it apparently missing a navigating buoy an ran aground about 100 yards offshore early Friday. That night, the rescue tugs got it loose briefly but it got stuck a second time, the Free Press said.
"There's no threat of blocking any shipping traffic, and no threat of causing any pollution," Westmiller said Saturday.
The crew of about two dozen were able to enjoy a Christmas dinner on board the vessel, Westmiller said.

Half-century of research basis for new book on PA coal and communities

Tribune Review - December 26, 2010
After researching and writing for almost a half century, retired professor John Enman finally completed a book that sheds new light on Pennsylvania coal and coke communities.
The book, titled "Another Time Another World: Pennsylvania Bituminous Coal, Coke, and Communities," is now available at the Coal and Coke Heritage Center at Penn State Fayette, The Eberly Campus, where it was published.
"I've been retired for about 26 years now, and that is what made it possible

for me to finally write the book -- all of my free time," said the 89-year-old north-central Pennsylvania man as he laughed.

The book examines the coal and coke communities in detail and sheds light on a great deal of information that was nearly lost. It grew out of Enman's 1962 dissertation on the Connellsville Coke Region.

Enman, who earned a bachelor's degree in geology from the University of Maine and master's and doctorate degrees in geography from Harvard University and the University of Pittsburgh, respectively, said he worked on the dissertation while he was a professor at Washington & Jefferson College in southwestern Pennsylvania from 1948-59.

As he researched the book, Enman said he discovered puzzling discrepancies in information.

"The whole book was based on the differences that I found when doing research for my dissertation," he said. "It got me thinking that not all of the writing that was done about the coal and coke region was accurate."

After he left Washington & Jefferson College to take a position at what is now Bloomsburg University in north-central Pennsylvania, Enman said he continued to find even more discrepancies as he traveled 250 miles east to Columbia County. Enman taught at Bloomsburg University from 1959 until his retirement in 1985.

Enman said useful information about the Pennsylvania coal and coke period disappeared with the destruction of company records, destroyed government documents and incomplete surveys. The surveys created by state and federal legislatures gave communities very little time to complete them.

His search for information took him back to the beginning of coal mining in the Pennsylvania bituminous field.

From there, Enman was able to sort through the literature, conduct research in the field and arrive at new insights to what was previously known about the industry, the people and the communities involved.

"I talked to a lot of the coal miners and the people who worked in the Coal and Coke Heritage Center when I was working on the book," Enman said.

Enman said he received help from Evelyn Hovanec, a co-founder of the Coal and Coke Heritage Center and primary book project coordinator, and former center curator Pamela Seighman.

Hovanec said "Another Time Another World" provides a broader context for the earlier publications "Patch/Work Voices: The Culture and Lore of a Mining People" and "Uncommon Lives of Uncommon Strength." These earlier books focused on the Connellsville Coal and Coke Region and southwestern Pennsylvania.

"Another Time Another World" weaves the story into the broader mosaic of the bituminous coal industry of western Pennsylvania, Hovanec said.

Hovanec said the book also provides a more detailed look at the physical aspects of the story -- types of coal and uses, production, transport, patch and

housing design and other material and statistical aspects of the industry, the people and the land affected by the industry.

"'Another Time Another World' completes another chapter of the story of coal and coke, people, land and resources and an industry that dominated the lives of millions of western Pennsylvania," Hovanec said.

Enman began transferring the dissertation manuscript and research materials to the Coal and Coke Heritage Center in 1994.

Dennis Bretensky, a co-founder of the center, contacted Enman in the 1980s and invited him to speak on his research at several conferences sponsored by the center.

Several years later, Seighman, Hovanec and oral historian Elaine DeFrank began editing and adapting the text, as well as gathering and selecting illustrations and photographs to complement the dissertation text.

Additional reports and information from a variety of sources enlarged the scope of the work. What emerged after several years was the 340-page book now available to the public.

"I think it's a pretty good book, and I certainly enjoyed writing it," Enman said. "I had a lot of help from the people from the Coal and Coke Heritage Center. The pictures and the illustrations are clear and bright. They are strictly black and white."

"This book is the result of a lot of work and love of the topic by many people," DeFrank added. "It is a reference work that will be extremely useful for historians, educators and people who just want to learn something about their ancestors and how they lived."

Part 1 of "Another Time Another World" examines the history of the bituminous coal mining industry, including Pennsylvania coal seams, mine information, transportation and the coke ovens.

Part 2 of Enman's work explores the people, including immigrants and native-born miners, the miner's plight and family life, and the importance of religion and churches. Part 3 provides details about the rationale of Pennsylvania coal towns, the housing of coal towns and "patches" and the design of "patches."

Publication of "Another Time Another World" was funded by contributions from the family of Max Nobel, Evelyn Hovanec and John Enman. The book is available at the Coal and Coke Heritage Center (www.fayette.psu.edu/coalandcoke) and costs $30. For more information, call 724-430-4158.

ONE FROM THESTRANGE SIDE:

For Ark park: Coal-stoning pit

Herald Leader -Guest Article by Jerry Richardson- December 26, 2010

I've been rethinking my recent objection to the proposed Ark Park, which is coming soon to a convenient location just off of Interstate 75 halfway between Lexington and Cincinnati.

I still believe Gov. Steve Beshear's intent to provide tax incentives to facilitate the creation of the park is unconstitutional; but other than that, I'm beginning to see the possibilities.

The centerpiece of the park will be a replica of ark Noah built around 4,000 years ago to save mankind and all the animals of the earth from extinction at the hands of a loving god.

Personally, I have a few questions about that, but I'm willing to roll with it for right now.

My biggest concern is how to get a good return on my tax money that Beshear is throwing into the mix.

I haven't seen all the plans for the park, but I'll bet you my season pass to the Creation Museum no one has thought of including a stoning pit.

This is a perfect fit for Kentucky. The coal operators can sponsor the pit.

We'll stone the rebellious, miscreant sons and daughters, per biblical dictate, who make up a good-size chunk of Kentucky's current population.

And, as a nod to our sponsors, we'll only stone with Kentucky coal.

Talk about a return on our investment. We'll save a fortune on drug rehab, and county jails will become a thing of the past.

I'm really excited about this. I'm telling you the stoning pit could be big. In the early years of our country, people rounded up the kids, packed a few provisions and traveled for days to watch a good hanging.

Everybody — well, almost everybody — had a good time. And local merchants made out handsomely.

With the means of transportation available today, we'll pack the place. And if we run out of disobedient sons and daughters from Kentucky, we'll license rights to the pit to other states.

I can hear it now.

"Robert, it's your brother, Cletis. Yeah, I'm all right. Listen, Madge and I are flying in to catch a few stonings at the Ark Park. Think you can put us up for a few days?"

Folks, this will get so big we'll have to modify our state slogan. "Kentucky:

Unbridled Spirit" will give way to, "Kentucky: Unbridled Spirit Just A Stone's Throw Away,"

It's a marketer's dream.

Oh, I know what some of you are thinking. But believe me, there won't be a shortage of "stonees." Remember, Mosaic Law included the following provision for dealing with a disobedient son:

"His father and mother shall take hold of him and bring him to the elders at the gate of his town. They shall say to the elders, 'This son of ours is stubborn and rebellious. He will not obey us. He is a profligate and a drunkard.' Then all the men of the town shall stone him to death. You must purge the evil from among you." (Deuteronomy, 21:19—21)

And, if we were to somehow run out of miscreant sons, there's always Deuteronomy 22:20:

"But if this charge is true, that the girl was not found a virgin, then they shall bring out the girl to the doorway of her father's house, and the men of her city shall stone her to death because she has committed an act of folly in Israel by playing the harlot in her father's house; thus you shall purge the evil from among you."

I'm telling you, the governor's on to something with his Ark Park crusade. The cynical might think he's just trolling for votes among the faithful.

But think about it. For a few measly tax breaks and only a slight abrogation of the First Amendment, we can get rid of our profligates and our drunkards, purge the evil from among us, promote Kentucky coal and save a bundle on social services and incarceration.

Now, let's get started. Who's going to cast the first piece of coal?

Jerry Richardson lives in Georgetown.

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Exec. V-P
ECSI
(O) 859-233-2102
(C) 859-312-4209
jzaluski@engrservices.com

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From: Donald Iannone
To: Josh Jenkins; Liz Edmondson; John Maxwell; John Morgan; Andy DeVito; benjamin_simon@ios.doi.gov
Cc: Michael C. Carroll
Subject: Conference Call with Benjamin Simon @ 3 PM Today
Date: Tuesday, January 04, 2011 12:28:33 PM

All,

I spoke with Benjamin Simon in the DOI Office of Policy Analysis, and generally explained our work on the RIA since July.

He is available at 3 PM today for a short call about the RIA analysis in general, and our particular need for advice on quantifying the economic benefits of the proposed rule.

Andy: Benjamin indicated that he has not seen the proposed rule or any other reports related to the rulemaking process. He will contact you to see what you can provide him for review after today's call.

Josh: Could you please setup a conference call-in number and notify everyone of that number?

Thank you.

Don Iannone

From: Donald Iannone
To: John Maxwell
Cc: "Jenkins, Josh"
Subject: Re: benefit valuation
Date: Tuesday, January 04, 2011 5:14:51 PM

John,

Thanks. I will review these links and dcouments tomorrow.

We will do the best we can given information, time, and budget.

I will work up a definition of what is entailed in preparing the conceptual logics piece that Ben Simon suggested. This could get involved though.

We will build upon the earlier methodology piece we prerpared that did identify how we define benefits and costs and what role economic impact analysis played in our analysis.

Don

On Jan 4, 2011, at 4:50 PM, John Maxwell wrote:

> http://water.epa.gov/scitech/swguidance/waterquality/standards/economics/appendc.cfm
>
> ***<image001.jpg>***
>
> John R. Maxwell
> Senior Environmental Scientist
> Polu Kai Services
> 352.258.1045
>
> *"For Official Use Only – Deliberative Process Material"*

From: Donald Iannone
To: John Maxwell
Cc: Jenkins, Josh; Varvell, Stephanie L.; Jose Sosa; Shortelle, Ann
Subject: Re: spr
Date: Thursday, January 06, 2011 10:28:34 AM

---

1 pm Friday works for me. Thanks.

Don

On Jan 6, 2011, at 10:18 AM, John Maxwell wrote:

> We have set a tentative time for the meeting at 1:00 on Friday. Please confirm if attendees are available.
> Thank you.
>
> ---
>
> **From:** Jenkins, Josh [mailto:JLJENKINS@mactec.com]
> **Sent:** Wednesday, January 05, 2011 4:40 PM
> **To:** Varvell, Stephanie L.; John Maxwell
> **Cc:** Jose Sosa; Shortelle, Ann; diannone@ix.netcom.com
> **Subject:** RE: spr
>
> Stephanie/John – I appreciate OSM providing DOI Office of Policy Analysis the opportunity to weigh in on the Conceptual RIA at this time. However, there are clearly points (yellow highlighted) in Ben Simon's email that cannot be addressed based on previous directive received and the work that has been completed. I am checking with Don on other items.
>
> I would like to set up a time to discuss Thursday or Friday at your convenience.
>
> Thank you.
>
> **Joshua L. Jenkins** | Project Manager/Senior Geologist
> MACTEC Engineering and Consulting, Inc. | Atlanta, Georgia
> **Phone** 770.421.3412 | **Mobile** 770.833.6429 | **Fax** 770.421.3486
> **Email** jljenkins@mactec.com | **Web** www.mactec.com
> ***For Official Use Only – Deliberative Process Material***
>
> ---
>
> **From:** DeVito, Andy [mailto:adevito@osmre.gov]
> **Sent:** Wednesday, January 05, 2011 4:18 PM
> **To:** Donald Iannone; Jenkins, Josh; Craynon, John
> **Cc:** Shawley, Dianne M; Varvell, Stephanie L.; Sylvester, Cheryl; Rice, Dennis; Winters, William R. "Bill"; Uranowski, Lois J.
> **Subject:** FW: spr
>
> Attached are Ben Simon's comments on the RIA.
>
> Andy DeVito

Office of Surface Mining Reclamation and Enforcement
1951 Constitution Avenue NW (MS-252)
Washington, DC 20240
202-208-2701
Email: adevito@osmre.gov

From: Simon, Benjamin M
Sent: Wednesday, January 05, 2011 3:21 PM
To: DeVito, Andy
Cc: Crowley, Christian; Cline, Sarah A; Lawyer, Mark
Subject: spr

Hi Andy,

Here are a few general comments on the "conceptual" RIA.

- Clearly distinguish between economic benefits and costs, transfer payments, and economic impacts. Impact analysis should not be the primary tool used for the analysis.

- Include a section discussing the need for the regulation, specifically addressing the extent to which market failures or information asymmetries are present. Why are the existing regulations inadequate? Are existing regulations enforced?

- Clearly state that the goal of the analysis is to evaluate net economic benefits from a national perspective.

- Define the regulatory base line against which the net benefits will be evaluated.

- Define the period of analysis and justify the selection of this period.

- Discuss the anticipated pattern of implementation over time and how this might impact the accrual of the benefits and costs over time.

- Discuss in conceptual terms how the economic analysis will be approached. How are costs to be estimated? How should benefits be estimated in concept and how will they be evaluated for this analysis?

- Define cost categories (e.g., compliance costs,OSM administrative costs, foregone production, increased electricity costs to consumers)

- Define the benefit categories (e.g., water quality improvements, recreation benefits, health/safety, visibility/noise reductions, etc.). Explain specifically how the regulation would be anticipated to affect each type of benefit in physical/biological terms. Discuss how these effects might be monetized.

- If avoided costs are to be used as a measure of benefits, a justification for this approach should be provided. Note that economic impact estimates are not necessarily equal to economic costs. A better approach for estimating costs might simply be the sum of the value of foregone annual production plus OSM administrative costs plus private sector compliance costs. This stream of costs should be discounted to the present. Any benefits that are monetized should also be discounted appropriately.

- The RIA focuses on regional shifts in production, etc.. While the distributional information may be useful, the focus of the analysis should be to look at net economic benefits to the nation.

- The RIA should explain how the cost estimates were derived (such as the compliance cost estimates that are included in the current draft). The RIA provides 2 different estimates of compliance costs but few details on the elements of these costs or how they are calculated. Perhaps this is explained in more detail in the complete full analysis.

Ben

==========

Benjamin Simon
Director, Economics Staff, Office of Policy Analysis
U.S. Department of the Interior
Mail Stop 3530
1849 C St. NW
Washington DC 20240
202 208 4916
benjamin_simon@ios.doi.gov

From:	Donald Iannone
To:	John Morgan
Cc:	John Maxwell; Jose Sosa; Josh Jenkins; Michael C. Carroll; Will Burns
Subject:	Re: RIA comments and conference w/Josh and Don
Date:	Thursday, January 20, 2011 7:54:46 PM
Attachments:	DOI_Economic-Impacts-Report-1.pdf ATT00001.htm

Please see the attached.

It's interesting to see that Ben Simon and the DOI Office of Policy Analysis raises questions about Economic Impact Analysis (EIA) and Implan-type models, when they did the VERY same thing in analyzing the impact of DOI efforts. Just a point of information.

In my mind, this validates that DOI sees the value of this type of analyis in defining the economics of federal policies and programs. Once again, Implan has a legitimate place in the RIA, but it cannot be the only analytic method.

See this exerpt from page 41 of the attached report:

"The methodology used to evaluate the employment and economic impacts was developed by Interior economists based on an initial set of information developed by the USDA Forest Service known as IMPLAN. IMPLAN is a widely used electronic input-output (I/O) software and data system for estimating the job and income effects of the interdependencies and interactions of economic sectors and consumers to estimate output, income and employment effects. IMPLAN contains data for up to 409 economic sectors and nine income brackets using 2007 data, the most recent data available. IMPLAN draws upon data collected by the Minnesota IMPLAN Group from multiple Federal and state sources including the Bureau of Economic Analysis, Bureau of Labor Statistics, and the U.S. Census Bureau."

Don

From: Varvell, Stephanie L.
To: John Maxwell
Cc: Sloanhoffer, Nancy E.; Craynon, John; Jose Sosa; Jenkins, Josh; diannone@ix.netcom.com; Mike Stanwood; Shortelle, Ann
Subject: RE: RIA
Date: Thursday, January 06, 2011 4:55:58 PM

John,
What schedule items do you have remaining?

From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Thursday, January 06, 2011 4:47 PM
To: Varvell, Stephanie L.
Cc: Sloanhoffer, Nancy E.; Craynon, John; Jose Sosa; Jenkins, Josh; diannone@ix.netcom.com; Mike Stanwood; Shortelle, Ann
Subject: RE: RIA

Stephanie,

We will stop work on the RIA until further notice and when the RIA content has been decided. Let us know when a meeting is needed and we will attend.

Do you have a feel for how this will affect the RIA schedule?

Thank you,

John

From: Varvell, Stephanie L. [mailto:svarvell@osmre.gov]
Sent: Thursday, January 06, 2011 4:38 PM
To: John Maxwell
Cc: Sloanhoffer, Nancy E.; Craynon, John
Subject: RIA

John,

Based on the directions I've received there is really nothing to be further done on the RIA at this time. We need to confirm what is acceptable to OMB and our chain of command. We will have follow-up questions. We can have a meeting tomorrow if you want but I would suggest it would be premature.

Stephanie Varvell
Project Manager/
Contracting Officer's Representative
Contract # S10PC00060
859-260-3925

From: Varvell, Stephanie L.
To: John Maxwell
Cc: Sloanhoffer, Nancy E.; Craynon, John
Subject: RIA
Date: Thursday, January 06, 2011 4:38:19 PM

John,

Based on the directions I've received there is really nothing to be further done on the RIA at this time. We need to confirm what is acceptable to OMB and our chain of command. We will have follow-up questions. We can have a meeting tomorrow if you want but I would suggest it would be premature.

Stephanie Varvell
Project Manager/
Contracting Officer's Representative
Contract # S10PC00060
859-260-3925

From: Donald Iannone
To: John Morgan
Cc: jlienkins@mactec.com; John Maxwell; Liz Edmondson
Subject: Re: RIA Revisions
Date: Friday, January 21, 2011 4:28:07 PM

John,

Thanks for your thoughts.

A couple quick points:

1. An outline will get us no further at this stage. OSM wants specifics, especially on identification, quantification, and monetization of benefits (which everyone knows). The outline will be dictated by what Ben Simon needs from DOI's Office of Policy Analysis. Let's all focus on Ben Simon's 10-11 points. By the way, a detailed outline will take a lot of time to generate at this point if that is what you refer to.
2. My approach to revising the document is this. Prepare responses to each of Ben's questions or points and provide those to all of you and OSM for review and comment. We do this one by one. Initially, I will provide a document that contains text and some quantitative and monetized data from earlier work (and John your revised numbers when they are ready). We get concurrence on each point and then move to the next. Monday I will provide the first.
3. Once we get through all 10-11 points raised by Ben Simon, I will assemble them into one document for Ben and hopefully OBM.
4. The agreement we have with OSM is that the main focus of the next submittal will be the salient information minimally needed to get acceptance by Ben's office and then OMB.
5. As for IMPLAN, we will keep some of that in because it is relevant and useful to the study. Your numbers on cost will be given primacy, but we will include the IMPLAN numbers (modified in light of your latest numbers). We will also include the IMPLAN baseline analysis. Andy DeVito from OSM is Ok with this.
6. As for the reduction in coal production, we believe from an economic perspective that perspective should be included, but NOT featured. People need to think about the prospect that the future level may not remain the same. It is supplementary information only at this point. If you recall, OSM did NOT tell the RIA team to exclusively use the "stay the same assumption."
7. We will endeavor to be as consistent as possible with the EIS -- that has been everyone's understanding from the beginning.
8. Finally, we will do the best we can on a Feb 1 next deliverable schedule -- which is not very realistic given the amount of work and discussion that need to occur to resolve how to handle the benefits issue in particular.
9. John, DOI has made ample use of IMPLAN in the past on studies. It IS a credible method and source of analysis. We went with it at the beginning because we were asked to examine impacts at the local, state, and regional levels and then sum to the nation. Also, we asked to do an anlaysis that ties back to an analyzed baseline (pre-rule economics of coal mining. That is why the method was chosen. We will do the best we can in providing them with cost and benefit data and information.

I must head out how. Thanks.

john, talk with you at 1 pm Sunday. I will call you.

Don

On Jan 21, 2011, at 4:05 PM, John Morgan wrote:

In preparation for our telephone call this weekend I have read Don's two emails from yesterday regarding Bens comments.
Due to the apparent differences between the list prepared by Ben, OSM comments expressed during this week's meetings, and the ongoing issue of using IMPLAN.
Rather than produce another final document and then have it shot down again, I think we should engage OSM incrementally so that we start to have buy in on the new approach including the quantification of the benefits.
Therefore, I would like to go back to my previous suggestion and start developing an outline of the new RIA that addresses both Ben's and OSM's requirements.
We should circulate this outline to the parties on Monday and get them to agree or modify that, before we go to the next stage of expanding the text and analysis. We have to build consensus at each stage so we don't have any more wasted effort and expenditure.
I still think that we should delete the use of IMPLAN, as the reduction in coal production produced by the model is in direct conflict with the approach that OSM has already agreed for the development of Chapter of the EIS.
Lets discuss this on Sunday.
John

John S L Morgan
Office 859 259 0959
Cell 859 991 1414

From: John Maxwell
To: "Mike Stanwood"
Subject: FW: RIA comments and conference w/Josh and Don
Date: Friday, January 21, 2011 10:48:00 AM

From: Donald Iannone [mailto:diannone@ix.netcom.com]
Sent: Thursday, January 20, 2011 6:21 PM
To: John Morgan
Cc: John Maxwell; Jose Sosa; JLJENKINS@mactec.com
Subject: Re: RIA comments and conference w/Josh and Don

Hi John,

The best way to view Ben's comments is to see them as the key components for which he wants to see some content, which will be text only in some cases, quantification in some cases, and monetization in some limited cases.

I am still of the mind that the IMPLAN modeling IS valuable to the RIA even though OMB does not want us to hand the whole study on it, which we never intended to do. We choose the IMPLAN input-output model approach early on to respond to the request that we look at coal producing counties, states, and regions and the nation. Also, we were told that we needed to do an analysis that measures against a baseline (pre-rule situation). IMPLAN allows us to do that. Cost-benefit analysis is a collection of different techniques brought together using an acounting framework that identifies costs and benefits and the net of the two. That could be a net cost or a net benefit.

We are talking about a next document that provides only the KEY data and iinformation. It will not be a massive document that tries to include everything we have done or re-done.

The table of contents will focus on Ben's (Ben Simon works in the Interior Dept's Office of Policy Analysis, which is outside OSM and all other DOI operating units) points to make certain that people know we have provided the "best" information we can for each point. Once we respond to all of the points as best we can, I will organize them into a document that ties them together as best I can.

The last point is that Ben is NOT asking for totally new content except in a few places. He is asking for us to moderate the IMPLAN analysis with all other analyses used. He is asking us to use what we have that fits and supplement elsewhere.

Your updated numbers will be VERY important the next submssion.

Things have shifted many times since we started work on the RIA in July. It's hard to keep up. We will do the best we can within the budget and timeframe. We must be realistic about what can be done by the new Feb 1 deadline for a revised RIA document submission.

Thanks as usual!

Don

On Jan 20, 2011, at 5:32 PM, John Morgan wrote:

John
I am available over the weekend. Reading the email from Ben I get the impression that he is asking for a totally different format / content to the RIA. It would be very helpful to me to have a revised table of contents for the new RIA that addresses Ben's points and possibly identifies which parts of the existing document can be used. This will allow a clear definition of what needs to be done and who will have responsibility.
I also think that this is a new task, as far as MW is concerned.
Let me know when you want the conference call
John

From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Thu 1/20/2011 5:22 PM
To: John Morgan
Cc: Jose Sosa; 'Donald Iannone'; 'JLJENKINS@mactec.com'
Subject: RIA comments and conference w/Josh and Don

John,
As Jose discussed w/you earlier today, we would like for us to meet on a call with Josh and Don about the revised numbers to use on the RIA and EIS asap, possibly this weekend as tomorrow (Friday) is not convenient for all involved. Please indicate preferred times to meet.

I have copied comments from Benjamin Simon of OSM on the most recent RIA submittal for your review. (Josh and Don, if additional comments besides those below were provided, please forward to John M., Jose and me.)

We appreciate your support in getting this addressed.

From: Simon, Benjamin M
Sent: Wednesday, January 05, 2011 3:21 PM
To: DeVito, Andy
Cc: Crowley, Christian; Cline, Sarah A; Lawyer, Mark
Subject: spr

Hi Andy,

Here are a few general comments on the "conceptual" RIA.

Clearly distinguish between economic benefits and costs, transfer payments, and economic impacts. Impact analysis should not be the primary tool used for the analysis.

Include a section discussing the need for the regulation, specifically addressing the extent to which market failures or information asymmetries are present. Why are the existing regulations inadequate? Are existing regulations enforced?

Clearly state that the goal of the analysis is to evaluate net economic benefits from a national perspective.

Define the regulatory base line against which the net benefits will be evaluated.

Define the period of analysis and justify the selection of this period.

Discuss the anticipated pattern of implementation over time and how this might impact the accrual of the benefits and costs over time.

Discuss in conceptual terms how the economic analysis will be approached. How are costs to be estimated? How should benefits be estimated in concept and how will they be evaluated for this analysis?

Define cost categories (e.g., compliance costs,OSM administrative costs, foregone production, increased electricity costs to consumers)

Define the benefit categories (e.g., water quality improvements, recreation benefits, health/safety, visibility/noise reductions, etc.). Explain specifically how the regulation would be anticipated to affect each type of benefit in physical/biological terms. Discuss how these effects might be monetized.

If avoided costs are to be used as a measure of benefits, a justification for this approach should be provided. Note that economic impact estimates are not necessarily equal to economic costs. A better approach for estimating costs might simply be the sum of the value of foregone annual production plus OSM administrative costs plus private sector compliance costs. This stream of costs should be discounted to the present. Any benefits that are monetized should also be discounted appropriately.

The RIA focuses on regional shifts in production, etc.. While the distributional information may be useful, the focus of the analysis should be to look at net economic benefits to the nation.

The RIA should explain how the cost estimates were derived (such as the compliance cost estimates that are included in the current draft). The RIA provides 2 different estimates of compliance costs but few details on the elements of these costs or how they are calculated. Perhaps this is explained in more detail in the complete full analysis.

Ben

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John R. Maxwell
Senior Environmental Scientist
Polu Kai Services
352.258.1045

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From: John Maxwell
To: Jose Sosa
Subject: FW: Limitations and Notes on Revised Conceptual RIA Report Outline
Date: Wednesday, January 26, 2011 9:26:00 AM

From: Donald Iannone [mailto:diannone@ix.netcom.com]
Sent: Wednesday, January 26, 2011 1:41 AM
To: Josh Jenkins
Cc: Mike Stanwood; John Maxwell; John Morgan; Liz Edmondson
Subject: Limitations and Notes on Revised Conceptual RIA Report Outline

Team,

These comments are for you to think about, and in some acceptable fashion should accompany the outline submission to OSM.

In replaying the phone conversations over the past week, and looking again at the proposed outline, it is important to emphasize with OSM that the proposed February 4 Conceptual RIA document will have some significant limitations.

Limitations:

1. My reluctance in preparing this outline in the first place is that it gives an appearance that we are further along than we really are in getting the job done in a satisfactory manner. There is an unrealistic tidiness and completeness about report outlines.
2. There is no guarantee that the proposed February 4 (our initial attempt to respond to Ben Simon's list of points) or 11 (revision if only very minor changes are requested) document will meet the requirements of OMB.
3. The overall purpose of the proposed February 4 document is to speak "in spirit" to the key issues raised by Ben Simon.
4. We will include the results of the OSM survey of information cost burden related to the rule, but little will be said about it. If more explanation is required, then this will need to be provided to us by OSM.
5. We will make an effort to include the salient quantitative information from the EIS and John Morgan's updated cost analysis, but given the timeframe, we will not be able to say much about this information.
6. Only a bare minimum amount of information will be provided in response to most of the identified report outline elements because of time and the need to discuss and work through how best to respond to some of the hard issues related to measurement of economic costs and benefits.
7. There will likely be several unresolved conceptual issues in the document. There is no way in the timeframe to resolve these issues. And we will not know which issues we can and cannot resolve until we get into the job.
8. We will not be able to provide a well thought out assessment of the "net" economic costs and benefits of the rule alternatives in a quantitative/monetized way. This will be a conceptual discussion of these costs and benefits at this point.

Notes:

1. I think we have some serious timing concerns now that we have had an opportunity to discuss where we are and the next step, which suggest that the February 4 submission will not meet our own or OSM's requirements. At the earliest, the work by Morgan Worldwide will not be available until February 1, and perhps later. Many of the conceptual issues identified in Ben Simon's list will require us to confer frequently between now and completion. We will also need to go back and forth with OSM and Ben Simon on many of these issues. We have only "7" work days between now and February 4. I have other client obligations during this timeframe. At best I can work 4 days on the RIA project between now and February 4. I will face time constraints through the months of February and March. We also have very little budget remaining, which I believe will only get us through the proposed February 4 submission and possibly minor revisions by February 11.
2. What is a realistic timeframe to do all this right? Probably 4-6 weeks (closer to 6 weeks noting the amount of group discussion and engagement required) with a great deal of help from several people and additional budget resources.
3. In the analysis update by Morgan Worldwide, it is imperative that the deliverable be prepared in a way that can be readily dropped into the document. In that regard, long spreadsheet tables will not be workable. Also, a write-up describing the assumptions made and why, the limits to the analysis, the major findings of the cost analysis, and what they mean in the context of the RIA.
4. With respect to the list of benefits we are currently reviewing, we will need assistance from an engineering standpoint in defining these benefits in an environmental impact sense. We also need an assessment of how large or significant these benefits are expected to be in an environmental sense (small, medium or large contribution to environmental protection, restoration, etc.) A document needs to be prepared that defines each of these benefits and an assessment of whether and how they can be best quantified and monetized, along with the data sources (which may or may not exist) that will best serve the quantification and/or monetization purposes.
5. We will need significant help from OSM and the team members in assessing the current regulatory situation and how best to speak to possible uncomfortable issues like insufficient enforcement and others.
6. With respect to the use of IMPLAN modeling, only the results of the baseline run of the model will be included in the February 4 document. If an IMPLAN modeling of Alternatives 2 and 5 are to be included, it is imperative that these be re-run using the "net" of the cost and benefit numbers from all analyzed costs and benefits. These new model runs would be valuable to the RIA in my view, but they are not essential to the Conceptual RIA's acceptance by OMB. These runs will require at least two weeks to complete and write-up. There is no budget available to perform any new work uisng the IMPLAN model.

Once again, I am out all morning from 6:30 am till noon or shortly after. Hopefully the outline and these additional thoughts are useful.

Don

From: Mike Stanwood
To: John Morgan
Cc: Donald Iannone; Josh Jenkins; John Maxwell; Liz Edmondson
Subject: Re: Revised Conceptual RIA Report Outline
Date: Wednesday, January 26, 2011 9:59:33 AM

Hi John, I would say that an RIA under normal circumstances "should" make an attempt to identify future costs and benefits and discount them to the present using a discount rate, ultimately identifying and comparing total net benefits among the alternatives -- I am basing that on the following in the RIA checklist prepared by the White House:

• Does the preferred option have the highest net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires a different approach?
• Does the RIA use appropriate discount rates for benefits and costs that are expected to occur in the future?

However, I guess the question we have is this a "normal circumstance"? Are we still taking a more conceptual approach, or aiming for a full-blown RIA? Guess that goes back to our scope of work, OSM expectations, recent guidance from Ben Simon, etc.

So, if the agreed upon approach does not include assessment of future cost/benefits, then a discount rate would not be needed. And if that's the case, a statement to that effect should probably be included to OSM with this current outline (perhaps as part of the "limitations to the analysis" section)

On Wed, Jan 26, 2011 at 6:27 AM, John Morgan <jmorgan@morganworldwide.com> wrote:

> Mike
>
> I understand your comment regarding the use of a discount factor if we were trying to come up with a single number for the cost:benefit. However nothing in the RIA documents prepared to date have even tried to develop a future cash flow as we have agreed to keep coal production as a steady state (at 2008 levels) and we have never attempted t look at the change in either benefits or costs over time.
>
> It is my understanding that the RIA is looking at a snapshot after the rule is fully implemented.
>
> Do we need to discuss this?
>
> John

From: Mike Stanwood [mailto:r.m.stanwood@gmail.com]
Sent: Tuesday, January 25, 2011 6:31 PM
To: Donald Iannone
Cc: Josh Jenkins; John Maxwell; John Morgan; Liz Edmondson
Subject: Re: Revised Conceptual RIA Report Outline

Don, the only things I see potentially missing from a broad outline like this are "limitations of the analysis" and "discount rate". The RIA approaches that I've seen all include a discount rate to bring back future costs and benefits back to the present. Might be nice to point out that analysis will include that factor (assuming that is what will happen). It is always good to emphasize limitations of the analysis (including typical issues associated with cost-benefit analysis and difficulties in monetization of unquantified benefits).

mike

On Tue, Jan 25, 2011 at 4:14 PM, Donald Iannone <diannone@ix.netcom.com> wrote:

Team,

Here is the outline promised.

I am out in the morning tomorrow (Wednesday). I am out from 6:30 am till about noon.

Please provide your comments as quickly as possible and I will revise in light of them, with your help.

Thanks.

Don

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From: John Morgan
To: diannone@ix.netcom.com; Mike Stanwood
Cc: Josh Jenkins; John Maxwell; Liz Edmondson
Subject: RE: Revised Conceptual RIA Report Outline
Date: Wednesday, January 26, 2011 11:42:11 AM

I agree that providing a cash flow for the costs and benefits is fraught and going to be full of major assumptions. However, as most of the benefits are going to be from avoided impacts I think that the benefit will occur ahead of the costs, which are mainly spread out over the life of the mine. This timing benefit should certainly help the NPV analysis of the net cost of the proposed rule. John

---

From: diannone@ix.netcom.com [mailto:diannone@ix.netcom.com]
Sent: Wednesday, January 26, 2011 11:30 AM
To: John Morgan; Mike Stanwood
Cc: Josh Jenkins; John Maxwell; Liz Edmondson
Subject: Re: Revised Conceptual RIA Report Outline

John Morgan,

Yes the discounting and net present value issues do need a conversation by our team.

It is a required piece of the OMB guidance. We must address it in sonme fashion, even if with ballpark time periods that identify how the rule will unfold between now and 2012 (or another over timeframe.

We did some limited discounting of some numbers in the Dec 23 draft to OSM. It was a crude attempt assuming costs unfold uniformly over 12 years. We had nothing better, but we all know that is not a defensible way to do this. But with no other approach and lots of missing information (now in the EIS and elsewhere perhaps), we used that approach.

The underlying issue relative to the rule's proposed implementation schedule should also be discussed. This comes first. We used 12 years because of guidance given to us early on. We attempted to allocate the numbers in the Dec draft but we had no precise guidance as to how to do that in line with something resembling a realistic implementation schedule.

The difficulty for the RIA in this regard is providing insights on "when" are identifed costs and benefits expected (based upon what we know or estimate at this point in time) to accrue. No easy matter as you can imagine. Perhaps one avenue into this issue is to examine when certain identified environmental impacts (benefits mainly) would occur. Do we have anything in the EIS that defines time periods during which stream miles or land acres would be conserved? If we do, this would guide us in assigning timeframes to economic costs and benefits in the RIA. Short of that, we have no defensible way to get at the implementation ad impact schedules.

Does anyone on the team have a better strategy to get at this issue?

Don

Sent from my Verizon Wireless BlackBerry

From: "John Morgan" <jmorgan@morganworldwide.com>
Date: Wed, 26 Jan 2011 08:27:18 -0500
To: Mike Stanwood<r.m.stanwood@gmail.com>; Donald Iannone<diannone@ix.netcom.com>
Cc: Josh Jenkins<JLJENKINS@mactec.com>; John Maxwell<JMaxwell@polukaiservices.com>; Liz Edmondson<ledmondson@morganworldwide.com>
Subject: RE: Revised Conceptual RIA Report Outline

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Thanks.

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From: diannone@ix.netcom.com
To: Mike Stanwood; John Morgan
Cc: Josh Jenkins; John Maxwell; Liz Edmondson
Subject: Re: Revised Conceptual RIA Report Outline
Date: Wednesday, January 26, 2011 11:44:35 AM

Mike

Please see my response to John Morgan.

This is a conceptual undertaking, and a moving target for all of us in trying to help the client (OSM) get to the finish line.

A much stronger (RIA) (with more time and resources and a focused team) could be built now with much of the EIS available in draft form, and the client is now more fully engaged with the RIA.

We did the best we could with what we had, but that is not deemed sufficient by DOI and probably not OMB given they typically deal with RIAs that follow EIS's and are focused on a final rule. So this process has been very atypical.

The question is what can be done now to create a document that will help OSM get through the hurdles with minimal resistance. We also want something that is truly credible--all of us want that I think.

My advice is what I outlined in the accompanying notes to the outline I sent all of you last evening.

While the RIA is more of an internal or interagency document, it will scrutinized from various perspectives. And through Freedom of Information (FOI) it could get outside attention from industry, environmental groups, concerned citizens, and political camps. While we must plunge ahead, we need to make certain the next submission is as solid as possible in conceptual terms and analytically if time and budget are available.

Don

Sent from my Verizon Wireless BlackBerry

From: Mike Stanwood <r.m.stanwood@gmail.com>
Date: Wed, 26 Jan 2011 07:59:28 -0700
To: John Morgan<jmorgan@morganworldwide.com>
Cc: Donald Iannone<diannone@ix.netcom.com>; Josh Jenkins<JLJENKINS@mactec.com>; John Maxwell<JMaxwell@polukaiservices.com>; Liz Edmondson<ledmondson@morganworldwide.com>
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Thanks.

Don

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From: Jose Sosa
To: Sloanhoffer, Nancy E.; Varvell, Stephanie L.
Cc: John Maxwell; Mike Stanwood; Caroline Bari; Randy Sosa
Subject: Rev Draft WP RIA rev 012711 .docx
Date: Thursday, January 27, 2011 12:19:36 PM
Attachments: Rev Draft WP RIA rev 012711 .docx

Nancy/Stephanie:

As discussed yesterday, here is the work plan developed by MACTEC for the re-work of the RIA. PKS is looking at utilizing the services of another consultant, Southwick Associates, to assist with monetizing the economic benefits of the rule.

As I stated before, MACTEC has estimated 6 weeks to complete the re-work of the RIA.

Feel free to contact me with questions regarding the attachment.

Regards

Jose Sosa

From: Jose Sosa
To: Randy Sosa; Jenkins, Josh
Cc: John Maxwell
Subject: FW: ria
Date: Thursday, February 03, 2011 12:45:36 PM

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fyi

From: Varvell, Stephanie L. [mailto:svarvell@osmre.gov]
Sent: Thursday, February 03, 2011 11:05 AM
To: Jose Sosa
Cc: John Maxwell
Subject: FW: ria

Jose,
Here is some additional information from Ben Simon based on the TOC you gave him yesterday.

From: DeVito, Andy
Sent: Thursday, February 03, 2011 10:55 AM
To: Winters, William R. "Bill"; Uranowski, Lois J.; Broderick, Nancy R.
Cc: Varvell, Stephanie L.; Shawley, Dianne M
Subject: FW: ria

FYI

From: Simon, Benjamin M
Sent: Wednesday, February 02, 2011 5:47 PM
To: DeVito, Andy
Cc: Cline, Sarah A
Subject: ria

Hi Andy,

Here are a few comments on the Table of Contents for the RIA.

- I would suggest not characterizing the RIA as a "Conceptual RIA." The document is either a RIA or it is not. This does not mean the document cannot contain a conceptual-level discussion of some of the issues.

- Consider addressing the issue of the necessity for the rule in the context of the set of conditions that could imply a regulatory approach is appropriate. These conditions include things like market failures, information asymmetries, etc.

- Consider including some sort of side-by-side table to facilitate a comparison between the status quo and the proposed regulation.

- The discussion of the baseline should probably be a separate section, not a

component of section III.

- I would suggest separating the "Data Sources" and "Methods of Analysis" (currently section IV(e)) into individual sections. Methods should precede data sources.

- Including a discussion that provides an overview of the coal mining industry is appropriate (section V in the table of contents), however, I would shift all of the impact analysis (i.e., the analysis done using IMPLAN) to a new section that could be inserted before the existing section VII (Summary).

- Including a section on distributional issues would be appropriate.

Ben

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Benjamin Simon
Director, Economics Staff, Office of Policy Analysis
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1849 C St. NW
Washington DC 20240
202 208 4916
benjamin_simon@ios.doi.gov

From: J. Steven Gardner
To: Jose Sosa; John Maxwell; "Jenkins, Josh"; "David Bell"; "jmorgan@morganworldwide.com"; Randy Sosa; "Liz Edmondson"
Cc: "Joe Zaluski"; "Edmundo Laporte"; "Doug Mynear"; "Jeff Baird"
Subject: ECSI Concerns and items for clarification
Date: Friday, February 04, 2011 5:24:26 PM

Jose:

I have previously outlined numerous concerns in earlier emails, most recently on Jan 10 and February 2. Please refer to those. I will forward those back to you.

As we discussed yesterday, ECSI is working on Equitable Adjustment claims for a number of items from Day 1 of this project. We will be submitting that in due time. We plan to focus on spending our time finishing up the work on the DEIS in the meantime. As discussed today, we feel we will be close to burning through our budget at this stage.

Items for Clarification

1. It appeared to us that OSM was saying we should have used the following assumptions for the Methodology:

    a. That the 2008 SBZ rule is fully implemented and being enforced by OSM and all coal producing states with permanent programs
    b. That 2008 coal production figures reflect full implementation of the 2008 SBZ rule
    c. That EPA and Corps 402/404 permit actions are irrelevant to 2008 production figures
    d. That we should accept the 2008 RIA & EIS.

    We feel that this is contrary to earlier direction given the Team and is not true or defensible. We do not feel we can defend the conclusions of the 2008 RIA and EIS. We also feel that if OSM wants us redo the analysis, there is a claim for additional time and budget, plus we cannot guarantee that we will arrive at the conclusions that they desire.

2. Methodology generally
    a. That OSM does not agree with the production impacts methodology, even though this methodology was approved previously in writing

3. GHG
    a. GHG analysis (transportation due to production shifts, methane emissions, etc.) must now be included in the SPR EIS, even though we were advised by OSM in previous meetings that it is not to be addressed. Again, if this is the case, we would need additional time and budget to include in our analysis.

4. Economic analysis
    a. OSM now requires the PKS team to conduct an economic impacts/benefits analysis for all Alternatives (2-5)

5. Alternatives (Chapter 2)
    a. That the PKS team is to conduct its analysis based on the text of Chapter 2 of the EIS, and that Chapter 2 accurately reflects the text of the rule. The PKS team is not to conduct its analysis on the "matrix" or text of the rule itself.

6. Assessment of Future Mining Using Industry Projections (Contract Statement of Work, 4(r)(iii))
    a. ECSI spent considerable time and budget putting together our verification process as specified in the contract and approved by OSM, only to have OSM stop our efforts literally at the last minute.

These are all of the points we have for now. We will most likely have more points to bring up later.

Thanks,

Steve

J. Steven Gardner, P.E.
President/CEO
ECSI, LLC
Civil – Environmental – Mining
340 South Broadway, Suite 200
Lexington, KY 40508

859-233-2103 (office)
859-806-5826 (cell)
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jsgardner@engrservices.com
www.engrservices.com

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From:	Donald Iannone
To:	Jose Sosa
Cc:	Josh Jenkins; John Maxwell
Subject:	Re: Confidential: Response to Steve Gardner and John Maxwell"s Emails
Date:	Sunday, February 06, 2011 4:54:19 PM

Hi Jose,

Josh just called me and we talked about the situation, including MWW's unfortunate pullout. What was his reasoning, if I may ask?

Jose, we are trying our best to be helpful to the PKS team. That is point one.

As to your point on proof of guidance from OSM, the majority of this direction was provided from OSM to PKS/MACTEC and then from MACTEC to us. So the evidence there would be in that loop before it got to me. This is understandable since MACTEC was/is my client.

We have a contract scope which defines our work. This is discussed in my earlier email today. This also spelled out a methodology. Obviously, this scope was approved since we were hired to assist on the RIA as a member of the PKS/MACTEC team.

My early attempts to get any substantive guidance directly from OSM were unsuccessful. Several calls to John Craynon were never returned. I talked to Dennis Rice on a couple occasions about approach, available data, etc. He told me that OSM had nothing to give us that would help. OSM was essentially non-engaged in the RIA process until our September submission. We had frequent conversations with MACTEC about this, and we were advised to keep moving forward in light of the extremely tight schedule OSM had defined.

I reached out to the NMA and many others, including EPA and the state authorities, through calls and emails to identify any meaningful cost and benefit data that might help us. None of these sources could provide us with any thing very useful. That is ultimately why John Morgan was asked to provide some preliminary cost numbers to work with. The reality is there is no source of data out there that can accurately estimate the costs of the rule elements. As we found, it had to be created, which John Morgan did.

We were given by OSM via MACTEC a CD with some digital reports and documents. Some of which we had already reviewed, a few were new to us, and none were of substantive help to us with the RIA. I hardly consider this substantive guidance from OSM to the RIA work effort.

The early approval of our methodology was done through a series of emails and phone calls that did include Mike Stanwood. We were told to move ahead with this approach and use the best information we had. We chose IMPLAN for the reasons cited below that relate to geographic and industry levels of analysis, etc. We were asked to provide an outline to guide the conceptual RIA document. This was provided to MACTEC and I assume to PKS and OSM. We tried our best to follow that outline. Some changes were made when it was apparent selected data and information was not available, as discussed in my first email. Obviously, we are working off a new outline now, which is the one we will follow in the Feb 23 submission.

The decision to adopt the conceptual approach to the RIA was made in a Lexington meeting in late July at which I was not present. This is a cruical one by the way. The message communicated back to me was to approach this work in a conceptual manner, but work to analyze economic costs and benefits as best we can with the IMPLAN model.

The guidance we received from OSM directly began with our September submission. This guidance was given to us for the most part (90%) in the phone conference calls many of us participated in. Many of these calls, as you will recall, were chaotic with various OSM personnel

offering various views. We received a few emails from Dennis Rice, Harry Payne, and Andy DeVito with suggestions on possible cost and benefit sources and questions about our analysis (in particular the cost estimates produced by John Morgan.) We were responsive to all of these suggestions and questions. The request for information about assumptions used in the Morgan cost estimates was not provided to us from MWW. The understanding at the time was that MWW would update these numbers and then provide their rationale. I think this was a source of frustration to OSM personnel.

The debate about the use of the IMPLAN model started after our December submission, which is described below, including the reason for using this approach given the direction that we analyze local area impacts (counties, states and coal regions). The final advice from DOI OPA (Ben Simon) is that we can include the IMPLAN analysis (or parts of it such as the analysis of the baseline economic situation). He just wanted to make certain we did not use IMPLAN as our only primary method of analysis. Given Simon's use of the IMPLAN model in other DOI studies, he knows it is a credible economic model. I would guess that he would have used IMPLAN also if he was asked to examine the economic costs and benefits of the rule on local areas. The reason? Because there is no better approach.

I hear what you are saying about getting OSM to change. I do not have a direct vantage point of what is going on within the agency like you do. My comments in that connection were designed as constructive suggestions on how the ultimate client can help itself be more effective, etc.

It is really too bad that MWW will not do the rework. This will limit the usefulness of the next versions of the RIA and EIS in my view. Can you or anyone else identify another contractor who could do this update?

We will provide what we can given time and budget to deliver an improved conceptual RIA report product by Feb 23, but we will require significant help from other team members. I have severe limits on my time over the next couple months, which Josh and I discussed on several earlier occasions. I will do what I can given information availability, time and budget. Place holders, as you say, may be the only thing we can provide in many parts of the new RIA document. We will be making largely a conceptual response to key issues raised by Ben Simon.

What is the probability in your mind that OSM will move ahead with a CURE notice and what are the steps to attempt to resolve it, if it occurs?

Hopefully this is helpful to you and others.

Thanks.

Don

On Feb 6, 2011, at 3:27 PM, Jose Sosa wrote:

> Don
>
> We need any and all proof of guidance provided by OSM.
>
> I believe we are passed getting OSM to Change.
>
> They are all running for their political lives.
>
> MWW has decided to pull out from the rework of RIA.

We must provide what we can to meet the standard of care within the time given and provide the place holders when the information becomes available.

jose

Sent from my Verizon Wireless BlackBerry

From: Donald Iannone <diannone@ix.netcom.com>
Date: Sun, 6 Feb 2011 13:22:19 -0500
To: J. Steven Gardner<jsgardner@engrservices.com>
Cc: John Maxwell<JMaxwell@polukaiservices.com>; Edmundo Laporte<elaporte@engrservices.com>; Josh Jenkins<JLJENKINS@mactec.com>; John Morgan<jmorgan@morganworldwide.com>; Jose Sosa<jose@polukaiservices.com>; LizEdmondson<ledmondson@morganworldwide.com>; Mike Stanwood<r.m.stanwood@gmail.com>; Randy Sosa<Randy@PoluKaiServices.com>; AnnShortelle<ABSHORTELLE@mactec.com>; Michael C. Carroll<mcarrol@bgsu.edu>; Will Burns<wburns@bgsu.edu>
Subject: Confidential: Response to Steve Gardner and John Maxwell's Emails

Dear EIS/RIA Team Members,

Introduction

In response to recent emails from Steve Gardner and John Maxwelll, I would like to share some information from the standpoint of the Conceptual RIA work. Perhaps it will help as we move forward in trying to help our ultimate client (OSM) to succeed. Note: I have copied only those members of the team I have worked with directly over the past six months. My email speaks directly to the issue of whether the RIA team has complied with OSM direction, which we fully have complied. As a note, the RIA team has used its best professional knowledge and expertise throughout the RIA analysis process, but it has worked to be highly responsive to OSM direction at every step.

First, I have the same overall assessment as outlined by Steve Gardner of everyone's situation with respect to OSM direction and where we are today. In short, the RIA team did follow OSM's direction on the RIA, which is the main source of the problem we see at this time related to the RIA. We have been driven hard and fast to produce when the right numbers have not been available to us. We have been asked to do work outside our scope at various points in the past 6 months. We have been asked to respond to OSM's major shift from producing what was intended as a "Conceptual" RIA analysis to one that now reflects the requirements of a complete RIA as defined by OBM. And now, we are asked to perform work in two weeks that easily requires six weeks (or more) and with only a few days of budget left because we were directed by OSM to move ahead and produce based upon the limited data and information we had available.

As a starting point of clarification, my firm and the economic analysis team working on the RIA was hired by MACTEC to provide consulting services to MACTEC related to the RIA. From the beginning, our client has been MACTEC. We have worked

closely, cooperatively, and positively with MACTEC throughout this process. There has been frequent communication about our work with MACTEC on a weekly (and in many cases daily basis) to ensure that MACTEC fully understands the nature and status of our work. Our focus throughout has been to meet MACTEC's work expectations, but with a recognition that OSM is the ultimate client for all work completed on the RIA.

Key Points

1. Our Current Situation: First of all, the RIA team is committed to doing the best it can between now and February 23 to produce a stronger RIA document, given available time, data and information, and budget. We asked for six weeks to develop the next draft of the RIA document, but like the EIS team, we were given two weeks to produce the next draft. There are limits to what we can do in this timeframe. A concern is that this next draft of the RIA may fail to meet OSM's expectations. We hope this will not be the case.

2. **Our Contract Scope:** Our contract called for an economic analysis that would provide a best available economic understanding of the proposed SPR. Our scope was focused on producing an analysis that related to only one rule alternative (the preferred rule alternative or what later came to be known as EIS Alternative 5). We were asked to focus our analysis on local areas impacted by the SPR and give primary attention to the coal mining industry and coal mining areas. We were specifically asked to not look at economic impacts of the SPR on electric power generation and other industries. We were told that the costs of the rule would be of central concern given the history of the coal mining industry in fighting new regulations on the its activities. We developed a study methodology that responded to this scope. We were given the green light from OSM to proceed with our defined methodology. We provided a budget estimate for our work based upon this narrow analysis scope. Our contract says nothing about producing an RIA document that meets all of OBM's guidelines for a complete RIA, which now OSM says that it wants and needs. Nor does our contract say anything about producing an analysis of more than one rule alternative, which we were later asked to underake by OSM, and which we did in compliance with OSM direction.

3. What We Delivered/Provided: We produced a Conceptual RIA document with appendices that was almost 550 pages in October 2010. Our September 2010 early draft was close to 800 pages, which was edited significantly by our team (including MACTEC personnel). Then in December, we produced a new summary document that was about 70 pages in length. While none of us gets paid by the page or pound of paper, it is important for OSM to recognize the level of effort each of us has put forward to meets its expectations. In addition, we have participated in a large number of phone conferences and some in face meetings to share, learn and receive feedback (and direction) from OSM. Also, we have prepared several memoranda and emails as part of the ongoing communication process about the RIA with OSM. Until September (which coincides with our

initial Conceptual RIA submission), OSM provided very limited feedback or guidance on our work, though it was requested by us. However, we did communicate very frequently with MACTEC during this period. OSM's direction was to produce what we could within the deadline. We honored this direction. Starting in September, our direct contact with OSM increased through meetings and phone conference calls. This direction from OSM however was never prioritized internally by OSM and rarely provided in much detail. Our general impression was that within OSM several different voices existed about what should be done related to the RIA. This has greatly complicated our ability to work with direction given to us from OSM since September. While we were never directly (or officially) informed by OSM, it became increasingly clear to us through OSM's feedback on the October Conceptual RIA draft and since then (October up to the present) that OSM's expectations were shifting away from a Conceptual RIA as our final product to a complete RIA final product. We have been doing the best we can with very limited budget and time to be responsive to OSM's change of direction. We have made it clear to OSM that we cannot produce a complete RIA (with all the OMB identified elements) given the circumstances.

4. We Have Complied with OSM's Direction Which is the Main Source of the Problem Today: As a point of factual information, we have followed OSM's direction since we were brought on board by MACTEC back in July 2010 to work on an RIA for the SPR. I cannot think of a time when we failed to follow the Office's direction. However, as we now see the direction we received from OSM in large measure accounts for where we are today, which in OSM's view is an RIA document that is not ready for submission to OBM. We have been highly responsive to deliverable timelines/deadlines, which has forced us to produce an RIA document that at the present time lacks some key elements that OSM now expects to be in the document.

5. **Cart Before the Horse**: Our initial direction from OSM at the beginning of the RIA work was to proceed with work on an RIA without a full or final SPR definition to guide our work and in the absence of an EIS document, which typically contains a large amount of the positive and negative environmental impact information that provides the basis for identifying the economic costs and benefits of a rule. As a point of information, in most instances, the preparation of an EIS precedes the preparation of an RIA. OSM understood this was the case, but wanted the RIA team to proceed with its work and remain on schedule. Also, we had repeatedly asked OSM for clarification of the rule elements and rule alternatives. We were told no additional information was available since the elements and alternatives were in the process of being defined. We were instructed to remain on schedule and use the scant information available to us. Informed SPR definition and environmental impact information related to the rule and its alternatives have been provided to us very

recently with the completion of the draft EIS and the draft language in the Preamble to the rule.

6. **Conceptual RIA Direction from OSM and Many Later Changes of Direction**: After the first 3-4 weeks of our work in July 2010, it became readily apparent to the RIA team that we would not have much of the technical information and data required to prepare definitive economic cost and benefit estimates. This information was not available because: a) the SPR was too general to assess costs and benefits; b) the environmental impact data required for economic cost and benefit analysis was not available; and c) the coal-mining industry was unwilling and unable to provide the cost and benefit impact information needed. As background, we approached the National Mining Industry (NMA) about doing a survey of its coal members, and NMA informed us this was not possible because only scant information existed about the proposed SPR. We conducted interviews with selected mining companies and experts to the Colorado School of Mines as a substitute for the survey. These interviews produced little useful cost and benefit information and data for our analysis. We then turned to the published literature for guidance, and had even asked OSM to provide the data it had on costs and benefits. Little useful information was provided by OSM.

In late July, we were directed by OSM to continue on with our work, and produce a "Conceptual" RIA, which represented a "best effort" to produce interim information about economic costs and benefits on preliminary definitions of the rule elements. We were told that a Conceptual RIA was an acknowledgement that a complete RIA (or one containing definitive costs and benefits) was not possible or expected. We were asked to hold to the mid-September 2010 draft Conceptual RIA report delivery date. We met that deliverable date. OSM came back with questions challenging the cost estimate numbers used in our analysis and the assumptions underlying them. We explained to OSM that we used the best information available to us.

OSM also informed us that we would need to include an analysis of two other rule alternatives: the most stringent alternative (EIS Alternative 2) and the least stringent alternative defined as the baseline situation (EIS Alternative 1). Again, this work was not included in our contract scope, but we followed OSM's new direction with a recognition that new modeling and analysis was not possible because of limited budget and time. OSM said it was comfortable with us including best available information on the other two rule alternatives, which we did in the October draft submission.

In its review of the September draft submission, we were asked by OSM to improve upon the cost data used in our analysis. We explained that we used the approach we did because no better data and rule definitions was available to us. At that point, because of its expertise Morgan Worldwide (MWW) was asked to develop some preliminary cost estimates for each of the cost estimates of the proposed rule. Once available, MWW's preliminary cost data was incorporated in a re-run of the model and the results were incorporated in our extensive October deliverable. OSM was critical of our October RIA document with a request for more information about the cost assumptions used in our updated analysis, based upon the MWW cost estimates.

We were informed at that point that OSM had asked the mining engineers working on the EIS to produce a best available estimate of possible future regional and mining method shifts in the coal mining industry in light of the various SPR alternatives. We were told to wait for this analysis and incorporate the results (though preliminary in nature and likely to change) into our revised RIA report which we were asked to deliver as quickly as possible. We included this analysis in our

revised RIA summary report given to OSM just before Christmas. (We were asked then by OSM to provide only the essential information needed for a proposed late January 2011 OSM submission to OMB.) OSM directed us to hold up on revisions to the full RIA report and its appendices, and concentrate on producing a concise summary document that it could use with OSM. We provided what we could before Christmas to OSM, noting that much of the economic benefits data was not available and asked for OSM assistance in identifying rule benefits. We made it clear this was only a partial response to OSM's summary document direction. Note: While we received some feedback on economic benefits of the SPR from OSM, we did not receive a complete list of "possible" benefits until the middle of January 2011. Since then, we have been working with other team members (including MACTEC and MWW) to determine which and how the list of benefits could be either quantified or monetized.

We were informed after the fact that OSM had sent the incomplete December 2010 summary RIA document to the DOI's Office of Policy Analysis (OPA) and that the OPA stated that the SPR RIA had to contain much more information (though of a conceptual nature) aligned to the OBM complete RIA guidelines. We were surprised that OSM had submitted the incomplete draft to OPA. We would never had advised OSM to do that. At that point, we were asked to communicate with Mr. Ben Simon in OPA about his preliminary comments of the Conceptual RIA summary document. Again, we followed OSM's direction and talked with Mr. Simon, which pointed to the need for a more complete RIA document. After 6 months of work, we were informed that OPA would be a part of the RIA review process withe DOI. We were also informed at this point (now 6 months into our work) that our economic impact analysis methodology could not be used as the primary method of analysis in the RIA. Mr. Simon indicated that the impact analysis could remain in the report in some fashion, but we would need to follow the OMB guidelines for cost-benefit analysis at the national level only. This direction was completely contrary to OSM's direction all along that we focus our attention on local areas (states and multi-state coal mining regions.) After several conference calls with OSM, the RIA team indicated that it would work to provide a conceptual response to Mr. Simon's comments.

On January 6, 2011, OSM asked us to hold up work on the RIA until it had a chance to define the new direction moving forward. Once again, we complied with OSM's direction and held up work. Later in January, OSM asked for the RIA team (which included MACTEC and other contractors) to provide a new work plan outlining what could and could not be done related to the RIA and Mr. Simon's comments. We worked with MACTEC and others to prepare this work plan, which was provided to OSM. It was very clear at that point that our budget resources and the time would not be sufficient to meet the requirements defined in the new RIA work plan. The work plan outlined a request for a six-week work effort and some additional funding to complete the RIA work in as best a fashion as possible. OSM responded last week that our next draft of the RIA was due on February 23 and that a CURE Notice was a distinct possibility from OSM to PKS, and potentially all EIS and RIA contractors.

The draft Programmatic EIS (PEIS) was made available to the RIA team just a couple weeks ago. The document contains useful information that can be incorporated in the next Conceptual RIA draft. The EIS team has been given comments on the EIS draft, which it must address in the short term as well. It still is not clear the extent to which the environmental impacts identified in the EIS can be either quantified or monetized in a next draft of the RIA. While we have improved estimates of stream mile conservation and land acreage conservation, which can be used in the RIA, there is work by MWW needed to produce revised cost estimates in light of the new mining engineers' analysis of production shifts and associated land and stream impacts for the various EIA alternatives. It also is not clear which and

how the various SPR benefits identified by OSM can be either quantified or monetized at this point.

7. RIA Methodology Note: In preparation for our work back in July 2010, we defined and shared a methodology with MACTEC and OSM that included the use of economic impact analysis (IMPLAN input-output model). We were told to move forward. Other types of analysis were included in our methodology, including a thorough analysis of the coal-mining industry, its trends and expected future directions. IMPLAN (or an input-output analysis methodology) was chosen by our economic analysis team because OSM directed us to examine the "localized" impacts of the SPR on coal-producing counties, states, and multi-state coal-producing regions. Input-output analysis is the only reasonable method to employ for this type of localized area analysis. (Cost-benefit analysis, as typically performed in an RIA study, would not work in conducting an analysis of local area impacts.) After some initial test analysis with the IMPLAN model, it was clear that a credible analysis could not be completed on all 190+ coal-producing counties across the U.S., nor was this amount of detail necessary. After some back and forth, we settled on states and coal-producing regions as the most feasible and credible geographic area of analysis. Then much to our surprise, we were informed in early January 2011 that economic impact analysis was not an acceptable "lead" method of analysis for the RIA. This information was shared with the RIA team after OSM communicated with the DOI's Office of Policy Analysis about the RIA. We are now being asked to change direction again and shift back to the OMB cost-benefit analysis method at the national level.

Conclusion and Next Step

Conclusion

I do not believe it is in the best interest of OSM or the entire PKS team for OSM to issue a CURE Notice. While as an immediate threat, it is a strategy to motivate contractors to give OSM what it thinks it wants and needs relative to the EIS and RIA, the CURE action (if executed) will in the end sabotage the valuable work done on the EIS and RIA, further delay work efforts, and work against OSM's effort to get the SPR passed.

My personal belief is that the SPR in some reasonable version is needed to protect the environment and keep the U.S. coal mining industry viable. Given the unfortunate and premature release of the draft EIS document to the media and the negative reactions by some states and the coal mining industry, efforts to pass a successful rule have been injured. The lesson learned here is to only move forward with EIS and EIA documents when there is a high comfort level that their content is credible.

Politics will come into play with this rule as they do with every

other rule. As contractors on the outside, we have little to no control over the politics of this rule. The key in moving forward is to develop much improved team project management within OSM, and for OSM to give much more clear (and prioritized) direction to contractors on what is required to produce a successful EIS and RIA, and ultimately get an appropriate version of the SPR passed.

A higher level of trust between OSM and our team must be developed in the future. This will be everyone's job. Beyond swapping out OSM internal project managers, OSM needs to work on building a performance-based internal team that is clearly equipped to do the job right from here forward. Typical governmental/bureaucratic approaches (with typical chains of command) will not provide the needed project management approach. I would urge OSM to take the time now to build that internal team, even if that requires putting the EIS and RIA on hold for a month or more. This team must be capable of not only getting the EIS and RIA done successfully, but it must be capable of implementing the rule.

Next Step on Conceptual RIA

MACTEC has pulled together a team comprised of myself, MWW, and other consultants to produce the next round draft of the Conceptual RIA by February 23. Hopefully we can produce a document that meets OSM expectations and those eventually of DOI's OPA and OMB. We shall see.

My hope is that this memorandum provides a perspective of the RIA work, and the many challenges we have faced in attempting to "hit a fast moving target." I may have missed some points, but I have endeavored to provide as honest and comprehensive assessment of the situation as possible from my standpoint.

Don Iannone

On Feb 5, 2011, at 8:56 PM, J. Steven Gardner wrote:

> My follow up to the email last night and response to John Maxwell's email today. Not sure I copied everyone on this distribution list last night, but can forward after this to make sure.
>
> 1) It appears OSM is trying to say we did not follow their direction, when in fact we did just that. It is OSM that has changed their direction and is now telling the TEAM that we must deliver the work product based on

the NEW DIRECTION within the same deadlines. I would hope the entire Team agrees. We feel PKS must make that point abundantly clear to OSM and there must be acknowledgement on their part. If that has been done, OSM is not recognizing it. Has OSM come out and actually said that the TEAM or members have not followed direction in some way?

2) We feel that we have met the requirements of the SOW and directions of OSM, plus OSM's redirection of effort is still not clear. It seems there is incredible resistance on OSM's part to agreeing they are in any way at fault.

3) We can address some of the comments made and continue to clarify our underlying assumptions, but that is going to take time. There is still an underlying concern that OSM is trying to steer us to a desired outcome that cannot be supported.

4) We do have backup on the directions delivered throughout the process. We are gathering what we have, but I would rather spend our limited time addressing legitimate comments and making progress on Chapter 4.

5) There has been entirely too much time wasted throughout this entire process. How do we serve a "Cure" notice on OSM? I say that not wholly "Tongue in Cheek".

5) Yes, we can agree with Dianne that "The Glass is Half Full", but OSM is the one that spilled the other half, and now we have to fill it again.

6) Enough venting for tonight. Back to work.

Thanks,

Steve

J. Steven Gardner, P.E.
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jsgardner@engrservices.com
www.engrservices.com

From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Saturday, February 05, 2011 6:04 PM
To: (spr@engrservices.com); Caroline Bari; David Bell; Donald Iannone; Doug Mynear; Edmundo Laporte; J Steven Gardner; Jaque Mitchell; Jeff Baird; Jenkins, Josh; jmahan@plexsci.com; jmorgan@morganworldwide.com; Joe Zaluski; John Maxwell; Jose Sosa; Kathy Kelly; Liz Edmondson; Mike Stanwood; Randy Sosa; Shortelle, Ann; Singer, Robert
Subject: Preparation for Monday

Team,

Based on the activities of the past week, we must assume that OSM will serve us a cure notice. In order to stave off possible consequences, we should work to produce the PDEIS and RIA in as complete a condition we can for the Feb 23 submittal.

Based on the authors review of Ch 4 comments, we should identify the major comments and prepare appropriate responses. The responses that we should prepare for Monday morning's call w/OSM should identify/address the most pressing items and should document those that depart from former instruction/direction from OSM. Documentation of former direction should be presented if available (from written notes, original scope of work or email correspondence). I will prepare notes from recent email (OSM and the PKS team). Comment specific responses will help to defend our position and to proceed forward in the process to produce the PDEIS. If possible, provide additional input by Sunday night or early Monday morning.

Thank you.

<image001.jpg>

John R. Maxwell
Senior Environmental Scientist
Polu Kai Services
352.258.1045

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From: Jenkins, Josh
To: John Maxwell; Jose Sosa
Subject: RE: Draft RIA Outline - Proposed Stream Protection Rules
Date: Tuesday, February 08, 2011 11:15:43 AM

No.

And John Craynon and Stephanie Varvell did not respond to my July 30 email when this approach was revised, which again showed using IMPLAN.

Joshua L. Jenkins | Project Manager/Senior Geologist
MACTEC Engineering and Consulting, Inc. | Atlanta, Georgia
Phone 770.421.3412 | **Mobile** 770.833.6429 | **Fax** 770.421.3486
Email jljenkins@mactec.com | **Web** www.mactec.com
For Official Use Only – Deliberative Process Material

From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Tuesday, February 08, 2011 11:05 AM
To: Jenkins, Josh; Jose Sosa
Subject: FW: Draft RIA Outline - Proposed Stream Protection Rules

Josh,
I looked in my email files and could not find a reply from Li-Tai. Did you receive one? If not, then we didn't receive one stating the approach was unacceptable.
John

From: Jenkins, Josh [mailto:JLJENKINS@mactec.com]
Sent: Tuesday, July 06, 2010 7:56 AM
To: BilBao, Li-Tai S.
Cc: Jose Sosa; 'David Bell'; 'Doug Mynear'; 'J. Steven Gardner'; Jaque Mitchell; 'jburchett@morganworldwide.com'; Joe Zaluski; John Maxwell; 'John Morgan'; Randy Sosa; Shortelle, Ann
Subject: Draft RIA Outline - Proposed Stream Protection Rules

Li-Tai- Attached is a draft outline of the RIA that we propose to follow.

We are proposing to use IMPLAN at this time to model the economic conditions of select counties – approximately 63 total, or roughly 1/3 of the coal producing counties, to provide a broad overview of the potential economic impacts.

Please let me know if you concur with this outline and modeling approach or if there is an alternative approach you would prefer.

Thank you.
Joshua L. Jenkins | Project Manager/Senior Geologist
MACTEC Engineering and Consulting, Inc. | Atlanta, Georgia
Phone 770.421.3412 | **Mobile** 770.833.6429 | **Fax** 770.421.3486
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From: Donald Iannone
To: Jenkins, Josh
Cc: John Maxwell; Jose Sosa
Subject: Thoughts on the EIS/RIA Materials Request by OSM for the Congressional Request
Date: Friday, February 25, 2011 4:43:04 PM

Hi Josh, John, and Jose,

I recommend that we remind OSM that:

1. All work products and other information related to the Conceptual RIA are only working drafts, and they are not final work products. We have no final set of findings and conclusions at this time relative to the Conceptual RIA. In that regard, we do not know what the final answer is at this point in terms of the proposed rule's economic impacts.
2. The latest draft of the Conceptual RIA submitted on February 23, 2011 should be given greatest attention (even though document is incomplete, it is on the right track). The missing pieces can only be added after: a) the identification of costs and benefits of the rule elements under all alternatives is completed by the PKS team and OSM; and b) the analysis of costs and benefits is completed using the dynamic base modeling approach and the benefit analysis using the benefut transfer and contingent valuation methods.
3. We analyzed the coal mining industry nationally (including the baseline IMPLAN analysis of the industry at the national, coal-producing region, and state levels), and coal mining profiles were prepared for all coal states. (This shows we have been sensitive to the potential economic fallout from the rule.)
4. The various technical appendices on the MACTEC FTP site contain the details of our work on the Conceptual RIA submitted in October 2010.
5. Our primary data sources for the RIA work are: a) U.S. Energy Information Administration (EIA); b) U.S. Bureau of Labor Statistics (BLS); c) state coal regulatory authorities' published reports; d) OSM information and guidance; e) the IMPLAN input-output modeling system; f) National Mining Association (NMA) and various state mining associations; g) various EIS and RIA documents from earlier studies for US EPA and other federal agencies; and h) a review of the economic, industry, and environmental literature.

Finally, I believe it is important for PKS to talk ASAP with OSM to: a) request an extension of the response deadline; and b) ask OSM for more specific guidance on what it believes is needed for the Congressional information request.

Regards,

Don

Don Iannone
Two Bratenahl Place
Suite 14D
Bratenahl, Ohio 44108
Office: 216.268.2358
Cell: 440.668.1686

From:	Jenkins, Josh
To:	Jose Sosa
Cc:	Randy Sosa; John Maxwell; John Morgan; J Steven Gardner; Joe Zaluski; David Bell; Shortelle, Ann; Liz Edmondson
Subject:	Response to OSM Data Request
Date:	Tuesday, March 01, 2011 3:57:58 PM

Jose – MACTEC has uploaded PDEIS source files to the PKS SharePoint:

- **Air Quality, Noise and Meteorology**

Seven shape files from the National Park Service used in creating figures for Air Quality, Meteorology and Noise section.

- **Terrestrial and Aquatic Biology**

One Excel worksheet that contains source information from ESRI street map, U.S. Geologic Service, and U.S. Department of Agriculture Forest Service (2007) for Terrestrial and Aquatic Biology section figures and tables in the PDEIS.

- **Occupational and Public Health and Safety**

For Chapter 3, one Excel workbook containing spreadsheets from 2006-2008 NIOSH database and one Excel workbook containing MSHA Injury Statistics from the 2006-2009 MSHA databases. These files were used in creating tables and figures for Chapter 3.
For Chapter 4, one Excel book containing data from DOE/EIA 2008 used to create figures for the Occupational and Public Health and Safety sections of Chapter 4.

- **Socioeconomics and Environmental Justice**

For Chapter 3, 17 Excel workbooks used in creating tables and figures referenced in the PDEIS. One pdf from the Federation of Tax Administrators (2010) containing a table on state individual income taxes for 2010.
For Chapter 4, 17 Excel workbooks used to produce tables and figures for the socioeconomic and environmental justice sections of Chapter 4 of the PDEIS.

- **Transportation and Infrastructure**

Six Excel workbooks containing information from various sources (cited in the workbooks) used in creating tables and figures for both Chapters 3 and 4.

MACTEC relied upon publicly available information previously referenced in the RIA and the PDEIS for development of those documents. Please note that we have previously uploaded GIS shape files MACTEC created to develop PDEIS figures. Also note that there are no additional source files for the cultural resource section of the PDEIS or the RIA as these were developed with material referenced.

The information uploaded to SharePoint and the material referenced in the RIA and MACTEC's sections of the PDEIS are believed to be inclusive of all material MACTEC used to develop these documents. However, we will continue to review files and should we determine more information is available; we reserve the right to update the information provided.

If you have any questions, please let me know at your earliest convenience.

Thanks

Josh Jenkins

770-421-3412

Meeting 8/17/10
Dept. of Interior, OSM
Washington, D.C.

Attendance List

Name	Affiliation	Telephone	E-mail
John Craynon	OSM	202-208-2866	jcraynon@osmre.gov
Sterling Rideout	OSM	202-208-2596	srideout@osmre.gov
Bill Winters	OSM	865-545-4103 ext 170	bwinters@osmre.gov
Lois Uranowski	OSM	412-937-2805	luranowski@osmre.gov
Stephani Varnell	OSM	859-260-3925	svarvel@osmre.gov
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Randy Sosa	PKS	305-975-2173	randy@polukaiservices.com
John Maxwell	PKS	352-258-1045	jmaxwell@polukaiservices.com
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Doug Mynear	ECSI	859-233-2103	dmynear@engrservices.com
Joe Zaluski	ECSI	859-233-2103	jzaluski@engrservices.com
Steve Gardner	ECSI	859-233-2103	jsgardner@engrservices.com
Josh Jenkins	MACTEC	770-421-3412	jljenkins@mactec.com
Ann Shortelle	MACTEC	352-682-3419	abshortelle@mactec.com
David Bell	Plexus	703-845-5602	dbell@plexsci.com

- Consider transportation and federal lands as factors that determine the minability of coal

8. Alternatives development

- Concern expressed by contractors that the DOPA (Chapter 2) is too unclear to proceed with Chapters 3 & 4
- Chapter 2 is due 9/9/10; OSM will have an opportunity between 9/10/10 and 9/17/10 to comment on proposed preferred alternative
- Concerns: (1) Too many options for each alternate and each alternative needs discrete options in each column (two many similar options); (2) Complexity of generating Chapter 4 using the cafeteria method to assemble alternatives to be evaluated; and, (3) Potential for fragmented analysis, which will make the cumulative assessment difficult.
- OSM will better define the no action, preferred, most environmentally protective alternatives and refine the remaining alternatives
- OSM will limit options for each alternative to a reasonable range of impacts and eliminate similar and duplicate options
- No action alternative is current as of the email on Friday previous.
- Team agreed with the need for a clearly defined preferred alternative for the DEIS. This may change in the final EIS based on DEIS analysis and comments received on DEIS.
- Between the draft and final proposed rule and EIS, comments and analysis will cause a preferred alternative to emerge as the basis for the final rule.
- If, during NEPA process, there is a strong indication that OSM should consider some other, not currently identified alternative, contractors will bring this up as a matter of discussion so it can added to the proposed rule that the 'new' alternative is being considered.
- General comment – Team should keep in mind that due to the accelerated timeline, tasks normally done consecutively are being performed concurrently. This requires thorough and timely communication between, and coordination among, the Team and CAs.

not respond, it will be assumed that they have no comment. Any comments received after the cut-off date will not be considered.

- The contractor is to funnel rulemaking questions for CAs through OSM (this will be clarified in the PMP)
- If there is a task requiring receipt of a response by a certain date, OSM will initiate the contact.
- Information gathering will be conducted by the contractor, as needed.
- OSM has implemented a procedure to improve timeliness of responses provided to the contractor

5. Public comments status

- Emerging trends and major public comment issues: Open House participation less than expected. No negative incidents. Thus far, few comments raise new issues or ideas. All "new" issues were extracted and contractor is now determining if any of these are substantive.
- Approximately 20,400 email comments; 453 Open House comments; 100 mail-ins from Open Houses; 53 mail-ins from industry, state and local agencies; comments from 73 non-governmental organizations, industry and government agencies
- Discussion of Scoping Report contents: Group similar comments; evaluate issues raised and count number of similar comments; perform a statistical and substantive analysis to determine a breakdown on number of comments per alternative/issue and concerns raised; identification of new ideas; discussion of any outstanding issues

6. Chapter 1, status of OSM review/comment

- Six sets of comments received, 4 substantive
- Section on need for rulemaking and EIS requires additional information to explain why OSM may need to change the rule and the need for another EIS
- OSM will review all comments, determine which comments are acceptable, and consolidate. Assistant Secretary will have input during document review.
- Use the acronym OSM in documents.

7. Update of team data collection activities

- Counties that were the basis of the 2008 EIS and are representative of the various regions will be studied
- Counties for analysis were chosen because they are in active production and also are representative of the surrounding areas not currently being mined.
- Anticipated future mining areas - Pick nearby counties that can represent the counties where there may be mining in the future.

Meeting 8/17/10
Dept. of Interior, OSM
Washington, D.C.

1. Introductions – see attached attendance sheet

2. Contracting issues

   - Confirmation of invoicing: COR & PKS will improve communication regarding administrative matters; set up systems for email and conference calls between COR and PKS Admin; setting up a Project Management folder on SharePoint
   - Status of fully funding base contract and scoping modification – OSM has the funds to fully fund the project
   - Every change to a date stated in the contract or SOW will require a no-cost mod
   - PMP needs to better relate to SOW and invoicing to more closely match the work breakdown structure

3. Schedule

   - Dissemination of Rulemaking Schedule – OSM Rulemaking Committee has put together a consolidated timeline including a week-by-week breakdown of the Rulemaking steps and EIS milestones; OSM is updating weekly
   - Confirm delivery date of conceptual RIA: change original date (9/24/10) to 10/(8 or 15)/10 (still meets 90 day RIA submission in advance of DEIS)
   - Discussion of overall schedule and sticking points:
     - When contractor submits internal drafts of chapters, only OSM comments are expected. OSM will internally review and combine relevant comments from various reviewers with OSM comments.
     - Rulemaking committee requested advance copies of DEIS chapter sections. Declined due to need to conduct proper internal (contractor) QC technical review prior to submitting to OSM.
     - Team will provide Chapter 3 & 4 outlines to facilitate a dialog with OSM and subject matter experts and enable OSM to assign and coordinate reviewers. Outlines will be submitted to OSM by 8/24/10. OSM will revise internal subject matter experts contact list for contractors to utilize as needed.

4. Cooperating Agencies

   - Discussion of POC for CAs and OSM POC (see attached list of Cooperating Agencies)
   - OSM sending paper and electronic MOUs to interested parties; if signed MOUs not returned by 8/25/10 OSM will assume interested parties declined to be CAs
   - Dissemination of CA list
   - The OSM PM has requested internal and external commenter to submit comments no later than one day before OSM comments are due to the contractor. If a reviewer does

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Date: February 1, 2011
Location: Washington, D.C.

Files: Mtg, 02-01-11, Part 031.mp3

Participants:

Abbreviation	Name	Affiliation
BM	Brent Means	OSM
DB	Dave Bell	Plexus
DS	Dianne Shawley	OSM
EL	Edmundo LaPorte	ECSI
JB	Jeff Baird	ECSI
JC	John Craynon	OSM
JJ	Josh Jenkins	Mactec
JMa	John Maxwell	Polu Kai Services
JMo	John Morgan	Morgan Worldwide
JS	Jose Sosa	Polu Kai Services
JZ	Joe Zaluski	ECSI
NS	Nancy Sloanhoffer	OSM
RS	Randy Sosa	Polu Kai Services
SG	Steve Gardner	ECSI
SV	Stephanie Varvell	OSM

BM 4:57:31	Alleged mischaracterizations of the proposed rule. And, I can point out one you guys might already know about and I don't know how to work through this other than we need to work closer with you, but you guys might have already seen this in alternative 5, see what page it is. It's just that one where, let me see... and there's been a couple of those where there were questions whether that's what was really intended by the rule. The one in alternative 5, it was about long wall mining, it was on the second page of Alternative 5, and again, I don't know. Part of me wanted to bring the mischaracterization issue up because ultimately if you guys. I don't know if the folks who developed the numbers for the production shifts were the same ones writing some of this so that if something is stated here, that then carried through in the production numbers. Because if that's right then I'd say those production numbers are really going to change. But, on 4-1-96 it says, for example, line 24 so 4-1-96 line 24, 'If it is predicted that a long wall mine operation would, under a stream, would cause the stream to experience a decrease in elevation, so if a long wall mine would subside a stream it would be reasonable to assume that returning that stream to a pre-mining elevation would be difficult, if not impossible. Therefore the RA would not issue a permit for that long wall operation.' And, talking to Bill, and actually the Director, we even had him on the phone, that would not be the intent, we are not going to prohibit subsidence if subsidence propagated to the surface would changed the elevation of the stream. The only time that a long wall mine would basically be prohibited is if there is a prediction of material damage. And, obviously subsidence is one...
JC 2:18	Change in elevation is not that. The definition of material damage in the proposed rule focuses on loss of stream use, impairment of use.

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BM	And the only way I could sort of try to twist the words around to say this might end up (unintelligible). If you had a coldwater fishery that was high gradient, you subsided it and made a huge pool, somehow it warmed the water up, water's not moving fast, that somehow you might change the use of the stream from cold water to warm water. But, that's a very unique scenario. There's been some allegations before where a change in stream elevation has resulted in a change of use. But I think most of us would agree that most changes in use are going to come through water quantity and quality impacts in general. And so, I'm just not sure, one question I had was, is this how you guys used this in developing the numbers?
JMa	(unintelligible)
BM 3:01	O.K. Well, then that clarifies for us at least the ...
JMo	The production shifts preceded this by months.
BM	So, the production shifts may not necessarily be in concert with some of the text then? O.K. Then we need to probably work to get those. Because, obviously, as soon as I read that, I'm looking at the production shifts, saying there's predicted increases in underground mining. Well, those predicted increases in terms of production are going to be off because this was misinterpreted so
JZ 3:36	I'm going to relay to you what my understanding was in a debate with Bill, not a debate, discussion. Tell me if my understanding is inconsistent with what you just said. I remember the scenario was if the depth to cover is less than 400 ft that, and there were streams were on the permit, there was a big discussion of what a permit is for a deep mine. All that aside, let's assume the shadow area is not on the permit. If the depth to cover was less than 400 ft, the question I asked Bill was, if there is a stream in that zone, you're telling me Bill, that you would not issue a long wall permit. His first answer was "That's correct." His second answer was "In Tennessee we can design ways to work around that." We can work the long wall panel around that stream." Whether that's operationally sound would depend, I guess, on (unintelligible) I don't see that happening.
SG	I don't think he said Tennessee. I think he just said he thought there was a way to redesign long walls regardless of where they were.
JZ	But the bottom line I heard was, we would not issue that permit if it was predicted. Is that inconsistent with your understanding now?
BM 5:00	Absolutely, basically Alternative 5 would be a prohibition on subsidence. And as long as subsidence doesn't reach the threshold of material damage, then the permit would be issued. I mean, you could subside a stream, change the elevation, you'd require repair, let's say, but....
JZ	I remember that discussion and he said the magic number, Brent, was 400 ft.
BM	Well that's a Pennsylvania rule-of-thumb. It works for Pennsylvania.
JZ	But the bottom of the discussion, or the end of the discussion was, the permit would not be issued.
JC	If material damage is predicted
JZ	Which does not necessarily, by definition, include sinking a stream.
JC	If you change the designated use of the stream, which is a possibility, like the scenario Brent was just talking about. You change it from a cold water fishery to a warm water fishery, because of the stream morphology changing as a result of subsidence
JZ 5:55	So I could sink it, but not change its use. I don't mean to be flip.

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BM	Absolutely.
JC	Exactly right.
BM	Most designated uses are described based on water quantity and quality, not on stream morphology. Underneath state, so, I mean, if that was true, what you were saying, of what Bill said. I not sure who this Bill guy is (unintelligible). You guys have these conversations and I'm not really sure what Bill is telling you.
JZ	These were in fairly public rooms, where we had these discussions in. My question was, because of the production issue, the modeling, do we take that type of production out. That, we're going to lose that long wall and the further answer, I can tell you a couple of weeks later was, all we have to do is double room and pillar mining. That came from OSM. Again, I think that's operationally very difficult. But, that said, that was the backup to the position that we're not going to issue the permit. Rather than lose the reserve, we'll mine it conventionally and just increase, double the size of the mine, so, that's where we're coming from. That was the assumptions we were told to make.
BM	And, I understand what you're saying. Bill is like an X-file, I know he exists but I never see the guy.
JZ	I'm going to drag [him] up here next time.
JC	This is part of the reason the meeting was scheduled for 9:30 (unintelligible).
JZ	So, what I just told you is inconsistent with what you're understanding.
BM 7:29	Oh, absolutely. I personally think, if we had Bill here, it may result in Bill and I having an interesting conversation. But, that would end up being a prohibition against subsidence. No, if you think about it, the other thing is, could you actually rob water or cause water loss from a stream, would that automatically reach the threshold of material damage. Say it was flowing at 10,000 cfs and now it's flowing at 7,000 cfs, my answer would be, yes that's allowable. As long as that stream still meets it's designated use, that would be allowable. (unintelligible)
EL 8:06	We're all here debating between the hypothetical and the realistic scenarios. Because I can assure you, if I go with the permit application to OSM, I tell them that I'm going to sink the bottom of a river 20 ft, they're not going to give me a permit. Because, how can the regulator be assured that that will not impact the hydrologic conditions of the stream?
BM	The regulator knows that it's going to meet, permits. We don't have our blinders on. In southwestern Pennsylvania we don't have our blinders on saying permit application says no impact. Actually, there's descriptions of impacts it's just never going to meet the threshold of material damage. And the regulator has to meet a finding that's not going to reach that threshold. But, I mean, we're not morons out there in that long wall mining isn't subsiding streams. In fact, we're monitoring it, we're watching it happen.
EL	No, what I mean is how can the person who's supposed to issue the permit be assured that material damage will not occur? In my experience...
BM	No one has a crystal ball, but again it's through this increased baseline data collection as part of this proposed rule. More information you have, the theory is, the theory is the more information, the better the prediction and the better analysis. But, in the end the permit author, the regulatory authority has to make the permit finding that he believes that material damage is going to be prevented. Now, is he going to bet his house on it? I doubt it, but the theory is that no permit is being issued. So I just want to at least pick out one example where I was getting very confused. And, I'm glad to hear that this was not getting carried in the production analysis. That this was just, whoever wrote this might have been confused. And, I

	understand why you guys get confused. Oh, well, I understand why you get confused because I remember the first meeting in Atlanta or whenever we were at least talking about underground mining, that a lot of us were confused about underground mining. So, anyway...
SG 10:16	And I think we're still somewhat confused about the application of the rule to underground mining.
JC	The x-files Winters.
SG	I won't say that we totally did not consider some of those. I think that there's that uncertainty about what might be applied.
BM	I really think that if a lot of your predictions are either production shifting our west or shifting underground, let's say regional shifts underground like in Appalachia, we need to have a very serious conversation with Bill, the Director, and others who really envision how these are going to be applied to underground mining so that you guys can make the impacts reflective of the rule. Cause, my understanding of it might be different from Bill's. But...
JC	No, I think what you've described here is consistent with the way I understand the intent.
SG	And I agree, we should probably change this wording on the decrease in elevation by itself. But, I think we still think there will be situations where long wall mining will not be allowed, that's currently being allowed.
BM	Absolutely. Because right now, I guess allowing long wall mining is not premised on changing stream use under SMCRA. Now, clean water act people would have a heart attack if they saw that, but under us, we wouldn't be regulating it. So, absolutely.
JC	But, I think the clarification of what material damage means, that is creating a national definition that focuses on that change in stream use and in groundwater designated use may have the effect of, in some places, preventing long wall mining.
JZ	This was the whole basis for that disingenuous letter, which is, I've got out on the wall. Because, again, we mentioned Kentucky includes the shadow area as part of the permit. And the reason for the debate, John, was if our permit's going to be denied if we cause material damage off-permit we'll just permit the stream. And Bill went, the mysterious Bill went through the roof. And we got, I think Nancy signed the letter, I'm not sure who drafted it, but we got accused of being disingenuous. But, the reason for the argument was that, we were told, the law won't permit, would not be issued if it caused material damage off permit. So we said, easy, we'll keep the stream on the permit. And I'm telling you Brent, that was a debate, we thought that was put to bed . Now, what you're saying makes much more sense, I've got to tell you. But, you have to understand, OSM has to understand, we have done an analysis based on what we were instructed to do,
JC 13:03	Well, and I will tell you, and I'm sorry (unintelligible), I will tell you that the most common phrase I have uttered in the last month and a half is they did exactly what I told them to do.
Unknown	We did.
JC	And, you know, there, that is key. I have applied my professional judgment, which has been questioned, but that is the key. And, you know, I think as Dianne was saying now the idea is let's figure out how we get to where the powers that be want to go.
BM	But just to sort of sum up subsidence, you know there are two standards, right? You minimize impacts to the hydrologic balance in a permit area and if you're outside the permit area your regulatory standards prevent hydrologic impacts to the material, that cause material damage to the hydrologic balance. So, therefore, I think what you're saying is that someone would say, O.K. how much (unintelligible) the stream if there's a different standard. The inside the permit

	boundary is minimized, the outside (unintelligible). I'm just going to redraw that line. And then I'll have some regulatory relief.
JZ	We do that in Kentucky already. We consider the shadow area as the permit. I think there's only two places in the county, John, that do that.
JMo	Utah and Colorado.
JZ	Yeah, that do that. And, we thought, ah good, we're saved. And that's why we had, the reason I'm telling you that, that's why we had the debate. The merits of it aside, we had the debate because I asked Bill, so you would not issue that permit if there was predicted impact on the stream. The answer is yes, we would not issue the permit because that is material damage, sinking a stream. Now, there's ways to mine around it. Again, I find that very difficult to believe. But, we had a whole discussion. I like your interpretation much better.
BM	Well, my interpretation is strictly that of the definition, that what constitutes material damage is changing use, not subsidence. Now, subsidence can result in change of use but that's different. So, yeah, I just want to be clear. That was a biggy that I saw. There's other inconsistencies and you'll see some of the comments.
SG	I think we reword that. But, our understanding is still going to be the same. That there will be cases.
JC	There will be cases (unintelligible).
SG	But, that change of elevation could also result in, not every time.
JC	Yeah, not every time.
SG	There will be potential for that to be a material damage.
EL	And that's why there is a percentage of impact allocated to underground mining. It's because that small, if you wish, number of cases in which the subsidence will cause material damage.
BM	Absolutely. (unintelligible) any subsidence (unintelligible) The next thing is, we went though (unintelligible) coal, we went through mischaracterizations. The other thing, and I'll just get to the real big one that...
SG 15:58	Was there any other mischaracterizations that you thought?
BM	There are some in there but that was to me the real elephant. But then there's some slight (unintelligible).
JC	I think there's one that may show up as we talk about (unintelligible). As we get to the discussion of Alternative 5.
BM 16:17	The other thing, that is the methodology. Both in the comments and the call we had yesterday, the formal elicitation process. I think what people are struggling, first off, some folks; there's three issues that I see. Some folks think there's a mathematical model that's going to get presented as an appendix, or some sort of model. Those people that were on the call yesterday are the ones that are used to reviewing NEPA documents. That have a lot of models, you probably know what I'm talking about. And, so to them, for whatever reason, it wasn't conveyed, and I think you were very clear there wasn't going to be a mathematical function that you could provide different inputs into and get different outputs. But, that was one thing, that people were confused that there was going to be a model. But, that was lesser of an issue. The next was going to be the fact there was big confusion that in the writing it talked about a stochastic model that was being developed. O.K. It's in there, I could point to the page, not take the time. And what was very confusing was, how was this stochastic model different than the model that was used and are these numbers in the Table up on 4.14 and

	some of the other summary tables, are those, are those metric numbers going to then change? Or, are the stochastic results part of that, or confusion as to they say they're going to do a stochastic, they haven't provided us information about it yet and what are the results they're presenting really reflective of. So that was another people were really confused of. And, some were quite angry, o.k.? Cause they thought they were being forced to review a document that wasn't complete. And, therefore, they can't really comment on it because, we're not sure if these numbers are going to change or not. So that was another issue. And just real quick, can I get a response to this stochastic, is it implemented in here? The numbers on 4.14 with the stream impacts, are they going to change?
EL 18:23	Well, let's clarify the concepts first. The numbers you have there, I mean when the expert panel came up with the estimation of the impacts, we had one number for each impact. 10%, 20%, 30%, whatever it was. So, the stochastic model is just a way to reflect that even though, if our tables show one number, that number is the most likely value in our expert opinion within a range. So that range would define, you know, the probability of certain impacts to occur, but always the most likely impact is the one (unintelligible).
BM	But, I mean, would you be then, I guess the question would be, on these numbers on 4.14, which I'm just picking the stream impact one, but you could pick the production, are they going to then be, have limits placed on, or ranges then associated from the stochastic. Will there be another column or something that might say, the most common one is 110 stream-miles but, or 43 stream-miles, but really it could lie anywhere between 30 and 50 stream-miles.
EL	That's correct.
BM	I mean, is that what you're going to then, I mean, there is a piece of data that will come out of the (unintelligible). O.K.
SG	Yeah, that was the comment in the meeting in Lexington also on production impacts was to give a range (unintelligible) median number.
JC	And one of the reasons for that is, inside the beltway when a number stands alone it takes on a life of its own. If it's a range number, there is implicit that there is a, you know, it's the accuracy precision bar like you drew in the meeting in Lexington. That, if there's a single number people assign it a hundred percent precision and accuracy, which may or may not be there. They don't understand the error bar around it, etc... But, if you give a range, implicit in that is more uncertainty. And that, I think, is one of the key ways, key factors there is that the real desire, unless you can, you know, I mean there are those folks who want to know the alpha and all of the factors there but for the general population readers or for the multitude of reviewers internal to the government, by having a range implicit in that is an understanding that it's not as precise as a single number.
EL	And we noticed that during the last meeting in Lexington, just because Bill seems to be very happy with the idea of having a range, while Harry was kind of, (unintelligible) another character, but he thought that probably the ranges are too wide and he wanted them to be very, very narrow. So they were very close to the number we were reporting there.
JC	Well, he wanted the alpha to be...
JMo	But also there's probably some more data analysis we need to do on that table anyway based on life of permits because we know the acreages and I think the data we got back from the states (unintelligible)
BM	Then how are they reflected (unintelligible) mining permits, how are they reflected in those

22:03	tables?
JMo	I don't know. I'm saying that going back to the raw data we had certain mines, underground mines, and other facilities. But then then (unintelligible), which also affects the annual stream miles is something we need to look at. So I think that's, in my mind, still part of a work in progress. Because underground mines in Kentucky, showing 2008 is because, as Joe just said. Shadow area is part of the permitted in Kentucky.
BM	Yeah, Edmundo and I had that conversation on the phone about the permit acres. But, those aren't bonded acres. Then you guys' definition in here is bonded acres. So, Kentucky should be subtracted out and just... but anyway the last, and I think most important comment, that again, these are overarching that I just want to make sure you guys understand is for the methodology. You guys did a really nice job and when I speak here I'm just going to use terminology to convey my point. I have the utmost respect for the amount of effort you guys put forth. So don't take anything I say as not respecting the work you've done. But, in the methodology you guys did a really nice job on 4-2, 4-254 or somewhere in there, of walking the reader through an example of how a production shift would be calculated. How you convert to thermal units and then how you look at the percentage of mining that's in '08 and assume that would remain constant between underground and surface for certain things and just add, I mean you're shifting production and you walk the reader through with tables and illustrations and discussion that anyone then can say, although I'm not really sure why you chose Alternative 4 to walk the reader through, I wish it had been Alternative 5 but, I mean, it doesn't matter. But anyways, you walk the reader through that. Everyone can understand, you don't have to go through Alternative 1, Alternative 2, Alternative 3, and Alternative 5. That everyone knows how that is calculated. And then, but what happens is, is the story that's told is that this group of experts, who aren't defined, although one of the criteria in this expert elicitation process is identify who's on there and their qualifications. That was another big comment, that I thought that would be easily rectified and you guys would just put your names down and your qualifications. But that you basically say that a lot of professional opinions went into this process and you sort of start with this description of how it was done, with the assemblage of experts that would present different scenarios and they'd make judgment calls. And then you sort of go off and give the final results. Which are the final production numbers. And not walking through, the reader through a thought process like you did for the production shift, of an example. I have a guy here with more experience and looking at coal reserves and permitting than anyone at OSM and all of us combined. And what we did, is we asked him, if you were to have to stay off a hundred feet, or 300 feet off a stream, and your property on average in Appalachia is 100 acres, what would that do to the mine? I really think, because it is so black box, you guys really need to give some of these examples of types of questions and threshold numbers. There's still judgment and there're assumptions, but at least the reader knows what you're talking about. Because a lot of people are confused over what went in behind the closed doors. And so confused, that some people think the elicitation process was getting experts together that developed a mathematical model that's going to be presented here very shortly.
JC	And on the other side of that is five guys and a case of beer.
BM 25.51	Yeah. I mean, as far as (unintelligible). So providing an example, I would really, for the types of conversations. You know, did you use typical mines. I was still confused until I called Edmundo. We gather all these mines. Like, I gave a surface mine and long wall for

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	Pennsylvania. I was unsure, and so were others, if that was actually used or not. And I'm o.k. if it wasn't. But, it wasn't real clear if that was part of your elicitation process. Certainly, you guys had the information.
SG	That was going to be part of the industry contribution. Was getting their input on typical mines of their own plus one's we had as a check. That's what we got pulled off of.
BM	Well , all I can say is that basically if you look...
JC	Because of concerns about leaks, we see how that worked out.
BM	(unintelligible) If you really look at it, the real important parts are that you understand the rule, and describe it correctly, and then a lot of the other filler material, I mean, I'm really o.k. with. A lot of the hydrology filler material. But, the other big unknown is this method, I mean really the crux of this is this methodology and those magic numbers (unintelligible) and it's a black box right now.
SG 27:06	I think Edmundo actually had in there names of us, I cut that back out thinking we might be better to include it later in an appendix. Do you think it would be better...
JS	There's a chapter that basically, what's the chapter Dave that requires the names of...
DB	Contributors.
SG	Yeah, I thought that would be in there. But you think we ought to...
JMa	Maybe it ought to be in the part with the methodology.
SG	Is that what you're saying, you'd like us to put that up front?
BM	Here's the big criticism, 4-252, there's five, there's seven points that have to be met in order to be a subject matter expertise. You guys go through this. It helps build your case that you're not just a bunch of baboons out there that, I mean, seriously. You're basically building your case that, to justify these numbers. The very first one, possesses necessary knowledge and expertise, the forth one, willing to be identified publically with their judgments. (unintelligible) We were getting comments, listen man, one of the requirements is to give your expertise and who are you and haven't met that. And so, I don't think it's a huge thing, but I think you should just (unintelligible)
DB	Well, do you think it should be here in this chapter or...
BM	At least referenced to.
DB	A cross reference to chapter...
JC	If it said the panel of expertise is identified in..
DB	See, this is one of the flaws and one of the dangers of reviewing drafts of drafts.
BM	I know. (unintelligible)
DB	And, it's too bad that folks seized on that point to go off the deep end when had they seen the entire document or a refined version of the document then that might have been...
JC	And that actually was part of the message we carried on the phone calls to the cooperating agencies was, listen folks, this is a draft of a chapter seen in isolation. And, I think Brent, you actually made this point on the call, when you see the whole thing and how it fits together, you know, it's like criticizing a piece of a puzzle, without seeing the whole puzzle.
JS	But, I think I also see what Brent is saying. That perhaps in Chapter 4, there should be in that section where the methodology's described a (unintelligible).
JZ	Maybe I dreamt this but we did have our names in there, who was on that group. And I swear a NEPA editor, I'm not sure if it was ours or yours, contacted us and said you can't put the names in text, you can put it in the chapter where you list everyone's qualifications and who the contractors are. But, not in the text of the EIS. Maybe I dreamt that.

BM	Yeah, you might be right. I personally, all I know is..
JZ	Because Steve took them out, I remember that. (unintelligible)
BM	4-252, and even if you would just have in there cross reference that, and it's a minor one, the more bigger one was just the black box.
SG	Actually, I think it was just my personal preference. I thought it would be better not to in the chapter but to have it referenced. But, we didn't actually reference it. But I thought that would come. So which way do you think would be best?
JC	Well, I tell you the comments was put it right there. That was the sense of the comments that if you have this professional expertise that's a part of this formal, or informal, elicitation process... (unintelligible) I think maybe a compromise way because the contributors section is going to have all the descriptions and all of that, is a panel which included this level of expertise. These mining engineers with this type of experience and these kind of, you know it's not...
JMa	It's just going to be something under list of preparers.
SG	I just thought it seemed a little egotistical to stick it there.
BM	Understand, but people right now, you know, basically, the crux of this is based on professional judgments and right now a lot of folks don't know your names. There are people that do, but there are a lot of them that don't. We've got to tell them that you guys have this expertise.
JC	And let me throw another point out here because we're talking very frankly today. The fact is, part of the real advantage of this team of expertise is the balance between Morgan Worldwide and ECSI in these matters is seen by a lot of folks as being a very good thing. And the fact that you all came together and worked on this and agreed to the methodology I think, for a lot of folks, will be seen as it's not industry bias, it's not anti-industry bias that there really is a professionalism in the way it was done.
JZ	I find it stunning myself. (unintelligible)
JC	A lot of people do, actually. But, in all seriousness without making too much light of the point, I think that is a real strength of this team and it's very important. And, the fact that this process worked through that kind of contribution is not something to gloss over. I think it will help people have a higher level of confidence in the way things were done.
SG	One last time you want us to go ahead and put the names in the chapter or maybe refer in back, have just a page that's (unintelligible)
JMa	It's probably best to come out of where we have the list of preparers because one of the comments was, we refer to the team and it shouldn't be the team we are referring to because it's an OSM document.
JJ	To Steve's point, I think you ought to have, I think that some of that methodology at least the detailed methodology, you ought to put it in an appendix. Then you can put names in . Then you are also on the list of preparers. So you can see that we had these engineers, these engineering groups. Here's who did it. It was not just ECSI, Morgan corroborated, collaborated, whatever. And, you know, so it shows, but at this point of the review is it relevant now, people want to know but is it necessary? (unintelligible)
NS	Do you care about the names of the companies or is it their professional (unintelligible).
JC	It's the professional qualifications.
BM	It was just part of the, the methodology section is that, people really wanted, how you walked people through, and it was done well. You know, coal production, you did graphs, figures, or

	tables of how you walked the reader through. Just there needs to be some, because I truthfully don't understand the key tables and, you know, and people are asking me that. Clarify to them of how these key tables in 4-14 were developed and I'm not even sure if refuse piles are in underground (continued in Part 4)

Meeting Transcript, Morning Part 1a

Date: February 10, 2011
Location: Lexington, Kentucky

File: 02-10-11, Part 01a.mp3
Participants:

Abbreviation	Name	Affiliation
BW	Bill Winters	OSM
DS	Dianne Shawley	OSM
SV	Stephanie Varvell	OSM
LU	Lois Uranowski	OSM
JC	Jeff Coker	OSM
HP	Harry Paine	OSM
PE	Paul Ehret	OSM
JS	Jose Sosa	Polu Kai Services
DB	Dave Bell	Plexus
JMa	John Maxwell	Polu Kai Services
SG	Steve Gardner	ECSI
EL	Edmundo LaPorte	ECSI
JB	Jeff Baird	ECSI
DB	Doug Mynear	ECSI
JJ	Josh Jenkins	Mactec
AS	Ann Shortelle	Mactec
JMo	John Morgan	Morgan Worldwide
LE	Liz Edmundson	Morgan Worldwide

Dave Bell notifies participants that the meeting is being recorded. Introductions.

BW	Couple of things, we're just going to throw on the table and talk about, the cure letter. We had some discussion; there was an agenda that was sent out last night. We are not at liberty or authority to talk about the contractual parts of the cure letter. So, we can't talk about it. We can't discuss it. And, frankly, we didn't develop it. So, (unintelligible) What we are going to talk about is the format, structure of the EIS. Kind of the attachment type things that were in the cure letter. So, what we're trying to do here, for the next two weeks, is we basically have two weeks, is to get some significant issues with the EIS and the RIA straightened out. So, what I thought we would do is come up with an agenda and a game plan to address the big issues moving forward. We got two weeks to do it. So, how do we best maximize, what we got, what time we got left? And you'll see that we put together some thoughts, o.k., the agenda. I think what you'll find is this agenda covers a lot of what is in the cure letter. The items at the end of it, and we think when you get done with this meeting you should have the information necessary to address things in that cure letter. We need to concentrate on getting this product to meet the CEQ regs and to do that what we did is outline some high-priority things. I put together a list last week, sent it to Jose. I'm sure he circulated it among the folks. It looks a lot like what's on this piece of paper. We thought we would start there. And, the reason to do that, quite frankly, is there were some things in the EIS and associated documents that we felt weren't accurate or that there was gaps. And, we thought, there's no

	sense spending time wordsmithing, clarifying things like that. We might as well address the big ticket items, get the framework of that straightened around, and then fill in the pieces with the subject matter experts and move forward that way. Pretty optimistic that if we address these things in the next couple of days on the agenda, that by the 23rd we'll have a product that meets all of our needs. So that's where I was glad to see you guys wanted to meet. I think the next two days we can address some of these deficiencies that we see. But, at the end of the day it's not going to do us any good to throw rocks, point fingers go down that road. It just doesn't. We got things we have to get done by the 23rd, let's concentrate the next two days on the 23rd, and get those things done.
JS	Bill, I agree with that. I think, you know, and I apologize for sending the email that we were going to address the cure notice in the framework of this meeting. The intent of meeting is exactly what you just said, the idea is to grab the attachment of the cure notice which addresses the deficiencies and work those. I think, consensus-wise, everybody wants to concentrate on Chapter 4. We still have the draft EIS, that we can capture a lot of the three, given, you know, any kind of change of direction, that you may want to adopt in Chapter 3. There's a lot of history, like Bill said, (unintelligible) phone calls, that we could spend the two days, you know, and what I have instructed everybody is, any history that is documented with directives and directions by OSM previous team members and things of that nature, just put it on the table and then we can come back to you and say by this date, by this individual, on this particular time, in this meeting, we were directed to do this. And, I think from our side, that's the overall, arching comment that we're being unfairly judged. And, I don't want to get into semantics, that poor us, no we're here to work. (unintelligible) Because at the end of the day, everybody here is a pretty stand up professional. Nobody wants to see us going down into a nasty divorce in open forum. Let's try to work together, reconcile our differences, and get this product out the door. Which is what we set out to do in the beginning. So, I think, with that said, if anybody else wants to add some to that. You guys are welcome to do so.
DB (6:12)	Actually, I have a couple of things I'd like to add to it. You all ought to recognize that even if you identify something as a deficiency doesn't necessarily mean we agree with it. We are under this legal cloud now of a cure notice and because some of the items are the subject of a legal dispute, o.k., we reserve our rights with each and every one of them and they'll be addressed formally in the response to the cure notice. Again, because the cure notice outlines officially, and very specifically, from the contracting officer, deficiencies have to be corrected by the 23rd our focus, the teams focus needs to be on addressing those specific items. And our conversations that deviate from those, while nice, I think don't help us address the very legal issue that we have to deal with.
DS	Dave, I think I'd like to go back to Nancy and ask her what the response to the cure letter needs to be. I thought from my reading that it was your plan to address it. And, I think that by delivering a product which deals with the deficiencies, such as the revised Chapters 3 and 4, and a complete PDEIS, that that is the right response to the cure notice. I don't see those as dueling requirements in other words. But, I will get clarification on that and let you know. Because I don't think that her intent at all was to take away the effort toward finishing the EIS.
DB	Well, as I read it, we're required to address each and every one of these items by the 23rd.
DS	In the draft.
DB	Right, in the PDEIS. We may or may not be able to accomplish that. It's kind of interesting and it's, I guess, your first topic but we've now talked twice about Chapter 3. Chapter 3 isn't mentioned in this document, in this PDEIS, except in one respect when it talks about the

	misrepresentation of regulations. O.K.? Bill's message from Monday at 12:29 gives us a page and a half of discussion on Chapter 3. I got to tell you, Chapter 3 is closed. The authors are done, I have final documents that are now in the process of being assembled and formatted and put into the PDEIS. I don't have time to go back. For me, that's redoing work that is done. The comment period for Chapter 3 closed in November. It was reopened in November to rewrite the water resources section. It closed again in December. It's done. It's been done for two months. So, a page and a half worth of comments. Wonderful. We all have an opinion of how we could write this document in a different way. But, time is time. And, right now, this focus is on Chapter 4. So, I'm really concerned that we start off at the very outset going back to October, and directions we were given then. So,
DS	We're going to defer to you on your interpretation and we've got an agenda, so let's try to work through the agenda. You're going to make your decisions as to how you want to proceed, we just want to use this as a working session and work off the agenda.
BW (10:15)	And I would add to that Dave, at the end of the day this is a contractual obligation and we paid you guys for your expertise. What I'm here to do, what I was tasked to do, was look through these documents and come up with something that meets CEQ regulations and the substantial issues raised by our cooperating agencies, one of which is EPA. So, at the end of the day, we're here to assist. And so, I get a little nervous because I've had my name brought up and say Bill Winters said yada yada yada. Our role here is to assist you guys. That's it. And what we did in those two documents that I sent you was lay out, here's some things that we see. You're under no obligation to do any of that, to be real frank with you about it. We're here to assist. However you want to use us in the next two days is fine. This is a rather a conceptual list of things that we see, most of those deal with Chapter 4, I would agree with you. Three sets the stage for four. So, with that being said there needs to be a significant nexus or symbiotic relationship between 3 and 4. And, what we have indicated is, there is some gaps in that. If you chose not to go back and address those, I mean, that's o.k. I mean honestly.
DB	Bill, you know, with all due respect, you know, you're the third program manager that's, project manager that's assigned to this. You know, we listened to Lai-Ti Bilboa for two months, John Craynon for the next, what, the next five months. And many of the directions that we acted upon were directions given by OSM's representative at that time. O.K.? We have documentation in writing. I don't know how many meetings were held, sidebar meetings were held. We put together additional teams to do exactly what we're doing right now. The reason why I raise this is, you've given us on Monday, a separate list that is not the same as the list subject to cure. O.K.? And yet, I sense that you want to use your list to guide these discussions. And frankly, you know, you're another project manager. And for all I know, you'll not be here in two months. We'll do this and you won't be here in two months. What assurance do we have that if we do what you ask us to do, that we won't be here with project manager number four? Because the agency is unhappy with what its project manager committed the agency and told us as contractors, because we do take our direction from you. We take our information from you. And, that's why we formed these, these teams. You know, Chapter 3 requires some revision now because the agency changed Chapter 4. We met in Lexington, here, in OSM's offices to go through an outline for Chapter 4. We presented that to the agency and a month later in November, in, what was it? Atlanta? Or, was it Lexington? I guess it was in Lexington again. John Craynon changed it. So that we reorganized all of Chapter 4 and you rewrote Chapter 3's water resources section to combine four or five sections. Right?
BW	O.K. Dave. At the end of the day here, my goal is to help you guys out.

DB (13:52)	Thank you Bill. Our goal here is to help you write a defensible EIS. And we have been focused on that task from day one. Not a person in this room has expended one ounce of effort to do anything other than that. So, you know, from day one, remember, the very first thing that we had to address was whether or not this agency would engage in scoping. And your lawyer said, oh you know, those meetings you held with industry and invited guest were sufficient scoping and plus, the notice was sufficient. Well, the first thing we did and advise, and in the span of less than half a day, the Director saw that that was wrong, Was put together nine scoping meetings to be conducted within, what, less than two months. And, we managed to do all that. So, our focus has been to do exactly what you now say we want to produce by the end of this process. So, we agree 100%. There's not a person in here who will disagree with that statement, I'm sure. So, we're with you on that.
BW	At the end of the day Dave, we can have this discussion probably all day. What I want to concentrate on is how do we move forward. And what I hear you say is that you think going back and addressing Chapter 3 probably is not going to be the most efficient use of time. Is that what I hear you say?
DB	Yes.
BW	O.K. I think most of the items on here have to do with Chapter 4. The only reason that Chapter 3 shows up there is we want to be sure there's consistency to carry over into four. You guys think it does that?
DB	No, I don't think it does that.
BW	Wait a minute Dave. Wait a minute. We're paying you guys to help us out there.
DB	And we asked the question in November and December and were told, don't change Chapter 3, here's the structure, it's just fine.
BW	I just find it a little funny that I'm telling you the same thing you just agreed with me on. But, we're not going to address that so ...let's just move forward.
JS	I would agree with that, Bill, as I said. Dianne and I talked a little bit about that just a while ago. We can spend not two days, we can spend the next two months arguing back and forth and it's not going to solve anything.
DB	I will shut up on this point. The reason why we find ourselves sitting here in an emergency meeting, and I call this an emergency meeting because it's a come-to-Jesus meeting in light of this thing, o.k.? It's a come-to-Jesus meeting where we have certain things that we've got to accomplish. But the reason why we find ourselves with less than two weeks now, is that right? To accomplish all of these things in this attachment is because of the path we have been set on and has been agreed to by the agency. So, where there are changes from that path they are, in our view, my view, head nods or not, the result of the agency's specific direction. Not inadvertence on our part, or larks that we, tangents that we've gone on. Specific, conscious decisions. So, two weeks to undo and fix things that were set in motion back in October, we'll see.
BW	Let's do this, Dave. Let's walk through here and do it that way. Because, I think that, the goal of this meeting is to let's talk about the overarching things and then arrange the deck chairs to fit what we come up with here. I mean, I think that's what we need to do. That is a lot (unintelligible). Are we in agreement that the things on this list are mostly Chapter 4? And, the only reason Chapter 3 shows up on here is the nexus slash relationship (unintelligible). I mean, I wrote this, I'm telling you that's what it is.
DB	O.K. I accept your interpretation of your document.
BW	Thank-you. Sometimes I struggle with that. So, anybody else have anything to say before we

	move forward? I think we're going to move forward. O.K. Good.
SG	I'm biting my tongue so I'll just sit and listen from here on. I mean, the letter was professionally insulting and OSM's got to take some responsibility for it, where we are right now. That's all I'll say.
BW	From my perspective I think there's equal amounts of opportunity to point fingers all the way around the table. I think there's certainly equal amounts of, I'm not going down that road (unintelligible)
SG	That's all I'm going to say.
BW	That' not going to help us.
JS	We're going to get in the mud and we're not going to come out of it.
BW	Plus, it's too cold out to get in the mud. (unintelligible) O.K. One of the things that you had mentioned Jose is the first topic there. You had thought there were some conflicts between some of the things that I said and the gap analysis that you guys did. Is that the Chapter 3 thing that Dave just brought up? Is that where you think there's some conflicts with...
DB	That's, that's part of it, that's one of them. Let's set that page and a half aside for just a second because we, of course, didn't speak to Chapter 3 at all in our strategy. But, one of the things I think there was a disconnect on is we described to you a process for moving forward on baseline data. I'm just taking an example out of the ...
BW	Baseline data, that's the EIA
DB	Yeah, exactly. And, it seemed like our two documents passed in the night. Because, yours speaks to using 2008, the inappropriateness of the 2008 data, because it's the highest production year ever for coal and skews the numbers and instead suggests that there be a, perhaps, a better way to do it would be to average 2-3 years. Is that a fair characterization?
BW	Correct.
DB	And yet that morning, you responded to Jose's note, or John Morgan's note of Sunday saying, hmm, dynamic sounds a way of moving forward, or a way to address this problem. So, your note of 12:29 on Monday is inconsistent with you email, which is inconsistent with what Jose put in his strategy Monday evening, and, I will go back to the cure notice, inconsistent with the cure notice. So, we don't know which of the four alternatives...
BW (20:48)	Here's the perfect point right here. What I'm telling you Dave is the two documents I sent you are thoughts. O.K. So, they don't represent a position per se. What I'm trying to do, and I'm just going to be real flat honest with you, and so this is what concerns me when I hear my name brought up all the time. I'm about working with everybody else in this room. This is not a dictatorship and this is not us telling you what to do or you telling us what to do. I thought we were all on the same page and were going to problem solve together moving forward. I will tell you, that's my sole intent. Everything that I produce is with that in mind. So, at the end of the day, if you see conflict in documents that's why I said initially I'm not going to talk about the cure notice. That's a contractual thing, I don't know about that. I was put in charge here to try to work through this problem. As professionals and technical, we're all on the same page here folks. We're all in this together. I'm throwing out ideas to solve the problems as we see them. So, yes, I looked at the data, I have problems with the 2008 baseline. I always have and I've been bringing this up since September. Not a secret. I saw what John put together and thought through it a little bit and it addresses some of my concerns. I thought it was a good idea. I still think it's a good idea. It's probably a better idea than the one I put forth. That's o.k. If everybody agrees with me there's only one of us thinking, Dave. So, there is a couple of things on the table, yes. This meeting is designed to reconcile those and move forward as a

	group. They're not specific directions.
DB	I'm just telling you that that's the reason that we asked to reconcile the document. Because the guidance that we received, the discussion that's ensued since the face to face. Dianne, you were there. You weren't Bill, I'm not sure why, but you weren't there. Because it was a very important meeting in which many of the topics you raise in your paper were discussed specifically and explicitly at that meeting. They showed up in this, so, God help you, I have to believe that this was a document that was in some form of preparation on the first of February. And because many of the topics, the very words that appear on the cure notice are exactly what appear on your document, there is some relationship between the two. So, we're not totally out in left field by drawing the connection.
BW	I'm not saying I didn't send those documents entirely. I'm not saying that.
DB	Bill, just to, we had this discussion on which data to use. Way back in, what, September, October and it wasn't you told us to do this or we told, we, it was exactly as your describing the process we're using here. Collaborative. We didn't just blindly accept it, we had a back and forth discussion with the agencies representatives. And, at that time the decision was move forward with 2008 baseline. John Morgan, Steve, and I correct or not?
AS	July meeting in Lexington, that's where that decision was made. I'm sure that's well documented.
DB	So now, since the first of February, we have three proposals on the table. I'm assuming baseline data based on 2008 alone is off the table. Right? Everybody agree?
BW	Why are you assuming that?
DB	Well because on the 1st of February we were told that that was unacceptable. And, the cure notice says that it's unacceptable. You say in your note it's unacceptable. So, I'm not stupid. We take that guidance very seriously. It's unacceptable. Right?
BW	Because there are problems with using that approach that have been brought up and discussed.
SG	And that was the first time it's ever been mentioned in this cure notice.
BW	What?
SG	That it's inappropriate. First time. And, you cannot say otherwise.
BW	O.K. Let's do this folks. Can we move forward? Honestly, I mean, I hear what you're saying. I empathize with you on that. At the end of the day I'll go back to what I just told Dave. We can do this for the next two days or we could look at the solution, the ideas on the table, and pick a path forward. I'm suggesting that's what we do.
DB (25:16)	Nobody disagrees Bill. We're just trying to figure out what, how we do that. What's the process for doing it and will it stick. You know, will it mean something at the end of the day. Because, on the 1st of February we were told to do 2008 with SBZ enhancement. Right? Dianne, you were there. Was that not what we were told to do? 2008 with the SBZ overlay on top of it and folks there, Joe, I don't know how we're going to do that. I won't sign up to that. But, you can go forward with it. That was what we were told to do. There was no discussion about averaging years, there was John, it was pre-John Morgan Sunday evening not regarding a dynamic model using the EIA data. So, that wasn't discussed. We had, at that time, a path forward that everybody believed was problematic. So, is that off the table?
BW	Wait a minute. If everybody believed it was problematic, you guys were willing to move forward with things you don't agree with?
DB	We thought it. We said you told us to do it this way. You want us to do it that way. You know,

	we're looking, and John, and John came, to his credit, came up with another alternative and put that forward on Sunday. And, that's on the table. So, yes, you're right. We have to have a way to move forward because without that kind of information they have no baseline against which to compare.
DS	Can we talk about John's proposal?
DB	Absolutely.
DS	I think it has merit. One of the things we discussed was how to deal with the 2008 data, saying, and we were talking about writing paragraphs to try to explain that it was not a good fit. And, that there was going to be a range in there somehow. There's a new suggestion on the table that we think addresses those issues and, this is the first time the group's been together since John sent out his suggestion, so...
DB	Our solution at that time was to write around it. That basically was it. We were going to write around the problem, try to explain it, and as a result, we weren't tossing all of the work done until this point. But, this will, I think, Josh you tell me...
JJ	Yeah, I mean, it sounds like a great idea. But, I think you all need to understand, and it's unfortunate the contracting officer is not here, but this will take time, this will take rework on a lot of the analyses. And, I told our prime here that's how some of the analysis that we're doing, not only in the EIS but also in the RIA. And that's my biggest concern. It's like, we can do it, but it's just going to throw your schedule and budget.
AS	Dynamic modeling actually came up early on.
JJ	It did.
AS	And it was set aside, in group discussions, and it was set aside not because it doesn't have technical merit but, because it absolutely does, but because it was going to be a budget, and especially and schedule buster. You know, not going to disagree on the technical merit of it. The ramifications are, we have to rewrite 3 and 4. And including the run-up analyses after the modeling is done. That's the ramification. Technically, I think you'd get everybody in the room to jump on board. Readily. Readily.
BW	So, O.K. So, let's put that group of issues here. So, you are telling me, or you are, you guys are wanting to continue forward with 2008. How do you propose to do that?
DM	I think first thing about 2008 data, you say it was a record year. And, while it was a record year, it also falls on that upward trend that was happening at the time. I mean, the trend line was going up (unintelligible) the economy in 2009. 2009 is the anomaly here. Not 2008, 2008 fits with that upward trend.
BW	Well, let me throw out a concept here. This is where I would probably disagree with my friend Steve a little bit. (unintelligible) I can tell you the meetings I've been in, I've brought this up. One of the issues I think here is anytime you do a regulation, you have some cost. However you define that. And, this is market economics and as such it follows a supply and demand curve. And so conceptually, if we get down to the end of the cost analysis and the price of coal in the Appalachian Region goes up $7.82 a ton or whatever the number is. How does that effect the supply and demand economics? I saw no discussion about it at all. Nothing. It was just assumed it was a pass through cost. And so, if we start down that road, one of the reasons why I liked John's idea was it was an independent forecast using the coal market supply and demand economics and all the variables that go into it. And, I thought, that is a good idea because that addresses the supply and demand thing, number one. Number two; it's not anybody in this room coming up with forecast, production, anything else. It is an independent group that is well versed, well documented, the whole deal. That was the attraction that I saw

	to it. It addresses all of those things.

Meeting Transcript, Morning Part 1b

Date: February 10, 2011
Location: Lexington, Kentucky

File: 02-10-11, Part 01b.mp3
Participants:

Abbreviation	Name	Affiliation
BW	Bill Winters	OSM
DS	Dianne Shawley	OSM
SV	Stephanie Varvell	OSM
LU	Lois Uranowski	OSM
JC	Jeff Coker	OSM
HP	Harry Paine	OSM
PE	Paul Ehret	OSM
JS	Jose Sosa	Polu Kai Services
DB	Dave Bell	Plexus
JMa	John Maxwell	Polu Kai Services
SG	Steve Gardner	ECSI
EL	Edmundo LaPorte	ECSI
JB	Jeff Baird	ECSI
DB	Doug Mynear	ECSI
JJ	Josh Jenkins	Mactec
AS	Ann Shortelle	Mactec
JMo	John Morgan	Morgan Worldwide
LE	Liz Edmundson	Morgan Worldwide

DM	I don't think any of us disagree with you. As a matter of fact, we met with John and discussed this before it was ever presented to OSM. So, we're not in disagreement with it but, there were several months of keeping the production levels at 1.1 billion tons per year was part of the assumptions we were working under.
BW	If you understand why I said the average of the last three years because obviously we had an issue with the supply and demand economics and all the variables that went into that that resulted in decreased production. That's the part I couldn't reconcile with the way that you guys were moving forward with 2008. How do we incorporate supply and demand economics and the whole deal? That's where I still say that John's idea is very good, because it addresses all that for us. If you guys in particular don't have to go on record as saying hey here's what our forecast in production, here's what our forecast, and consider all the 4,000 variables that go into supply and demand economics. That's why I like the idea. Fair enough? (unintelligible)
JJ	We like it, too. It's got to be, we can't just stick our heads in the sand and say two weeks. It just can't be done. It just can't be done with all these documents. And, I think there needs to be a little movement one way or the other. Please understand that concept.
BW	Another thing here Josh is, we move forward according to how you guys been going (unintelligible) 2008. How are we going to reconcile the whole supply demand cost increase? How are we going to reconcile that?
JJ	I'm not saying you can. I'm not saying you can where we are right now. What I'm understanding, what I understand that I hear is that you want a different approach on the

	production, which I don't think anyone here necessarily has an argument with from the technical approach. But, I think there is a lot of trepidation from the fact that you're still wanting this major shift and you want the whole thing delivered in two weeks. That is not doable. That's my biggest concern. And, you know, technically it sounds like it's a great way to go. It sounds like everyone around the table is thinking it's probably to your point. It take personal, it takes people off the hook as far as professional judgment. But my biggest concern is you've been saying February 23rd for the last two weeks now and...
DS	We have difficulty talking about; we can't talk about the time and the contractual requirements.
JJ	I understand.
DS (3:03)	I think we do need to focus on what's the best approach. And, if everyone here is in agreement that's the best approach then I think we need to go forward with that. I don't know how we deal with the other issue. My suggestion would be on the time, the cure notice asks for a response and a work plan; put it in the response and the work plan. I don't know where it will go from there but I think that the goal is to have a defensible EIS. And, that's a group of people you have here. On the contractual side of things, I think there is a way to present PKS' position. And, that's separate from the conversation here. So we, what we would like to do and that's a decision you need to make on how you want to use your time. Is we would like to go forward with [John Morgan's] proposal because we think it's the right way to go and you are all in agreement. And, see what we need to do to go down that path and come up with a better product. And, hopefully on the contractual side of things PKS will deal with it in the way they think they have to, our contract people will deal with it. That's all I can say. So I guess it's really up to you how you want to use the meeting, but I think we're not in disagreement over the way the document should go.
JS	And I think Dianne and Bill, I think that's, you framed it up the correct way. There is the overarching, you know, off the cliff deadline, 23rd, and I think, you know, at this stage, for both parties, if we don't produce a document that is defensible, everybody, everything is thrown out the window. So, you know, what you just said Dianne, I think, is the approach. Take the issues on the table, reconcile those issues, let us go back , and as she suggested, let's put in the plan what it would take, how long it's going to take, you know, to implement the dynamic model like John [Morgan] suggested and whatever financial, timeline, whatever implications. And, as she said, then contractually we can go back and either fight it out or do whatever it is. But, at the end of the day we got to produce a document that, you know, we're not going to be thrown, you know, under the bus by the cooperating agencies and everybody else that is writing, you know, nasty stuff, you know, out there in the press and the politicians and everybody else. To me, that's a fair approach.
DB	Jose, I think that's conceptually wonderful. I will tell you that the cure notice says fix the deficiencies, of which this is a major, major, major piece by the 23rd. It says, give us your plan, but the plan better fix the deficiencies so that we deliver a compliant PEIS and RIA by the 23rd. That's the, that's what this document says. Now, we can put together a plan that says we recommend that we change to this dynamic model that addresses concerns, legitimate concerns, that will all believe exist in the current approach. An approach that was agreed to and approved by the agency back in October, September, July, whatever, o.k. Put I got to tell you, when the contracting folks, they're not going to T for D us because, terminate for default; they're not going to terminate us for default because...
JS	T for C, T number 4 D, or D number 4 C.

Meeting Transcript, Morning Part 1b

Date: February 10, 2011
Location: Lexington, Kentucky

AS	I'm so glad I didn't know what that meant.
DB	It's a whole lot shorter than terminate for default. It doesn't sound quite as threatening.
JMa	It sounds like a pesticide.
DB	They're not going to terminate us for default if the agency believes that this is appropriate and for the reasons you just said, necessary to defend the document. They won't do it. But, we can't do it alone. That requires the project folks to be on board and supportive of it.
JJ	I think if we come out of this meeting with an approach that Bill and Dianne agree upon then it will make our case stronger to contracting that this is the correct way to deliver.
DB	Contracting has only enforced the words on the paper because the agency wants to enforce the words on the paper. They move the schedule at will based on the project's description of what is required.
JJ	We used to have a process that we need to follow at this point. And, I think our strength, our strength is the technical people to be working together. Otherwise we show fractured...
DB	I agree Josh.
JJ	And we don't need to do that.
DB	And were we not working with the technical folks to this point?
JJ	Yes, and we have new ones now.
DB	And so, I want to make sure that moving forward. When we work with the technical, the new technical folks today, and we come up with an answer that we all agree. That two months from now the next set of technical folks don't come in and say now that's wrong.
JJ	There's no guarantee. (unintelligible)
DB	I'm actually not digging your grave for you (unintelligible)
BW	One of our approaches could have been Dave, hand me the cure letter (unintelligible) have fun.
DB	Yeah, and we would have been in court and deal with that.
BW	I don't like that approach. I'm offering things to you guys. And so, please don't beat me up over things that I'm offering. I'm being serious Dave. All you're going to do is piss me off and I'm going to sit here and go, o.k. Dave, what do you want to do. Fix it.
DB	Our professional reputations, our professional lives are on the line here.
BW	I get it. I'm here to help you do that.
DW	Thank you very much. So were your predecessors.
BW	Please don't beat me up with ideas that I'm putting on the table to help us all get to the end of the day.
DW	So, if we decide that the dynamic model solves the problems, are we going to have your support within the agency that, yes, this is what we need to do. And, yes contracting, go mod the darn contract so that we can accomplish what we as professionals believe is technically necessary in order to move forward.
BW	Here's what I will tell you Dave, I will tell you...
DS (10:11)	Can I say one thing Bill? We will be asked, I'm sure, at the end of these two days, yeah, our opinion of how we thought things went and so I think the more progress we can make in the next two days and what we can go back and tell the Director is going to carry a lot of weight. I can't tell you that what either Bill or I say is the bottom line. But, I can tell you that we will be asked and, if we come away feeling like gee, we made great progress, we're on the right track, this is going to be a dam good EIS, OSM has a huge stake in it. I think that will go a very long way. And, you may have also noticed that a lot of the letters also, I mean the main thing

	they mention is OSM. And so, there's a lot at stake here. The other piece of it is, Dave, you know, we're going to put this out there and we're going to get tons of comments. And, everything that's in the document is going to be subject to attack. And, we may be persuaded that we need to make another change. So, I think, you know, we're going by consensus, it's not Bill dictating or whatever. But, I don't think any of us have a choice at this point. I think we may as well just, we agree that what John [Morgan] proposed is a good way to go. Then, I don't think everyone agrees to that, then let's go forward with it. And, we'll report back how things went.
JS	Are we then in agreement Dianne, two things, are we then in agreement that we're going to framework perhaps decisions and ideas here that we can then present in the cure, in the plan to cure the deficiencies of the EIS.
DS	I think that's a matter of judgment for you to make. But, I think that's the practical sense. I mean we're all here because we've got to fix the document.
JS	The other comment that I would make, is that getting a working draft, and unfortunately these documents have leaked out to everybody. O.K., but to get a first working draft, the interactive process of an EIS is exactly this. Under normal, 2 or 3 year process, you get a draft, no, I think we need to change, and the interaction and the change starts to take place. Here, from day one, and we've been making it known to the agency and the leadership. Unfortunately here I think we know that this has gone beyond you guys, gone beyond across the street, I think this is going way up to the administration. We all know that. But, we've made it known that, you know, the compressed nature of the schedule that you presented from the onset, and we took on. So, we've been trying to work together. So, the thing here is let's look at the ideas, lets present the plan, there's certain things that we can do humanly, you know, like we said some other time ago, it doesn't it doesn't matter if you put a million PhDs to work on something there's things that cannot be done in the period of time. And, we'll present the plan and say, this is what we think, you know, is doable. And then you guys, it's our judgment, your judgment and because at the end of the day it's both our exposures. As Dave said, we're all professionals, we all have certifications and licenses that we've worked 30, 40 years very hard to maintain and obtain. And, our respect from the peers. And, at the end of the day we want to come out of here with our dignity and respect of everybody. So, that's it.
BW	I want to address your comment specifically Dave. I mean, to be honest with you. We leave out, my goal is to leave here with a plan that we think is the best. If we do that, and come to consensus and it makes sense, I will support that. So, that's your answer, yes. As Dianne said, we are not the final say on that. So, as far as this baseline thing that [John Morgan's] talking about, you'll notice that it's not specifically on here, but it is a topic to discuss. And what I'd like to see come out of here is each one of these topics on these agenda, a plan. How are we going to address this folks? That's my goal, to leave here Friday and say, we talked about all these things, talked about the big major gaps, big major holes, here's the plan. I can support that. What I don't want to do is leave here and say, yeah we argued about it for two days. And Dave yelled at me for two days. I'll be honest with you, I will have failed.
DB	That will be failure. And, you know, you both said it. If you support it, I do believe that it will carry a great deal of weight within the agency. So, that, in and of itself, to me is worth its weight in gold. And, that is a basis to move forward and take each one of these items on the attachment and in the agenda and try to, as you say, get a plan. Have a plan moving forward. We got to write it down and at the end of the day, we'll send it back to you for concurrence

	that that's the plan for us to move forward, so we, so there's no misunderstanding as to what we have all said is the path forward.
BW	You're recording this?
DB	Yeah.
BW	Can you please say that you're done yelling at me?
DB	I'm done yelling at Bill.
BW	Thank-you. It's o.k. we're under a lot of stress here folks, it's o.k. This is not the first time anybody's been yelled at. It's o.k. What I would suggest, what I'd like to do anyway, is talk about our 9:30 agenda item. Because I think the reconcile chapter 3-4 high priority PKS analysis, my sense, and you can tell me if I'm wrong. My sense is we talk about the things on this agenda and work through issues that might come up. Which I'm sure there might be a thing or two that comes up. We will address the gaps, or at least reconcile what you guys put together with what we put together. That's my sense.
JMa	The next topic is the 30 CFR and SPR assumptions. Should those be made clear before we determine what are gaps?
BW	That's one of the reasons why we put together the document. We wanted to walk down this, walk through it. Here's what we did. As a matter of fact, let's pass those out. Put it up on the screen, however you guys want to deal with it. Here's what we did. What we did is, (unintelligible)
(15 minute break)	

Meeting Transcript, Morning Part 2a

Date: February 10, 2011
Location: Lexington, Kentucky

File: 02-10-11, Part 02a.mp3
Participants:

Abbreviation	Name	Affiliation
BW	Bill Winters	OSM
DS	Dianne Shawley	OSM
SV	Stephanie Varvell	OSM
LU	Lois Uranowski	OSM
JC	Jeff Coker	OSM
HP	Harry Paine	OSM
PE	Paul Ehret	OSM
JS	Jose Sosa	Polu Kai Services
DB	Dave Bell	Plexus
JMa	John Maxwell	Polu Kai Services
SG	Steve Gardner	ECSI
EL	Edmundo LaPorte	ECSI
JB	Jeff Baird	ECSI
DB	Doug Mynear	ECSI
JJ	Josh Jenkins	Mactec
AS	Ann Shortelle	Mactec
JMo	John Morgan	Morgan Worldwide
LE	Liz Edmundson	Morgan Worldwide

BW	Let me set up the format of what this is. This is what we did. We took each one of the elements. Now you know this is (unintelligible) EIS. Sometimes it says eleven elements, sometimes it says 13, I think there's one that even says 15. This is not according to any number. Because you'll see the last three pages say miscellaneous. O.K. So don't get caught up in the number. Because element number 5 is not going to match EIS element number 5 the way you guys put them together. So look at the headings. So number one is stream definition. You'll see the first two bullets of stream definition frankly are the content of the reg. And then you'll see parentheses, that's the exact reg cite. Hey John, you want sunglasses? Then you'll see under that we did something called purpose. Which, here's what we're trying to accomplish with that particular reg or element. O.K. We tried to keep those concise. And then you'll see what we think are the benefits. Now, let me make this clear. Let's be clear about this. We're not handing you this document and saying here's the answer. O.K. We did this internally for us to keep track of things. So, when we said benefit, those are our initial thoughts on what benefits are. We would really like to hear your thoughts as well. So, everybody's clear with that? We're not handing this to you and saying, here, this is the cost benefit. We're not doing that. This is our conceptual thoughts on paper to help clarify the rule.
JMo	Can I ask one question Bill which has been disturbing me for a while about this which is that I thought our mandate was to conduct an EIS, which is looking for alternatives. And a range of alternatives which we categorize Alternatives 2 through 5. I think, and Dave you're probably more of a NEPA expert than any of us, is that we in EIS production, our aim is to make sure

	that it's a balanced document that evaluates all the alternatives. And, I think that we've got to be very careful that we don't suddenly, because of your being on the rule team, have your focus, which is in far more detail than we have on the other elements which we looked at for alternatives 2, 3, and 4. So, overlying all this as I think this is very critical that whatever we do on 5 we also do on 2, 3, and 4. Because otherwise (unintelligible) open for challenge. And, if we have to simplify the elements to a certain extent, which is what happened in Chapter 2, in order to categorize the rule, or one of the alternative rules, I think we need to go that way. Because, otherwise we're never going to have a balanced EIS. And I know you've got a propensity because you've lived the rule for so long.
BW	Yeah, so help me understand. Let me try to parrot back to you what you just said. What you're saying is in order to make the alternatives analysis and comparison meaningful, it may need to pare back some of the elements.
	What I'm saying is that if you look at the normal process of an EIS, it's to look at the process to guide the rulemaking. The process is being accelerated so the rulemaking has been going on in parallel with the EIS. The rulemaking has reached a much higher degree of sophistication than the alternatives discussed in the EIS. Just because the natural timeframe, which you said yourself. So you have two parallel tracks. Normally, they should have been sequential that you'd have done the EIS, then you developed the rule based on public comments and you'd move forward there. You short-circuited it. So, now you have a rule out there and you have an EIS which is trying to play catch up. And I think it's very critical (unintelligible) not relevant in alternative three, which had merits and during the public comment to say, we really like that idea. Then you've got to develop enough clarity within the EIS to say that could be switched for a similar element in alternative 5.
BW	Yeah, I think we can do that.
JMo	But, the underlying point is that all the discussions I've seen recently from people who've been on the rule team is that you've been involved so intimately with that we've been discussing to a level of detail,. We've never had that detail for some of the different potential elements which would have been in that same alternative 3 or 4. And that's why I think we've got to get that balance.
	I hear what you're saying. I don't think what we're saying is the level of detail. What I am saying is that we see things in the rule that don't, aren't consistent even with 30CFR as it stands. Now, let alone the proposed rule. And the one that Steve and I love to discuss is material damage. And, if those assumptions or interpretations that you guys made underlie your analysis, what comes out of the end of that's going to be flawed. We think that's where we're at. And, so the goal of this is not to go through this in excruciating detail, even though there's more detail here to your point, there is more detail in hear than you'll need. But we thought that by walking through here, we could help, talking about the generic purposes of what we're trying to accomplish.
JMo	I just think in the comments I read, there was a danger that people were referring back to the proposed rule to say something's wrong in the EIS. Where, in reality, the proposed rule shouldn't even be out there to (unintelligible) the EIS. It should be the concept of a rule as if equally to the concept of the other alternatives.
LE	(unintelligible) in evaluating the proposed rule, we're using the text from Chapter 2, we're not looking at what the proposed rule says. So, if there's something that is more elaborative in chapter (unintelligible), during the proposed rule that is not in Chapter 2, that's not a consideration in our evaluation.

	Let's walk through that because I think...
LE	And I think that's where some commenters are getting confused, because they're like well this rule does this, this, and this Chapter 2 and it doesn't say that.
DB	This started out as a programmatic-level approach. And so, the alternatives were developed with concepts in these 11 principal elements. Alternative 5, which represented the conceptual elements, or the concepts that the rule would take into account, was written much more broadly until November or so.
DS	And I think, and I would agree with you from a legal standpoint. As long as the discussion of, that's in Chapter 2 is broad enough to, so that the rule as it's finally proposed, can be derived from that and shows a, the range of alternatives fully discussed. I think, Bill's point, is you need a really good understanding of the preferred alternative. That is where the rule is at this point although it may change. So, this will help. This discussion will help and it will also allow you to QA/QC what you've said and make sure, one of the comments were that there seemed to be some misunderstanding. So,
DB	I think you're talking two different, there are two different things going on.
DS	I think maybe if we start to work your points really good. If we start to work through Bill's, what Bill, Lois, Harry put together and maybe get into it a little bit that might help direct our discussion.
JMo (8:18)	I don't disagree with clarification of the details at all. I never did that. All I'm making sure is that where we come out of this is a balance in discussions in Chapter 4 between the alternatives. And, if you're given comments like this on alternative 5, to match the proposed rule. Then we need to have an equal clarification and expansion on alternatives 2, 3, and 4 to keep that balance.
LE	And it would probably be beneficial to clarify what those alternatives are since there might similar misunderstandings and differences in interpretation.
DB	And, the danger we've got to guard against, frankly from my perspective is that we not write alternative 5 so that it is precise rule provisions. Because if we do that, now we're going back and rewriting Chapter 2.
BW	We're not saying that.
DB	Yeah. We can talk about what the rule says, and then try to develop a little umbrella under which that concept can rest.
DS	We want it broad enough and general enough so that we can be reactive to public comment and not have to go back and change the, and do a supplemental EIS.
DB	Absolutely. That's the right way to do it. Can you just turn that, just ever so slightly? (unintelligible)
JMa	Is this what you're going to put up on the screen?
BW	Yes.
JMa	I think it would be more helpful for me to work from the paper and just write notes on the paper as we're talking about it. (unintelligible)
BW	I think your point John is consistency among the alternatives and then not get into the technical weeds on the rule.
JMo	Yeah.
BW	We agree. (unintelligible)
BW (11:07)	This is set up to say, here's what we're trying to do, here's the rule language, here's the purpose, what we think the benefit is, what we think the costs are. Because at the end of the

	day, that's kind of one of the things we got to get across in the EIS. So, why don't we just walk through this element by element. And if there's questions, thoughts, comments, concerns let's talk about them. Steam definitions. Frankly, all we're trying to do is put a biological component on stream definition to make the process easier. Because right now, everything is flow-based. And, I've been in enough arguments when I was doing permitting with folks to draw the intermittent/ephemeral point on a map. You go out there on Tuesday and it's here, you go out there Wednesday, and it's here. I've seen people get red faced, mad and leave. This is designed to get rid of some of that, nothing else. Clear? O.K. Costs, benefits, purpose, the whole deal. What I'll do is walk through here and kind of tell you what we were trying to get, our intent. I'll let you guys try to look at the cost benefits and if you see something that's way out in left field, let us know. If you see something you think needs to be added as far as cost/benefit, please make a note on your , on your outline here, and I'd like to see it. Fair enough? I think we've got like 13 of these to get through. But, we got an hour to do it so we have plenty of time. (unintelligible) O.K. Let's move to number 2, material damage, because this might start some discussion. Here's what we're trying to get at here. There's never been officially defined material damage in 30 CFR. With the exception of alluvial (unintelligible). O.K. And there is some discussion of material damage about subsidence but this is material damage to the hydrologic balance. Two points. There's two concepts in SMCRA that you need to be aware of, two global points. One is damage outside the permit and one is damage inside the permit. The generic standard outside the permit is prevent material damage. The generic standard inside the permit is minimize. O.K. So this is material damage to the hydrologic balance outside permit. This is focused on use. Whether it's groundwater use, stream sue. The most active context is normally stream use. That's one of the reasons why we tied it to the clean water act. Because the clean water act, every other year or every third year, some rotation. They have to go out, or They're supposed to go out, and do an analysis of their streams. That's where they generate the 303d list. They have a prescribed method, a prescribed protocol. It's quantitative, it's accepted. The whole deal. So, we decided, we're not going to reinvent the wheel here. If you're going to look at streams, here's the 305B method. Hell, it's already approved. We don't need to reinvent the wheel. So the whole deal is, prevent material damage. It Doesn't preclude use, that's stream use, groundwater use, whatever they have to (unintelligible) outside the permit. O.K. There's a clarification on the bottom there, down towards the bottom there of (unintelligible) about underground mining. It's the second bullet actually. (unintelligible) Steve and I've discussed once or twice.
SG	We thought we were on the same page. (unintelligible)
BW	We think we are now. But, the deal with underground mining is, you have two types. You got some that are planned subsidence. Some are unplanned subsidence. Planned subsidence says you're going to have subsidence. It's not the subsidence we're trying to prevent. Some people have erroneously picked that up and say well 'What do you mean you can't have subsidence?' Well, it doesn't say that. What it does say is if your subsidence causes material damage; if you go out and long wall panel, long wall mine, which is planned subsidence, high extraction, you're going to get subsidence. If you long wall underneath the stream with a hundred feet of cover, you're going to take the stream. If the stream has no water in it, how is it meeting its designated uses? And, the answer is - well, it's not. So that's material damage. So then there's another trick that some agencies have tried which is to put the whole underground mine plan inside permit boundaries. So then the standard becomes minimized. No. We put some language in there to clarify that because that's not the intent. If that was the case we'd

	just draw permit lines the size of Tennessee and say, hey we're inside the permit now all we got to do is minimize. No.Not going down that road either. So, it's not the subsidence. It's the effects of the subsidence.
LU	And, it's also not elevation change.
BW	Correct. It was stated in the EIS that way.
BW	Yes.
JMa	And this is something determined on a permit-specific basis, right?
JMa	And in that case how is it possible to quantify that (unintelligible).
BW (16:50)	Let's back that, I'll be with you in one second Steve. 20-second history lesson. When SMCRA first came out, this term material damage was talked about, There was proposed definitions thrown around. At that point in time we decided, SMCRA language says. The states shall develop their own definition of material damage. We thought, we're not going to weigh in, come up with this national thing. Each region's different, each state can pick whatever they want for material damage criteria. What happened is, there's about five states that did that out of 26. And so, the rest of it is this kind of this big, gray fuzzy mush ball. I'll know it when I see it. It's professional judgment, blah, blah, blah. No, that's not, that was not the intent of SMCRA. And, frankly, OSM has struggled with weighing in and telling states that doesn't cut it. That is, some of that's on us. This is an attempt to correct that. Mr. Gardner.
JMa	So in order to quantify that, do we look at past violations (unintelligible) percentage for each region.
BW	Steve, I know you're dying to address that. Go ahead.
SG	Well, I think the comment about what we've written so far in the chapter that was the only thing I should have caught. But, we need to clarify that it's not just the elevation change. But, I thought we did, we were on the same page in our discussions that material damage that material damage has changed. What Kentucky does, and I think Utah does, on their underground boundaries, was it in the famous letter that we received from OSM clarifying the underground issue. The disingenuous nature of using that as a permit criteria (unintelligible). That is a fact. That is the way it has been done in those two states. I thought we were on the same page, that we understood what your interpretation was is that material damage is impact on the hydrologic system. Just the elevation change is not that. But, if you do impact the hydrologic balance by an elevation change then that area probably would not be permitted.
BW	Well, that's going to be the assessment they make on the up front. But, I don't like to link the elevation change at all. Because, we see lots of long wall panels, Steve, underground, underground or under mine streams. The stream's still flowing. They might cut the gates (unintelligible)
LU	Or, the opposite. You have no elevation change but you still have material damage because you have these great big cracks in the sandstone (unintelligible)
SG	I can see that that needs to be clarified and changed. (unintelligible) We talked to Brent about that. But still, I think we're clear on the fact that this changes the standard to material damage. Or, I think, you say it's always been there but...
BW	It has.
	But it's just the way it's been enforced. And it's supposed to be more consistent now across the states. And, it will result in some mines not being permitted.
HP	You know, I wouldn't, I wouldn't be so broad in that area. I mean, if you take an example,

	there might be certain areas of a mine that are so shallow above the overburden that they cannot do either room and pillar mining. They're too shallow. Because you're going to dewater the above the mine streams. I remember that in Ohio we had people who wanted to room and pillar under perennial streams that were 80 feet of cover. And, that was all sandstone fracture. We said, you know, you're going to completely dewater the stream. We can't, we can't allow that. So I think, but if they move to higher cover, you know, these underground mines, the one's I'm familiar with sometimes are thousands of acres. So, to say entire permit would be denied, I think is too broad.
SG (20:31)	Well, I wouldn't say the entire permit. Let me go back and clarify that. Areas of, certain areas that have previously been permitted will not be permitted in the future under this standard.
BW	This is where we will conceptually disagree. Because I think that (unintelligible) I can't be subtle Steve. I'm not going to be subtle. You take the states of West Virginia and Kentucky, yeah, there might be some areas in there that they may have to reconsider. But, you take states like Pennsylvania, Ohio, everywhere else around them, we've been doing that. So, that's why I say we can't say there's a generic statement. That's the trouble I have with your statement is we can't generically say that, to Harry's point, that a) mines are going to be denied. Because, to me, we don't start with denial what we start with is 'How do we make this mine plan work?' I did permit review. I ran an office consulting. I did that. That's where we started. We didn't start with the negative. We didn't start with 'you're not going to get a permit.' So we started with 'How do we change the mine plan to make this happen?' And so there are areas, not permits, areas, that would be, would have an issue. We honestly think, and I will believe this to the day I die, that that is supposed to be going on right now. And, it is in most states. If it's not in West Virginia and Kentucky I don't say we that hold that as the standard and say this is how everybody else on the planet does it. We're going to have to do some averaging there and so, O.K. West Virginia and Kentucky, yeah they might be a little (unintelligible). But, they frankly should have been doing this all along. This analysis, it's a hydrologic analysis. The PHC is supposed to pick up on it from the consultant. The industry is, through the regulatory authority is supposed to do a CHIA. Between those two people, they are supposed to Identify the issue and then reconcile it. We can't, we know we're not kings of the world. We can't weigh in on every permit and say 'Dude, you're not doing that right.' We have done some of that in the past. We have done some modifications, but I tend to agree that there is some areas in some states may not be mined. We don't think we're talking, we're looking at wholesale permit denial. I just don't believe that.
SG	I'm not trying to say that. There will be areas that will not be permittable under this standard. How's that?
BW	Yeah, we agree.
SG	I think that maybe it will impact Illinois also because getting into that zone of long wall mines with less that 400 ft of cover, greater that 400 may also be impact. Those mines can still probably be permitted and mined under, say, room and pillar without retreat.
BW	I don't know, because see the hydrologic setting the whole hydrologic issue. And, Paul, help me out here cause you may know something about Indiana. (unintelligible) The hydrologic issue (unintelligible) is basically you're flat and you're cutting a hole in the groundwater table. So, to get groundwater levels to rebound, sometimes that's not a big stroke. So, I think the hydrologic issue's different. And, I would not make that blanket statement to say, in the east we talked about numbers. And, this is kind of the analysis I would like to see Based on stream density. Is, I thought, was a really good idea. (unintelligible) If we took some, The assumption

	is if you're long wall under 350 ft of cover, you're going to impact the streams. So, if you've got this stream density GIS, you come up with a script fill, you draw a 300 ft boundary around it on a potential long wall mine. Say, o.k., these reserves might not be mineable. Maybe room and pillar it's 150 feet. But, that gives you an analytical base on which to make that statement and It's not you and me arguing about what you think it is and what I think it is. It's an analytical base and then what we talk about is, O.K., Is the number 150 or is it 175? And we'll throw it out ther and everybody, everybody and their brother will have a comment on 175. But, at the end of the day, it's a common base for everybody to start with. So...
SG	Well, I don't think we disagree a whole lot on this. It's the fact that we're on a programmatic analysis of the potential impacts. And, we're trying to grasp some number of how far. If we got more time and budget we can do it on a very detailed basis And, come up with exact numbers of the impacts of those. But that's not what was possible under this contract.
BW	I think that the key thing here is that we don't disagree with your statement that some areas according to element (unintelligible) . I think the magnitude is probably where we might have exception. That's where we've put together the rationale thought behind the production shifts. (unintelligible) think, now remember, this was a big one. That's important to understand, how you guys arrived at that. Frankly, we got 50,000 questions about that (unintelligible). We got beat up pretty good on that. Anything that you can do to quantify the production shift thing in some method and anything that you can do to help us understand. Because, there was lots and lots and lots of comment and we had a hard time answering questions.
SG	And that's one of the things we were still working on, quantifying, after our last meeting here in Lexington.
DS (25:41)	On setting out the assumptions. Now in what you were saying, if you're talking about, if you're in agreement, that it's, what did he say, what were the states, Kentucky, West Virginia you mentioned. Yeah. You mentioned Illinois. The discussion should be that narrow. It should be, that may be an issue here and, you know, the assumption is this and this. That some parts of this, that some areas under a permit may not be able to be mined, and why. And, I don't know if you've already done that, but I would think that that would be setting out the assumptions and not using the meat clever, trying to use the scalpel as much as possible.
BW	I think fair Steve, to character- I mean, talking as a professional here. I think if I was going to describe it I would say, here's the conditions of what we think there might be a new type of production. How long wall mines come under blah, blah, blah. Room and pillar mines under stream valley, blah, blah, blah. I think it's fair to set those up and from there, go into your assumptions . Because you're framing your assumptions in some quantitative basis. And, I think that was one of the things missing in the past, (unintelligible) it appeared as though they were just a number. So, I think if we did that going forward, here's our assumptions. Long wall is under 350, room and pillar under blah, blah, blah. Whatever, number, whatever way you guys want to do it. Anything that you can do like that is greatly beneficial in this effort. And, in that way we focus this discussion on (unintelligible) 175. Rather than, how the hell did you come up with those numbers. I think we're on the same page. I think we are. I just caution against, I just caution again to say that the conditions that are on the ground, possibly, in West Virginia and Kentucky may not be the way it is across the remaining 22, 24 states. And, I'm sure Roger Calhoun and Joe Blackburn might (unintelligible)
SG	No, I agree with that.

Meeting Transcript, Morning Part 2a

Date: February 10, 2011
Location: Lexington, Kentucky

BW	O.K. I think that's fair. (unintelligible) Any other thoughts, questions, comments on the material damage thing? Because, (unintelligible). This is one of the bigger ones.
DB (28:09)	You've identified in your paper, the, several specific sections. Are those the only places where you saw an issue?
BW	What are you talking about?
DB	I'm talking about your paper from Monday. Your, your list of items.
BW	Yeah, I put some examples. Just to give some meat to what we were drinking. That's where I was going when John said about consistency. That's what I was trying to clarify. Because I could point to specific examples where we make the, there's just a total either misprint or misunderstanding. And listening to Steve. I mean, I know Steve. I know Steve knows what the deal is. I think there was just, The whole evaluation change thing, was probably, he was thinking of it in one terms, we're thinking of it in another. That's where we got to reconcile. Because, a lot of the cooperating agencies. That's exactly (unintelligible) the elevation change. A lot of the cooperation (unintelligible). How is material damage related to elevation change? Not until you understand subsidence, and have the discussion we did today, well, yeah, that's what he meant.
DB	Brent brought that up in the face-to-face. So, we talked about that specific example and got clarification of that. On the other ones, do we need clarification? On the ones that Bill specifically mentions in the paper.
BW	The one's that I sent that you don't have?
DB	The prioritized list. I mean, I want to make sure we address , you know, obviously the things where you have honed in on something. And then, more globally the concepts that....
SG	I think we can go back and address those. I don't know if we need to discuss those in detail at this time.
DB	I'm just saying, you have the framework to do that so I'm going to check that off as a part of our plan moving forward.
BW	What I would suggest , to be honest with you. I'll just tell you what I'd like to see in that plan. What I'd like to see in that plan is the authors will go through and have a look at their sections of rule interpretations in light of our discussion here . And, that way we don't have to sit here and itemize every little thing that we think is, even though I think you'll find in the comments (end of recording).

Congressional Request Item 3.

A list of all individuals or entities including their titles and telephone and mailing contact information receiving chapters of the draft Environmental Impact Statement (EIS) provided by Polu Kai or the DOI and the date on which draft chapters of the EIS was received.

PKS Submitted Document Recipients

The PKS team provided project related information exclusively to OSM/DOI personnel. No public entities were provided any project documents from the PKS team. Submittal/access details are provided below:

Draft Conceptual Regulatory Impact Analysis Report

10/18/2010 7:11 PM posted to electronic file access site restricted to OSM personnel

Preliminary Draft EIS Chapters

Chapter 1: August 11, 2010 12:42 AM by email

- Nancy Sloanhoffer, Contract Specialist, OSMRE, nsloanhoffer@osmre.gov, 1951 Constitution Avenue NW, South Interior Building, Room 353, Washington, D.C. (202)208-2902 (office), (202)219-3104 (fax)
- Stephanie Varvell, Senior Program Analyst, OSMRE, svarvell@osmre.gov, 2679 Regency Road, Lexington, KY 40503 (859) 260-3925
- John R. Craynon, P.E., Chief, Division of Regulatory Support, OSMRE, jcraynon@osmre.gov,

Chapter 2: October 4, 2010 6:52 PM by email

- Nancy Sloanhoffer, OSMRE,
- Stephanie Varvell, OSMRE
- John Craynon, OSMRE

Chapter 3: October 22, 2010 9:37 by email

- Nancy Sloanhoffer, OSMRE
- Stephanie Varvell, OSMRE
- John Craynon, OSMRE

Chapter 4: January 12, 2011 10:18 by email

- Nancy Sloanhoffer, OSMRE
- Stephanie Varvell, OSMRE
- John Craynon, OSMRE

Chapter 5: February 20, 2011 10:30 by email

- Bill Winters, OSMRE, bwinters@osmre.gov, (865) 545-4103 ext. 170

Complete PDEIS (all chapters) February 24, 2011 11:45-11:46 AM posted to electronic file access site restricted to OSM personnel listed below:

- Nancy Sloanhoffer, OSMRE
- Stephanie Varvell, OSMRE
- Bill Winters, OSMRE
- Dianne Shawley, OSMRE, dshawley@osmre.gov,
- Lois Uranowski, OSMRE, luranowski@osmre.gov, (412) 937-2805

OSMRE personnel granted access to electronic files. Additional contact information can be obtained through OSMRE:

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Winters, Bill	bwinters@osmre.gov	6/18/2010
Yellowman, Mychal	myellowman@osmre.gov	6/29/2010

Response to Item 4

Agreements to maintain confidentiality related to the project and this inquiry are provided in two documents. The original Scope of Work provided by OSM includes the two items reproduced below. A second document addressing release of claims (included under this tab) contains similar confidentiality language.

Selected text from SOW:

RELEASE OF INFORMATION
The Contractor may not disseminate any information concerning the specific project without special written approval of the Contracting Officer.

Limited Use of Data
Performance of this effort may require the contractor to access and use data and information proprietary to a Government agency or Government contractor which is of such a nature that its dissemination or use, other than in performance of this effort, would be adverse to the interests of the Government and/or others.
Contractor and/or contractor personnel shall not divulge or release data or information developed or obtained in performance of this effort, until made public by the Government, except to authorize Government personnel or upon written approval of the Contracting Officer (CO). The contractor shall not use, disclose, or reproduce proprietary data that bears a restrictive legend, other than as required in the performance of this effort. Nothing herein shall preclude the use of any data independently acquired by the contractor without such limitations or prohibit an agreement at no cost to the Government between the contractor and the data owner which provides for greater rights to the contractor.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE OF PAGES
		1 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
0005	03/24/2011		

6. ISSUED BY CODE S10

OSM, Headquarters
1951 Constitution Ave, NW
Washington DC 20240

7. ADMINISTERED BY (If other than Item 6) CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

POLU KAI SERVICES, LLC
Attn: ATTN GOVERNMENT POC
137 NORTH WASHINGTON STREET
FALLS CHURCH VA 22046-2931

CODE 0070171114 FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. S10PC00060

10B. DATED (SEE ITEM 13) 06/01/2010

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) FAR Clause 52.243-1 Changes

E. IMPORTANT: Contractor ☐ is not, [X] is required to sign this document and return 3 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)
This modification is issued to make the following changes: (See attached pages):

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
Jose J. Sosa: Executive Vice President	Nancy E. Sloanhoffer
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED 3/24/2011
16B. UNITED STATES OF AMERICA (Signature of Contracting Officer)	16C. DATE SIGNED 03/24/2011

NAME OF OFFEROR OR CONTRACTOR
POLU KAI SERVICES, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	1. The period of performance as set forth in Section F.1 of the contract, 06/01/2010 to 05/31/2011, is hereby revised to read 06/1/10-03/24/11. 2. OSM and PKS agree not to make any statements, written or verbal, or cause or encourage others, including subcontractors, to make any statements, written or verbal, that defame, disparage, ridicule or in any way criticize the personal or business reputation, practices or conduct of the other party, its employees, directors and officers. OSM and PKS acknowledge and agree that this prohibition extends to statements, written or verbal, made to anyone, including but not limited to, the news media, investors, potential investors, any board of directors or advisory board of directors, industry analysts, competitors, strategic partners, vendors, employees (past and present), and clients. OSM and PKS acknowledge and agree that, notwithstanding the foregoing, the parties are not prohibited from disclosing any information to their attorneys or in response to a lawful subpoena, congressional inquiry, administrative proceeding, court order, Freedom of Information Act (FOIA) request, or other legal requirement, including under the Federal Acquisition Regulation. If either party is required to disclose information under operation of law, the party will disclose only such information as is legally required or ordered by a court of competent jurisdiction or other competent administrative body. 3. Pursuant to the terms of this contract, and in consideration of the sum of $3,700,269, which has been or is to be paid under the contract to PKS by OSM, PKS unconditionally waives and releases the Government from any and all obligations, liabilities, and existing and future claims and demands, known or unknown, that it may have against the Government arising under or relating to this contract. Similarly, the Government unconditionally waives and releases PKS from any and all obligations, liabilities, and existing and future claims and demands, known or unknown, that it may have against PKS arising under or relating to this contract. Continued ...				

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	S10PC00060/0005	3	3

NAME OF OFFEROR OR CONTRACTOR
POLU KAI SERVICES, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	4. The parties will promptly take any further necessary actions to close out the contract and execute the terms of this modification including, but not limited to, proper disposition of government property and submission of any further documentation. 5. The Contract Amount is decreased by: $1,281,401. Contract Total Amount is revised to read: $3,700,269. All other terms and conditions remain the same.				

SOLICITATION - SECTION B

Payment will be made every other month per the Payment Schedule in Section F of the Statement of Work as follows:

Item	Description	Qty.	Unit	Unit Price	Total Amount
0001	Monthly Progress of segments of the DEIS with approved comments (9.1 – 9.9) (5% per payment)	4		$_____	$_____
0002	Approval of Preliminary DEIS and complete mailing (30%) (9.10)	1		$_____	$_____
0003	Monthly Progress of Draft FEIS (9.11 – 9.15) (5% per payment)	3		$_____	$_____
0004	Approval of Proposed FEIS and complete mailing (30%) (9.16)	1		$_____	$_____
0005	Execution of Release Claims and Receipt of all originals and record in Required format (5%) (9.17)	1		$_____	$_____
TOTAL					$_____

52.232-19 AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR. (Apr 1984)

Funds are not presently available for performance under this contract beyond September 30, 2010. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond September 30, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

SECTION C - SUPPORTING INFORMATION, SPECIFICATIONS, AND REFERENCE MATERIALS

Office of Surface Mining, Reclamation & Enforcement (OSM)

Statement of Work
For the
Preparation of an
Environmental Impact Statement

STATEMENT OF WORK

1.0 INTRODUCTION

The OSM will require Contractor support services for the preparation of a draft and final environmental impact statements (EIS) prepared under the National Environmental Policy Act (NEPA). Contractor support services will be required also for: preparing floodplain and wetlands assessments, complying with related Executive Orders, statutes such as the National Historic Preservation Act and the Endangered Species Act and their implementing regulations, policies, guidance and procedures; incorporating NEPA values (such as analysis of cumulative, offsite, ecological, and socioeconomic impacts); preparing supplemental analyses, compiling environmental information to support the NEPA process, and evaluating environmental information used in EISs. This Scope of Work (SOW) describes in a general manner the range of services that are anticipated over the duration of this contract.

This SOW provides for the analysis of the potential environmental impacts resulting from the proposed rulemaking action as well as its alternatives, to include the no action alternative. The federal action, together with the alternatives related to it, is hereafter referred to in this SOW as the proposed action and its alternatives.

2.0 BACKGROUND

2.1 NEPA is our basic national charter for the protection of the environment. It establishes policy, sets goals, and specifies the process for carrying out the policy. In part, NEPA states that all federal agencies shall "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment. " NEPA, at Section 102(2)(C), requires federal agencies to include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, a detailed statement known as an EIS on: "(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-turn productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."

2.2 The Council on Environmental Quality's (CEQ's) NEPA implementing regulations, at 40 CFR §1500-1508, are binding on all federal agencies, and establish the minimum general requirements that assure NEPA compliance. These CEQ regulations establish a multistage process that describes how the agency is to analyze and describe to the public and the decision maker any significant environmental impacts that could result from carrying out a proposed action.

STATEMENT OF WORK – CONTINUED

2.3 The CEQ regulations at 40 CFR § 1502.10 establish requirements for an EIS. The recommended format is described at 40 CFR 1502.10: (a) cover sheet, (b) summary, (c) table of contents, (d) purpose of and need for action, (e) alternatives, including the proposed action (sections 102(2)(C)(iii) and 102(2)(E) of NEPA), (f) affected environment, (g) environmental consequences (especially sections102(2)(C) (i), (ii) (iv), and (v) of NEPA), (h) list of preparers, (i) list of agencies, organizations, and persons to whom copies of the EIS are sent, (j) index, (k) appendices (if any).

2.4 The Department of the Interior regulations contains its procedures for implementing NEPA and is located at 43 CFR Part 46. These regulations also contain the Departmental policies and procedures for compliance with NEPA, Executive Order (E.O.) 11514, E.O. 13352, and the Council of Environmental Quality's (CEQ's) regulations (40 CFR Parts 1500-1508). Department officials will use these regulatory requirements in conjunction with and supplementary to these authorities.

2.5 OSM has provided as attachment #1 draft language to be inserted in the portions of the EIS that describe the "purpose and need for agency action". The list of "alternatives including the preferred alternative" is provided as attachment #2. All other portions of the EIS, which are prepared by a Contractor, are subject to review and approval of data and analyses by OSM and cooperating agencies.

2.6 Proposed actions, alternatives, and issues to be addressed in the OSM's NEPA documents may be highly complex, and the subject areas may be technologically and scientifically precedent-setting. The proposed actions and range of alternatives to the proposed actions that may need to be analyzed are often unpredictable and may change during document preparation of the Draft EIS (DEIS) and the Final EIS (FEIS) as a result of factors such as agency evaluation and negotiation, public comment, or external developments. The Contractor will be expected to make corresponding changes in research, data collection, analysis and related documentation and services.

2.7 The EIS preparation requires an integrated interdisciplinary approach. The preparers' disciplines must be appropriate to the identified scope and issues. The NEPA document preparation team shall include but is not limited to: various fields of engineering, surface and groundwater hydrology and water quality, geomorphology and fluvial processes, geology and seismicity, air quality and meteorology, radioactive and chemical contaminant transport, traffic and transportation safety, terrestrial and aquatic ecology, land use management, endangered species biology, soil science, wetland management, water resource planning, paleontology, archaeology and cultural resources, utility and infrastructure design, occupational and public health and safety, noise, socioeconomics, visual resources, recreation, landscape architecture, environmental justice, adaptive management, modeling, statistical analysis, and risk assessment.

2.8 These NEPA documents will address highly controversial issues and will be subject to rigorous review by experts in scientific and legal fields, federal and state agencies, tribes, interest groups, the general public, and the courts.

A. SCOPE

3.1 This SOW is for the preparation of a draft and final EIS to include the completion of the necessary environmental impact analyses and their appropriate documentation and review under the requirements of the National Environmental Policy Act (NEPA). The EISs and the processes for their preparation must be consistent with and meet all requirements of NEPA and implementing CEQ regulations (hereafter referred to as the CEQ regulations) and guidance. These requirements are referred to collectively hereafter as the federal NEPA requirements, or simply NEPA. Contractor data collection, analysis, and documentation will identify and evaluate all relevant impacts, conditions, and issues associated with the proposed action, and the alternatives in accordance with NEPA.

3.2 The EIS shall:

A. Include a cover sheet, table of contents, summary, introduction, including a description of the proposed federal action (the rulemaking), the purpose of the proposed action, and the need for the action, and a description of the organization of the document, a discussion of background information including issues raised in the comments on the ANPR, and a description of the scope of the EIS analysis;
B. Describe the alternatives of the proposed action;
C. Describe existing conditions and environmental impacts resulting from the proposed action and related to the physical environment, including topography, geology, soils, mineral resources, hydrology, ecology, meteorological conditions, air and noise quality, environmental justice, economics, cultural environment (including but not limited to: population, employment, housing, land use, zoning, transportation, utilities and community);
D. Describe unavoidable adverse impacts, and any mitigation;
E. Describe the relationship between the local short-term uses of the human environment and the maintenance and enhancement of the long-term productivity;
F. Describe the potential alternative courses of action (including no action) and their impacts;
G. Analyze the unavoidable commitment of resources required to complete the proposed action;

STATEMENT OF WORK – CONTINUED

H. Contain a Regulatory Impact Analysis with cost-benefit data that fulfills the requirements of sections 6(a)(3) (B) and (C) of Executive Order 12866, 40 CFR 1502.23, OMB Circular A-4 and the Regulatory Flexibility Act (5 U.S.C.601).

I. Discuss the public awareness of the proposal; list the agencies, groups, and individuals consulted during the environmental review process and public comments;

J. Provide documentary support for all of the above;

1) Set the analysis of alternatives against the base alternative of "no action".

2) Documents prepared shall include, but not be limited to:

a. Collection and analysis of all available pertinent data;
b. Identification of short and long-term impacts;
c. Definition and discussion of potential primary impacts;
d. Categorization of potential impacts by geographic area (i.e., on-site, immediate vicinity, watershed, regional, national, etc);
e. Comparative analysis of the alternative courses of action.

The final product of the Contract will be a detailed analysis of all potential impacts that reasonably can be expected to occur as a result of the proposed action. Measures to neutralize or eliminate adverse impacts of the proposed action shall be discussed in detail. Potential adverse impacts which cannot be reasonably avoided shall be discussed in detail, along with measures to mitigate these impacts.

3) Use of existing information

Existing information shall be fully utilized in order to avoid duplication of previous research that may be pertinent to the proposed action. On the date of the award of the contract, the OSM will furnish the Contractor with all known pertinent data and documents; however, such data is limited. The Contractor shall be solely responsible for accessing and utilizing all non-OSM sources which are relevant to the proposed federal action.

4) Collection of Empirical Data
The use of various analytical models by the Contractor in assessing the environmental impacts arising from the proposed action will necessitate the establishment of a data baseline.

Existing data available from Federal, state, and local government agencies and tribes shall be used whenever possible, assuming that the data is widely considered as accurate and extant (i.e. Standard Methods). It shall be the sole responsibility of the Contractor to obtain all information necessary for the full, accurate, and timely completion of the contract. The Contractor shall also be responsible for thoroughly reviewing and assessing the validity of previously generated data and shall provide a complete detailed description of the methodology used in this regard. The Contractor shall institute a professionally acceptable program of empirical research and data collection in those areas where data does not exist, is insufficient for thorough analysis, or is deemed as obsolete.

It is important that the data assembled from all sources is as comprehensive as possible, based on professionally accepted standards. The data should include, but not be limited to:

a. Pertinent demographic and socioeconomic data;
b. Employment and commercial activity data;
c. Data on the physical environment (including but not limited to: ecology, geology, hydrology, seismology);
d. Data relating to local land use regulations and local land use plans;
e. Data relating to historic preservation and the potential impacts of the proposed rulemaking;
f. Data relating to potential archaeological impacts;
g. Water management plans and flood plain studies;
h. Data relating to National Ambient Air Quality Standards (NAAQS) and the impact of the proposed rulemaking.

i. A summary of NPDES, 404, and 402 stream related permits associated with coal mining for the last five (5) years (source EPA and COE). A narrative describing the Corps of Engineers' (COEs) 2008 compensatory mitigation rule influence on stream restoration projects completed under SMCRA permits.
j. A Comparison and contrast of SMCRA material damage definition and existing degradation policies associated with the Clean Water Act (CWA) (303d).
k. Provide narrative describing variations in the 404 and 402 permitting process across EPA regions and Corps Districts to acknowledge regional differences in how coal mining activities are regulated under the CWA. Recent EPA letters have addressed the in parts of the Appalachian Region. OSM will provide data for the Contractor to review and provide analyses summary.
l. Provide a narrative of the programmatic overview of current state program requirements to include but not limited to: buffer zone variances, monitoring, and reclamation techniques and standards.
m. Provide an overview of how recent implementation of SMCRA relates to the conditions of the 1996 Biological Opinion (as covered in previous in the attached EISs). OSM will provide to the Contractor species specific protection and enhancement plans and any other applicable materials attained from FWS.
n. An assessment of the location of each coal mining region with regards to climate and geology (The attached 2008 EIS provides background information).
o. A comparison and contrast of federal agency (COE, EPA, USGS, OSM) definitions of intermittent and ephemeral streams.

p. An assessment of the extent of threatened and endangered (T&E) species in coal fields potentially impacted by mining related stream impacts (Source state heritage program databases).

q. The contractor shall perform all NEPA consultation associated with this project. This is to include but is not limited to Section 7 consultation.

r. The Contractor shall identify cumulative effects, to include but not limited to:

   i. Review the three (3) most recent reports of the biennial state water quality (305b) reports to identify trends of non-coal mining related impairments within the coal field basins.

   ii. Provide a narrative of the water quality monitoring requirements, at the program level, from the completion of mining to phase III bond release. OSM will provide the data to the Contractor for comparison and analyses.

   iii. An assessment of future mining activity using the coal industry's projection.

   iv. A summary of 303d related watershed scale analyses conducted within the last 10 years that are related to coal mine impacts. Provide a comprehensive list of all303d listed streams within the coal fields along with the causes of impairment for each stream. Identify any observed patterns within the list.

   v. GIS products should be used to support topics in a spatially distributed pattern. Examples include but are not limited to: 303s listed streams, density of

STATEMENT OF WORK – CONTINUED

coal related valley fills per 10 digit coalfield watershed, location of each coal mining region with regards to climate and geology, T7E per 10 digit coalfield watershed recently observed ranges in total dissolved solids (TDS), sulfate, pH, and selenium per watershed.

vi. Determine specific state program requirements for mining in a stream buffer zone (variances to fill, mine through, or any activity within one hundred (100) foot buffer zone), this shall include but not limited to: the process for granting variances (i.e. conditions for granting), state restoration standards for mining through a stream, including monitoring provisions, assessment standards for restored streams – standards for bond release, process by which the Regulatory Agency determines the recovery of restored streams (i.e. habitat, chemistry, flow, macroinvertebrates, fish, mussels, etc.).

vii. A narrative summarizing peer reviewed publications resulting from long term studies on water quality impacts from surface and underground mines. A compilation of some of the studies is provided in attachment #2.

s. Narrative describing trends in permitted activities involving Approximate Original Contour (AOC) variances by operation type and with topographic, geologic, and hydrologic considerations.

t. A narrative of fill minimization/optimization procedures associated with excess fill operations, including specific review of water quality, excess spoil fill operations, including specific review of water quality, excess spoil fills, under drains, sloped, stability, stream mitigation, and surface drainage control.

u. A watershed scale review of geomorphic reclamation: land forming, stream reconstruction, and stream restoration techniques designed to approximate the natural system.

v. Topics to be included for Material Damage to Hydrologic Balance – Cumulative Hydrologic Impact Assessment (CHIA) topics include but are not limited to:

    i. A narrative summary of existing water quality and quantity (surface and ground water) downstream of coal mine sites at a CWA 305(b) scale with emphasis on regional analysis. Including but not limited to: active and reclaimed mines (water quality, flow, loadings), land use categories (identified as a percentage) within a CWA 305(b) scale, percent of disturbed relative to bond release status, percent of valley fills, percent of remined areas, and identification of mining impacts (surface and underground) to existing groundwater conditions. Source material shall include most recent coal field watershed and hydrology reports (USGS).

    ii. A compilation of the scores of biological indices as related to water quality and stream classifications from characterizations or ratings produced through aquatic life monitoring or bioassessment protocols.

iii. A narrative describing the state and federal standards applied to stream restoration and mitigation projects for mine activities associated with mine- throughs, fills, and undermining.

iv. Provide a narrative of the regulatory program criteria/standard used for determining material damage. This includes the quantitative and/or qualitative methods used. Identify state methodology/standard/process for conducting CHIAs, including the steps taken to develop the CHIA and any post mining CHIA evaluations. Determine how data are collected, stored, and managed in the CHIA evaluation. Identify the extent that data are stored electronically, regularly maintained in databases, and used in hydrologic evaluations. Assess the compatibility of electronic databases relative to the national mapping initiative. OSM will provide the data for the Contractor's evaluation and analyses.

w. Compile a list professionally recognized bioassessment protocols currently in use by state or federal agencies to assess the biological condition of streams. For each protocol identified, provide a narrative describing the taxa utilized and the agencies using each specific protocol.

For purposes of evaluating reasonably foreseeable significant adverse effects pursuant to 40 CFR 1502.22, if there is incomplete or unavailable information, the Contractor shall make clear that the information is lacking and shall provide a statement of the relevance of the incomplete or unavailable information, a summary of existing credible scientific information relevant to

evaluating those effects, and the Contractor's evaluation of these impacts, consistent with section 1502.22.

The recommended outline shall be in accordance with CEQ regulations.

B. TECHNICAL REQUIREMENTS

4.1 Technical direction for preparation of the EIS will be provided by the Contracting Office Representative (COR) who will be designated by the Contracting Officer.

A. The Contractor shall use Microsoft Word '07, for the preparation of all deliverable documents. All documentation must use Times New Roman 12 font. Software used for analyses and modeling may be proprietary but calculations obtained from applying such software must be provided to COR.

B. All deliverables must be submitted in digital format that is searchable.

C. The Contractor shall prepare a project management plan based on the scope of work description. The project management plan shall identify how each task element is addressed in the document.

D. Contractor shall implement a formal change control process and prepare a cost report that identifies the cost of a draft EIS and the basis of the cost estimates. Each revision of the cost report will be submitted to OSM for review so that the incremental costs of changes and corrections may be tracked. The basis of the cost estimates should include such categories as approach, cost assumptions, cost elements, direct labor, fringe benefits, direct costs, overhead, travel, general and administration, purchased equipment, purchased material, subcontracts, cost of facilities capital, inflation factors, etc.

E. The Contractor shall coordinate with OSM on acceptable levels of data analysis and on assumptions, analytical methods and models.

F. The Contractor shall identify and analyze the onsite and offsite environmental impacts of the proposed action and each of the alternatives evaluated in detail in the EIS. This may include, but not be limited to: conducting literature searches; modeling; preparing graphs, maps, charts and tables; calculating; interpreting samples; interviewing experts; and documenting such research, analyses, or use of professional judgment in the absence of preexisting information.

G. The Contractor shall identify and describe mitigation measures. During the course of the analysis for the DEIS, it may become apparent that mitigation could reduce, avoid, eliminate, or compensate for the environmental impacts of a proposed action or alternative. If the analyses indicate the potential for such mitigation, the Contractor shall identify the mitigation measures to the OSM to consider incorporating into the proposed action, an alternative, or a mitigation action plan.

SERVICES

5.1 If any of the services do not conform to contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by re-performance, the Government will reduce the contract price to reflect the reduced value of services performed.

5.2 If the Contractor fails to perform the services or to take necessary action to ensure performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and charge the Contractor any cost incurred by the Government that is directly related to the performance of such service or (2) terminate the contract for default.

C. DELIVERABLES

6. The Contractor shall submit all material in electronic format required hereunder to the COR in accordance with the following schedule.

6.1 The Contractor shall submit a work plan within 30 days of Notice to Proceed. The work plan shall include a milestone schedule, technical approach, staffing plan, work breakdown structure, and management controls to complete the Regulatory Impact Analysis with cost-benefit data by September 24th, 2010; DEIS by February 4th, 2011; and FEIS by October 7th, 2011The Contractor will be required to participate in scoping process. The Contractor will send consultation letters to Government Agencies and all other interested parties within 30 days of Notice to Proceed.

6.2 The Contractor shall hold meetings twice a month with COR and other designated persons to report progress. All documentation shall be provided electronically. One meeting shall be via teleconference (TELCON) and the other shall be in South Interior Building 1951 Constitution Avenue, NW, Washington, DC 20240 (Room to be determined (TBD) at a later date).

6.3 At monthly meetings, the Contractor shall provide completed segments of the DEIS. The purpose is to ensure that segment progress is in accordance to scope.

STATEMENT OF WORK – CONTINUED

6.4 The Contractor shall submit a Preliminary Draft EIS (DEIS) by November 19th, 2010. The Contractor shall provide 3 hard copies and 50 digital copies. The Government and other cooperating agencies will have 7 business days to review and submit comments. The Contractor will then have 15 calendar days to compile comments and make corrections.

6.5 Review of Preliminary DEIS by the OSM and Cooperating Agency will be seven business days. Comments will be submitted at the end of this period. [Isn't this the same statement as above in 6.4?]

6.6 Participation in Public Hearing: The Contractor shall incorporate comments into FEIS within 45 days following publication in the Federal Register.

6.7 The Contractor shall prepare and submit to OSM the public comments on the DEIS that were submitted to the Federal rulemaking comment website. The Contractor shall organize substantive comments by topic for the inclusion in the FEIS within 30 days of the close of the DEIS comment period.

6.8 Final Environmental Impact Statement (FEIS)

A. The Contractor shall complete the Proposed FEIS within 50 days after close of DEIS comment period.
B. OSM and cooperating Agencies will have 14 business days to review and provide comments.
C. The Contractor shall submit the FEIS within 14 days of agency comment receipt.
D. Provide 3 hard copies and 50 digital copies of the FEIS.

Prompt delivery of the items listed above is essential to the performance of this contract.

In accordance with the schedule provided, the time period for completion of a submission shall begin on the date that the Contractor receives approval of the previous submission.

Some submissions may be approved with the reservation that OSM and Cooperating Agency comments regarding that submission shall be incorporated into the subsequent submission. If these comments are not incorporated, the document submitted will be returned without further review. Each submission after the first shall be accompanied by a letter noting OSM and cooperating agency comments and explaining how each was resolved. In the event that a submission is not acceptable and is sent back to the Contractor for revision, OSM will have additional time to review the subsequent revised submission.

In order to expedite the review process, the Contractor shall notify the COR at the time of completion of significant subsections of each document. OSM will then request that 3 hard copies and 15 digital copies be submitted for review and comment.

At the request of the Contractor, the schedule of submissions may be extended in the event that performance is delayed by circumstances beyond the control of, and without fault or negligence on the part of, the Contractor, as determined by the Contracting Officer.

D. RELEASE OF INFORMATION

The Contractor may not disseminate any information concerning the specific project without special written approval of the Contracting Officer.

E. TRAVEL

Travel required in connection with this work order is to be included in the detailed cost breakdown, when the Contractor submits a proposal for the order. Travel costs shall not exceed the FAR 31.205-46, Travel Costs, and Federal Travel Regulations.

F. PAYMENT SCHEDULE

9.1 Monthly progress of segments of the DEIS with approved comments - May (meetings including DEIS segment reviews)

9.2 Monthly progress of segments of the DEIS with approved comments - June (5%) (meetings including DEIS segment reviews)

9.3 Monthly progress of segments of the DEIS with approved comments - July (meetings including DEIS segment reviews)

9.4 Monthly progress of segments of the DEIS with approved comments - August (5%) (meetings including DEIS segment reviews)

9.5 Monthly progress of segments of the DEIS with approved comments - September (5%) (meetings including DEIS segment reviews). Complete Regulatory Impact Analysis with cost-benefit data.

9.6 Monthly progress of segments of the DEIS with approved comments - October (5%) (meetings including DEIS segment reviews)

9.7 Monthly progress of segments of the DEIS with approved comments - November (meetings including DEIS segment reviews)

STATEMENT OF WORK – CONTINUED

9.8 Monthly progress of segments of the DEIS with approved comments-December (5%) (meetings including DEIS segment reviews)

9.9 Monthly progress of segments of the DEIS with approved comments- January (meetings including DEIS segment reviews)

9.10 Approval of Preliminary DEIS and complete mailing – February 14th, 2011 (30%)

9.11 Collection and organization of comments received – May 13th, 2011 (5%)

9.12 Monthly progress of Draft FEIS – June (Meetings including FEIS segment reviews)

9.13 Monthly progress of Draft FEIS – July 29th, 2011 (5%) (Meetings including FEIS segment reviews)

9.14 Monthly progress of Draft FEIS – August (Meetings including FEIS segment reviews)

9.15 Monthly progress of Draft FEIS – September (5%) (Meetings including FEIS segment reviews)

9.16 Approval of Proposed FEIS and complete mailing – October 7th, 2011 (30%)

9.17 Execution of Release of Claims and receipt of all originals and record in required format– October 31st, 2011 (5%)

OPTION	SECTIONS	FUNDS
OPTION #1	9.1 THROUGH 9.8	**Subject to the Availability of funds**
OPTION #2	9.9 THROUGH 9.10	**Subject to the Availability of funds**
OPTION #3	9.11 THROUGH 9.15	**Subject to the Availability of funds**
OPTION #4	9.16 THROUGH 9.17	**Subject to the Availability of funds**

ATTACHMENT #1 - PURPOSE AND NEED STATEMENT

NEED AND PURPOSE FOR THE FEDERAL ACTION

NEED

On January 2010 the GAO issued a report entitled: Surface Coal Mining - Financial Assurances for, and Long-Term Oversight of, Mines with Valley Fills in Four Appalachian States. The report was an evaluation of the long term monitoring of surface coal mines with valley fills and the assurance that the mines will be properly reclaimed. The GAO examined surface coal mines in Kentucky, Tennessee, Virginia, and West Virginia. The GAO report made the following findings, among others, in the report:

> Studies have found environmental impacts resulting from reclaimed mines with valley fills including: subpar reforestation efforts; contaminated streams that have impacted aquatic organisms; water flows that may have been affected by the fills; and cases where mines have not been restored to approximate original contour.

In addition, recent studies suggest that surface mining activities that affect streams may have impacts on stream and riparian biota that are not explicitly addressed under existing regulatory requirements implementing SMCRA. [*Cite to, very briefly summarize a couple of the more significant studies.*]

Downstream effects of mountaintop coal mining: comparing biological conditions using family- and genus-level macroinvertebrate bioassessment tools, Gregory J. Pond, et. al. July 8, 2008

This study found that surface coal mining with valley fills has impaired the aquatic life in numerous streams in the Central Appalachian Mountains; such mining activity has had subtle to severe impacts on benthic macroinvertebrate communities. Sites downstream of reclaimed MTM and VFs revealed little sign of biological recovery after 6 to 7 years; Impacts to ecosystem

structure and function (i.e., soil and water biogeochemistry, leaf decomposition, macroinvertebrates) remained after 15 years of recovery of a coal-mined watershed in Maryland, and the oldest VF site in the data still had downstream specific conductance values >1200 lS/cm and no mayflies after 15 years.

Mountaintop Mining Valley Fills and Aquatic Ecosystems: A Scientific Primer on Impacts and Mitigation Approaches, Margaret A. Palmer and Emily S. Bernhardt

This executive summary of this paper stated: "...The more surface mining and valley fill activity within a large watershed, the greater the cumulative transport of alkaline mine drainage pollutants to major rivers will be. The streams and rivers below valley fills receive alkaline mine drainage that include highly elevated concentrations of sulfate, bicarbonate, calcium and magnesium ions and which often include elevated concentrations of multiple trace metals. The combined toxicity of

multiple constituents results in significant increases in conductivity and total suspended solids below valley fills. This decline in water quality leads to a loss of sensitive aquatic organisms even when downstream habitats are intact. The resulting high conductivity and high sulfates can persist long after mining activities cease and scientists have found no empirical evidence documenting recovery of macroinvertebrate communities in the streams impacted by alkaline mine drainage. The water quality impacts of MTMVF activities are more severe and more persistent than other land use changes within the southern Appalachians."

In consideration of the concerns raised by this information, as well as OSM's experience in evaluating the impacts of surface coal mining operations on mountainous areas and surface and ground waters, OSM believes there is a need to improve the effectiveness of the regulations implementing SMCRA in reducing the harmful impacts of surface coal mining operations that affect mountaintops and streams, including but not limited to operations that engage in mountaintop mining, steep slope mining, and contour mining. Any Federal Action by OSM to achieve a reduction in the adverse impacts of surface coal mining operations must be authorized by and consistent with SMCRA.

PURPOSE

The Surface Mining Control and Reclamation Act of 1977 provide that:

> "It is the purpose of this Act to –
>
> (a) establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations;
>
> (c) assure that surface mining operations are not conducted where reclamation as required by this Act is not feasible;
>
> (d) assure that surface coal mining operations are so conducted as to protect the environment."

On June 11, 2009, the Secretary of the Department of the Interior, the Administrator of the U.S. Environmental Protection Agency (EPA), and the Acting Assistant Secretary of the Army (Civil Works) entered into a memorandum of understanding (MOU)[1] implementing an interagency action plan designed to significantly reduce the harmful environmental consequences of surface coal mining operations in six Appalachian states, while ensuring that future mining remains consistent with federal law. The MOU also calls for us to consider whether revisions to other OSM regulations (including, at a minimum, approximate original contour requirements) are needed to better protect the environment and the public from the impacts of Appalachian surface coal mining.

However, OSM's experience is that adverse impacts of surface coal mining operations on mountainous areas and surface and ground waters occur nationwide, and are not limited to

[1] The MOU can be viewed online at http://www.osmre.gov/resources/ref/mou/ASCM061109.pdf.

Appalachia. Therefore, the purpose of this Federal Action is to improve the effectiveness of regulation under SMCRA, in reducing the harmful environmental consequences of surface coal mining operations that affect mountainous areas and surface and ground waters throughout the nation. Specifically, the purpose of this Federal Action is to amend OSM's rules implementing SMCRA, to require that mining operations are permitted, operated, and reclaimed in a manner that prevents or minimizes significant long-term adverse environmental effects on mountains, streams, and related environmental values. More particularly, the purpose of this action is to amend OSM's stream buffer zone (SBZ) rule published on December 12, 2008, as well as certain other existing OSM regulations, in order to significantly reduce the adverse impacts from surface coal mining operations on mountainous areas and surface and ground waters and related environmental values nationwide, and to maximize the use of the best science and technology available in regulating those operations and in conducting the operations.

Many of the adverse environmental impacts that have been identified in recent studies are related to instances where mining operations have not effectively restored approximate original contour, or have not prevented or minimized projected adverse hydrologic consequences of coal mining operations or the cumulative adverse hydrologic impacts of all mining within a watershed. Therefore this Federal action will take a comprehensive approach to evaluating the relationships among mining impacts such as these, and the permitting requirements, performance standards, and reclamation requirements that address the impacts.

ATTACHMENT #2 - NARRATIVE SUMMARIZING PEER REVIEWED PUBLICATIONS

Effects of Valley Fills on Benthic Macroinvertebrates

Literature Review

"As can be concluded based on results from the primary literature and from studies performed for this EIS, filling or mining stream areas even in very small watersheds has the potential to impact aquatic communities some of which may be of high quality or potentially support unique aquatic species. It has not been determined if drainage structures associated with mining can provide some benefits (i.e.; increased flows at toe of fills, retaining drainage structures) that could offset aquatic impacts."

Mountaintop Mining/Valley Fills in Appalachia: Draft 2003. Programmatic Environmental Impact Statement US Environmental Protection Agency, Washington, DC.
Pg. III D-4

Mountaintop mining and valley fill operations have been determined to have adverse and detrimental effects on the integrity of all surrounding ecosystems including both aquatic and terrestrial. The following summary will encompass several parameters associated with the degradation of the benthic macroinvertebrate community below valley fills in conjunction with mountaintop mining operations. The material referenced will discuss the influence of geology, hydrology, water chemistry, site location, bioassessment protocol and methodology using qualitative and quantitative measures, insight on reclamation strategies, and elaborate on conflicting opinions on overall conclusions pertaining to mining/valley fill impacts.

The consensus stated within this literature review has been derived from studies, opinions and most importantly the results of various researchers including the USEPA, USGS, USFWS, several state agencies, academia, consulting firms and the coal industry. A collection of 71 articles/studies/opinions have been assembled complete with individual bibliographies and citations included. Additionally, several studies discovered are unpublished and are not peer reviewed with questionable research tactics so the stature of their conclusions is subject to debate. A few comprehensive studies conducted by various private agencies were discovered but found to be unobtainable so for reference and for the potential of obtaining these studies in the future, they will be included as an attachment but not cited in the completed literature review. Relative studies correlating most to the objectives of this comprehensive literature review found that the majority of influential studies noted locations ranging from eastern Kentucky to southern West Virginia.

Valley Fills

When the topography of the mountain is altered via mountaintop removal, radical changes ensue including the flattening of contours, exposure of unsettled spoil, reduced vegetative cover, and elimination of all natural mountainside and valley stream channels. In 2004, mountaintop mining was determined to be dominant land cover use in central Appalachia with an estimated 1.1 million acres being impacted by active mining operations (Townsend et al. 2009 and Loveland et al. 2003).

In order to accurately assess the influence of valley fills on the benthic macroinvertebrate community, a review of several important topographical and geological components must be discussed. To begin with, when a mountain top is mined all vegetation, topsoil, and overlying rock strata are removed down to the coal seam and redeposit as overburden. As the rock and soil layers are being removed, a volumetric expansion of the blasted material occurs resulting in swell. The excess spoil (swell) is redeposited in an adjacent valley to try and eliminate the cost of rehandling the material. The importance of less handling stems from the push for economic profit for the mining industry because the less the mining company has to handle the spoil the lower production costs are resulting in the evolution of valley filling.

Geology and Overburden Composition

One of the most important factors in understanding the influence of valley fills on the aquatic benthic macroinvertebrate community is to understand the composition of the overburden that is deposited in the valley fills within the Appalachian coal bearing region. This is significant because the constituents that comprise the overburden will eventually contaminate the streams adjacent to the valley fills through precipitation and other natural and mechanical earth moving events. Beginning with the geology of the region, according to the USGS the bedrock within the central Appalachian region is comprised of Pennsylvanian aged strata with interwoven beds of shales, siltstones, mudstones, mudrock, limestones, carboliths and sandstones overlapping the older Mississippian aged strata (USGS 2000b and Sobek et al 2000). Understanding the geology of this region is imperative to understanding certain chemical and physical parameters such as acid forming potential and metal contaminant loads which vary based on which rock strata overlies the coal seam.

Through modern mining techniques, blasting the bedrock to expose the coal seams generates spoil, once the spoil has been removed and deposited into a valley fill, it is exposed to the atmosphere and with the addition of precipitation and oxygen immediately a variety of chemical reactions begins to transpire. Certain chemical components found embedded within certain rock strata throughout the Appalachian coal region have the potential to generate detrimental effects on the aquatic community by degrading the water quality. For example; the oxidation of pyrite and sulfide S generate AMD when exposed to water and oxygen decreasing the pH and increasing Fe, Mn, Al, temperature and TSS to harmful levels (Sobek 2000). The noted harmful constituents of overburden found generally within the central Appalachians includes; varying pH, alkaline reactions within soils, salinity potentials, electrical conductivity and toxic metals including; boron, mercury, and selenium. Physical properties that can influence the hydrology of the overburden and ultimately impact the aquatic community via runoff and other nature water

moving parameters include; rock type and stability, hardness, slaking, weathering rate, sedimentation, infiltration and porosity (Sobek 2000). Understanding the physical and chemical parameters of the spoil found within the valley fills will help determine what contaminants will impact the adjoining stream and how they will adversely degrade the benthic macroinvertebrate community downstream.

Hydrologic Regime

When assessing the biological integrity of streams below valley fills, the hydrology has been determined to be an additional key component. Understanding how water moves through the fills and streams will help illuminate the importance of the hydrologic regime because without an adequate supply of water the habitat for the benthic community cannot exist.

The ephemeral, intermittent or perennial streams that are buried as a result of valley fills represent a significant loss of natural habitat (Palmer et al. 2009). Studies have determined that headwater streams emerging from the toes valley fills are the crucial link to the integrity and health of ecosystems downstream and to adjacent river networks. Headwater streams are the beginnings of the river systems and are critical sites for nutrient cycling and organic matter processing while offering a refuge from temperature fluctuations, spawning and rearing areas, food and creating migration corridors (Clark et al. 2008, Lowe et al. 2005, Meyer et al. 2003, and USGS 2000a).

Another major determination concludes that the percentage of watershed influenced by the addition of valley fills to ephemeral, intermittent or perennial streams varies based on the number of fills. Additionally, watershed size may actually buffer the effects of fills and mines (Fulk and Hutchens, 2002). Lastly, in order to perform bioassessment of the benthic macroinvertebrate community it has been determined that drought and stream channel morphology are both directly correlated to the integrity of aquatic ecosystems (Clinton et al. 1996, Feminella 1996, and Powell 1999).

When mining occurs within the steep terrain of the Appalachian region, the hydrology of the entire ecosystem is drastically altered. Water flow pathways throughout the geological strata are radically changed and can in turn severely reduce or completely eliminate the hydrological recharge to streams whether buried by a valley fill or deep mining (Ferguson 1967, Ferguson et al. 1981 and USGS 1991). Additionally, due to the exposure of loose sediment and no vegetative cover there has been a noted decrease in water infiltration and an increase in runoff contributing to increased base flow from the toe of the valley fills raising the potential for flooding and sedimentation to the downstream ecosystems (Messinger 2003, Phillips 2004 and USGS 2001).

"Streams in watersheds where MTM/VFs exist are characterized by an increase of minerals in the water as well as less diverse and more pollutant-tolerant macroinvertebrates and fish species. Questions still remain regarding the correlation of impacts to the age, size, and number of valley fills in a watershed, and effects on genetic diversity. Some streams below fills showed biological assemblages and water quality of good quality comparable to reference streams.

Streams in watersheds below valley fills tend to have greater base flow. These flows are more persistent than comparable unmined watersheds. Streams with fills generally have lower peak discharges than unmined watersheds during most low intensity storm events; however, this phenomenon appears to reverse itself during higher-intensity events."

> ***Mountaintop Mining/Valley Fills in Appalachia: Final Draft 2005. Programmatic Environmental Impact Statement. US Environmental Protection Agency, Washington, DC***

Water Quality Impacts as a result of Valley Fills/Mining

Studies have concluded that a variety of factors are attributed to the decline and eradication of benthic macroinvertebrates in areas with active or inactive mining (e.g. Bradfield 1986, Chambers and Messinger 2001, Eberle and Razem 1985, Freund and Petty 2007, Fulk and Autrey 2003, Green and et al 2000, Hoke et al 2001, Kennedy et al 2003, Maggard and Kirk a, b, c, 1999, Maggard 2006, Minear 1976, Merricks et al 2007, Palmer 2009, Pen Coal Corp 2000, Phillips 2004, Pond et al. a, b, c, d, Powell 1999, Stout and Wallace 2003, and USGS, 2000) In addition to mining, Fulk 2003 and Pond a, c and e also determined the same conclusions concerning the integrity of the benthic macroinvertebrate community when assessing the influence of residential and agricultural impacts on the adjacent habitat.

Studies have proven that not one specific stressor is to blame for the poor water chemistry parameters which is responsible for the poor water quality (Freund and Petty 2007 and Lester and Norton 2003). The literature search concluded that the degradation of the benthic community can be attributed to a combination of the chemical parameters (Bryant and McPhilliamy 2002). Below is a table listing the chemical parameters assessed.

Chemical Parameters Assessed	
Calcium	Temperature
Sulfate	Magnesium Hardness Solids
Dissolved Manganese	Total Conductivity, Field (uS/cm)
Selenium	Alkalinity
Potassium	Sodium
Manganese	Dissolved Chloride
Acidity	Nitrate/Nitrite
Acidity	Hot Aluminum
Dissolved Antimony	Arsenic
Beryllium	Cadmium
Chromium	Cobalt
Copper	Mercury
Nickel	Organic Carbon
Total Phosphorous	Silver
Thallium	Vanadium
Barium	Dissolved Oxygen
Organic Carbon	Dissolved Solids
Suspended Iron	Total Iron
Dissolved Zinc	Aluminum, Total

Studies that assessed valley fills associated with mining determined the following targeted parameters in combination and with elevated concentrations are attributed to the degradation of water quality correlated with the reduction and/or eradication of certain orders of aquatic benthic macroinvertebrates.

Chemical Parameters Determined to be Impacted by Valley Fills	
Sulfate	Hardness
Total Magnesium	Total Calcium
Total Dissolved Solids (TSS)	Total Manganese
Dissolved Manganese	Specific Conductance
Total Selenium	Alkalinity
Total Potassium	Acidity
Nitrate	Nitrite

Table from Byrant and McPhilliamy 2002

AMD, Specific Conductance and Total Dissolved Solids have been the notated culprits of water quality degradation in several peer-reviewed studies and have demonstrated adverse impacts on the benthic macroinvertebrate community when elevated levels are detected below valley fills and in active/inactive mining watersheds (Bradfield 1986, Bryant and Mcpilliamy 2002, Chambers and Messinger 2001, Eberle and Razem 1985, Feldman and Connor 1992, Freund and Petty 2007, Green et al 2000, Hartman et al 2005, Hoke et al 2000, Pond a, c, and Schoenholtz 2008 USGS 1990, and USGS 2000).

As stated before, there is no one singular culprit to the degradation of water quality in mined/valley filled watersheds but the literature cited has determined the most influenced chemical parameter is specific conductance. Specific conductance is merely a cumulative measure of ionic strength and when conductivity is high, the disruption of osmoregulation takes place which is essential for aquatic insects to regulate their ion intake and release (Pond et al 2008). Both ionic strength and effluent toxicity can be defined as constituents containing but not limited to a combination of the following water quality parameters including conductivity, TDS, salinity, alkalinity and hardness (Chadwick Ecological Consultants 2000 and Goodfellow et al 1996)

Additionally, Dow 2000 determined specific conductance and pH were not only found to be detrimental to benthic communities in watersheds with active mining but also in residential neighborhoods such as a recent study conducted in New Jersey. On the contrary, Maggard 2006, refutes the findings of Pond and Dow and states specific conductivity is unrelated to the benthic macroinvertebrate communities present downstream of varying types of mine water discharge but note this study was not peer reviewed and only presented at a symposium so the validity may be skewed or bias.

In addition to specific conductance, bioaccumulated metals have also been attributed to the benthic macroinvertebrate community decline in locations with and without mining influences (

e.g. Ankley 1996, Cain et al 2006, Clements a, b, Clements et al 1988, Hickey et al 1998, Soucek et al 2001, and Vogel 2000).

Benthic Macroinvertebrates

There are several metrics, indices and statistical interfaces used in assessing the degree of impairment mining and valley fills have had on the habitat for benthic macroinvertebrates and the overall importance of aquatic insects in the surrounding ecosystem. Preference of methodology and assessment was based on age of study and locality with studies using different metrics and methods based on if the study sites were in Kentucky or West Virginia (e.g. Burton and Gerritsen 2003, Green and Swietlik 2000, Merritt and Cummins 1996, Merritt et al 1984, Morse et al a, b, O'Bara et al 1993, Rosenberg and Resh 1996 and Virginia DEQ 2006b)

The majority of studies reviewed utilized similar multi-metric indices to assess the macroinvertebrate communities. In West Virginia the West Virginia Stream Condition Index (WVSCI) has been used and in Kentucky the Kentucky Macroinvertebrate Bioassessment Index (KMBI) has been used. Both methods for bioassessment use Total Taxa, EPT (Ephemeroptera Plecoptera Trichoptera) Taxa%, % Chironomidae (midges, a family of insects that is generally tolerant to pollution), % Two dominant Taxa, and a family-level Hilsenhoff Biotic Index (HBI) to develop a numeric score that usually ranges from 0-100. This score is then compared against a reference to determine if a stream is impaired or failing to meet aquatic life use criteria.

All studies of benthic macroinvertebrates below fills found changes in the community composition. Mayflies (Ephemeroptera) were either completely eliminated or severely reduced. Additionally, Stoneflies (Plecoptera) and caddisflies (Trichoptera) also showed declines in both species richness and diversity. The percentage of species sensitive to pollution decreased and the number of pollution tolerant species increased. Several studies found significant differences in aquatic insect composition between mined and unmined watersheds with and without valley fills (e.g. Bradfield 1986, Chambers and Messinger 2001, Freund and Petty 2007, Fulk and Autrey 2003, Green and et al 2000, Hartman et al 2005, Hoke et al 2000, Maggard and Kirk 1999b, Merricks et al 2007, Palmer and Bernhart 2009, Pen Coal 2000, Pond and Mcmurray 2002, Pond 2004, and Pond et al 2008).

Age of Fills

Studies have been conducted on a range of valley fills in both eastern Kentucky and southern West Virginia but there is little information given in most studies on the exact age of fills. The date of permit issuance is given in a few studies but not the completion date of the fills. One study, Merricks et al (2007) does give specific ages of fills, which ranged from 3 to 15 years. Their results were similar to the other studies reviewed. It doesn't appear anyone has focused on older fills exclusively. One question that has been raised is; do TDS and conductivity in these streams attenuate over time? Problems to be addressed in the design of a study of older fills would be accurately determining the age of fills and whether we have pre-mining data to do a before/after comparison or if a reference stream approach should be used.

Noted Remediation

A recent testimonial given by Margret Palmer to the United States Senate Committee on Environmental and Public Works states; "*The impacts of mountaintop removal with valley fills are immense and irreversible, and there are no scientifically credible plans for mitigating these impacts.*" Additionally, studies have concluded that several mitigation techniques fail due to a variety of issues including chemical and physical barriers ranging from poor water quality to unstable stream channel design (Palmer and Bernhart 2009, Palmer and et al 2005) Despite the previous statements, there has been noted remediation attempts with marginal success on several parameters associated with mining but most notably the reduction of AMD and recreation of stream channels but the science of valley stream remediation is relatively new (Denicolla and Stapleton 2002, Hawkins 1994).

Consensus and Conclusion

With the evidence presented in this literature review, valley fills do have an adverse affect on the benthic macroinvertebrate community via degradation of the aquatic environment. The only question still lacking a definitive answer is; do these streams and watersheds attenuate over time and if so how long does it take to reverse the change and shift the community back from a pollution tolerant community to a community dominated by sensitive species? Assessment of adjacent reference streams in conjunction with the bioassessment protocols used by the majority of the studies compiled has determined the benthic macroinvertebrate community was thriving with a pollution comprised of sensitive species Ephemeroptera, Plecoptera and Trichoptera prior to any mining and a noted depletion or eradication of the community has occurred post mining. This literature review concludes that yes valley fills have been assessed and yes they do have detrimental effects but the question about attenuation over time has not been exclusively researched. Without a direct answer to this question, the true effect of valley fills on the surrounding environment cannot be completely and definitively answered.

Despite the varying opinions on the degree of degradation of the benthic community below valley fills, one conclusion is evident; there is an obvious shift from a sensitive to a pollution tolerant community and this is attributed to the poor water quality flowing from the toe of the valley fills. The poor water quality is credited to a variety of chemical parameters but the most evident and conclusive is found to be specific conductance, variable pH, unpredictable stream flow and elevated levels of TSS and TDS. In conclusion, the proportional abundance of tolerant taxa was the most sensitive indicator of nutrient enrichment and habitat, degradation, whereas Ephemeroptera richness was the most sensitive indicator of elevated metals or ion concentrations (Lester 2003).

ATTACHMENT #3 - 2009 ANPR COMMENTS

General Comments on ANPR

Appalachian Center for the Economy and the Environment (Joe Lovett and Derek Teaney)

- Stream buffer zone rule

1. Under section 201(c)(2) of SMCRA, OSM has broad rulemaking authority to carry out both the purposes and provisions of the Act. Because most of the purposes of SMCRA focus on environmental protection, OSM can adopt any rule that protects the environment from the adverse effects of mining, irrespective of the more specific environmental performance standards enumerated later in the section 515 or other provisions of the Act.

   The performance standards in SMCRA establish a floor, not a ceiling, with respect to the adoption of regulations to protect the environment. The buffer zone rule could prohibit all mining in streams and be fully consistent with the purposes of the Act. Indeed, it must do so, given the adverse environmental consequences of fills and other mining activities in streams. OSM should not—and must not—limit the scope of the stream buffer zone to the provisions of sections 515(b)(10) and (24). OSM has the statutory authority to require environmental protection standards more strict than the minimization standards established in those two provisions. It can prohibit mining where reclamation is not feasible or where OSM cannot assure that the environment will be protected from the adverse effects of mining.
2. The 2008 rule erroneously relied upon section 515(b)(22)(D) of SMCRA as evidence that Congress did not intend to prohibit the construction of excess spoil fills in streams. At most, this provision "recognizes the possibility of placing excess spoil material in waters of the United States." *Kentuckians for the Commonwealth v. Rivenburgh*, 317 F.3d 425, 443 (4th Cir. 2003) (emphasis added). However, that possibility is only a minimum standard for fill placement. It does not preclude more stringent prohibitions on fill placement that may be necessary to carry out the purposes of SMCRA.

3. There is no evidence that current reclamation practices in the coal industry can feasibly alter or reduce the conductivity levels in streams below fills to comply with water quality standards that prohibit biological impairment. Scientific studies show that ion concentrations have either remained constant or increased over time. These effects have been measured from three to fifteen years after reclamation was completed, and therefore can be expected to persist over time. In these circumstances, OSM should adopt the same policy that it adopted in 1997 for mines that are expected to discharge acid mine drainage; i.e., prohibit the approval of permit applications that would have these impacts on water quality.

   OSM is duty-bound by the purposes in paragraphs (a), (c) and (d) of section 102 of SMCRA, and by the duty in 510(b)(3) to prevent material damage to the hydrologic

balance, to use its rulemaking authority under section 201(c)(3) to issue a stream buffer zone rule that prohibits the construction of fills that cause or contribute to violations of narrative or numeric water quality standards. Because those violations are so widespread throughout Appalachia, a complete ban on the placement of valley fills in streams, and on allowing "mining through" streams by operations that will generate significant spoil that will contribute to such violations, is required.

4. In the ANPR, OSM wrongly suggests that the "water courses" mentioned in section 515(b)(22)(D) of SMCRA, which establishes requirements for the construction of excess spoil fills, must include ephemeral, intermittent, and perennial streams. This approach is inconsistent with the brief that the Government filed in the *Bragg* litigation, which states that "The Secretary of the Interior has reasonably concluded that 'springs, natural water courses or wet weather seeps' do not include intermittent or perennial streams."

5. The supplemental environmental impact statement (SEIS) should analyze an alternative to the 2008 rule that would prohibit all placement of mining spoil or waste in all types of streams (ephemeral, intermittent, and perennial) because such activities are known to cause or contribute to significant degradation and violations of water quality standards in downstream waters. This alternative would be more restrictive than the 1983 rule. The percentage of fills and mining disturbances causing those violations is so high (80-90%) that OSM must impose a blanket prohibition on their use in order to comply with the Clean Water Act. The SEIS for this alternative should investigate and document the scope and extent of stream degradation downstream from mined areas in Appalachia, with a special focus on conductivity and selenium.

6. The preferred alternative in the SEIS and proposed rule should not be based on the type of stream, because scientific studies show that ephemeral streams can be as important ecologically as intermittent or perennial streams. Ephemeral and intermittent streams are habitat or feeding-ground for a unique and diverse assemblage of organisms including salamanders, insects, fish and larger wildlife. They are also the conduits that transport water, sediments and dissolved materials from mountaintops to large river ecosystems. While stream functions take place in perennial streams, they do so at different rates and in different ways than those occurring in ephemeral and intermittent streams, and the smallest streams harbor some species that are not found in perennial reaches.

7. If OSM decides not to prohibit the placement of valley fills in all streams, it must at the very least prohibit their placement in intermittent and perennial streams and must interpret the 1983 rule to have that effect because that was the position taken by the Clinton Administration in an appeal brief filed in *Bragg v. Robertson*. Brief for the Federal Appellants at 2, *Bragg v. W. Va. Coal Ass'n*, 248 F.3d 275 (4th Cir. 2001) (No. 99-2683). The brief further stated that "fills that disturb intermittent or perennial streams may be approved only if there is a finding that activity will not adversely affect the environmental resources of the filled stream segment." *Id.* at 41.

8. The 2008 rule does not carry out the primary purpose of SMCRA because it does not prevent environmental harm. Under the existing rule, every permit approving disturbance of a perennial or intermittent stream must include a permit condition requiring that the permittee demonstrate compliance with the Clean Water Act before conducting any activities that require authorization or certification under that Act.

   However, this demonstration requirement is merely a generalized and theoretical requirement that the project applicant comply with the law. It does nothing to monitor, assess, measure or determine whether significant degradation is occurring or will occur. The rule does not contain any practical requirements (1) to monitor and measure for the type of biological impairment and elevated pollution levels that are occurring downstream from valley fills; (2) to treat conductivity or selenium discharged from valley fills or spoil on the mined area to prevent impairment of downstream reaches; or (3) to otherwise prevent discharges that cause or contribute to violations of water quality standards. Without an actual on-the-ground assessment of the effectiveness of permits and certifications to prevent stream impairment, the demonstration requirement in the existing rule is merely a paper exercise.

- Impacts of mountaintop mining

9. Mountaintop mining and construction of fills in streams result in a decline in water quality, which leads to a loss of sensitive aquatic organisms even when downstream habitats are intact. High levels of conductivity and sulfates can persist long after mining activities cease. Scientists have found no empirical evidence documenting recovery of macroinvertebrate communities in the streams impacted. The water quality impacts of mountaintop mining activities are more severe and more persistent than other land use changes within the southern Appalachians.

10. A complete prohibition on mountaintop mining and construction of fills in streams would not be inconsistent with section 102(f) of SMCRA, which provides that one of the purposes of SMCRA is to "strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy." Recent economic studies demonstrate that even a complete ban on mountaintop mining would have a relatively minor impact on the cost of electricity. The insignificance of this impact can be traced to two factors: a predicted decrease in the overall demand for coal and a predicted increase in the availability of alternative sources of energy.

11. The supplemental environmental impact statement must take into account not only the potential of the alternatives to impact the price of energy, but also the broader economic impacts on the Appalachian region, including the increase in healthcare costs, water treatment costs, and lost potential for jobs that are borne by communities close to mountaintop mining.

National Mining Association

- NMA strongly opposes eliminating the current (2008) stream buffer zone rule. Any changes could jeopardize a fragile regulatory compromise that has taken more than a decade to establish. In addition, pursuing some extreme alternatives to the current rule would open a Pandora's box of regulatory uncertainty that could unnecessarily impede, or perhaps even eliminate, significant segments of the coal mining industry.

- The extensive changes made in the excess spoil and coal mine waste rules, as well as the stream buffer zone rule and related permitting rules, in December 2008 need to be given a chance to work. They are clearly more restrictive than the prior rules and may well "significantly reduce the harmful environmental consequences of Appalachian surface coal mining operations" in a manner consistent with federal law as sought by the June 11, 2009, memorandum of understanding implementing the interagency action plan.

- OSM offers nothing to support its implications that there are problems with the 2008 SBZ regulation. To our knowledge, there have been no state regulatory authorities clamoring for OSM to repeal or revisit the SBZ rule. The only basis cited for this complete reversal of policy is the politically and ideologically-driven MOU announced on June 11, 2009.

- In proposing changes to the SBZ rule and related rules, OSM must remain cognizant of unintended regulatory consequences of its actions. Actions aimed at surface mining in Appalachia may have a significant impact on mining in other areas, or even on underground operations in the same region. For example, virtually all coal produced by underground mines in central Appalachia must be washed through a preparation plant to remove rock and other impurities. The resulting coal mine waste lacks the stability of excess spoil and must be placed in disposal areas that extend farther down into valleys than excess spoil fills in order to meet the stability requirements of SMCRA. To preclude the placement of coal mine waste disposal sites in areas that extend into perennial streams in central Appalachia is to eliminate the underground coal mine industry throughout central Appalachia, which is one of the nation's richest and highest quality underground reserves. SMCRA simply does not contemplate or authorize any such restrictions on coal mine waste placement. To the contrary, such restrictions would be inconsistent with section 102(k) of SMCRA, which states that one of the purposes of the Act is to "encourage the full utilization of coal resources through the development and application of underground extraction technologies." See also the finding in section 101(b), in which Congress states that it is "essential to the national interest to ensure the existence of an expanding and economically healthy underground coal mining industry."

- Although NMA at one time advocated more coordination between the various regulatory agencies, we now have serious concerns about the agency's establishment of such practices. Judging by our experience with the EPA's interference with the Corps' permitting process under § 404 of the Clean Water Act and the effective creation of a permit moratorium under that program, we believe that introducing personnel from EPA and the Corps into SMCRA permitting decisions of the regulatory authority is

inappropriate. Each agency has its clearly defined jurisdiction with regard to issuing permits under SMCRA and the Clean Water Act, respectively. To allow state-issued SMCRA permits to be held up in indefinite review periods by agencies that have no jurisdiction over the majority of the mine project is inappropriate. Moreover, one of the biggest problems with the 404 permit moratorium has been a complete lack of transparency by the EPA and the Corps with respect to what companies need to do in order to obtain a permit. This process has been abusive and unfair to our members, and we strongly object to any plans by the administration to institute a similar practice on the SMCRA permitting side.

Colorado Mining Association

- The impetus for the proposed rule is attributed to the need to significantly reduce harmful environmental consequences of surface coal mining in Appalachia. However, the impact of the proposed changes would extend nationwide since it virtually impossible to conduct surface mining without encountering a stream, whether perennial, intermittent, or ephemeral.

- The outcome of the proposed rulemaking appears to have been predetermined, based on the statement that the 2008 rule will be either revised or repealed. This statement indicates a predetermined course of conduct in advance of, and separate from, the rulemaking record yet to be developed and to that extent is inconsistent with the Administrative Procedure Act.

Virginia Mining Association

- The proposal to change the recently adopted SBZ rule is unnecessary and without a rational basis. The attempt to change a rule within months of its adoption demonstrates that the proposal is politically rather than scientifically driven. The existing regulation was adopted after years of careful consideration and deliberation, including an environmental impact statement.

- Some degree of regulatory certainty is necessary for rational business decisions and for obtaining financing for mining operations. It is not uncommon for mining operations in Virginia to be planned for an operational life of a decade or two. Such operations require multiple permit renewals. Without some degree of regulatory certainty companies cannot obtain or commit the financial resources to begin or continue such operations.

- Some of the alternatives in the ANPR would have effects far beyond elimination of mountaintop removal mining or even surface mining in general. Approximately two-thirds of the coal mined in Virginia is produced by underground mines. The topography of the Virginia coalfields is characterized by steep mountainsides separated by narrow creek and river bottoms. It is almost never possible to create a coal mine, even an underground mine, in Virginia without placing excavation spoil or mine refuse in or near a stream. Underground mines require flat surfaces for preparation plants, equipment

yards, offices and bath houses. Also, the mine refuse from underground mines must be put somewhere. This material is composed almost entirely of small pieces of rock. The only place to dispose of mine refuse in Virginia is in the "hollows" formed by intermittent or ephemeral streams near the mines.

Texas Mining & Reclamation Association

- The SBZ rule has far-reaching implications, applying to all intermittent and perennial streams at coal mines anywhere in the United States. New or revised rules that would prevent operations from rerouting waterways may render substantial coal reserves in Texas economically unrecoverable without any corresponding environmental benefit, given Texas operators' exemplary record with respect to restoration of water features.

Interstate Mining Compact Commission

- To be consistent with decisions of the Fourth Circuit Court of Appeals, OSM's rule should define how excess spoil can and must be placed in streams to comport with the law. It should not ban the practice. And while OSM can prescribe a national standard for accomplishing this task, it remains the responsibility of the states, as exclusive regulatory authorities where primacy programs have been approved, to apply the standard through the permitting process, in which OSM plays no role other than through appropriate federal oversight.

- The real dilemma lies not with OSM's rule, but with the practice of excess spoil disposal itself, which the courts have authorized and found to be consistent with the way SMCRA is currently written. Any significant change in direction would therefore require an amendment to SMCRA.

- As OSM continues to search for new alternatives to address this matter, two things must be kept in mind: 1) the states' implementation of this rule and its many iterations over the years has not been the stumbling block, and 2) as OSM attempts to move forward once again with a new variation on a common theme, it is critical to bring the states into the final solution given their role as sole issuers of permits that incorporate and implement the standards.

- OSM must consider how any rule will impact each state's SMCRA regulatory program in terms of both implementation and resources. The incorporation of approaches such as the "alternatives analysis" contained in the 2008 final rule will require the investment of considerable time and effort by state permitting personnel that could prove to be overwhelming. Given the current fiscal constraints under which the states are operating, attempting to accommodate these types of permitting analyses could seriously jeopardize primacy programs.

- Reading between the lines of the ANPR, what we sense is an attempt by OSM to reconcile not just its own regulatory requirements under SMCRA, but a larger, undefined

set of standards for water quality protection being advocated by EPA and the Corps. This rulemaking simply cannot be taken out of context from all the other activity that has attended the development and implementation of the June 11, 2009, interagency MOU. While much of that activity has been focused in central Appalachia, the overarching concerns regarding conductivity, total dissolved solids, and numerical and narrative biologic water quality standards have implications nationwide. And even if it is agreed that this activity resides only in Appalachia for now, there is simply no agreement among the affected federal agencies on what those standards should be.

- OSM should convene a summit of all affected state and federal agencies before proceeding with further rulemaking. The summit's purpose would be to sort out and hopefully agree upon several key issues: 1) who is taking the lead on the issues; 2) what specific regulatory standards are in play under both SMCRA and the CWA; 3) how and where these standards should be incorporated into existing regulatory programs, especially at the state level; and 4) what the expectations are for both implementation of and compliance with those standards. These types of discussions are long overdue and without some resolution with all parties at the table, rulemakings such as that regarding the SBZ rule and related issues are likely to fail.

Alaska Coal Association

- OSM should adopt the team approach in which regulators and operators from the various approved State programs are included in discussions of developing new rules or modifying existing regulations.

Ohio Coal Association

- OSM should bring stakeholders, including the coal mining industry, to the table to discuss these issues before moving forward with this rulemaking.

- Given the ramifications to the coal industry, OSM should err on the side of contemplation and pragmatism and allow time for the 2008 SBZ rule to work and be evaluated before undertaking any additional rulemaking.

Center for Biological Diversity

- Headwater streams are of tremendous importance from a hydrological and biological perspective. Small headwater streams greatly influence downstream chemical and physical properties (Rabeni 1992), and "should not be considered unimportant or ignored" (Shute et al. 1997). Appalachian headwater streams contain one of the most diverse assemblages of aquatic insects in North America, and also support diverse assemblages of fishes and salamanders (Wallace et al. 1992). Intermittent streams are of biological importance because they support many rare species, particularly crustaceans (Herrig and Shute 2002, p. 543). Many species of amphibians are most abundant in intermittent streams (Reid and Ziemer 1994). Headwater seeps and small streams in

forested habitats are required to maintain population viability in many stream salamander species (Petranka 1998).

- Studies should be undertaken to determine the cumulative extent of mining impacts on streams in Appalachia.

- An easy-to-use website database should be created so that the public can readily access information on permits.

- Surface mining in Appalachia has been especially harmful for amphibians and mussels. Amphibian diversity and abundance is lower on lands that have been mined (EPA 2005). Wood (2009) reports that salamanders in headwater stream ecosystems have been significantly negatively impacted by mountaintop coal mining. Mountaintop mining negatively impacts many salamander species, including high-elevation endemics, low-elevation cosmopolitan species, low-elevation specialist species, stream salamanders, and cave-dwelling salamanders (Gatwicke 2008). As mountain topography is altered, high-elevation habitat is lost. The flattened topography alters the soil structure and hydrology. Filling valleys with mining waste causes sedimentation downstream that may negatively affect stream salamanders (Starnes & Gasper 1995). Valley-filling activities also result in flooding, sedimentation, and aquatic pollution and alter essential ecological elements for salamanders including organic matter, cover, and the prey base (Gatwicke 2008). Gatwicke (2008) states: "Of all the mining practices in the Appalachians, mountaintop removal is the most visible and destructive for salamanders." Salamander populations may take more than 70 years to recover from disturbance from clearcutting and mining, if they recover at all (Ford et al. 2002, Williams 2003).

- Locke et al. (2006) suggest that mining-influenced tributaries are negatively affecting downstream mussels. Field and laboratory studies implicate sedimentation from mining in the decline of mussels and snails (Aldridge et al. 1987, Neves et al. 1997). Neves et al. (1997) observes that "[m]any species of mollusks have been extirpated from headwater streams where mining has been most intense" (p. 69). Numerous studies have attributed the decline in diversity and abundance of mussels to habitat loss and degradation resulting from coal mining (Neel and Allen 1964, Stansberry 1969, Ahlstedt and Brown 1979, Neves et al. 1980, Branson et al. 1984, Anderson 1989, Houp 1993, McCann and Neves 1992, Wolcott and Neves 1994, Naimo 1995, Ahlstedt and Tuberville 1997, Neves et al. 1997, Cherry et al. 2001, Ahlstedt et al. 2005, Warren and Haag 2005, Locke et al. 2006).

Trout Unlimited

- Research on brook trout in Maryland suggests that "brook trout are very sensitive to landscape alterations in Maryland and disappear at low levels of impervious land cover regardless of the specific mechanism involved." The Maryland study did not examine mountaintop removal mining areas, but the findings regarding deforestation and altered hydrology can help inform mountaintop mining decisions.

a) Brook trout were almost never found in watersheds where impervious land cover exceeded 4%.

b) Brook trout appear to only occupy streams with summer temperatures that remain less than 24°C and they prefer much cooler streams (MacCrimmon and Campbell 1969).

c) Forest cover loss was the most important factor degrading streams and that low levels of development and forest clearing are sufficient to substantially alter hydrological and biological stream conditions (Booth et al. (2002).

d) Recent brook trout declines and extirpations from many central Maryland streams appear to be correlated with relatively minor amounts (<2%) of total impervious land cover (Boward et al. 1999; Morgan et al. 2004) within a watershed (1224).

e) For every 1% increase in impervious land cover within a catchment, the odds of brook trout presence decreased by 0.599; brook trout were predicted to be absent from watersheds where impervious cover exceeded 3.3% (1227).[2]

The impervious surfaces studied in Maryland were comprised of roads, parking lots, rooftops, and other forms of development. Because of the removal of forests and topsoil and the compaction of land in previously mined areas, there are similarities in the hydrologic impacts of mountaintop removal mining. The science on brook trout indicates that impervious surfaces must be kept to no greater than two percent of a catchment area, and that forested areas should make up at least 70 percent of a subwatershed.

George McClung (WV)

- The majority of "streams" affected are little more than small ditches or drainage ways. A hard look needs to be taken in regard to what actually defines a "stream".

- Water quality standards are unjustly slanted against the coal industry, while other industries (logging, commercial development, sewage treatment, farming, and the list goes on) get very little scrutiny. I personally would much rather drink raw water from the bottom of a mountaintop removal valley fill than from the discharges associated with any of the other industries listed above.

- Selenium is little more than a tool created by coal opponents for the purpose of fighting the mining industry. Compare the limits of 4 ppb for mining with the 50 ppb allowed in drinking water.

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[2] Stranko, Scott A., Robert H. Hilderbrand, Raymond P. Morgan II, Mark W. Staley, Andrew J. Becker, Ann Roseberry-Lincoln, Elgin S. Perry. *Brook Trout Declines with Land Cover and Temperature Changes in Maryland.* North American Journal of Fisheries Management 28:1223–1232, 2008. DOI: 10.1577/M07-032.1

- New more stringent regulations affect not only surface mines, but also underground mines and coal refuse facilities. The Appalachian Region is known for its lack of flat ground away from streams and drainage ways.

International Coal Group

- Application of the SBZ rule to fills simply doesn't work and would actually block a primary accomplishment of SMCRA, which was stopping the environmentally-destructive practice of "shoot and shove" mining. Instead of simply pushing material over the hill to form a "spoil bank," SMCRA required that highwalls be backfilled and all excess earthen material be placed in fills. Surely a person can't honestly believe that Congress intended for OSM to adopt a stream buffer zone rule that would ban valley fills in favor of spoil banks, which would be a major step backward for everyone.

- Punitive regulation intended to strangle Appalachian surface mining will have severe and unacceptable economic impacts on West Virginia and Kentucky. Do not change the 2008 stream buffer zone rule, but apply it based on historic precedent.

Kentucky Waterways Alliance

- The original intent of the SBZ rule, which was to prohibit all disturbances within 100 feet of a stream, must be restored and fully enforced.

- To comply with section 702(a) of SMCRA, any SBZ rule or other rules that OSM proposes must be consistent with the Clean Water Act's primary goal, which is "to restore and maintain the chemical, physical and biological integrity of the nation's waters."

Mark Morris (WV)

- The existing SBZ rule is consistent with SMCRA and court decisions and should not be revised. Over-regulating the coal mining industry will ultimately hurt each and every American, compromise our national defense, and deprive us of coal as a bridge to energy independence. More Americans will be hurt by higher energy bills, in a time which most Americans are struggling to make ends meet. With unemployment currently higher than 10 percent, how could the Federal Government force more Americans out of work with this regulation? These actions will devastate the local Appalachian economy and hurt more than just coal miners. This one rule will halt coal mining as we understand it. Our national defense will be compromised because the United States will increasingly purchase its energy from foreign countries with citizens who are intent on doing harm to the country.

The Navajo Nation

- OSM needs to convene regional meetings to explain the analysis that OSM completed before determining that the existing rules need to be changed. The meetings should include representatives of the business community and state and local governments.

North Dakota Public Service Commission

- Some of the alternatives being considered will create a great amount of confusion and unnecessary burdens for the regulatory authorities and mining companies in states like North Dakota in which there have been no concerns or issues with the current stream protections that have been in place for many years. The ANPR indicates that the rulemaking process is being initiated to better protect the environment and the public from the impacts of Appalachian surface coal mining. Rather than initiating a nationwide rulemaking to address concerns in one region of the country, it would be better to identify the key issues and address them on a case-by-case basis in the states where the concerns exist.

Southern Environmental Law Center

- OSM must revoke the 1996 programmatic biological opinion concerning the conduct of surface coal mining and reclamation operations with respect to threatened and endangered species. In addition, the bureau must conduct permit-specific consultations under the Endangered Species Act to avoid jeopardizing any listed species or the destruction or adverse modification of designated critical habitat.

West Virginia Department of Environmental Protection

- This rulemaking provides an opportunity for OSM and other federal agencies to clarify the relationship between SMCRA and the Clean Water Act.

- There is a need to clarify that the SBZ rule applies to activities in streams throughout the country and that the rule does not preclude disposal of excess spoil in areas in which SMCRA expressly allows such disposal.

Pennsylvania Department of Environmental Protection

- OSM should not proceed with a rulemaking that would require all states to amend their programs to resolve a problem that only appears in a few states with mountaintop mining. Should OSM proceed with overly broad rulemaking, Pennsylvania would be forced to amend three statutes and four chapters of mining regulations to conform to new federal regulations, the genesis of which is a form of mining that does not occur in the state. This effort would require a significant investment of time and resources when the state budget and OSM grant are insufficient to fund even the core functions of the state SMCRA regulatory program.

- Because of the complexity of the subject, the process of developing a new SBZ rule should be accompanied by extensive interactive outreach to the states, citizen groups, and the coal mining industry.

- One matter that requires attention is striking a proper balance between maintaining appropriate boundaries among OSM, state regulatory authorities, EPA, and the Corps of Engineers and the need to coordinate permitting reviews and authorizations. Any OSM rulemaking should maintain a focus on SMCRA requirements. Clean Water Act requirements will work themselves out in the context of permitting actions by the states, EPA, and the Corps of Engineers.

United Mine Workers of America

- OSM should encourage public participation in the rulemaking process by holding hearings at times and places that are convenient to stakeholders and do not require blue-collar workers to forfeit pay and incur travel expenses. Hearings are important because blue-collar workers tend to be less comfortable with the written word.

- There should be no permitting moratorium while the rulemaking process is underway.

- The UMWA vigorously opposes any unnecessary regulation that would result in a loss of employment for union members.

- Any SBZ rule must clearly allow surface mining activities to take place within the buffer zone.

Approximately 18,000 commenters

- OSM should rely upon sound science to prohibit both valley fills and mining through streams.

Detailed Summary of Comments on Alternatives Listed in the ANPR

Note: Specific suggestions for rule revisions other than those listed in the description of the alternative itself are highlighted in yellow.

***Alternative 1*: Replace the 2008 stream buffer zone (SBZ) rules at 30 CFR 780.28, 784.28, 816.57, and 817.57 with the 1983 version of the SBZ rule at 30 CFR 816.57 and 817.57.**

- OSM should quickly and fully restore the protections present under the 1983 SBZ rule. (approx. 31,000 commenters)

- The previous SBZ rules (1977, 1979, 1983, and 2008) have not adequately ensured the protection of streams. Accordingly, stronger regulations than the 1983 rules are now necessary to protect aquatic values, and stronger enforcement is required. SMCRA

requires that natural watercourses be protected during coal mining activities, but to date it is apparent that the health of waterways has been sacrificed for coal production. (Center for Biological Diversity)

- Instead of reinstating the 1983 SBZ rule, OSM should adopt as its preferred alternative a rule that would strictly prohibit the filling or mining through of any stream segment. (SELC)

- Failing that, OSM should reinstate the 1983 SBZ rule, but expand its applicability to include ephemeral streams and make strict enforcement of this rule a condition of all state regulatory programs. In addition, OSM should apply and require that states interpret the 1983 rule in the manner set forth in the appellate brief that the Government filed in the *Bragg* litigation. Finally, OSM should reaffirm that the prohibitions and restrictions in the rule apply to the stream segment in the footprint of any proposed fill as well as to downstream reaches of the stream. (SELC)

- Replacing the 2008 SBZ rule with the 1983 version of the rule would be consistent with the intent of the MOU and should promote stream protection because the 2008 rule exempts certain activities from the buffer zone protections and does not require protection of a buffer zone for a stream segment that ceases to exist in its original location as a result of mining activities. (Corps of Engineers)

- This alternative would, in effect, maintain the status quo for all primacy states that have not amended their programs in response to the 2008 SBZ rule. (VA DMME)

- Repeal of the 2008 SBZ rule and reinstatement of the 1983 rule would be the preferred option for Pennsylvania. However, the general concept of exempting certain activities (e.g., the construction of coal mine waste disposal facilities in perennial or intermittent streams) from the prohibitions and restrictions of the SBZ rule and instead crafting specific requirements for that class of activities is also reasonable. (PADEP)

- The current North Dakota stream protection rule, which is based on the 1983 version of the SBZ rule, has been in place for nearly 25 years and is working without concerns or issues. Therefore, reinstatement of the 1983 rule should be considered. (ND PSC)

- The best course of action would be to retain the 2008 rule. Nevertheless, if OSM moves forward with a proposal to return to some version of the 1983 rule, it is imperative that the agency provide clear guidance that conducting surface coal mining activities in the stream buffer zone is not prohibited. No rational interpretation of a stream buffer zone rule could survive judicial challenge if it provided for either a *per* se or a *de facto* prohibition on filling some stream segments. (NMA)

- OSM should implement the 2008 rules and give them a chance to further improve environmental performance before even considering, let alone initiating, major regulatory

changes in an area that is in dire need of regulatory stability. (NMA, assorted mining companies, approx. 1,500 other commenters)

- The Alaska coal program has run under the 1983 version quite successfully. A return to this version would be acceptable to the Alaska Coal Association membership. (Alaska Coal Ass'n)

- OSM should not revert to the 1983 SBZ rule. The existing (2008) rule finally clarified what industry needed to do to protect streams. It would be a mistake to throw out that rule and return to the confusion and uncertainty associated with the 1983 rule. (Wyoming Mining Ass'n)

- OSM should retain the 2008 SBZ rule, which was the result of a 5-year public process and which ended years of ambiguity and uncertainty. If changes are needed to address certain mining operations in Appalachia, OSM should develop a separate SBZ rule for that region of the country. (Illinois Coal Ass'n, Indiana Coal Council)

- Reinstatement of the 1983 SBZ rule would do nothing to address the concerns raised in the MOU and would return the industry to the same uncertain interpretive quagmire that existed prior to adoption of the 2008 rule. The 1983 rule is unworkable. (Ohio Coal Ass'n)

- If the 1983 version of the SBZ rule is reinstated and its interpretation remains faithful to SMCRA, it will result in a decrease in the amount of environmental analysis and review of mining permits that are situated in or near streams. Considering the stated goals of the MOU upon which the ANPR was based, repealing a more stringent regulation in favor of a less stringent one is, at worst bizarre, and, at best, confusing. (West Virginia Coal Ass'n)

- The 1983 language is legally vague, which is one major reason why the 2008 change was made. Returning to the 1983 language would likely result in increased litigation. (Peabody)

- Legal challenges to the 1983 rule as well as difficulties in practical application of the 1983 rule are discussed in detail in the preamble to the final 2008 rule. We have experienced these difficulties first-hand and recognize that application of the rule requires greater detail than is provided in the 1983 rule. For these reasons, we object to this alternative. (D.R. Allen & Associates)

- North Dakota lignite producers worked effectively with the North Dakota regulatory authority under the 1983 SBZ rule. However, the producers have reviewed the 2008 rule and determined that they can also work well under that rule. Therefore, no change in the national 2008 rule is recommended, although states should have the discretion to revise their rules to address problems of a state or regional nature. (Lignite Energy Council)

Alternative 2: **Apply the prohibitions and restrictions of the stream buffer zone rule to all segments of all perennial and intermittent streams and to the surface of all lands within 100 feet of those streams, with the possibility of adding restrictions on disturbance of ephemeral streams.**

- Prohibiting the placement of excess spoil or coal mine waste in all segments of intermittent or perennial streams, or even imposing a rebuttable presumption that such placement is unacceptable, exceeds restrictions authorized or contemplated by SMCRA, and would be contrary to it. (NMA)

- Prohibiting placement of excess spoil in perennial and intermittent streams would destroy the surface coal mining industry, while prohibiting placement of coal mine waste in perennial and intermittent streams would destroy the underground coal mining industry in central Appalachia. (NMA)

- Close coordination on federal and state stream jurisdictional determinations will be needed to implement this alternative. (Corps of Engineers)

- Please provide clarification to distinguish between prohibition of spoil placement in perennial and intermittent streams and their buffer zones and restrictions on spoil placement in ephemeral streams and their buffer zones. (Corps of Engineers)

- This alternative would expand the prohibitions established under section 522 of SMCRA and would necessitate statutory and regulatory amendments. (VA DMME)

- This option should not be considered because it appears to conflict with section 515(b)(22)(D) of SMCRA, which allows the disposal of excess spoil in natural water courses if lateral drains are constructed to prevent the infiltration of water into the spoil. (ND PSC, others)

- The focus of protection should remain on perennial and intermittent streams because those terms are well-understood and relatively straightforward to implement. Any other alternative would be unnecessarily disruptive to state regulatory programs and would inject litigation and its associated costs and delays into the permitting process. (PADEP)

- To prohibit mountaintop mining or valley fills by regulation would be directly and clearly contrary to SMCRA and how it has been interpreted by the courts. As the 4th Circuit explained:

> SMCRA does not prohibit the discharge of surface coal mining excess spoil in waters of the United States.... It is beyond dispute that that SMCRA recognizes the possibility of placing excess spoil material in waters of the United States even though those materials do not have a beneficial purpose.

Kentuckians for the Commonwealth v. Rivenburgh, 317 F. 3d 425, 442-443 (4th Cir. 2003). (NMA)

- This alternative would result in sterilizing certain coal reserves. Valuation of federal coal for bidding purposes would become uncertain and the federal government may need to compensate operators mining existing leases where restrictions are placed on the reserve that could not be foreseen during the bidding process. (Colorado Mining Ass'n, Peabody)

- The possibility of prohibiting surface coal mining activities in ephemeral streams is particularly troubling because it would severely restrict coal production nationwide. (BHP Billiton)

- Such a blanket prohibition would be overly restrictive, is an over-reaction, removes any ability to evaluate a plan at the state level, and is counter to the preamble of SMCRA in which a balance between protection of the environment and the nation's need for coal as an energy source is required. Streams can have vastly different value, function and density in various areas of the nation. A blanket prohibition does not allow for a fair and valid case-by-case review. In areas with an extremely high drainage density, such as exists in portions of Alaska, this single alternative could prohibit coal mining in the region, even though plans and operations could readily be designed with no material damage to the regional hydrologic balance. The same could be said for coal mines in arid regions. Please drop this alternative from consideration. (Alaska Coal Ass'n)

- OSM previously considered and rejected application of the SBZ rule to ephemeral streams during both the 1983 and 2008 rulemaking processes. The arguments in Part VII of the preamble to the 2008 rule remain sufficient to justify excluding ephemeral streams from application of the rule. (D.R. Allen & Associates)

- Many intermittent streams can be of low value because of land uses such as agricultural drainage systems. Mitigation as part of the mining and reclamation operation can enhance the stream's environment, in which case it makes no sense to prohibit mining activities in those streams and their buffers. (Peabody, Colorado Mining Ass'n)

- This alternative likely would eliminate most surface mining because streams are ubiquitous and it is not reasonable economically or environmentally to mine in between them. (Peabody)

- SMCRA has never included a prohibition on mining in stream buffer zones. Therefore, OSM has no authority to adopt such a prohibition. The courts have struck down a previous attempt by OSM to extend a prohibition expressed in SMCRA beyond the distance specified in the Act. See *In re: Surface Mining Regulation Litigation*, 627 F.2d 1346, 1358-1359 (D.C. Cir. 1980). (Mettiki)

- OSM should prohibit all surface mining activities, including the placement of spoil, mine waste, and/or fill, along the entire length of perennial, intermittent, and ephemeral streams and to the surface of all lands within at least 200 feet of those streams, without exception. It has been demonstrated that 100-foot buffers are not large enough to protect aquatic values during activities that produce severe sedimentation, such as surface coal mining, and in areas with steep terrain (Wenger 1999). (Center for Biological Diversity)

- OSM should not propose or adopt the variation of this alternative that would establish a rebuttable presumption that placement of excess spoil or coal mine waste in a perennial or intermittent stream is prohibited because it would result in an unacceptable level of environmental damage. Adoption of this presumption would simply preserve the status quo and allow unwarranted and routine exceptions to the prohibitions in the SBZ rule. (SELC)

- We support this alternative to the extent that it is intended to ordinarily disallow spoil and waste disposal in streams as well as on the lands surrounding those streams. We also support extending this protection to ephemeral streams, especially since there is uncertainty as whether and to what extent those streams will receive protection under the Clean Water Act. (NRDC)

Alternative 3: **Revise 30 CFR 816.57 and 817.57 to provide that the SMCRA regulatory authority may authorize mining activities in a perennial or intermittent stream, or on the surface of land within 100 feet of such a stream, only if those activities (1) would not violate sections 401 and 402 of the Clean Water Act; (2) would not violate section 404 of the Clean Water Act; (3) would not significantly degrade the water quantity or quality or other environmental resources of the stream; and (4) would minimize disturbances and adverse impacts on fish, wildlife, and other related environmental values of the stream to the extent possible using the best technology currently available.**

- Any changes should consider and clearly explain how they will relate to TMDL reports and requirements. (VA DMME)

- This rather vague option should not be considered because it is likely to create situations in which OSM inspectors and technical reviewers will second-guess findings made by the state regulatory authority. (ND PSC)

- The federal agencies should take this opportunity to clarify the relationship between the SMCRA permit and the section 404 authorization. How can the SMCRA regulatory authority impose requirements that are in conflict with a Clean Water Act authorization? (WVDEP)

- For this alternative to be successful, concurrent evaluation of all permit applications by all regulatory authorities would be necessary. The rule should require that the SMCRA regulatory authority communicate with the Corps of Engineers with respect to compliance with section 404 of the Clean Water Act and communicate with the

applicable state NPDES permitting authority and/or EPA to determine compliance with sections 401 and 402 of the Clean Water Act. (Corps of Engineers)

- The first two criteria under this alternative are superfluous and unnecessary because, with or without such a SMCRA rule, mining operations must still comply with applicable provisions of the Clean Water Act. Including the provisions suggested in this alternative in SMCRA rules would be inappropriate because it would place the SMCRA regulatory authority in the position of making determinations on whether or not the Clean Water Act would be complied with or is even applicable. SMCRA regulatory authorities have absolutely no authority to make such determinations, nor can OSM give them such authority by regulation. Section 702(a)(3) of SMCRA states that nothing in SMCRA shall be construed as superseding, amending, modifying or repealing the Clean Water Act or its implementing regulations. Neither the Clean Water Act nor its implementing regulations provide for authorizing SMCRA regulatory authorities to make applicability or compliance determinations for sections 401, 402 or 404 of the Clean Water Act unless the delegation occurs under the Clean Water Act, not SMCRA. (NMA)

- The third criterion would need some spatial clarification such as outside the permit area or within 100 feet of the surface mining activities. Without such clarification, there will be controversy over whether this language does or does not preclude constructing an excess spoil fill in an intermittent or perennial stream, just as there was with the 1983 SBZ rule. (NMA)

- The wording of the fourth criterion is essentially identical to existing 30 CFR 816.71(a)(4) and 816.57(c)(3) as finalized in the 2008 rulemaking. Therefore, existing OSM rules already require that the regulatory authority must find that an operation will comply with these requirements before a permit can be issued. There is nothing new in this criterion that is not contained in existing rules. (NMA)

- The ambiguous language of the fourth criterion of this alternative is worrisome. How will OSM determine if disturbances or adverse impacts have been properly "minimized"? What do you consider an adverse impact? What exactly are "other related environmental values"? (D.R. Allen & Associates)

- How will minimization "to the extent possible" be interpreted? Will the need for a company to have a financial incentive to mine coal be considered? The balance between environmental protection and allowing for such a financial incentive is critical to ensuring the continued production of coal at levels necessary for sustainability of both our nation's energy supply and economy. (D.R. Allen & Associates)

- This alternative is fraught with ambiguity. Its adoption would result in a return to the very same interpretive ambiguity from which OSM emerged with the promulgation of the 2008 rule. (Ohio Coal Ass'n)

- OSM should revise 30 CFR 816.57 and 817.57 to provide that the SMCRA regulatory authority may not authorize mining activities in perennial, intermittent, or ephemeral streams under any circumstances. The best technology currently available to ensure that streams meet Clean Water Act standards is to prohibit all mining activity near streams. Given the history of lax Clean Water Act enforcement, the addition of caveats requiring Clean Water Act compliance is inadequate to protect waterways from continuing to be filled or polluted by surface mining activities. Moreover, it is known that in mining areas, current water quality criteria are not adequate to protect sensitive species or sensitive life stages of species (Neves et al. 1997, FWS 1994, 1997, 2009). (Center for Biological Diversity)

- The National Park Service supports the third criterion of this alternative, which would prohibit significant degradation of the water quantity or quality or other environmental resources of the stream outside the permit area. While section 522(e)(3) of SMCRA prohibits surface coal mining activities outside park boundaries that would adversely affect any publicly owned parks, the Service has been reluctant to raise this prohibition even though numerous units of the National Park System are downstream recipients of runoff originating on or near surface coal mining operations and therefore could be adversely affected by this nonpoint discharge. We believe that a more effective way to protect park resources from upstream discharges is by preventing significant degradation of the water quantity or quality or other environmental resources of the stream outside the surface mining permit area altogether. (NPS GRD)

***Alternative 4*: Establish numerical limits on fill size, the percentage of a watershed disturbed by mining operations at any one time, or total stream miles covered by fills in each watershed.**

- There is no new information that would justify limits of this nature. OSM should avoid a "one size fits all" approach. Determinations should be site-specific and take into consideration past mining impacts and opportunities to improve sites left unreclaimed by prior mining. (VA DMME)

- This option should not be considered because it would be very difficult to establish thresholds of this nature to cover the variety of conditions that exist in different areas. (ND PSC)

- Proposing one-size-fits-all numerical limits is impracticable and inappropriate because of differences in site-specific characteristics. (WVDEP)

- This alternative would effectively prevent Alaska from developing its coal resources in a way that maximizes resource recovery while still protecting the environment. (Alaska DNR)

- Establishing numerical limits would be very difficult. The rule should instead require an analysis of the structure and function of premining stream channels to allow regulatory

authorities to evaluate whether reclamation or mitigation is adequate to offset stream losses as a result of the mining activity. (Corps of Engineers)

- A 30-day comment period is insufficient for industry to provide the requested information concerning bright-line thresholds. (Ohio Coal Ass'n)

- Imposing numerical limits on fill size is unsound from an environmental standpoint. The laws of geometry dictate that placing 30 million cubic yards of excess spoil in 30 separate one-million-cubic-yard fills would affect substantially more total area with much greater risk of fill failure than placing that same material in six separate five-million cubic yard fills, which would, in turn, cover more total area with greater risk of failure than placing the entire 30 million cubic yards in one fill. (The surface area-to-volume ratio decreases as volume increases, which means that 30 separate one-million cubic yard fills would cover approximately 10 times the surface area that would be covered by one 30-million cubic yard fill.) (NMA)

- Imposing numerical limits on fill size is unsound from the standpoint of safety and stability. Gravity comes into play because the smaller the fill, the higher the toe of the fill would be--and the higher the toe of the fill, the steeper the slope where that toe is placed. A fill that toes out where the slope of the natural ground is less than 10 percent is orders of magnitude easier to hold in place than one where the slope of the natural ground is over 15 percent at the toe (and there would be 30 fill toes on those steeper slopes rather than six toes on a gentler slope, or one toe on a still gentler slope). (NMA)

- The courts have held that an agency seeking to change its previous holdings must provide a thorough and comprehensive statement of reasons for the decision and, in cases where the agency's rule departs from prior policy, such analysis must go beyond that which is required when the agency has not taken a position in the first instance. In this case, OSM has previously taken the position that there is neither statutory authority nor a scientific basis for establishing bright-line numerical thresholds for fills. Thus far, OSM has identified no change in its SMCRA authority nor has it produced any new scientific data to support a change in its prior findings on these issues. (NMA)

- This alternative would be inconsistent with the maximum economic recovery requirements of the Mineral Leasing Act for leased federal coal as set forth in 43 CFR 3484.1. (BHP Billiton)

- A numerical limit on the size of fills, percentage of watershed disturbed, or total miles covered by fills could never be developed for Alaska, much less nationally. Even with exhaustive scientific information gathered at the cost of tens of millions of dollars, there are no one-size-fits-all limits that could be appropriately applied. We suggest this alternative be dropped from further consideration. (Alaska Coal Ass'n)

- Limits on fill size or stream miles do not make sense in this context. Mitigation should be considered in determining what impacts are significant. Otherwise, substantial coal reserves will be sterilized. (Peabody)

- Considering the large variations in project-specific site conditions throughout the Appalachian surface coal mining states, application of even a regional limit (whether numerical, qualitative, or quantitative) to all operations is nonsensical. (D.R. Allen & Associates)

- The new rule should establish numerical limits on the percentage of a watershed or county that can be cumulatively permitted for mining activities, past or present. Whether the numerical limit is determined by watershed boundary or county boundary should be based on which delineation will result in the least amount of area that is permitted for mining. We support using county delineations because that data is already available for eastern Kentucky and West Virginia in the December 2009 Governmental Accountability Office report on surface mining in the Appalachian portions of those states. Numerous scientific studies have shown that biodiversity and water quality are negatively affected when greater than 10 percent of the surface area of a watershed has been altered (e.g., Yaun and Norton 2003, Allan 2004, Morgan and Cushman 2005).

  Based on this standard, we suggest as the most lenient standard, denial of the further issuance of surface mining permits in counties or watersheds where 10 percent of the land area has already been permitted for surface coal mining, whether the permits are active or reclaimed. With regard to a numerical limit on fill size or total stream miles covered by fills within a watershed, the limit should be set at the present amount of devastation, and no further filling of streams should be permitted, without exception. (Center for Biological Diversity)

- Numerical limits are vital to addressing cumulative impacts from surface mining and to give effect to the requirement in section 515(b)(24) of SMCRA that adverse impacts on fish, wildlife, and related environmental values be minimized to the extent possible, using the best technology currently available. There is scientific support for prohibiting all fills in streams, but, failing that, the rule should prohibit the issuance of new permits for mining through or filling a stream in any watershed in which surface coal mining operations have affected 10 percent of the watershed. (SELC)

- If a permit is issued and subsequent monitoring shows significant degradation or violation of water quality standards, the rule should require that the regulatory authority order a cessation of operations. (SELC)

Alternative 5: **Establish a quantitative or qualitative threshold beyond which further damage to water quality or aquatic life in a particular watershed would be prohibited.**

- Virginia already implements this approach through its TMDL program, which establishes protective thresholds for aquatic life on a watershed basis. Only permit applications that propose to offset their pollution loads with watershed improvements are eligible for approval. Other states should emulate Virginia's example. (VA DMME)

- Any threshold involving benthic life impairments should state specifically what species of macroinvertebrate or other biological marker organism(s) indicates impairment. For instance, does the presence or absence of a particular mayfly species when other mayfly species are present indicate impairment? Additionally, the assessment protocol, scoring method and specific score should be specified. Any in-stream water quality criteria based on benthic life impairment should not be mandated on a regional basis because Virginia's experience with TMDLs indicates that some of the most detrimental impacts on benthic life result from development and straight-pipe discharges, not coal mining. (VA DMME)

- This option should not be considered because it would be very difficult to establish this type of threshold due to the variety of conditions that exist. (ND PSC)

- Pennsylvania is not aware of any empirical data that would support a quantitative impact threshold. (PADEP)

- Guidelines for water quality standards and effluent limitations designed to protect water quality and aquatic life for specific uses have already been established under the Clean Water Act. The courts have rejected previous OSM rules that intruded into this area of Clean Water Act regulation. (WVDEP)

- This alternative would effectively prevent Alaska from developing its coal resources in a way that maximizes resource recovery while still protecting the environment. (Alaska DNR)

- This type of threshold may be difficult and impracticable to establish because it would require comprehensive analyses of the baseline conditions of all affected watersheds and their ecological carrying capacity. (Corps of Engineers)

- When assessing water quantity and quality outside the permit area, the SMCRA regulatory authority should work closely with both the EPA and other federal land managers, like the NPS, to identify downstream aquatic resource impacts and to develop appropriate water quality and quantity thresholds that promote healthy natural aquatic systems for federal trust resources. Impacts from individual operations as well as cumulative impacts need to be evaluated with regard to aquatic species, especially threatened and endangered species. These impacts also should be considered in assessing past and present conditions in the watershed. (NPS GRD)

- Establishing watershed water quality criteria (either quantitative or qualitative) is entirely beyond the scope of what is authorized by SMCRA. This approach cannot be harmonized with the Clean Water Act and would be in violation of section 702(a)(3) of SMCRA, which states that nothing in SMCRA shall be construed as superseding, amending, modifying or repealing the CWA or any rule or regulation promulgated there under. (NMA)

- Establishing an arbitrary threshold is not feasible and is beyond the scope of SMCRA authority. These concerns should be covered by the existing requirement for a cumulative hydrologic impact assessment and separate permitting processes under the Clean Water Act. (Colorado Mining Ass'n)

- Mitigation should be considered in determining impacts. (Peabody)

- Considering the large variations in project-specific site conditions throughout the Appalachian surface coal mining states, application of even a regional limit (whether numerical, qualitative, or quantitative) to all operations is nonsensical. (D.R. Allen & Associates)

- The rule must define what a watershed is for regulatory purposes. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- Cumulative impairments should be examined at multiple levels, starting with a very local scale (HUC 14) and include the small watershed scale (HUC 11) to HUC 8 scale (watershed level). Otherwise, true watershed impacts cannot be assessed. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- The development of cumulative thresholds should be evaluated across various seasonal flow regimes to establish appropriate values. In addition, criteria should be set in relation to least disturbed condition streams from nearby areas. OSM or permit applicants should fund studies to gather information on what the critical environmental thresholds should be for threatened or endangered species (water quality, percentage of local watershed disturbance). (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- OSM should consider the diversity, connectivity, and integrity of freshwater mussel communities within watersheds, especially those downstream of major mining operations. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- OSM should work directly with EPA, the U.S. Geological Survey, and scientific groups such as the North American Benthological Society, the American Fisheries Society, the Ecological Society of America, and the Freshwater Mollusk Conservation Society, to establish a framework for establishing appropriate criteria for biological thresholds. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- The cumulative effects of mining on groundwater resources must be considered as these connections are critical to the hydrological and biological integrity of watersheds. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- Appalachian waterways have already been ravaged by surface coal mining and no further degradation of aquatic habitats should be permitted. (Center for Biological Diversity)

***Alternative 6*: Adopt by regulation the watershed approach described in the preamble to the 2008 rule, rather than making project-specific determinations.**

- Any watershed approach must properly account for pre-SMCRA and nonmining pollutional loads, as well as accurately measure those loads through data analysis. (VA DMME)

- A watershed approach could open the window to the use of offsite best management practices and offsets that would provide the most benefit to water quality and aquatic life. It should encourage offsets to NPDES pollutant loading by companies engaging in point source to non-point source offsets and not in-kind offsets such as offsets for TSS or TDS for straight-pipe removal or sewage treatment projects. (VA DMME)

- This option is quite vague and more specifics are needed to have a clearer understanding of the proposal in order to properly evaluate and comment on it. (ND PSC)

- This alternative should be implemented. The SMCRA regulatory authority should evaluate the individual and cumulative effects of past, present, and reasonably foreseeable future activities in the watershed. The rule should specify the size of the watershed that must be evaluated, using Hydrologic Unit Codes. (Corps of Engineers)

- Requiring operators to engage in watershed-scale impact analysis likely would result in the extinction of mining by many of Ohio's smaller operators. The analysis is legally tenuous and would require operators to engage in a guessing game with respect to future mining development, land use, and downstream uses and characteristics. (Ohio Coal Ass'n)

- This alternative ignores the essential point that coal mining operations differ from other industrial sites that EPA is used to regulating. Mines can only go where the minable coal is. Coal mines are, by necessity, located where minable coal reserves are located. Minable reserves are not evenly distributed, nor do they encompass only a certain percentage of each watershed. Some watersheds are full of minable reserves, while others have few or no reserves. To preclude the mining of minable reserves--particularly when the infrastructure and equipment is already in the area--simply because other mines are already in the watershed makes no sense, either from an environmental or practical perspective. It would only increase the size of the infrastructure footprint for the same amount of coal production. (NMA)

- This alternative would be contrary to SMCRA in that section 102(k) encourages the "full utilization of coal resources" by underground mining methods, and section 515(b)(1) requires that surface coal mining operations be conducted so as "to maximize the utilization and conservation of the solid fuel resource being recovered so that reaffecting the land in the future through surface coal mining can be minimized." (NMA)

- Precluding mining of readily available reserves would constitute a taking of private property requiring just compensation under the Fifth Amendment to the Constitution, especially when coal reserves are acquired years prior to mining, which is typically the case. (NMA, Colorado Mining Ass'n, Peabody)

- The SMCRA mandate for the regulatory authority to prepare a cumulative hydrologic impact assessment (CHIA) should not and cannot be shifted to the permit applicant. Further, the finding required by the regulatory authority, after preparing the CHIA, only applies to the proposed operation, not all anticipated mining. (NMA)

- Stopping mining in a watershed as opposed to providing sufficient mitigation will drive mining into greenfield locations, which would potentially be both more costly and more environmentally damaging. If mitigation is sufficient, there is no sound reason to limit mining in a watershed. (Peabody)

- All the factors mentioned in the 2008 preamble discussion of the watershed approach that EPA recommended are required under the Clean Water Act, not SMCRA. OSM has no authority to incorporate these requirements into SMCRA regulations, nor can OSM legally assume Clean Water Act duties that are reserved to EPA and its delegated states. (West Virginia Coal Ass'n)

- The rule must define what a watershed is for regulatory purposes. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

Alternative 7a: **Define the term "material damage to the hydrologic balance."**

- This definition is needed, together with identification of actions that can be taken to ensure the material damage is prevented. (Corps of Engineers)

- The definition should require consideration of adverse on-site impacts, such as the conversion of perennial or intermittent stream segments within the permit area to ephemeral stream segments following reclamation. (Corps of Engineers)

- OSM should define the term "material damage to the hydrologic balance outside the permit area" to expressly include:

  a) exceedance of any applicable federal or state numeric water quality standard for a pollutant or condition that a surface coal mining and reclamation operation may

reasonably be expected to discharge, cause, or worsen, where the exceedance occurs in any water resource that a particular surface coal mining and reclamation operation may or does detectably affect;

b) any lesser concentration or load of a mining-related pollutant or combination of pollutants that a SMCRA or Clean Water Act regulatory authority may find to indicate or constitute an unacceptable degree of damage to a water resource that a surface coal mining and reclamation operation may or does detectably affect;

c) any condition that applicable federal or state narrative water quality standard or anti-degradation standard prohibits and that a surface coal mining and reclamation operation may reasonably be expected to cause or worsen in a water resource that the operation detectably affects;

d) any other condition that the regulatory authority determines to constitute an unacceptable degree of damage to a water resource that a surface coal mining and reclamation operation may or does detectably affect; or

e) disturbance of more than 10% of the land area of any watershed.

Section 702(a)(3) of SMCRA precludes OSM from defining "material damage to the hydrologic balance outside the permit area" in any manner that fails to recognize an exceedance of applicable water quality standards under the Clean Water Act or state statutes that implement the Clean Water Act as "material damage to the hydrologic balance." (Appalachian Center for the Economy and the Environment)

- The definition of the term "material damage to the hydrologic balance outside the permit area" must expressly include any potential exceedance of state or federal numeric or narrative water quality standards or antidegradation requirements. (SELC)

- The significant amount of hydrologic information gathered during the past 25 years demonstrates the great variability in conditions from area to area and state to state. It confirms the wisdom of OSM's 1983 decision to leave determinations of material damage to the states, rather than codifying a national definition or establishing national criteria for material damage. (VA DMME)

- If OSM decides to define material damage, the definition must be based on sound science and be site-specific. A scoring matrix of relevant factors may provide the necessary flexibility. (VA DMME)

- To be consistent with EPA actions, any definition should consider establishing a conductivity of approximately 500 micro Siemens or TDS of approximately 350 mg/l as thresholds for material damage. (VA DMME)

- Any definition of material damage that includes a benthic life component should state specifically what species of macroinvertebrate or other biological marker organism(s) will be used as a measure of impairment. For instance, does the presence or absence of a particular mayfly species, when other mayfly species are present, indicate impairment? Additionally, the assessment protocol, scoring method, and specific score should be established. (VA DMME)

- Any in-stream water-quality-based definition of material damage to benthic life should take into consideration the fact that benthic impairment results from a combination of factors (e.g., drought, development, and straight-pipe discharges) that are not all related to coal mining. (VA DMME).

- As mentioned in the ANPR, OSM did not define this term in the past because the gauges for measuring damage vary from area to area and from operation to operation. This rationale remains valid. Therefore, we strongly oppose the suggestion that "material damage" be defined by rule. When the material damage topic has come up in OSM training courses and other discussions, OSM staff has consistently stated that this needs to be evaluated and determined on a case-by-case basis. (ND PSC)

- West Virginia has already adopted a definition of this term, as has OSM in Tennessee. Both definitions are crafted to avoid potential inconsistencies with the Clean Water Act. (WVDEP)

- Given the significant differences in geology, hydrology, and terrain among the various regions of the country where surface coal mining operations occur, regulatory terms such as "material damage to the hydrologic balance" have necessarily been left to each state to define based on their unique circumstances. This is the very essence of SMCRA's design, whereby Congress vested primary governmental responsibility for developing, authorizing, issuing and enforcing regulations for surface coal mining and reclamation operations with the states so as to accommodate the diversity in terrain, climate, biologic, chemical, and other physical conditions in areas subject to mining operations. (IMCC, Ohio Coal Ass'n)

- It is difficult to imagine one nationwide definition (or nationwide criteria) for what constitutes "material damage to the hydrologic balance outside the permit area." While some generic qualitative language like the definition that OSM has approved as part of the Wyoming program might work nationwide, it is hard to see that it would add much clarity. Criteria that would be appropriate for defining material damage to the hydrologic balance outside the permit area-for a permit covering thousands of acres in the Four Corners area with annual precipitation less than 10 inches a year and no intermittent or perennial streams in the immediate area can and should be quite different than those criteria appropriate for a mountaintop operation in central Appalachia, or a large dragline operation in the flat areas of east Texas with more than 50 inches of annual precipitation. (NMA)

- If OSM does propose a definition, the phrase "outside the permit area" should be included as part of the term because it is an integral part of the finding that a regulatory authority must make. (NMA)

- If OSM deems a definition necessary, it should include the following language: "Any long-term or permanent change in the hydrologic balance caused by surface mining operations that has a significant adverse impact on the capability of the affected water resources to support existing conditions and uses." (Mettiki)

- Time and further development of science cannot override geography. (West Virginia Coal Ass'n)

- OSM is precluded from assuming any role in areas of water quality regulation that are reserved to individual states under the Clean Water Act. (West Virginia Coal Ass'n)

- It would be difficult to come up with a definition appropriate for the vastly differing hydrologic conditions where coal mining occurs, and by necessity should be determined by state programs relative to individual sites. (Colorado Mining Ass'n)

- As stated in the ANPR, in 1983, OSM decided not to propose or adopt a definition or fixed criteria for material damage to the hydrologic balance "because the gauges for measuring damage may vary from area to area and from operation to operation." This is still the case; the conclusion drawn in 1983 still applies today. For example, the tolerance for change in a highly productive aquatic habitat would be significantly different than that for a barren aquatic zone. State programs should have the flexibility and authority to judge each project on a case-by-case basis. (Alaska Coal Ass'n)

- Any definition most likely would be unworkable because it would probably conform to the current EPA stance that almost any adverse impact on aquatic communities equates to material damage to the hydrologic balance. (Clintwood Elkhorn Mining Company)

- While understanding of the relevant hydrology and associated technology have advanced since 1983, the statement in the 1983 preamble quoted in the ANPR remains relevant: "...the gauges for measuring damage may vary from area to area and operation to operation..." The large variations in project-specific site conditions (climate, geology, etc.) would make any definition of material damage ripe for legal challenge. (D.R. Allen & Associates)

Alternative 7b: **Revise the definition of "cumulative impact area" and the requirements for CHIAs and PHC determinations to incorporate elements that are consistent with the manner and standards by which the Corps of Engineers determines potential cumulative adverse impacts on waters of the United States under section 404 of the Clean Water Act.**

- OSM should align the geographic scope of the cumulative impact analysis under SMCRA with the geographic scope of NEPA to promote greater consistency between SMCRA and Clean Water Act cumulative impact analyses. (Corps of Engineers)

- OSM should not revise the definition of "cumulative impact area" to incorporate the manner and standards used by the Corps of Engineers for determinations under section 404 of the Clean Water Act. It is not necessary to invoke standards developed by another federal agency to meet provisions under a different federal act. (ND PSC)

- OSM should not incorporate elements of the Corps of Engineers' processes and standards for potential adverse impacts of fill disposal under the Clean Water Act Section 404 program into the SMCRA probable hydrologic consequences (PHC) determination and CHIA processes. As acknowledged in the ANPR, the Corps is concerned with determining adverse impacts to waters of the U.S. in relation to the discharge of fill material under Section 404 of the Clean Water Act. The CHIA process and the finding that the SMCRA regulatory authority must make is concerned with the possible impact of the entire mining operation upon the entire hydrologic balance outside the permit area (not the stream inside the permit area and not just the stream). (NMA)

- As the jurisdictional reach of the Corps of Engineers has been limited to the affected waters and adjacent riparian areas by the U.S. Court of Appeals for the Fourth Circuit in *Ohio Valley v. Aracoma Coal Co.*, No. 07-1479 (4th Cir. 2009), the differences in the scope of analysis between the section 404 and SMCRA permits warrant elimination of the portion of this alternative that would have OSM incorporate elements of the Corps of Engineers' processes and standards for potential adverse impacts of fill disposal under the Clean Water Act section 404 program into the SMCRA PHC determination and CHIA processes. (D.R. Allen & Associates)

- OSM should not revise the definition of "cumulative impact area" at 30 CFR 701.5. The definition requires regulatory authorities to delimit cumulative impact areas on the basis of scientific analysis of hydrologic data that demonstrate the geographic extent to which the effects of a proposed surface coal mining and reclamation operation may, given the particular environmental conditions adjacent to the proposed permit area, interact with the hydrologic effects of other mining operations to produce a cumulative impact on the hydrologic balance. That method of delimiting cumulative impact areas is pragmatic, wholly supportive of the purpose of CHIA analysis, easily reviewable for error, and not susceptible to manipulation by those who favor or oppose mining without regard to Congress's intent in enacting SMCRA. Properly applied, the definition works well. [Appalachian Center for the Economy and the Environment (ACEE), West Virginia Coal Ass'n]

- The Corps of Engineers' "Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material" contains scant methodology or standards for OSM to incorporate into its CHIA regulations. Other than repeated admonitions to look both individually and cumulatively at the various effects of fill placement, the "Guidelines" mention "cumulative" analysis only twice. Neither of these provisions adds anything to the CHIA process defined in OSM's current regulations and internal guidance documents. The Corps's cumulative impact methodology appears to differ from OSM's CHIA procedures only by limiting the extent of the Corps's analysis to what that agency deems "reasonable and practical," as opposed to OSM's statutory mandate to evaluate "the probable cumulative impact of all anticipated mining in the area" of a proposed mine. 30 U.S.C. § 1260(b)(3). Certainly, OSM has no authority to curtail the focus of its CHIA analysis to anything less than the extent of the agency's statutory mandate. Accordingly, OSM could not incorporate the Corps's narrower cumulative impact focus. (ACEE)

- Congress chose to elevate cumulative impact analysis from the simple mention of cumulative impact as a factor in deciding whether to issue a general permit for fill construction under the CWA to the far more elaborate and crucial test for issuance of any permit for any type of surface coal mining and reclamation operation under SMCRA. In doing so, Congress put the Secretary of the Interior, not the Secretary of the Army, in the driver's seat with respect to methodology and standards for cumulative impact analysis related to surface coal mining and reclamation operations. For that reason, if any incorporation is to be done, it is the Corps which must incorporate OSM's more detailed and stringent cumulative impact regulations rather than the other way around. (ACEE)

***Alternative 8*: Require that a SMCRA permit applicant concurrently submit the SMCRA permit application to the SMCRA regulatory authority, the National Pollutant Discharge Elimination System permitting entity, the U.S. Army Corps of Engineers, EPA, and the state agency responsible for certification under section 401 of the Clean Water Act.**

- Concurrent submittals are necessary to ensure successful interagency communication and to ensure that all agencies are evaluating the effects of the proposed mining activity on all aquatic resources that each agency regulates. (Corps of Engineers)

- The Tennessee Department of Environmental Conservation expressed support for this alternative.

- OSM should require prompt submittal of permit applications to the Fish and Wildlife Service so that threats to proposed and listed threatened and endangered species can be assessed on a permit-by-permit basis. (Center for Biological Diversity)

- Virginia's SMCRA permitting process already incorporates extensive coordination and cooperation with the listed agencies. (VA DMME)

- Electronic permitting allows simultaneous access to permit applications by all interested state and federal agencies. (VA DMME)

- We strongly oppose this option because the specific review times under SMCRA-based law and rules are likely to be very different from those of the state agency that handles the NPDES permitting and other Clean Water Act responsibilities and that of the Corps of Engineers for Section 404 authorizations that may be required. While we currently coordinate and consult with these other agencies as necessary, there should not be a mandatory requirement that the permit applications be filed at the same time. (ND PSC)

- This alternative is totally inappropriate and well beyond what is authorized by SMCRA. It just looks like permit review by a committee that includes parties that have no jurisdiction in a SMCRA permitting decision. If OSM wants to facilitate better coordination, then it should follow the pattern set by 30 CFR 780.16(c) for fish and wildlife protection. Under those rules, it is the responsibility of the SMCRA regulatory authority to provide relevant parts of the application to other agencies that have an interest. Further, the only permit application information provided to other agencies should be information that is relevant to the other agencies' jurisdiction. Also, if National Pollutant Discharge Elimination System authority has been delegated to a state, there is no reason for EPA to be involved. (NMA)

- Where is the authority under SMCRA to impose such a requirement? Such a requirement goes far beyond simple coordination or consultation. (Colorado Mining Ass'n)

- Adoption of this alternative would result in more duplication of effort both for industry and government. Integrated permitting would not assist with solving the already troubled and cumbersome permitting process under the Clean Water Act. In addition, the integrated permitting process in Ohio has been a failure. (Peabody)

- While coordinated permitting sounds attractive, there is a reason why different agencies have different permitting procedures and review parameters—those procedures and parameters are specifically tailored to their respective authorizing statutes and thereby their environmental and regulatory expertise. For example, submission of a detailed SMCRA permit application to an NPDES permitting authority will not benefit the section 402 review in any way—it will only supply volumes of irrelevant information. (West Virginia Coal Ass'n)

- West Virginia's experience with coordinated permitting initiatives shows that they quickly become obstacles to efficient and timely permit issuance under any of the programs and agencies involved, a problem that is exacerbated by the fact that additional funding rarely accompanies any of these initiatives. (West Virginia Coal Ass'n)

- In many cases, this is indeed how an applicant organizes the permit process. However, for large projects that may require an EIS or be managed under a permit coordinating agency (such as the Office of Project Management under the Alaska Department of

Natural Resources), this timing may not be in the best interest of the project or the agencies. For example, it may require incomplete applications be submitted to one agency to fulfill this requirement, only to have a modified application filed later, thus requiring additional review time. Allowing the applicant and the agencies the ability to coordinate their permit application submission and review schedules is in the best interest of all parties. No project can proceed until all applications are processed and approved, regardless of the timing of submittals. Thus, we suggest that this alternative be dropped from further consideration. (Alaska Coal Ass'n)

- Enhanced coordination that does not delay the permitting process is always welcome. However, it is not essential because no disturbance may be conducted until a permittee has obtained all necessary permits. Additionally, procedural issues with certain agencies may result in delays that would prevent submittal of all permit applications. Therefore, conditioning when a permittee may submit an application is in our opinion overly restrictive and would require revisions to not only OSM's regulations, but also the Corps of Engineers regulations as well as those of all state regulatory authorities. (D.R. Allen & Associates)

- We support a streamlined, practical approach to permitting, but to date the agencies have not been able to design such a system. Nothing in this alternative will change this reality. Each permitting authority operates on varying timelines and may request additional information and technical analyses from permit applicants. Under this alternative, those applicants then would be required to potentially submit numerous and unnecessary supplemental information to several agencies. In addition, there is no legal authority for this alternative. (Ohio Coal Ass'n)

***Alternative 9*: Establish more detailed permit application requirements and performance standards for stream-channel diversions and restoration of streams.**

- No further disturbance and diversion of streams should be permitted. Artificially-constructed stream channels do not support the same flora and fauna or fulfill the same ecological roles as natural streams, and the destruction of natural streams should be prohibited. However, because stream damage is likely to continue to be permitted, premining stream surveys should be conducted to document conditions including but not limited to: flow, temperature, conductance, turbidity, pH, dissolved oxygen, total suspended solids, total dissolved solids, and levels of nutrients and metals including nitrogen, phosphorus, sulfur, iron, selenium, arsenic, and mercury. Premining stream surveys should also include aquatic flora and fauna ranging from zooplankton and phytoplankton to aquatic macroinvertebrates, mollusks, amphibians, reptiles, and fishes. If coal mining activities are not going to be entirely prohibited in and near streams, then coal operators should be required to return streams to their premining biological condition. If these conditions cannot be met, then permits should not be issued. (Center for Biological Diversity)

- Performance bonds should not be released until restored streams fully support the forms of life which were present prior to mining. (Center for Biological Diversity)

- No additional requirements or performance standards are needed if applicants must demonstrate compliance with sections 401 and 404 of the Clean Water Act before the SMCRA permit is approved. (VA DMME)

- No additional monitoring or bond release requirements are necessary because the Corps of Engineers has adequate authority to require correction of any discrepancy found after SMCRA bond release. There is no need to require the state SMCRA regulatory authority to incur the additional inspection and administration expenses that would result from additional monitoring and bond release requirements. (VA DMME)

- This option is quite vague and more specifics are needed to have a better understanding of the proposal to properly evaluate and comment on it. (ND PSC)

- SMCRA regulatory authorities should develop stream relocation and restoration criteria that, when practical, align with mitigation requirements under the Clean Water Act. (Corps of Engineers)

- OSM should explore the practicality of requiring that the SMCRA regulatory authority hold the SMCRA performance bond until the success of stream restoration and mitigation requirements under the Clean Water Act have been demonstrated. (Corps of Engineers)

- It may be reasonable to consider adding more detailed permit application requirements for modern stream assessment and mitigation techniques and practices. (Peabody)

- Premining condition surveys would prove useless for permits subject to the arbitrary one-square-mile intermittent stream definition at 30 CFR 701.5. (Peabody)

- OSM needs to better articulate what problem it is trying to solve. It is unclear what the basis is for thinking that further rulemaking is needed on stream-channel diversions, or how this alternative is connected to central Appalachia. With no stated basis or purpose, it is simply impossible to respond without further information. In short, NMA does not believe that OSM should propose additional requirements of this nature. (NMA)

- It will be difficult to develop requirements that will properly fit all situations. State programs have the ability to request additional stream-channel details, such as Alaska has done for the proposed Chuitna Coal project, but this level of detail would not be justifiable or beneficial for all mine sites. Thus, this alternative should be dropped from further consideration. (Alaska Coal Ass'n)

- The current regulations regarding stream diversions and stream restoration are adequate. Because there can be only one mitigation plan, these regulations also would need to

conform to any requirements of the Corps of Engineers district within which the proposed project exists. (D.R. Allen & Associates)

***Alternative 10*: Adopt provisions that would apply only to mountaintop removal operations and operations on steep slopes. This may include the deletion of 30 CFR 824.11(a)(9), which limits the statutory ban on mountaintop removal operations that would damage natural watercourses to those watercourses located below the lowest coal seam to be mined.**

- Any changes to the SBZ rules should apply nationwide because mining activities in states other than central Appalachia also adversely affect streams. (Corps of Engineers)

- It does not make sense to limit the SBZ rule to states that have historically allowed mountaintop removal operations. (Tennessee Dept. of Environmental Conservation)

- This approach, based solely on topography, involves constitutional issues such as the taking of private property and interference with interstate commerce. (VA DMME)

- This alternative appears to arbitrarily ignore the fact that mining impacts streams nationwide, regardless of the presence or absence of excess spoil fills. How can the federal government impose harsher standards on some states while allowing other states much more flexibility? (WVDEP)

- OSM should focus its rulemaking efforts squarely on mountaintop mining and valley fills and avoid adopting a rule that would require other states to revise their programs. (PADEP)

- Instead of proposing additional rules pertaining to these types of operations, OSM should work with the affected states to address the issues on a case-by-case basis. (ND PSC)

- It is beyond our understanding how OSM could apply regulations to specific states in a given coal region under a statute intended to be national in scope. Any such move by OSM would place Appalachian coal mining operations at a competitive disadvantage through selective application of a national statute. If anything, OSM and the other federal agencies should more closely examine the impact of mining operations on streams outside Appalachia because much less information is available for those areas. (West Virginia Coal Ass'n)

- Deletion of 30 CFR 824.11(a)(9) is a backdoor way of prohibiting all fills in streams. It would violate the spirit and intent of SMCRA and illegally restrict mining above and beyond the Clean Water Act. (West Virginia Coal Ass'n)

- We question the rationale for limiting the application of the rule to those states with mountaintop removal or steep-slope operations. Is OSM taking the stance that streams in the Appalachian states are in some way a more valuable resource than those present in other states? (D.R. Allen & Associates)

- Any such regulations must be limited to the types of issues that SMCRA recognizes as distinct to those operations, namely those identified in paragraphs (c) and (d) of section 515 of the Act. However, OSM has not articulated any support for such rules. (NMA)

- To the extent that OSM is concerned with mountaintop removal operations, it should identify and, if necessary, address those specific concerns instead of imposing a patchwork of new ill-considered regulations on all operations in all states. (Ohio Coal Ass'n, Peabody)

- Restricting certain provisions to certain regions is a valid approach for dealing with regional issues. However, as written in the ANPR, the alternative lacks sufficient detail for further comment. If the intent is to restrict certain regulations to a region, OSM should find a legally defensible way to clearly limit those requirements to a specific region, rather than applying those requirements to all mountaintop removal operations or steep-slope mining operations. In other words, the adoption of requirements intended to address a problem in central Appalachia, but not specifically restricted to central Appalachia, could lead to unintended consequences with no net benefit to operations outside the region that exist in an entirely different environmental setting. (Alaska Coal Ass'n)

- As practiced today, mountaintop removal operations are fundamentally incompatible with the requirement in section 515(c)(4)(D) of SMCRA that, before approving a permit application for a mountaintop removal operation, the regulatory authority must find that "no damage will be done to natural watercourses." It is simply impossible to fill streams with mining refuse without damaging them. The SMCRA regulatory authority has both the authority and the duty to deny permits that perpetuate this damage. (Center for Biological Diversity)

- OSM should revise its rules to delete 30 CFR 824.11(a)(9), which limits the statutory ban on mountaintop removal operations that would damage natural watercourses to those watercourses located below the lowest coal seam to be mined. However, otherwise, any revised SMCRA rules should apply to all states, not just Kentucky, Virginia, and West Virginia. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission, SELC)

Should we revise the approximate original contour (AOC) provisions of our regulations?

- AOC is a term expressly defined in SMCRA on a national basis. Any regulatory changes to it would have to be national in scope and consistent with the statutory definition. The differences in terrain from Appalachia to the Illinois coal basin, to East Texas, to the Western states, and on to Alaska simply preclude further specificity in that definition in a way that is workable across the nation. (NMA)

- Each state program has the discretion to further clarify the nationwide definition of AOC as it applies to mining conditions in that state. If further refinement is warranted for the

specific conditions in a state, it should be done at the state (or federal program for a state) program level. (NMA)

- The permitting process for each operation constitutes the appropriate way to address any concerns that citizens or others may have about how AOC is being applied in Appalachia as well as other areas of the nation. No new national rulemaking is needed to facilitate that site-specific process. (NMA)

- Any requirements beyond those in the 2008 rule and existing policies in the central Appalachian states would somehow have to modify natural, physical mechanics of geology and the constants of engineering or compromise safety and stability. (West Virginia Coal Ass'n)

- There should be no revisions to the AOC provisions of OSM's regulations, which are well-understood and have withstood the test of time. (PADEP)

- OSM should adopt a rule similar to the Montana program provision requiring that reclaimed drainage basins, including excess spoil fills, valleys, channels, and floodplains, be constructed to:

  (a) Comply with the postmining topography map approved by the regulatory authority.

  (b) Restore the approximate original contour.

  (c) Allow the drainage channel to remain in dynamic equilibrium with the drainage basin system without the use of artificial structural controls unless approved by the regulatory authority.

  (d) Provide separation of flow between adjacent drainages and safely pass the runoff from a six-hour precipitation event with a 100-year recurrence interval, or larger event as specified by the regulatory authority.

  (e) Provide for the long-term relative stability of the landscape by creating appropriate geomorphic landforms. The term "relative" refers to a condition comparable to an unmined landscape with similar climate, topography, vegetation and land use.

  (f) Provide an average channel gradient that exhibits a concave longitudinal profile.

  (g) Establish or restore a diversity of habitats that are consistent with the approved postmining land use, and restore, enhance where practicable, or maintain natural riparian vegetation.

(h) Exhibit dimensions and characteristics that will blend with the undisturbed drainage system above and below the area to be reclaimed and that will accommodate the approved revegetation and postmining land use requirements.

Technological innovations made since the promulgation of SMCRA currently provide landform design tools that greatly facilitate the ability of coal operators to comply with these provisions. Such technologies have been successfully demonstrated and they should be implemented in accordance with the SMCRA requirement to use the best technology currently available. Previously permitted excess spoil fill designs are inherently unstable landforms that natural forces will ultimately, if not catastrophically, remove. It is time to require that coal operators seek to emulate nature, rather than control nature. Adoption of these provisions would provide a framework within which surface coal mining, and specifically the practice of mountaintop removal, could continue in Appalachia. (New Mexico MMD)

- OSM should revise its rules to clarify that approximate original contour (AOC) restoration requirements apply to excess spoil fills. The legal opinion to the contrary is flawed. (ACEE, SELC)

- OSM needs to define AOC to mean that the reclaimed area must resemble the area before mining in aspect (or slope) and elevation. A minimum difference in elevation between premining and postmining conditions should be established as an enforceable requirement in a regulation. The regulation should also require a minimum difference in premining and postmining slopes as well as describe the allowable differences between the drainage pattern of the postmining site and the premining site. For example, OSM should require the postmining site to have as many linear feet of ephemeral, intermittent and perennial streams as the premining site. It should require those streams to be similar in configuration and morphology to the original streams. To demonstrate compliance or non-compliance with these requirements, the rule should require mine operators to submit premining and postmining field surveys, GPS data, photographs and measurements of slope of stream beds, plan cross-sections and aerial photographs of the disturbed areas. (ACEE)

- OSM should adopt a regulation clarifying that when an operation cannot comply with AOC restoration requirements as a result of application of a fill optimization formula such as those in place in Kentucky and West Virginia, the operation must obtain a legitimate variance from the AOC requirement. (ACEE)

- Because the detailed, site-specific reclamation plans required by SMCRA are rarely required by permitting authorities, OSM must promulgate a rule setting out in detail the requirements for a variance from AOC. (ACEE)

- OSM should clarify that AOC requirements and variances do not override the prohibitions and restrictions in the SBZ rule. (SELC)

- OSM should seek to minimize the use of AOC variances and improve the consistency with which different states adhere to AOC requirements. The large number of vacant mountaintop removal sites indicates that variances for residential, industrial, or commercial use often are not warranted. Variances should be subject to review to consider economic feasibility and the potential that the stated postmining land use will in fact occur. It is also important that AOC standards are implemented consistently across all states. (Trout Unlimited)

What other provisions of our regulations should we consider revising to better protect the environment and the public from the impacts of Appalachian surface coal mining?

- Hydrology, geology, and aquatic biology

1. OSM should define perennial, intermittent, and ephemeral streams in a manner that is consistent with the Clean Water Act, rather than using or referencing definitions from the U.S. Geological Survey. (Corps of Engineers)

2. OSM should adopt rule language that encourages state and federal agencies to coordinate on stream jurisdictional determinations as part of the permitting process. (Corps of Engineers)

3. OSM should establish baseline aquatic life information and monitoring requirements at the genus level rather than at the family level. (Bryon Arnold)

4. OSM should adopt a multifactor approach for the SBZ rule. While a 100-foot buffer should be the absolute minimum, the regulatory authority should be required to determine whether a wider buffer is needed to protect all streams. Such a determination should be based upon information concerning adjacent slopes, geology, soil types, and existing riparian context. Whatever stream protections are adopted should apply, without exception, to any intermittent, temporary, or perennial watercourse. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

5. The current recommendation for stream buffers to protect amphibian habitat is 100 meters. This fact is especially important because the Appalachian region supports the highest diversity of amphibian species in North America and amphibian species worldwide are undergoing a rapid decline, largely due to habitat loss and water pollution. (Elizabeth Summers, UT)

6. The mining of coal and disruption of surrounding strata high in selenium are common sources of selenium that can degrade water quality and biologic diversity. Any rules proposed by OSM should require regulatory authorities to include selenium monitoring as a routine sampling parameter at all mines and require establishment of numerical limits for selenium for all outfalls at any mine where an overburden core sample shows elevated selenium concentrations. OSM also should revise its rules to

specify that no permit may be issued where selenium may become a problem unless the applicant has (1) submitted a viable plan for treating selenium pollution if it becomes a problem during mining and (2) demonstrated the financial ability to implement an effective selenium treatment plan. (KY Waterways Alliance)

7. OSM should promulgate a regulation that requires (1) routine, site-specific core sampling for selenium as part of each permit application, and (2) core testing that includes leachable selenium instead of just total selenium and decreases the interval between core samples. In addition, the regulation should make clear that operations at risk for selenium discharges must, during the mining process, test the geology for selenium every time mining operations change in elevation, enter a new strata or move more than 100 feet. One method of accomplishing this may be to require testing of holes drilled to blasting. The operator should be required to submit these samples to the regulatory authority at least twice per month. [Appalachian Center for the Economy and the Environment (ACEE)]

8. OSM should promulgate a regulation requiring that if selenium is found in core samples before or during mining, an analysis must be performed to determine whether it may create a perpetual pollution discharge. If the analysis shows that selenium is present in sufficient quantities to cause perpetual material damage to the hydrologic balance (including causing violations of water quality standards), then the mining operation must cease and reclamation must begin. (ACEE)

9. OSM should require additional information on the baseline hydrology and additional characterization of the premining hydrologic balance. Specifically, OSM should amend 30 CFR 780.21(b)(1) and (2) and 784.14(b)(1) and (2) to—

   a) Expressly provide that a minimum of 12 consecutive months of water quality and quantity information is necessary to establish the seasonal flow conditions that SMCRA requires each permit applicant to demonstrate. The amended regulation should clarify that baseline monitoring of flow rates must occur daily to enable the permit applicant and the regulatory authority to distinguish between seasonal flow patterns (including base flow from ground water) and flow rates that are generated in immediate response to precipitation events.

   b) Require, throughout the minimum 12-month baseline collection period, synchronous measurements at a sufficient number of stations along each stream course to enable the permit applicant and the regulatory authority to identify when and where the stream is gaining or losing flow. This change is needed to ensure collection of adequate information on exchanges between streamflow and groundwater.

   c) Designate the pollutants and conditions currently listed there as "pollutants and conditions of concern." The PHC determination, the CHIA, the hydrologic monitoring plans, and the hydrologic reclamation plan must expressly address the potential of the proposed surface coal mining operation to cause or contribute to

an exceedance of the applicable numeric or narrative water quality standard or standards for each pollutant or condition of concern that applies to the proposed surface coal mining operation.

d) Require information on both total dissolved solids and specific conductance and to add aluminum, selenium, and sulfate as required parameters. Alternatively, OSM should require the regulatory authority to add aluminum, selenium, or sulfate as pollutants of concern wherever geologic or hydrologic baseline data indicate their presence in the permit area.

e) Require that wherever geologic or hydrologic baseline data indicate the presence of any other pollutant or condition for which there exists an applicable federal or state numeric or narrative water quality standard, such as additional metals or temperature, the regulatory authority must treat it as a pollutant or condition of concern for which the permittee must at least provide baseline information.

f) Provide that where proposed operations would introduce contaminants or potential sources of contamination to the permit area that are unrelated to geologic materials at the site–for example, explosives, fuels, coal combustion wastes, or coal processing chemicals—those pollutants also must be treated as "of concern" and the permit applicant must provide baseline information on each contaminant, including background concentrations, whenever that substance or contaminant naturally occurs in, or has previously been introduced into, the surrounding environment.

g) Provide that where a proposed operation would discharge into a water resource listed as impaired on a state's list under section 303(d) of the Clean Water Act, the regulatory authority must treat as "pollutants and conditions of concern" each pollutant or condition that is identified as a cause of impairment in question and is among the pollutants or conditions that the proposed operation may reasonably be expected to discharge, cause, or worsen.

h) Expressly require that the regulatory authority treat all applicable narrative water quality criteria for each water resource that will receive a discharge from a proposed surface coal mining operation as conditions of concern for which baseline information must be collected. The amended regulations should ensure that the regulatory authority formulates numeric standards or criteria (such as the Index of Biological Integrity) to translate each narrative "free from" into a measurable standard.

i) Expressly provide that a pollutant or condition of concern for which a permit applicant must collect and present baseline information may be eliminated from analysis in the PHC determination and CHIA and from the proposed hydrologic monitoring and reclamation plans only if baseline geologic and hydrologic information indicate to a reasonable degree of scientific certainty that discharges of that substance from the proposed permit area will not cause or contribute to an

exceedance of any applicable numeric or narrative water quality standard. (ACEE)

10. OSM should amend 30 CFR 780.21(b) and 784.14(b) to require that the regulatory authority inform each permit applicant of the minimum pollutants and conditions of concern that the PHC determination, hydrologic monitoring plan, and hydrologic reclamation plan must address, based on the regulatory authority's assessment of the baseline hydrologic information provided in the permit application or otherwise available to the regulatory authority. (ACEE)

11. OSM should amend 30 CFR 780.21(f)(3)(iv) and 784.14(e)(3)(iii) to expressly require that the PHC determination analyze the probable impact of the proposed surface coal mining operation on each pollutant or condition of concern identified pursuant to amended 30 CFR 780.21(b) or 784.14(b). (ACEE)

12. OSM should amend 30 CFR 780.21(g) and 784.14(f) to provide expressly that the regulatory authority may not conclude that a proposed surface coal mining and reclamation operation has been designed to prevent material damage to the hydrologic balance, and thus may not approve the pertinent permit application, if the proposed operation includes a new discharge to a water resource on a state's 303(d) list under the Clean Water Act for a mining-related pollutant or condition that the proposed operation would discharge or worsen, except in compliance with the requirements of 40 CFR 122.4(i) concerning available waste load allocations under a TMDL and compliance schedules covering existing dischargers. (ACEE)

13. OSM should amend 30 CFR 780.21(g) and 784.14(f) to require that each CHIA identify all pertinent material damage criteria for the proposed operation, including, at a minimum, each numeric water quality standard or translated numeric standard for a narrative water quality standard or anti-degradation standard applicable to each water resource that the proposed operation will likely affect. The amended regulation should further require the regulatory authority to notify the permittee as soon in the permit application evaluation process as practicable, through a publicly available document, of the material damage criteria applicable to the proposed operation. The amended regulation should require that each notice also direct the permittee to structure its hydrologic monitoring plans and hydrologic reclamation plan so as to detect trends toward exceedance of those criteria and to specify measures to prevent actual exceedances. (ACEE)

14. OSM should amend its water monitoring regulations at 30 CFR 780.21(i)(1) and (j)(2)(i) and 784.14(h) and (i)(2)(i) to require that—

    a) The permittee regularly monitor each pollutant and condition of concern and annually monitor each other pollutant or condition for which there is a material damage criterion.

b) Each hydrologic monitoring plan require monitoring at times and places capable of ascertaining the mine's compliance status with respect to all pollutants and conditions of concern.

c) The hydrologic monitoring plans of any permit application that includes a material handling plan meant to prevent water pollution (whether by acid mine drainage, selenium, or any other substance) contain specific measures to be taken within the permit area to indicate effectively whether the material handling plan is failing or has failed to prevent water pollution as predicted.

d) Selenium be included as a routine sampling parameter at all mines.

e) The regulatory authority establish numerical limits for selenium for all outfalls at any mine where a core sample shows elevated selenium concentrations. (ACEE)

15. OSM should amend its regulations at 30 CFR 780.21(h) and 784.14(g) concerning hydrologic reclamation plans to—

a) Provide that the "preventative and remedial measures" required by the current regulations must address specifically each pollutant or condition of concern that the regulatory authority identifies for the proposed operation. The amended regulation should require the permittee to identify, in terms of hydrologic monitoring data and any other appropriate condition, the trigger event or series of events that would prompt the permittee to implement each preventative or remedial measure proposed in the plan. The amended regulation should further require the permittee to explain how each proposed preventative or remedial measure will accomplish its purpose and how the permittee will monitor and assess the effectiveness of each measure. The suggested amendment would promote use of hydrologic monitoring data as an effective early warning system for actually preventing, rather than remediating, material damage to the hydrologic balance outside the permit area.

b) Require that the regulatory authority order a permittee to develop alternate or additional "preventative and remedial measures" for inclusion in the hydrologic reclamation plan whenever one or more of the initially approved measures fail to prevent deterioration toward material damage, prevent material damage itself, or remedy material damage to the hydrologic balance.

c) Forbid regulatory authorities from accepting any material handling plan as a component of a hydrologic reclamation plan and require that the hydrologic reclamation plan of any permit application that includes a material handling plan meant to prevent water pollution (whether by acid mine drainage, selenium, or any other substance) contain specific preventative and remedial measures to be taken if monitoring data indicate that the material handling plan is failing or has failed to prevent water pollution as predicted. (ACEE)

16. OSM should amend its permitting regulations to provide that if the regulatory authority relies to any extent on information not in the permit application, the regulatory authority must place a written copy of all such information among the publicly available decision documents for the application in question. The amended regulations should require the regulatory authority to provide the required notice at the time that the regulatory authority determines the permit application to be administratively complete. The amended regulation should authorize the regulatory authority to amend its notice of pollutants and conditions of concern based on information subsequently submitted or obtained, provided that both the amended notice and the supporting information are made immediately available for public inspection. (ACEE)

- Revegetation, topsoil, and postmining land use

1. The revegetation regulations should be modified to ban the planting of non-native species during restoration. (Center for Biological Diversity)

2. OSM must promulgate a regulation assuring that topsoil is saved unless operators can demonstrate that the proposed topsoil substitute is "the best available subsoil which is best able to support vegetation," as required by section 515(b)(6) of SMCRA. (ACEE)

3. OSM must make clear that topsoil substitutes may not be approved on sites with a postmining land use that involves woody plants unless the applicant demonstrates that the substitute will result in a soil medium that is at least as productive as the premining site. Specifically, OSM must make it clear that regulatory authorities may not permit mining operations to utilize gray sandstone as a topsoil substitute. No studies have shown gray sandstone to be the "best available in the permit area to support revegetation," nor have any studies shown that this material is "equal to, or more suitable for sustaining vegetation than, the existing topsoil," as required by 30 CFR 816.22(b). (ACEE)

4. OSM must promulgate a rule clarifying the requirements of a "higher or better use." Postmining sites used as fish and wildlife habitat, hayland or pasture, and forestland cannot measure up to SMCRA's "higher or better" use standard. (ACEE)

- Performance bonds

12. OSM should revise its bonding and reclamation regulations to effectively address the problem of long-term postmining pollutional discharges. OSM should amend its regulations to require that owners and operators of mines with the potential for long-term postmining pollutional discharges post additional financial guarantees sufficient to cover the costs of permanently treating such discharges. The revised regulations should further provide that owners and operators who do not post the additional financial guarantees will be ineligible to receive any new surface mining permits. (ACEE)

- Permit renewal requirements

  1. OSM should clarify and strengthen rules governing renewal of permits when the applicant is violating federal and state laws protecting surface water quality. First, 30 CFR 774.15(c)(1)(ii) should be amended to add the following clause to the end: "including, but not limited to, effluent limitations established in NPDES permits issued pursuant to section 402 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1342, and the rules and regulations promulgated there under." Second, 30 CFR 774.15(c)(2) should be amended to add the following sentence at the end of the existing provision: "If the opponents of renewal, including citizen opponents, establish one of the criteria in § 774.15(c)(1) of this chapter, the regulatory authority shall deny the renewal application." (ACEE)

- Violation information requirements and permit block sanction

  1. OSM should promulgate a regulation that provides that, where the surface mining regulatory authority and the water pollution regulatory authority are the same entity, "the regulatory authority, department, or agency which has jurisdiction over" violations of the Clean Water Act or permits issued there under is the U.S. Environmental Protection Agency for purposes of section 510(c) of SMCRA. (ACEE)

  2. OSM should ensure appropriate oversight of surface mining regulatory authorities by expanding the definition of "regulatory authority, department, or agency" for purposes of section 510(c) of SMCRA to include citizens that have provided notice under one of the citizen suit provisions of the federal environmental statutes to sue an operator for violation of the one of the laws referred to in section 510(c). Through those citizen suit provisions, Congress evidenced its intent for citizens to act as private attorneys general. Therefore, it is appropriate to treat them as regulatory agencies for purposes of section 510(c). (ACEE)

  3. OSM should define the terms "has been corrected" and "is in the process of being corrected" for purposes of section 510(c) of SMCRA. The term "has been corrected" should be defined to mean that "the violation at issue has completely ceased and that there is no real likelihood of its recurrence." The term "is in the process of being corrected" should be defined to mean that "the applicant is subject to a judicial decree or other judicially enforceable order compelling the applicant to achieve full compliance with no real likelihood of recurrence as soon as possible, but not to exceed one year from the date of the decree or order." (ACEE)

- Other provisions

  1. The alternatives analysis requirements for coal mine waste impoundments and refuse piles should be revised to include consideration of impacts to local residents, such as traffic, dust, and noise. (PADEP)

ATTACHEMNT #4 - REFERENCE MATERIAL

REFERENCE MATERIAL

1979 OSM-EIS-1 *Permanent Regulatory Program*

1983 OSM-EIS-1 *Supplement*

2003 DRAFT EIS *Mountain Top Mining and Valley Fills*

2005 EIS *Mountain Top Mining and Valley Fills*

2008 OSM-EIS-34 *Excess Spoil Minimization and Stream Buffer Zones*

END OF STATEMENT OF WORK

SOLICITATION – CONTINUED

SECTION E – INSPECTION AND ACCEPTANCE

52.246-4 INSPECTION OF SERVICES - FIXED-PRICE (AUG 1996)

(a) Definitions. "Services," as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) If any of the services do not conform to contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by reperformance, the Government may (1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and (2) reduce the contract price to reflect the reduced value of the services performed.

(f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service or (2) terminate the contract for default.

SECTION F - PERFORMANCE

F.1 Period of Performance

A base period of one-year is anticipated to begin on or about mid May and end 12 months later. Three one-year options will be included.

F.2 Place of Performance and Hours of Operations

Place of Performance: The place of performance is OSM Headquarters Building at 1951 Constitution Ave., NW, Washington, DC 20240.

Hours of Operations: Hours of operation are traditionally five days per week, with hours ranging from as early as 6:00 a.m. to as late as 7:00 p.m.. Overtime is not expected; however, may be required on a limited basis.

Federal Holidays: Federal Holidays must be covered by the contractor; compensation plan and backup included as an overhead expenditure. Contractor will not be paid for administrative leave or extra holidays given to Government employees.

F.3 Special Considerations

Contract employees are to have appropriate experience for positions.

F.3.1 Disclosure Information

Information made available to the contractor by the Government for the performance or administration of this effort shall be used only for those purposes and shall not be used in any other way without the written agreement of the Contracting Officer.

The contractor agrees to assume responsibility for protecting the confidentiality of Government records, which are not public information. Each contractor or employee of the contractor to whom information may be made available or disclosed shall be notified in writing by the contractor that such information may be disclosed only for a purpose and to the extent authorized herein. A signed Non-Disclosure Agreement (NDA) will be required.

F.3.2 Limited Use of Data

Performance of this effort may require the contractor to access and use data and information proprietary to a Government agency or Government contractor which is of such a nature that its dissemination or use, other than in performance of this effort, would be adverse to the interests of the Government and/or others.

Contractor and/or contractor personnel shall not divulge or release data or information developed or obtained in performance of this effort, until made public by the Government, except to authorize Government personnel or upon written approval of the Contracting Officer (CO). The contractor shall not use, disclose, or reproduce proprietary data that bears a restrictive legend, other than as required in the performance of this effort. Nothing herein shall preclude the use of any data independently acquired by the contractor without such limitations or prohibit an agreement at no cost to the Government between the contractor and the data owner which provides for greater rights to the contractor.

F.3.3 Section 508

The 1973 Rehabilitation Act amended in 1998 required Federal agencies to ensure that any time the Government maintains, procures, develops, or uses electronic and information technology that it is accessible to persons with disabilities. Unless an undue burden of significant difficulty or expense can be established OSM will provide reasonable accommodation for Section 508 compliance.

F.4 Contract Type.

OSM intends to award a Firm Fixed Price contract.

F.5 Travel Requirements.

The Contractor will be reimbursed, not to exceed amount for all domestic travel as described below, incurred directly and specifically in the performance of this contract, claimed by the Contractor and accepted by the Contracting Officer.

Costs for lodging, meals, and incidental expenses will be based on the Federal Travel Regulation per diem rates. Actual expenses or a combination thereof may be used provided the method used results in a reasonable charge. A written justification for use of the higher amounts will be approved by COR.

http://www.gsa.gov/Portal/gsa/ep/contentView.do?P=MTT&contentId=9646&contentType=GSA_BASIC

All travel related expenses will be charged to ODC.

F.6 Government Furnished Facilities, Property, Materials

When the contractor is working at the OSM Headquarters site located at 1951 Constitution Ave, NW, Washington, DC, the Government is responsible for providing office space and supplies, software, hardware, DOI required IT security training, and the appropriate monitoring resources for hardware and software.

F.7 Government POCs -- Contract Administrator/COR/PM

Contracting Officer's Representative:	Li-Tai BilBao Phone #: 202 208-2895 Fax # 202-219-3276 Email: lbilbao@osmre.gov
Contracting Officer:	Nancy E. Sloanhoffer Phone #: (202) 208-2902 Fax # (202) 219-3104 Email: nsloanhoffer@osmre.gov
Contract Specialist:	Tracy R. Meeker Phone #: 303-236-0330 x253 Fax #: 303-236-0340 Email: tmeeker@osmre.gov

SECTION G – CONTRACT ADMINISTRATION

INVOICE - The Contractor shall submit all invoices for services rendered to:

Office of Surface Mining
Attn: Nancy Sloanhoffer
1951 Constitution Avenue, NW
SIB, RM 336
Washington, DC 20240

SECTION H - SPECIAL CONTRACT REQUIREMENTS

The proposal shall includes a plan/statement describing how the contractor will address organizational and other conflicts of interest for subcontractors or persons who are consultants or who work for organizations with potential conflicts.

1. Progress Reports

   Monthly progress reports shall be submitted to the COR beginning one month from the date of Notice to Proceed. The monthly reports shall be concise, factual, and informal and shall include, but not be limited to:

   A. Work accomplished during the period of the report;
   B. A description of the overall progress, including data, in sufficient detail to explain the progress achieved;
   C. A description of the current problems that may impede performance with the proposed corrective actions;
   D. A description of the work to be performed during the next reporting period.

2. Mailing to Third Parties

   The Contractor shall provide appropriate envelopes and postage for all mailings under this contract. OSM shall review and approve all mailing lists before the documents are mailed. The Contractor shall be responsible for assembling documents and preparing them for mailing. The Contractor shall also be responsible for preparing all mailing lists; updating those lists as necessary; preparing mailing labels and/or envelopes; assuring that all mailings are timely, accurate, and inclusive of all required materials.

3. Drawings, Reports, and Publications

   All drawings, reports, publications, notes, and other work developed and submitted or relied on for submittals in the performance of this contract shall become the property of the Government and the Government shall have unlimited rights to their use, including the right to use the same without additional compensation to the Contractor. The Contractor hereby grants to the Government a current license to all such works to which it may assert or establish any claim under design patent or copyright laws. The Government shall be considered the "person for whom the work was prepared" for the purpose of authorship in any copyrightable work. With respect thereto, the Contractor agrees not to assert or authorize others to assert any rights nor establish a claim under the design patent or copyright laws.

4. Contractor Services

The Contractor shall furnish the necessary personnel, materials, services, equipment, facilities and otherwise do all other things necessary for an incident to the performance of the work specified in a manner consistent with accepted professional standards.

The Contractor shall be responsible for providing 3 hard copies and 15 digital copies of verbatim transcripts of the official proceedings of all public meetings held in conjunction with this contract.

Specific minimum service s to be provided by the Contractor shall include the following documents:

A. Draft Environmental Impact Statement

1. The Contractor shall assist the OSM in the preparation for and shall conduct public scoping meetings to be scheduled 45 days after Notice to Proceed. The Contractor shall prepare the invitation on behalf of the OSM, subject to review and approval by the COR. In addition, the Contractor shall in conjunction with the OSM, prepare an agenda and project summary for distribution at the meetings. Additional assistance for the preparation and conduct of scoping meetings may be requested by the OSM's contracting officer.

2. The Draft EIS shall analyze the impact of the proposed action.

3. The Contractor shall submit 3 hard copies and 30 digital copies of the preliminary DEIS.

4. After the OSM and cooperating agencies review and comment, the Contractor shall submit 3 hard copies and 50 digital copies for the OSM. In addition, the Contractor shall provide sufficient digital copies for mailing. A mailing list of proposed recipients of the Published DEIS will be approved by the OSM prior to the Contractor's mailing. It shall be the sole responsibility of the Contractor to ensure that the Draft EIS is mailed to all parties (including attendees at the Scoping Meetings) who have requested a copy, as well as those who are required to receive one. OSM will provide an appropriate transmittal letter on OSM letterhead for inclusion with the mailings.

5. The Contractor shall be responsible for printing the DEIS and consulting with the printer to ensure quality reproduction of all materials. If additional copies are needed, they shall be provided by the Contractor at their exact printing cost.

6. The Contractor will be responsible for publishing the DEIS Notice of Availability in appropriate general circulation local newspapers. OSM will assist the Contractor in determining which newspapers are to be selected.

7. Mailing of the completed DEIS shall be coordinated with the publication of the Notice of Availability in the Federal Register.

8. OSM shall be responsible for the publication of the Notice of Availability in the Federal Register.

9. During and after the close of the public review and comment period following the publication of the Notice of Availability of the DEIS in the Federal Register, the Contractor shall consult with the COR in determining which responses are substantive and must be addressed in the FEIS.

B. Final Environmental Impact Statement

The Contractor shall be responsible for the complete analysis of all significant new issues raised as a result of the DEIS review process.

1. The Contractor shall submit 3 hard copies and 30 digital copies of the proposed FEIS for OSM and cooperating agency review and approval.

2. After review by OSM and cooperating agencies, the Contractor shall submit a revised FEIS incorporating responses to comments by OSM and cooperating agencies. The Contractor shall submit 3 hard copies and 50 digital copies for the OSM. In addition, the Contractor shall provide sufficient electronic copies for mailing. A mailing list of proposed recipients of the Published FEIS will be approved by OSM prior to the Contractor's mailing. It shall be the sole responsibility of the Contractor to ensure that the FEIS is mailed to all parties (who have requested a copy), as well as those who are required to receive one. OSM will provide an appropriate transmittal letter on OSM letterhead for inclusion with the mailings.

3. The Contractor shall be responsible for printing the FEIS and consulting with the printer to ensure quality reproduction of all materials. If additional copies are needed, they shall be provided by the Contractor at their exact printing cost.

C. Submission Requirements

All documents shall be prepared on 8 ½ x 11 inch bond paper and bound in a manner agreed upon by the Contractor and COR. A cover page design for the proposed Draft and Final EISs shall accompany each of those documents for approval by the OSM. All designs have to be approved by the OSM prior to submittal.

SECTION I

52.252-02 CLAUSES INCORPORATED BY REFERENCE FEBRUARY 1998

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address (es):

Federal Acquisition Regulation clauses and provisions:
http://www.acquisition.gov/comp/far/index.htm or http://www.arnet.gov/far/loadmainre.html

CLAUSES INCORPORATED BY REFERENCE

52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions on Subcontractor Sales to the Government	SEP 2006
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	JAN 1997
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	JAN 1997
52.203-12	Limitation on Payments to Influence Certain Federal Transactions	SEP 2007
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment	SEP 2006
52.212-3	Offeror Representations and Certifications—Commercial Items	
52.215-2	Audit and Records - Negotiation	JUN 1999
52.215-10	Price Reduction for Defective Cost or Pricing Data.	OCT 1997
52.215-11	Price Reduction for Defective Cost or Pricing Data - Modifications	OCT 1997
52.215-12	Subcontractor Cost or Pricing Data	OCT 1997
52.215-13	Subcontractor Cost or Pricing Data - Modifications	OCT 1997
52.215-15	Pension Adjustments and Asset Reversions	OCT 2004
52.215-16	Facilities Capital Cost of Money	JUN 2003
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions	JUL 2005
52.219-6	Notice of Total Small Business Set-Aside	JUN 2003

52.219-8	Utilization of Small Business Concerns	MAY 2004
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	JUL 2005
52.222-21	Prohibition of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	MAR 2007
52.222-35	Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	SEPT 2006
52.222-36	Affirmative Action for Workers with Disabilities	JUN 1998
52.222-37	Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	SEPT 2006
52.222-41	Service Contract Act of 1965, as Amended	NOV 2007
52.222-43	Fair Labor Standards Act and Service Contract Act-Price Adjustment (Multiple Year and Options Contract)	NOV 2006
52.222-44	Fair Labor Standards Act and Service Contract Act-Price Adjustment	FEB 2002
52.222-50	Combating Trafficking in Persons	FEB 2009
52.223-6	Drug-Free Workplace	MAY 2001
52.223-14	Toxic Chemical Release Reporting	AUG 2003
52.225-1	Buy American Act - Supplies	FEB 2009
52.225-13	Restrictions on Certain Foreign Purchases	FEB 2006
52.227-1	Authorization and Consent	DEC 2007
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement	DEC 2007
52.228-5	Insurance-Work on a Government Installation	JAN 1997
52.229-3	Federal, State, and Local Taxes	APR 2003
52.232-8	Discounts for Prompt Payment	FEB 2002
52.232-9	Limitation on Withholding of Payments	APR 1984
52.232-11	Extras	APR 1984
52.232-17	Interest	OCT 2008
52.232-23	Assignment of Claims	JAN 1986
52.233-2	Serviced of Protest	SEP 2006
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.242-13	Bankruptcy	JUL 1995
52.242-15	Stop Work Order	AUG 1989
52.244-5	Competition in Subcontracting	DEC 1996
52.244-6	Subcontracts for Commercial Items	FEB 2009
52.245-1	Government Property	JUN 2007
52.245-2	Government Property Installation Operation Services	JUN 2007
52.245-9	Use and Charges	JUN 2007
52.246-25	Limitation of Liability - Services	FEB 1997
52.247-34	F.O.B. Destination	NOV 1991
52.253-1	Computer Generated Forms	JAN 1991
1452.203-70	Restriction on Endorsements - Department of the Interior	JUL 1996

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS (JUL 2004)

(a) When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless—

(1) The solicitation, or amended solicitation, provides a different definition;

(2) The contracting parties agree to a different definition;

(3) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or

(4) The word or term is defined in FAR Part 31, for use in the cost principles and procedures.

(b) The FAR Index is a guide to words and terms the FAR defines and shows where each definition is located. The FAR Index is available via the Internet at http://www.acqnet.gov at the end of the FAR, after the FAR Appendix.

52.204-7 CENTRAL CONTRACT REGISTRATION (APR 2008)

(a) Definitions. As used in this clause—

"Central Contractor Registration (CCR) database" means the primary Government repository for Contractor information required for the conduct of business with the Government.

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System+4 (DUNS+4) number" means the DUNS number means the number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same concern.

"Registered in the CCR database" means that—

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and

(2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record "Active". The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.

(b) (1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS or DUNS+4 number that identifies the offer or's name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) Via the internet at http://fedgov.dnb.com/webform or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Trade style, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g)(1)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to:

(A) Change the name in the CCR database;

(B) Comply with the requirements of Subpart 42.12 of the FAR;

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the Internet at http://www.ccr.gov or by calling 1-888-227-2423, or 269-961-5757.

52.215-8 ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT (OCT 1997)

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order:

(a) The Schedule (excluding the specifications).

(b) Representations and other instructions.

(c) Contract clauses.

(d) Other documents, exhibits, and attachments.

(e) The specifications.

52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed one year. The Contracting Officer may exercise the option by written notice to the Contractor within 15 calendar days.

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 15 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed three years.

52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for—

(1) *Services (except construction).* At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.

(2) *Supplies (other than procurement from a nonmanufacturer of such supplies).* The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) *General construction.* The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) *Construction by special trade contractors.* The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

52.222-42 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only:
It is not a Wage Determination

Employee Class	**Monetary Wage -Fringe Benefits**
GS - 11	$24.10
GS - 12	$28.88
GS - 13	$34.34

52.232-1 PAYMENTS (APR 1984)

The Government shall pay the Contractor, upon the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified in this contract, payment shall be made on partial deliveries accepted by the Government if—

(a) The amount due on the deliveries warrants it; or

(b) The Contractor requests it and the amount due on the deliveries is at least $1,000 or 50 percent of the total contract price.

52.232-19 AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR. (Apr 1984)

Funds are not presently available for performance under this contract beyond September 30, 2010. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond September 30, until funds are made available to the

Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

52.232-25 PROMPT PAYMENT (OCT 2008)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer (EFT). Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) *Invoice payments* --

(1) *Due date.*

(i) Except as indicated in paragraphs (a)(2) and (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

(A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(ii) of this clause).

(B) The 30th day after Government acceptance of supplies delivered or services performed. For a final invoice, when the payment amount is subject to contract settlement actions, acceptance is deemed to occur on the effective date of the contract settlement.

(ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice; provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) *Certain food products and other payments.*

(i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are --

(A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to, but not later than, the 7th day after product delivery.

(B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.

(C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise

regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.
(ii) If the contract does not require submission of an invoice for payment (*e.g.*, periodic lease payments), the due date will be as specified in the contract.
(3) *Contractor's invoice.* The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(3)(i) through (a)(3)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils), with the reasons why it is not a proper invoice. The Government will take into account untimely notification when computing any interest penalty owed the Contractor.
(i) Name and address of the Contractor.
(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of the mailing or transmission.)
(iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).
(iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.
(v) Shipping and payment terms (*e.g.*, shipment number and date of shipment, discount for prompt payment terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.
(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.
(viii) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
(ix) Electronic funds transfer (EFT) banking information.
(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (*e.g.*, 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (*e.g.*, 52.232-33, Payment by Electronic funds Transfer—Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
(x) Any other information or documentation required by the contract (*e.g.*. evidence of shipment.)
(4) *Interest penalty.* The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However,

when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.
(i) The designated billing office received a proper invoice.
(ii) The Government processed a receiving report or other Government documentation authorizing payment, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.
(iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.
(5) *Computing penalty amount.* The Government will compute the interest penalty in accordance with Office of Management and Budget prompt payment regulations at 5 CFR part 1315.
(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance is deemed to occur constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivers the supplies or performs the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. If actual acceptance occurs within the constructive acceptance period, the Government will base the determination of an interest penalty on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.
(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.
(6) *Discounts for prompt payment.* The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.
(7) *Additional interest penalty.*
(i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--
(A) The Government owes an interest penalty of $1 or more;
(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and
(C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(7)(ii) of this clause, postmarked no later than 40 days after the invoice amount is paid.
(ii)
(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall --

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and
(3) State that payment of the principal has been received, including the date of receipt.
(B) If there is no postmark or the postmark is illegible--
(1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or
(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.
(iii) The additional penalty does not apply to payments regulated by other Government regulations (*e.g.*, payments under utility contracts subject to tariffs and regulation).
(b) *Contract financing payments.* If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.
(c) *Fast payment procedure due dates.* If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.
(d) *Overpayments.* If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall—
(1) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the—
(i) Circumstances of the overpayment (*e.g.*, duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);
(ii) Affected contract number and delivery order number if applicable;
(iii) Affected contract line item or subline item, if applicable; and
(iv) Contractor point of contact.
(2) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER-CENTRAL CONTRACTOR REGISTRATION (OCT 2003)

(a) Method of payment.

(1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either—

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) *Contractor's EFT information.* The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) *Mechanisms for EFT payment.* The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR Part 210.

(d) *Suspension of payment.* If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Liability for uncompleted or erroneous transfers.

(1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for—

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and—

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(f) *EFT and prompt payment.* A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(g) *EFT and assignment of claims.* If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register separately in the CCR database and shall be paid by EFT in accordance with the terms of this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a

financial institution properly recognized under an assignment of claims pursuant to Subpart 32.8, is not permitted. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(h) *Liability for change of EFT information by financial agent.* The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(i) *Payment information.* The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

52.233-1 DISPUTES -- ALTERNATE I (DEC 1991) (JUL 2002)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The Contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding $100,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor."

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

52.243-1 CHANGES - FIXED-PRICE -- ALTERNATE I (APR 1984) (AUG 1987)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Description of services to be performed.

(2) Time of performance (*i.e.,* hours of the day, days of the week, etc.).

(3) Place of performance of the services.

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

52.249-2 Termination for Convenience of the Government (Fixed-Price). (May 2004)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government—

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in paragraph (b)(6) of this clause; *provided*, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in paragraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by the Government (or sold or acquired under paragraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of—

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under paragraph (g)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(2)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including—

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the

Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted—

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and

expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.244-2 Subcontracts (June 2007)

(a) *Definitions.* As used in this clause—

"Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contractor a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds—

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

ALL SUBCONTRACTS.

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting—

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (b), (c), or (d) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination—

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this

contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

52.249-8 DEFAULT (FIXED-PRICE SUPPLY AND SERVICE) (APR 1984)

(a)(1) The Government may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to—

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see paragraph (a)(2) of this clause); or

(iii) Perform any of the other provisions of this contract (but see paragraph (a)(2) of this clause).

(2) The Government's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

(b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.

(e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any (1) completed supplies, and (2) partially completed supplies and materials, parts, tools, dies, jigs,

fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract. Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.

(f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

SECTION J - LIST OF ATTACHMENTS

WD 05-2103 (Rev.-8) was first posted on www.wdol.gov on 06/02/2009

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REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT By direction of the Secretary of Labor	U.S. DEPARTMENT OF LABOR EMPLOYMENT STANDARDS ADMINISTRATION WAGE AND HOUR DIVISION WASHINGTON D.C. 20210
Shirley F. Ebbesen Director Division of Wage Determinations	Wage Determination No.: 2005-2103 Revision No.: 8 Date Of Revision: 05/26/2009

States: District of Columbia, Maryland, Virginia

Area: District of Columbia Statewide
Maryland Counties of Calvert, Charles, Frederick, Montgomery, Prince George's, St Mary's
Virginia Counties of Alexandria, Arlington, Fairfax, Falls Church, Fauquier, King George, Loudoun, Prince William, Stafford

SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

In accordance with FAR 4.1201, representations and certifications shall be entered through www.bpn.gov using the ORCA system and updated annually.

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (FEB 2009)

(a) (1) The North American Industry classification System (NAICS) code for this acquisition is 541519.

(2) The small business size standard is $25.0 Million.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) Clause at 52.204-7, Central Contractor Registration, is included in this solicitation, so paragraph (d) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

[ ] (i) Paragraph (d) applies.

[ ] (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in ORCA are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed $100,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the clause at 52.204-7, Central Contractor Registration.

(iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(v) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vi) 52.214-14, Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(vii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(viii) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(ix) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(x) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xi) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xii) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA–designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xiv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA–designated items.

(xv) 52.225-2, Buy American Act Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xvi) 52.225-4, Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternate I, and Alternate II) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than $25,000, the basic provision applies.

(B) If the acquisition value is $25,000 or more but is less than $50,000, the provision with its Alternate I applies.

(C) If the acquisition value is $50,000 or more but is less than $67,826, the provision with its Alternate II applies.

(xvii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xviii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan—Certification.

(xix) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to—

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(d) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at http://orca.bpn.gov. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

DUE DILIGENCE AND INFORMATION ON THE CONTRACT - By submitting a Proposal, the Offeror represents and warrants that s/he has studied and is thoroughly familiar with the requirements and specifications of this solicitation in its entirety. This includes the documents attached to the Request for Proposal (RFP), with all current equipment, labor, material market conditions, and applicable laws, such that the Offeror accepts responsibility for and is prepared to execute and shall completely fulfill any obligations under this solicitation/contract. The Offeror also accepts that s/he will not make any claim for or have any right to damages because of any misinterpretation or misunderstanding of the solicitation/contract, or because of any information which is known or should have been known to the Offeror.

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (APR 2008)

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offer or's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet, Inc. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same concern.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) Via the internet at http://fedgov.dnb.com/webform or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Trade style, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

52.215-1 INSTRUCTIONS TO OFFERORS-COMPETITIVE ACQUISITION (JAN 2004)

(a) *Definitions*. As used in this provision—

"Discussions" are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

"In writing," "writing," or "written" means any worded or numbered expression that can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

"Proposal modification" is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

"Proposal revision" is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

"Time," if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) *Amendments to solicitations.* If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).

(c) Submission, modification, revision, and withdrawal of proposals.

(1) Unless other methods (*e.g.,* electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

(2) The first page of the proposal must show—

(i) The solicitation number;

(ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

(iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offer or's behalf with the Government in connection with this solicitation; and

(v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(3) Submission, modification, revision, and withdrawal of proposals.

(i) Offerors are responsible for submitting proposals, and any modifications or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.

(ii)(A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and—

(1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(3) It is the only proposal received.

(B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.

(5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.

(6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

(7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

(8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

(d) *Offer expiration date.* Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).

(e) *Restriction on disclosure and use of data.* Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall—

(1) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [*insert numbers or other identification of sheets*]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(f) Contract award.

(1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and sub factors in the solicitation.

(2) The Government may reject any or all proposals if such action is in the Government's interest.

(3) The Government may waive informalities and minor irregularities in proposals received.

(4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offer or's initial proposal should contain the offer or's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

(5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.

(6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.

(7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.

(8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.

(10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.

(11) If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:

(i) The agency's evaluation of the significant weak or deficient factors in the debriefed offer or's offer.

(ii) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.

(iii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.

(iv) A summary of the rationale for award.

(v) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

(vi) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm fixed price type of contract resulting from this solicitation.

52.233-2 SERVICE OF PROTEST (SEPT 2006) - DEP. OF INT. (DEV.) (JUL 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Bureau of Land Management, Oregon State Office, Branch of Procurement Management, 333 S.W. First Avenue, Portland, Oregon, 97204.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(c) A copy of the protest served on the Contracting Officer shall be simultaneously furnished by the protester to the Department of the Interior Assistant Solicitor for Procurement and Patents, 1849 C Street, NW, Room 6511, Washington, D.C. 20240.

1452.215-71 USE AND DISCLOSURE OF PROPOSAL INFORMATION (APR 1984)

(a) Definitions. For the purposes of this provision and the Freedom of Information Act (5 U.S.C. 552), the following terms shall have the meaning set forth below:

(1) "Trade Secret" means an unpatented, secret, commercially valuable plan, appliance, formula, or process, which is used for making, preparing, compounding, treating or processing articles or materials, which are trade commodities.

(2) "Confidential commercial or financial information" means any business information (other than trade secrets) which is exempt from the mandatory disclosure requirement of the

Freedom of Information Act, 5 U.S.C. 552. Exemptions from mandatory disclosure which may be applicable to business information contained in proposals include exemption (4), which covers "commercial and financial information obtained from a person and privileged or confidential," and exemption (9), which covers "geological and geophysical information, including maps, concerning wells."

(b) If the offeror, or its subcontractor(s), believes that the proposal contains trade secrets or confidential commercial or financial information exempt from disclosure under the Freedom of Information Act, (5 U.S.C. 552), the cover page of each copy of the proposal shall be marked with the following legend:

"The information specifically identified on pages -- of this proposal constitutes trade secrets or confidential commercial and financial information which the offeror believes to be exempt from disclosure under the Freedom of Information Act. The offeror requests that this information not be disclosed to the public, except as may be required by law. The offeror also requests that this information not be used in whole or part by the Government for any purpose other than to evaluate the proposal, except that if a contract is awarded to the offeror as a result of or in connection with the submission of the proposal, the Government shall have the right to use the information to the extent provided in the contract."

(c) The offeror shall also specifically identify trade secret information and confidential commercial and financial information on the pages of the proposal on which it appears and shall mark each such page with the following legend: "This page contains trade secrets or confidential commercial and financial information which the offeror believes to be exempt from disclosure under the Freedom of Information Act and which is subject to the legend contained on the cover page of this proposal."

(d) Information in a proposal identified by an offeror as trade secret information or confidential commercial and financial information shall be used by the Government only for the purpose of evaluating the proposal, except that: (i) If a contract is awarded to the offeror as a result of or in connection with submission of the proposal, the Government shall have the right to use the information as provided in the contract, and (ii) if the same information is obtained from another source without restriction it may be used without restriction.

(e) If a request under the Freedom of Information Act seeks access to information in a proposal identified as trade secret information or confidential commercial and financial information, full consideration will be given to the offer or's view that the information constitutes trade secrets or confidential commercial or financial information. The offeror will also be promptly notified of the request and given an opportunity to provide additional evidence and argument in support of its position, unless administratively unfeasible to do so. If it is determined that information claimed by the offeror to be trade secret information or confidential commercial or financial information is not exempt from disclosure under the Freedom of Information Act, the offeror will be notified of this determination prior to disclosure of the information.

(f) The Government assumes no liability for the disclosure or use of information contained in a proposal if not marked in accordance with paragraphs (b) and (c) of this provision. If a request

under the Freedom of Information Act is made for information in a proposal not marked in accordance with paragraphs (b) and (c) of this provision, the offeror concerned shall be promptly notified of the request and given an opportunity to provide its position to the Government. However, failure of an offeror to mark information contained in a proposal as trade secret information or confidential commercial or financial information will be treated by the Government as evidence that the information is not exempt from disclosure under the Freedom of Information Act, absent a showing that the failure to mark was due to unusual or extenuating circumstances, such as a showing that the offeror had intended to mark, but that markings were omitted from the offer or's proposal due to clerical error.

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REF. (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer in lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Upon request, the Contracting Officer will make their full text available. Also, the full text of a solicitation provision may be accessed electronically at this address: www.arnet.gov/far

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any Department of the Interior Acquisition Regulation (48 CFR Chapter 14) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

L.1.0 GENERAL

Proposals which merely offer to conduct a program in accordance with the requirements of the Government's statement of work will be considered technically unacceptable to this request and will be excluded from the competitive range. The offer must submit a definitive proposal to accomplish the requirements as stated in the RFP. The technical proposal should not contain any price information. Proposals shall be submitted in two parts consisting of (1) a technical proposal and (2) a price proposal. Each part shall be separate and complete in itself so that evaluation of one may be accomplished independently of the other. Sufficient and detailed information must be presented in the technical proposal to enable the Government to evaluate the proposal fully in accordance with the Evaluation and Award Criteria contained in Section M. The Government is not obligated to ask for additional information and in the absence of appropriate information; the proposal will be rated deficient.

L.2.0 PROPOSAL SUBMITTAL

L.2.1 L.2.1 Electronic Submittal - Proposals must be submitted electronically and must be in a printable format. Pricing needs to be a separate file. Submissions shall be made to the Contracting Officer: nsloanhoffer@osmre.gov and the contract specialist: tmeeker@osmre.gov.

In accordance with FAR 4.1201, representations and certifications shall be entered through www.bpn.gov using the ORCA system and updated annually.

TECHNICAL PROPOSAL

Interested offerors shall submit their proposals in the following format:

TECHNICAL CAPABILITIES

The proposal shall show the offeror's application of expert knowledge of project management and environment impact development, quality assurance, and subcontractor management. If the offeror lacks expert knowledge in one or more of the areas, the proposal will show that the offeror has established partnerships or subcontracts with other individuals or organizations to supply the missing expertise.

SUBCONTRACTING PLAN

The Offeror shall submit a subcontracting plan which includes a detailed listing of subcontractors and their specific disciplines that will support the development of the EIS. Include by name – experience, past performance, capabilities, qualifications and certifications.

The plan shall include how the contractor will address organizational and other conflicts of interest for subcontractors or persons who are consultants or who work for organizations with potential conflicts.

PRICE

Completed Form SF 1499 and Section B.

PAST PERFORMANCE

A. List of three (3) references on comparable contracts, where your company was the prime contractor, include:
   1. Name of contract.
   2. Agency or entity issuing contract.
   3. Name and current phone number of contact.
   4. Dates of contract period of performance.
   5. Type of contract and estimated value.

6. Contract/project description

2. Past contract performance information, including:
   1. Brief summary of any defaults or issues or accolades.
   2. Reworks required.

SECTION M - EVALUATION AND AWARD FACTORS

52.217-5 Evaluation of Options. (July 1990)
Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

M.1.0 EVALUATION AND AWARD FACTORS

The OSM intends to make a single award to the responsive and responsible firm whose proposal is most advantageous to the OSM, price and non-price related factors will be considered. Proposals will be evaluated according to all of the criteria stated below. An objective evaluation will be performed on each offer or's proposal based on the information furnished and subsequent information gathered after proposals are received, such as responses from references or data from past performance databases.

M.2.0 EVALUATION FACTORS

Proposals shall be prepared in accordance with Technical Proposal Preparation Instructions, as set forth in Section L. The following major factors and sub factors shall be used in the evaluation of the proposals.

M.2.1 Technical Capabilities

a. The collective qualifications, experience, capabilities and quality of past performance of the consultants or subcontractors proposed for the Offeror's team; the appropriate proportion of work to be performed by each consultant or subcontractor, identified by name and experience, qualification, capabilities and quality of past performance of the consultant or subcontractor proposed to perform the required tasks.

b. The Offeror shall submit a subcontracting plan which includes a detailed listing of subcontractors and their specific disciplines that will support the development of the EIS.

c. Demonstrated ability of the understanding of the PWS and tasks.

M.2.2 Past Performance –

The proposal shall show the offeror's application of expert knowledge of project management and environment impact development, quality assurance, and subcontractor management. If the offeror lacks expert knowledge in one or more of the areas, the technical proposal will show that the offeror has established partnerships with other individuals or organizations to supply the missing expertise.

The proposal shall describe the offeror's relevant past and current experience in projects of comparable size, complexity, and similarity to the objectives of this requirement.

1. A list of the contracts completed during the past three years and all contracts currently in progress for services comparable to the solicitation. Degree of experience in projects comparable to this solicitation, past performance on similar projects in terms of schedule adherence, planning and implementation, and record of the ability of the organization to provide services in a timely and satisfactory a manner. Reference checks demonstrate favorable past performance on comparable contracts completed including:

a. Consistent, positive references and reputation of the company and key personnel demonstrating quality outputs and performance.
b. Record of minimal notices of non-compliance and re-work on past projects, minimal contract defaults.
c. Consistently demonstrated a commitment to delivering quality products or services.
d. Consistently demonstrated a commitment to timeliness of performance.
e. Consistently demonstrated commitment to good business relationships with their clients.

2. Include the following information:

   a. Name of Contracting Organization
   b. Contract Number (for subcontracts, provide the prime contract number and subcontract number)
   c. Contract Type
   d. Total Contract Value
   e. Description of Requirement
   f. Contracting Officer's Name and Telephone Number
   g. Project Officer's Name and Telephone Number

3. Each offeror will be evaluated on their performance under existing and prior contracts for similar services. Performance information will be used for both responsibility determinations and as an evaluation factor against which offerors' relative rankings will be compared to assure the greatest value to the Government. The Government will focus on information that demonstrates quality of performance relative to the size and complexity of the acquisition under consideration. The

Government is not required to contact all references provided by the offeror, References other than those identified by the offeror may be contacted by the Government to obtain additional information that will be used in the evaluation of an offer or's past performance.

M.2.3 PRICE Price reasonableness will be determined through price analysis in accordance with FAR 15.402. A comparison of proposed prices received in response to the solicitation. The proposed price between offers with substantially equal technical and past performance ratings will be a major factor in the selection of a proposal for award.

M.3.0 OTHER CRITERIA

The Contracting Officer shall consider several factors in the selection process which are important, but have not been assigned specific points or values, such as:

a. Proposals must respond to all the requirements of the Request for Proposal (RFP) and must include all information specifically required in all sections of the RFP.

b. Award will not be made to any offeror unless agreement can be reached on all general and special provisions.

M.4.0 CONTRACT AWARD

M.4.1 CONTRACT AWARD FACTORS

For evaluation purposes only, award will be based on the total of all listed items for the base year plus the total value of the option years. The Government will make award on an all-or-none basis in accordance with Section L.

Award will be made on a best-value basis. The Government's objective is to obtain the highest quality considered necessary to achieve the objectives with a realistic and reasonable price. Evaluation factors as a whole are more important than price. Therefore, award to a technically superior, higher-priced offeror may be made in lieu of a lower-rated, lower-priced offeror if the technical advantage merits the higher price within funds available. Award will be made on an all-or-none basis. Any unexplained inconsistency within the proposal which raises a fundamental issue of the offer or's understanding of the nature and scope of work required and of the financial ability to perform the contract, may cause the proposal to be excluded.

The Government intends to award a contract resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and sub factors in the solicitation.

The Government may reject any or all proposals if such action is in the Government's interest.

The Government may waive informalities and minor irregularities in proposals received.

The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offer or's initial proposal should contain the offer or's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

M.4.2 This request does not commit the Government to award a contract or to pay any costs incurred in developing Contractor's proposal.

SECTION C - SUPPORTING INFORMATION, SPECIFICATIONS, AND REFERENCE MATERIALS

Office of Surface Mining, Reclamation & Enforcement (OSM)

Statement of Work
For the
Preparation of an
Environmental Impact Statement

STATEMENT OF WORK

1.0 INTRODUCTION

The OSM will require Contractor support services for the preparation of a draft and final environmental impact statements (EIS) prepared under the National Environmental Policy Act (NEPA). Contractor support services will be required also for: preparing floodplain and wetlands assessments, complying with related Executive Orders, statutes such as the National Historic Preservation Act and the Endangered Species Act and their implementing regulations, policies, guidance and procedures; incorporating NEPA values (such as analysis of cumulative, offsite, ecological, and socioeconomic impacts); preparing supplemental analyses, compiling environmental information to support the NEPA process, and evaluating environmental information used in EISs. This Scope of Work (SOW) describes in a general manner the range of services that are anticipated over the duration of this contract.

This SOW provides for the analysis of the potential environmental impacts resulting from the proposed rulemaking action as well as its alternatives, to include the no action alternative. The federal action, together with the alternatives related to it, is hereafter referred to in this SOW as the proposed action and its alternatives.

2.0 BACKGROUND

2.1 NEPA is our basic national charter for the protection of the environment. It establishes policy, sets goals, and specifies the process for carrying out the policy. In part, NEPA states that all federal agencies shall "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment. " NEPA, at Section 102(2)(C), requires federal agencies to include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, a detailed statement known as an EIS on: "(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-turn productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."

2.2 The Council on Environmental Quality's (CEQ's) NEPA implementing regulations, at 40 CFR §1500-1508, are binding on all federal agencies, and establish the minimum general requirements that assure NEPA compliance. These CEQ regulations establish a multistage process that describes how the agency is to analyze and describe to the public and the decision maker any significant environmental impacts that could result from carrying out a proposed action.

2.3 The CEQ regulations at 40 CFR § 1502.10 establish requirements for an EIS. The recommended format is described at 40 CFR 1502.10: (a) cover sheet, (b) summary, (c) table of contents, (d) purpose of and need for action, (e) alternatives, including the proposed action (sections 102(2)(C)(iii) and 102(2)(E) of NEPA), (f) affected environment, (g) environmental consequences (especially sections102(2)(C) (i), (ii) (iv), and (v) of NEPA), (h) list of preparers, (i) list of agencies, organizations, and persons to whom copies of the EIS are sent, (j) index, (k) appendices (if any).

2.4 The Department of the Interior regulations contains its procedures for implementing NEPA and is located at 43 CFR Part 46. These regulations also contain the Departmental policies and procedures for compliance with NEPA, Executive Order (E.O.) 11514, E.O. 13352, and the Council of Environmental Quality's (CEQ's) regulations (40 CFR Parts 1500-1508). Department officials will use these regulatory requirements in conjunction with and supplementary to these authorities.

2.5 OSM has provided as attachment #1 draft language to be inserted in the portions of the EIS that describe the "purpose and need for agency action". The list of "alternatives including the preferred alternative" is provided as attachment #2. All other portions of the EIS, which are prepared by a Contractor, are subject to review and approval of data and analyses by OSM and cooperating agencies.

2.6 Proposed actions, alternatives, and issues to be addressed in the OSM's NEPA documents may be highly complex, and the subject areas may be technologically and scientifically precedent-setting. The proposed actions and range of alternatives to the proposed actions that may need to be analyzed are often unpredictable and may change during document preparation of the Draft EIS (DEIS) and the Final EIS (FEIS) as a result of factors such as agency evaluation and negotiation, public comment, or external developments. The Contractor will be expected to make corresponding changes in research, data collection, analysis and related documentation and services.

2.7 The EIS preparation requires an integrated interdisciplinary approach. The preparers' disciplines must be appropriate to the identified scope and issues. The NEPA document preparation team shall include but is not limited to: various fields of engineering, surface and groundwater hydrology and water quality, geomorphology and fluvial processes, geology and seismicity, air quality and meteorology, radioactive and chemical contaminant transport, traffic and transportation safety, terrestrial and aquatic ecology, land use management, endangered species biology, soil science, wetland management, water resource planning, paleontology, archaeology and cultural resources, utility and infrastructure design, occupational and public health and safety, noise, socioeconomics, visual resources, recreation, landscape architecture, environmental justice, adaptive management, modeling, statistical analysis, and risk assessment.

2.8 These NEPA documents will address highly controversial issues and will be subject to rigorous review by experts in scientific and legal fields, federal and state agencies, tribes, interest groups, the general public, and the courts.

A. SCOPE

3.1 This SOW is for the preparation of a draft and final EIS to include the completion of the necessary environmental impact analyses and their appropriate documentation and review under the requirements of the National Environmental Policy Act (NEPA). The EISs and the processes for their preparation must be consistent with and meet all requirements of NEPA and implementing CEQ regulations (hereafter referred to as the CEQ regulations) and guidance. These requirements are referred to collectively hereafter as the federal NEPA requirements, or simply NEPA. Contractor data collection, analysis, and documentation will identify and evaluate all relevant impacts, conditions, and issues associated with the proposed action, and the alternatives in accordance with NEPA.

3.2 The EIS shall:

A. Include a cover sheet, table of contents, summary, introduction, including a description of the proposed federal action (the rulemaking), the purpose of the proposed action, and the need for the action, and a description of the organization of the document, a discussion of background information including issues raised in the comments on the ANPR, and a description of the scope of the EIS analysis;
B. Describe the alternatives of the proposed action;
C. Describe existing conditions and environmental impacts resulting from the proposed action and related to the physical environment, including topography, geology, soils, mineral resources, hydrology, ecology, meteorological conditions, air and noise quality, environmental justice, economics, cultural environment (including but not limited to: population, employment, housing, land use, zoning, transportation, utilities and community);
D. Describe unavoidable adverse impacts, and any mitigation;
E. Describe the relationship between the local short-term uses of the human environment and the maintenance and enhancement of the long-term productivity;
F. Describe the potential alternative courses of action (including no action) and their impacts;
G. Analyze the unavoidable commitment of resources required to complete the proposed action;

STATEMENT OF WORK – CONTINUED

H. Contain a Regulatory Impact Analysis with cost-benefit data that fulfills the requirements of sections 6(a)(3) (B) and (C) of Executive Order 12866, 40 CFR 1502.23, OMB Circular A-4 and the Regulatory Flexibility Act (5 U.S.C.601).

I. Discuss the public awareness of the proposal; list the agencies, groups, and individuals consulted during the environmental review process and public comments;

J. Provide documentary support for all of the above;

1) Set the analysis of alternatives against the base alternative of "no action".

2) Documents prepared shall include, but not be limited to:

a. Collection and analysis of all available pertinent data;

b. Identification of short and long-term impacts;

c. Definition and discussion of potential primary impacts;

d. Categorization of potential impacts by geographic area (i.e., on-site, immediate vicinity, watershed, regional, national, etc);

e. Comparative analysis of the alternative courses of action.

The final product of the Contract will be a detailed analysis of all potential impacts that reasonably can be expected to occur as a result of the proposed action. Measures to neutralize or eliminate adverse impacts of the proposed action shall be discussed in detail. Potential adverse impacts which cannot be reasonably avoided shall be discussed in detail, along with measures to mitigate these impacts.

3) Use of existing information

Existing information shall be fully utilized in order to avoid duplication of previous research that may be pertinent to the proposed action. On the date of the award of the contract, the OSM will furnish the Contractor with all known pertinent data and documents; however, such data is limited. The Contractor shall be solely responsible for accessing and utilizing all non-OSM sources which are relevant to the proposed federal action.

4) Collection of Empirical Data
The use of various analytical models by the Contractor in assessing the environmental impacts arising from the proposed action will necessitate the establishment of a data baseline.

Existing data available from Federal, state, and local government agencies and tribes shall be used whenever possible, assuming that the data is widely considered as accurate and extant (i.e. Standard Methods). It shall be the sole responsibility of the Contractor to obtain all information necessary for the full, accurate, and timely completion of the contract. The Contractor shall also be responsible for thoroughly reviewing and assessing the validity of previously generated data and shall provide a complete detailed description of the methodology used in this regard. The Contractor shall institute a professionally acceptable program of empirical research and data collection in those areas where data does not exist, is insufficient for thorough analysis, or is deemed as obsolete.

It is important that the data assembled from all sources is as comprehensive as possible, based on professionally accepted standards. The data should include, but not be limited to:

a. Pertinent demographic and socioeconomic data;
b. Employment and commercial activity data;
c. Data on the physical environment (including but not limited to: ecology, geology, hydrology, seismology);
d. Data relating to local land use regulations and local land use plans;
e. Data relating to historic preservation and the potential impacts of the proposed rulemaking;
f. Data relating to potential archaeological impacts;
g. Water management plans and flood plain studies;
h. Data relating to National Ambient Air Quality Standards (NAAQS) and the impact of the proposed rulemaking.

i. A summary of NPDES, 404, and 402 stream related permits associated with coal mining for the last five (5) years (source EPA and COE). A narrative describing the Corps of Engineers' (COEs) 2008 compensatory mitigation rule influence on stream restoration projects completed under SMCRA permits.
j. A Comparison and contrast of SMCRA material damage definition and existing degradation policies associated with the Clean Water Act (CWA) (303d).
k. Provide narrative describing variations in the 404 and 402 permitting process across EPA regions and Corps Districts to acknowledge regional differences in how coal mining activities are regulated under the CWA. Recent EPA letters have addressed the in parts of the Appalachian Region. OSM will provide data for the Contractor to review and provide analyses summary.
l. Provide a narrative of the programmatic overview of current state program requirements to include but not limited to: buffer zone variances, monitoring, and reclamation techniques and standards.
m. Provide an overview of how recent implementation of SMCRA relates to the conditions of the 1996 Biological Opinion (as covered in previous in the attached EISs). OSM will provide to the Contractor species specific protection and enhancement plans and any other applicable materials attained from FWS.
n. An assessment of the location of each coal mining region with regards to climate and geology (The attached 2008 EIS provides background information).
o. A comparison and contrast of federal agency (COE, EPA, USGS, OSM) definitions of intermittent and ephemeral streams.

p. An assessment of the extent of threatened and endangered (T&E) species in coal fields potentially impacted by mining related stream impacts (Source state heritage program databases).

q. The contractor shall perform all NEPA consultation associated with this project. This is to include but is not limited to Section 7 consultation.

r. The Contractor shall identify cumulative effects, to include but not limited to:

   i. Review the three (3) most recent reports of the biennial state water quality (305b) reports to identify trends of non-coal mining related impairments within the coal field basins.

   ii. Provide a narrative of the water quality monitoring requirements, at the program level, from the completion of mining to phase III bond release. OSM will provide the data to the Contractor for comparison and analyses.

   iii. An assessment of future mining activity using the coal industry's projection.

   iv. A summary of 303d related watershed scale analyses conducted within the last 10 years that are related to coal mine impacts. Provide a comprehensive list of all303d listed streams within the coal fields along with the causes of impairment for each stream. Identify any observed patterns within the list.

   v. GIS products should be used to support topics in a spatially distributed pattern. Examples include but are not limited to: 303s listed streams, density of

coal related valley fills per 10 digit coalfield watershed, location of each coal mining region with regards to climate and geology, T7E per 10 digit coalfield watershed recently observed ranges in total dissolved solids (TDS), sulfate, pH, and selenium per watershed.

vi. Determine specific state program requirements for mining in a stream buffer zone (variances to fill, mine through, or any activity within one hundred (100) foot buffer zone), this shall include but not limited to: the process for granting variances (i.e. conditions for granting), state restoration standards for mining through a stream, including monitoring provisions, assessment standards for restored streams – standards for bond release, process by which the Regulatory Agency determines the recovery of restored streams (i.e. habitat, chemistry, flow, macroinvertebrates, fish, mussels, etc.).

vii. A narrative summarizing peer reviewed publications resulting from long term studies on water quality impacts from surface and underground mines. A compilation of some of the studies is provided in attachment #2.

s. Narrative describing trends in permitted activities involving Approximate Original Contour (AOC) variances by operation type and with topographic, geologic, and hydrologic considerations.

t. A narrative of fill minimization/optimization procedures associated with excess fill operations, including specific review of water quality, excess spoil fill operations, including specific review of water quality, excess spoil fills, under drains, sloped, stability, stream mitigation, and surface drainage control.

u. A watershed scale review of geomorphic reclamation: land forming, stream reconstruction, and stream restoration techniques designed to approximate the natural system.

v. Topics to be included for Material Damage to Hydrologic Balance – Cumulative Hydrologic Impact Assessment (CHIA) topics include but are not limited to:

   i. A narrative summary of existing water quality and quantity (surface and ground water) downstream of coal mine sites at a CWA 305(b) scale with emphasis on regional analysis. Including but not limited to: active and reclaimed mines (water quality, flow, loadings), land use categories (identified as a percentage) within a CWA 305(b) scale, percent of disturbed relative to bond release status, percent of valley fills, percent of remined areas, and identification of mining impacts (surface and underground) to existing groundwater conditions. Source material shall include most recent coal field watershed and hydrology reports (USGS).

   ii. A compilation of the scores of biological indices as related to water quality and stream classifications from characterizations or ratings produced through aquatic life monitoring or bioassessment protocols.

iii. A narrative describing the state and federal standards applied to stream restoration and mitigation projects for mine activities associated with mine- throughs, fills, and undermining.

iv. Provide a narrative of the regulatory program criteria/standard used for determining material damage. This includes the quantitative and/or qualitative methods used. Identify state methodology/standard/process for conducting CHIAs, including the steps taken to develop the CHIA and any post mining CHIA evaluations. Determine how data are collected, stored, and managed in the CHIA evaluation. Identify the extent that data are stored electronically, regularly maintained in databases, and used in hydrologic evaluations. Assess the compatibility of electronic databases relative to the national mapping initiative. OSM will provide the data for the Contractor's evaluation and analyses.

w. Compile a list professionally recognized bioassessment protocols currently in use by state or federal agencies to assess the biological condition of streams. For each protocol identified, provide a narrative describing the taxa utilized and the agencies using each specific protocol.

For purposes of evaluating reasonably foreseeable significant adverse effects pursuant to 40 CFR 1502.22, if there is incomplete or unavailable information, the Contractor shall make clear that the information is lacking and shall provide a statement of the relevance of the incomplete or unavailable information, a summary of existing credible scientific information relevant to

evaluating those effects, and the Contractor's evaluation of these impacts, consistent with section 1502.22.

The recommended outline shall be in accordance with CEQ regulations.

B. TECHNICAL REQUIREMENTS

4.1 Technical direction for preparation of the EIS will be provided by the Contracting Office Representative (COR) who will be designated by the Contracting Officer.

A. The Contractor shall use Microsoft Word '07, for the preparation of all deliverable documents. All documentation must use Times New Roman 12 font. Software used for analyses and modeling may be proprietary but calculations obtained from applying such software must be provided to COR.

B. All deliverables must be submitted in digital format that is searchable.

C. The Contractor shall prepare a project management plan based on the scope of work description. The project management plan shall identify how each task element is addressed in the document.

D. Contractor shall implement a formal change control process and prepare a cost report that identifies the cost of a draft EIS and the basis of the cost estimates. Each revision of the cost report will be submitted to OSM for review so that the incremental costs of changes and corrections may be tracked. The basis of the cost estimates should include such categories as approach, cost assumptions, cost elements, direct labor, fringe benefits, direct costs, overhead, travel, general and administration, purchased equipment, purchased material, subcontracts, cost of facilities capital, inflation factors, etc.

E. The Contractor shall coordinate with OSM on acceptable levels of data analysis and on assumptions, analytical methods and models.

F. The Contractor shall identify and analyze the onsite and offsite environmental impacts of the proposed action and each of the alternatives evaluated in detail in the EIS. This may include, but not be limited to: conducting literature searches; modeling; preparing graphs, maps, charts and tables; calculating; interpreting samples; interviewing experts; and documenting such research, analyses, or use of professional judgment in the absence of preexisting information.

G. The Contractor shall identify and describe mitigation measures. During the course of the analysis for the DEIS, it may become apparent that mitigation could reduce, avoid, eliminate, or compensate for the environmental impacts of a proposed action or alternative. If the analyses indicate the potential for such mitigation, the Contractor shall identify the mitigation measures to the OSM to consider incorporating into the proposed action, an alternative, or a mitigation action plan.

SERVICES

5.1 If any of the services do not conform to contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by re-performance, the Government will reduce the contract price to reflect the reduced value of services performed.

5.2 If the Contractor fails to perform the services or to take necessary action to ensure performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and charge the Contractor any cost incurred by the Government that is directly related to the performance of such service or (2) terminate the contract for default.

C. DELIVERABLES

6. The Contractor shall submit all material in electronic format required hereunder to the COR in accordance with the following schedule.

6.1 The Contractor shall submit a work plan within 30 days of Notice to Proceed. The work plan shall include a milestone schedule, technical approach, staffing plan, work breakdown structure, and management controls to complete the Regulatory Impact Analysis with cost-benefit data by September 24th, 2010; DEIS by February 4th, 2011; and FEIS by October 7th, 2011The Contractor will be required to participate in scoping process. The Contractor will send consultation letters to Government Agencies and all other interested parties within 30 days of Notice to Proceed.

6.2 The Contractor shall hold meetings twice a month with COR and other designated persons to report progress. All documentation shall be provided electronically. One meeting shall be via teleconference (TELCON) and the other shall be in South Interior Building 1951 Constitution Avenue, NW, Washington, DC 20240 (Room to be determined (TBD) at a later date).

6.3 At monthly meetings, the Contractor shall provide completed segments of the DEIS. The purpose is to ensure that segment progress is in accordance to scope.

STATEMENT OF WORK – CONTINUED

6.4 The Contractor shall submit a Preliminary Draft EIS (DEIS) by November 19th, 2010. The Contractor shall provide 3 hard copies and 50 digital copies. The Government and other cooperating agencies will have 7 business days to review and submit comments. The Contractor will then have 15 calendar days to compile comments and make corrections.

6.5 Review of Preliminary DEIS by the OSM and Cooperating Agency will be seven business days. Comments will be submitted at the end of this period. [Isn't this the same statement as above in 6.4?]

6.6 Participation in Public Hearing: The Contractor shall incorporate comments into FEIS within 45 days following publication in the Federal Register.

6.7 The Contractor shall prepare and submit to OSM the public comments on the DEIS that were submitted to the Federal rulemaking comment website. The Contractor shall organize substantive comments by topic for the inclusion in the FEIS within 30 days of the close of the DEIS comment period.

6.8 Final Environmental Impact Statement (FEIS)

A. The Contractor shall complete the Proposed FEIS within 50 days after close of DEIS comment period.
B. OSM and cooperating Agencies will have 14 business days to review and provide comments.
C. The Contractor shall submit the FEIS within 14 days of agency comment receipt.
D. Provide 3 hard copies and 50 digital copies of the FEIS.

Prompt delivery of the items listed above is essential to the performance of this contract.

In accordance with the schedule provided, the time period for completion of a submission shall begin on the date that the Contractor receives approval of the previous submission.

Some submissions may be approved with the reservation that OSM and Cooperating Agency comments regarding that submission shall be incorporated into the subsequent submission. If these comments are not incorporated, the document submitted will be returned without further review. Each submission after the first shall be accompanied by a letter noting OSM and cooperating agency comments and explaining how each was resolved. In the event that a submission is not acceptable and is sent back to the Contractor for revision, OSM will have additional time to review the subsequent revised submission.

In order to expedite the review process, the Contractor shall notify the COR at the time of completion of significant subsections of each document. OSM will then request that 3 hard copies and 15 digital copies be submitted for review and comment.

At the request of the Contractor, the schedule of submissions may be extended in the event that performance is delayed by circumstances beyond the control of, and without fault or negligence on the part of, the Contractor, as determined by the Contracting Officer.

D. RELEASE OF INFORMATION

The Contractor may not disseminate any information concerning the specific project without special written approval of the Contracting Officer.

E. TRAVEL

Travel required in connection with this work order is to be included in the detailed cost breakdown, when the Contractor submits a proposal for the order. Travel costs shall not exceed the FAR 31.205-46, Travel Costs, and Federal Travel Regulations.

F. PAYMENT SCHEDULE

9.1 Monthly progress of segments of the DEIS with approved comments - May (meetings including DEIS segment reviews)

9.2 Monthly progress of segments of the DEIS with approved comments - June (5%) (meetings including DEIS segment reviews)

9.3 Monthly progress of segments of the DEIS with approved comments - July (meetings including DEIS segment reviews)

9.4 Monthly progress of segments of the DEIS with approved comments - August (5%) (meetings including DEIS segment reviews)

9.5 Monthly progress of segments of the DEIS with approved comments - September (5%) (meetings including DEIS segment reviews). Complete Regulatory Impact Analysis with cost-benefit data.

9.6 Monthly progress of segments of the DEIS with approved comments - October (5%) (meetings including DEIS segment reviews)

9.7 Monthly progress of segments of the DEIS with approved comments - November (meetings including DEIS segment reviews)

STATEMENT OF WORK – CONTINUED

9.8 Monthly progress of segments of the DEIS with approved comments-December (5%) (meetings including DEIS segment reviews)

9.9 Monthly progress of segments of the DEIS with approved comments- January (meetings including DEIS segment reviews)

9.10 Approval of Preliminary DEIS and complete mailing – February 14th, 2011 (30%)

9.11 Collection and organization of comments received – May 13th, 2011 (5%)

9.12 Monthly progress of Draft FEIS – June (Meetings including FEIS segment reviews)

9.13 Monthly progress of Draft FEIS – July 29th, 2011 (5%) (Meetings including FEIS segment reviews)

9.14 Monthly progress of Draft FEIS – August (Meetings including FEIS segment reviews)

9.15 Monthly progress of Draft FEIS – September (5%) (Meetings including FEIS segment reviews)

9.16 Approval of Proposed FEIS and complete mailing – October 7th, 2011 (30%)

9.17 Execution of Release of Claims and receipt of all originals and record in required format– October 31st, 2011 (5%)

OPTION	SECTIONS	FUNDS
OPTION #1	9.1 THROUGH 9.8	**Subject to the Availability of funds**
OPTION #2	9.9 THROUGH 9.10	**Subject to the Availability of funds**
OPTION #3	9.11 THROUGH 9.15	**Subject to the Availability of funds**
OPTION #4	9.16 THROUGH 9.17	**Subject to the Availability of funds**

ATTACHMENT #1 - PURPOSE AND NEED STATEMENT

NEED AND PURPOSE FOR THE FEDERAL ACTION

NEED

On January 2010 the GAO issued a report entitled: Surface Coal Mining - Financial Assurances for, and Long-Term Oversight of, Mines with Valley Fills in Four Appalachian States. The report was an evaluation of the long term monitoring of surface coal mines with valley fills and the assurance that the mines will be properly reclaimed. The GAO examined surface coal mines in Kentucky, Tennessee, Virginia, and West Virginia. The GAO report made the following findings, among others, in the report:

> Studies have found environmental impacts resulting from reclaimed mines with valley fills including: subpar reforestation efforts; contaminated streams that have impacted aquatic organisms; water flows that may have been affected by the fills; and cases where mines have not been restored to approximate original contour.

In addition, recent studies suggest that surface mining activities that affect streams may have impacts on stream and riparian biota that are not explicitly addressed under existing regulatory requirements implementing SMCRA. [*Cite to, very briefly summarize a couple of the more significant studies.*]

Downstream effects of mountaintop coal mining: comparing biological conditions using family- and genus-level macroinvertebrate bioassessment tools, Gregory J. Pond, et. al. July 8, 2008

This study found that surface coal mining with valley fills has impaired the aquatic life in numerous streams in the Central Appalachian Mountains; such mining activity has had subtle to severe impacts on benthic macroinvertebrate communities. Sites downstream of reclaimed MTM and VFs revealed little sign of biological recovery after 6 to 7 years; Impacts to ecosystem

structure and function (i.e., soil and water biogeochemistry, leaf decomposition, macroinvertebrates) remained after 15 years of recovery of a coal-mined watershed in Maryland, and the oldest VF site in the data still had downstream specific conductance values >1200 lS/cm and no mayflies after 15 years.

Mountaintop Mining Valley Fills and Aquatic Ecosystems: A Scientific Primer on Impacts and Mitigation Approaches, Margaret A. Palmer and Emily S. Bernhardt

This executive summary of this paper stated: "...The more surface mining and valley fill activity within a large watershed, the greater the cumulative transport of alkaline mine drainage pollutants to major rivers will be. The streams and rivers below valley fills receive alkaline mine drainage that include highly elevated concentrations of sulfate, bicarbonate, calcium and magnesium ions and which often include elevated concentrations of multiple trace metals. The combined toxicity of

multiple constituents results in significant increases in conductivity and total suspended solids below valley fills. This decline in water quality leads to a loss of sensitive aquatic organisms even when downstream habitats are intact. The resulting high conductivity and high sulfates can persist long after mining activities cease and scientists have found no empirical evidence documenting recovery of macroinvertebrate communities in the streams impacted by alkaline mine drainage. The water quality impacts of MTMVF activities are more severe and more persistent than other land use changes within the southern Appalachians."

In consideration of the concerns raised by this information, as well as OSM's experience in evaluating the impacts of surface coal mining operations on mountainous areas and surface and ground waters, OSM believes there is a need to improve the effectiveness of the regulations implementing SMCRA in reducing the harmful impacts of surface coal mining operations that affect mountaintops and streams, including but not limited to operations that engage in mountaintop mining, steep slope mining, and contour mining. Any Federal Action by OSM to achieve a reduction in the adverse impacts of surface coal mining operations must be authorized by and consistent with SMCRA.

PURPOSE

The Surface Mining Control and Reclamation Act of 1977 provide that:

> "It is the purpose of this Act to –
>
> (a) establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations;
>
> (c) assure that surface mining operations are not conducted where reclamation as required by this Act is not feasible;
>
> (d) assure that surface coal mining operations are so conducted as to protect the environment."

On June 11, 2009, the Secretary of the Department of the Interior, the Administrator of the U.S. Environmental Protection Agency (EPA), and the Acting Assistant Secretary of the Army (Civil Works) entered into a memorandum of understanding (MOU)[1] implementing an interagency action plan designed to significantly reduce the harmful environmental consequences of surface coal mining operations in six Appalachian states, while ensuring that future mining remains consistent with federal law. The MOU also calls for us to consider whether revisions to other OSM regulations (including, at a minimum, approximate original contour requirements) are needed to better protect the environment and the public from the impacts of Appalachian surface coal mining.

However, OSM's experience is that adverse impacts of surface coal mining operations on mountainous areas and surface and ground waters occur nationwide, and are not limited to

[1] The MOU can be viewed online at http://www.osmre.gov/resources/ref/mou/ASCM061109.pdf.

Appalachia. Therefore, the purpose of this Federal Action is to improve the effectiveness of regulation under SMCRA, in reducing the harmful environmental consequences of surface coal mining operations that affect mountainous areas and surface and ground waters throughout the nation. Specifically, the purpose of this Federal Action is to amend OSM's rules implementing SMCRA, to require that mining operations are permitted, operated, and reclaimed in a manner that prevents or minimizes significant long-term adverse environmental effects on mountains, streams, and related environmental values. More particularly, the purpose of this action is to amend OSM's stream buffer zone (SBZ) rule published on December 12, 2008, as well as certain other existing OSM regulations, in order to significantly reduce the adverse impacts from surface coal mining operations on mountainous areas and surface and ground waters and related environmental values nationwide, and to maximize the use of the best science and technology available in regulating those operations and in conducting the operations.

Many of the adverse environmental impacts that have been identified in recent studies are related to instances where mining operations have not effectively restored approximate original contour, or have not prevented or minimized projected adverse hydrologic consequences of coal mining operations or the cumulative adverse hydrologic impacts of all mining within a watershed. Therefore this Federal action will take a comprehensive approach to evaluating the relationships among mining impacts such as these, and the permitting requirements, performance standards, and reclamation requirements that address the impacts.

ATTACHMENT #2 - NARRATIVE SUMMARIZING PEER REVIEWED PUBLICATIONS

Effects of Valley Fills on Benthic Macroinvertebrates

Literature Review

"*As can be concluded based on results from the primary literature and from studies performed for this EIS, filling or mining stream areas even in very small watersheds has the potential to impact aquatic communities some of which may be of high quality or potentially support unique aquatic species. It has not been determined if drainage structures associated with mining can provide some benefits (i.e.; increased flows at toe of fills, retaining drainage structures) that could offset aquatic impacts.*"

Mountaintop Mining/Valley Fills in Appalachia: Draft 2003. Programmatic Environmental Impact Statement US Environmental Protection Agency, Washington, DC.
Pg. III D-4

Mountaintop mining and valley fill operations have been determined to have adverse and detrimental effects on the integrity of all surrounding ecosystems including both aquatic and terrestrial. The following summary will encompass several parameters associated with the degradation of the benthic macroinvertebrate community below valley fills in conjunction with mountaintop mining operations. The material referenced will discuss the influence of geology, hydrology, water chemistry, site location, bioassessment protocol and methodology using qualitative and quantitative measures, insight on reclamation strategies, and elaborate on conflicting opinions on overall conclusions pertaining to mining/valley fill impacts.

The consensus stated within this literature review has been derived from studies, opinions and most importantly the results of various researchers including the USEPA, USGS, USFWS, several state agencies, academia, consulting firms and the coal industry. A collection of 71 articles/studies/opinions have been assembled complete with individual bibliographies and citations included. Additionally, several studies discovered are unpublished and are not peer reviewed with questionable research tactics so the stature of their conclusions is subject to debate. A few comprehensive studies conducted by various private agencies were discovered but found to be unobtainable so for reference and for the potential of obtaining these studies in the future, they will be included as an attachment but not cited in the completed literature review. Relative studies correlating most to the objectives of this comprehensive literature review found that the majority of influential studies noted locations ranging from eastern Kentucky to southern West Virginia.

Valley Fills

When the topography of the mountain is altered via mountaintop removal, radical changes ensue including the flattening of contours, exposure of unsettled spoil, reduced vegetative cover, and elimination of all natural mountainside and valley stream channels. In 2004, mountaintop mining was determined to be dominant land cover use in central Appalachia with an estimated 1.1 million acres being impacted by active mining operations (Townsend et al. 2009 and Loveland et al. 2003).

In order to accurately assess the influence of valley fills on the benthic macroinvertebrate community, a review of several important topographical and geological components must be discussed. To begin with, when a mountain top is mined all vegetation, topsoil, and overlying rock strata are removed down to the coal seam and redeposit as overburden. As the rock and soil layers are being removed, a volumetric expansion of the blasted material occurs resulting in swell. The excess spoil (swell) is redeposited in an adjacent valley to try and eliminate the cost of rehandling the material. The importance of less handling stems from the push for economic profit for the mining industry because the less the mining company has to handle the spoil the lower production costs are resulting in the evolution of valley filling.

Geology and Overburden Composition

One of the most important factors in understanding the influence of valley fills on the aquatic benthic macroinvertebrate community is to understand the composition of the overburden that is deposited in the valley fills within the Appalachian coal bearing region. This is significant because the constituents that comprise the overburden will eventually contaminate the streams adjacent to the valley fills through precipitation and other natural and mechanical earth moving events. Beginning with the geology of the region, according to the USGS the bedrock within the central Appalachian region is comprised of Pennsylvanian aged strata with interwoven beds of shales, siltstones, mudstones, mudrock, limestones, carboliths and sandstones overlapping the older Mississippian aged strata (USGS 2000b and Sobek et al 2000). Understanding the geology of this region is imperative to understanding certain chemical and physical parameters such as acid forming potential and metal contaminant loads which vary based on which rock strata overlies the coal seam.

Through modern mining techniques, blasting the bedrock to expose the coal seams generates spoil, once the spoil has been removed and deposited into a valley fill, it is exposed to the atmosphere and with the addition of precipitation and oxygen immediately a variety of chemical reactions begins to transpire. Certain chemical components found embedded within certain rock strata throughout the Appalachian coal region have the potential to generate detrimental effects on the aquatic community by degrading the water quality. For example; the oxidation of pyrite and sulfide S generate AMD when exposed to water and oxygen decreasing the pH and increasing Fe, Mn, Al, temperature and TSS to harmful levels (Sobek 2000). The noted harmful constituents of overburden found generally within the central Appalachians includes; varying pH, alkaline reactions within soils, salinity potentials, electrical conductivity and toxic metals including; boron, mercury, and selenium. Physical properties that can influence the hydrology of the overburden and ultimately impact the aquatic community via runoff and other nature water

moving parameters include; rock type and stability, hardness, slaking, weathering rate, sedimentation, infiltration and porosity (Sobek 2000). Understanding the physical and chemical parameters of the spoil found within the valley fills will help determine what contaminants will impact the adjoining stream and how they will adversely degrade the benthic macroinvertebrate community downstream.

Hydrologic Regime

When assessing the biological integrity of streams below valley fills, the hydrology has been determined to be an additional key component. Understanding how water moves through the fills and streams will help illuminate the importance of the hydrologic regime because without an adequate supply of water the habitat for the benthic community cannot exist.

The ephemeral, intermittent or perennial streams that are buried as a result of valley fills represent a significant loss of natural habitat (Palmer et al. 2009). Studies have determined that headwater streams emerging from the toes valley fills are the crucial link to the integrity and health of ecosystems downstream and to adjacent river networks. Headwater streams are the beginnings of the river systems and are critical sites for nutrient cycling and organic matter processing while offering a refuge from temperature fluctuations, spawning and rearing areas, food and creating migration corridors (Clark et al. 2008, Lowe et al. 2005, Meyer et al. 2003, and USGS 2000a).

Another major determination concludes that the percentage of watershed influenced by the addition of valley fills to ephemeral, intermittent or perennial streams varies based on the number of fills. Additionally, watershed size may actually buffer the effects of fills and mines (Fulk and Hutchens, 2002). Lastly, in order to perform bioassessment of the benthic macroinvertebrate community it has been determined that drought and stream channel morphology are both directly correlated to the integrity of aquatic ecosystems (Clinton et al. 1996, Feminella 1996, and Powell 1999).

When mining occurs within the steep terrain of the Appalachian region, the hydrology of the entire ecosystem is drastically altered. Water flow pathways throughout the geological strata are radically changed and can in turn severely reduce or completely eliminate the hydrological recharge to streams whether buried by a valley fill or deep mining (Ferguson 1967, Ferguson et al. 1981 and USGS 1991). Additionally, due to the exposure of loose sediment and no vegetative cover there has been a noted decrease in water infiltration and an increase in runoff contributing to increased base flow from the toe of the valley fills raising the potential for flooding and sedimentation to the downstream ecosystems (Messinger 2003, Phillips 2004 and USGS 2001).

"Streams in watersheds where MTM/VFs exist are characterized by an increase of minerals in the water as well as less diverse and more pollutant-tolerant macroinvertebrates and fish species. Questions still remain regarding the correlation of impacts to the age, size, and number of valley fills in a watershed, and effects on genetic diversity. Some streams below fills showed biological assemblages and water quality of good quality comparable to reference streams.

Streams in watersheds below valley fills tend to have greater base flow. These flows are more persistent than comparable unmined watersheds. Streams with fills generally have lower peak discharges than unmined watersheds during most low intensity storm events; however, this phenomenon appears to reverse itself during higher-intensity events."

Mountaintop Mining/Valley Fills in Appalachia: Final Draft 2005. Programmatic Environmental Impact Statement. US Environmental Protection Agency, Washington, DC

Water Quality Impacts as a result of Valley Fills/Mining

Studies have concluded that a variety of factors are attributed to the decline and eradication of benthic macroinvertebrates in areas with active or inactive mining (e.g. Bradfield 1986, Chambers and Messinger 2001, Eberle and Razem 1985, Freund and Petty 2007, Fulk and Autrey 2003, Green and et al 2000, Hoke et al 2001, Kennedy et al 2003, Maggard and Kirk a, b, c, 1999, Maggard 2006, Minear 1976, Merricks et al 2007, Palmer 2009, Pen Coal Corp 2000, Phillips 2004, Pond et al. a, b, c, d, Powell 1999, Stout and Wallace 2003, and USGS, 2000) In addition to mining, Fulk 2003 and Pond a, c and e also determined the same conclusions concerning the integrity of the benthic macroinvertebrate community when assessing the influence of residential and agricultural impacts on the adjacent habitat.

Studies have proven that not one specific stressor is to blame for the poor water chemistry parameters which is responsible for the poor water quality (Freund and Petty 2007 and Lester and Norton 2003). The literature search concluded that the degradation of the benthic community can be attributed to a combination of the chemical parameters (Bryant and McPhilliamy 2002). Below is a table listing the chemical parameters assessed.

Chemical Parameters Assessed	
Calcium	Temperature
Sulfate	Magnesium Hardness Solids
Dissolved Manganese	Total Conductivity, Field (uS/cm)
Selenium	Alkalinity
Potassium	Sodium
Manganese	Dissolved Chloride
Acidity	Nitrate/Nitrite
Acidity	Hot Aluminum
Dissolved Antimony	Arsenic
Beryllium	Cadmium
Chromium	Cobalt
Copper	Mercury
Nickel	Organic Carbon
Total Phosphorous	Silver
Thallium	Vanadium
Barium	Dissolved Oxygen
Organic Carbon	Dissolved Solids
Suspended Iron	Total Iron
Dissolved Zinc	Aluminum, Total

Studies that assessed valley fills associated with mining determined the following targeted parameters in combination and with elevated concentrations are attributed to the degradation of water quality correlated with the reduction and/or eradication of certain orders of aquatic benthic macroinvertebrates.

Chemical Parameters Determined to be Impacted by Valley Fills	
Sulfate	Hardness
Total Magnesium	Total Calcium
Total Dissolved Solids (TSS)	Total Manganese
Dissolved Manganese	Specific Conductance
Total Selenium	Alkalinity
Total Potassium	Acidity
Nitrate	Nitrite

Table from Byrant and McPhilliamy 2002

AMD, Specific Conductance and Total Dissolved Solids have been the notated culprits of water quality degradation in several peer-reviewed studies and have demonstrated adverse impacts on the benthic macroinvertebrate community when elevated levels are detected below valley fills and in active/inactive mining watersheds (Bradfield 1986, Bryant and Mcpilliamy 2002, Chambers and Messinger 2001, Eberle and Razem 1985, Feldman and Connor 1992, Freund and Petty 2007, Green et al 2000, Hartman et al 2005, Hoke et al 2000, Pond a, c, and Schoenholtz 2008 USGS 1990, and USGS 2000).

As stated before, there is no one singular culprit to the degradation of water quality in mined/valley filled watersheds but the literature cited has determined the most influenced chemical parameter is specific conductance. Specific conductance is merely a cumulative measure of ionic strength and when conductivity is high, the disruption of osmoregulation takes place which is essential for aquatic insects to regulate their ion intake and release (Pond et al 2008). Both ionic strength and effluent toxicity can be defined as constituents containing but not limited to a combination of the following water quality parameters including conductivity, TDS, salinity, alkalinity and hardness (Chadwick Ecological Consultants 2000 and Goodfellow et al 1996)

Additionally, Dow 2000 determined specific conductance and pH were not only found to be detrimental to benthic communities in watersheds with active mining but also in residential neighborhoods such as a recent study conducted in New Jersey. On the contrary, Maggard 2006, refutes the findings of Pond and Dow and states specific conductivity is unrelated to the benthic macroinvertebrate communities present downstream of varying types of mine water discharge but note this study was not peer reviewed and only presented at a symposium so the validity may be skewed or bias.

In addition to specific conductance, bioaccumulated metals have also been attributed to the benthic macroinvertebrate community decline in locations with and without mining influences (

e.g. Ankley 1996, Cain et al 2006, Clements a, b, Clements et al 1988, Hickey et al 1998, Soucek et al 2001, and Vogel 2000).

Benthic Macroinvertebrates

There are several metrics, indices and statistical interfaces used in assessing the degree of impairment mining and valley fills have had on the habitat for benthic macroinvertebrates and the overall importance of aquatic insects in the surrounding ecosystem. Preference of methodology and assessment was based on age of study and locality with studies using different metrics and methods based on if the study sites were in Kentucky or West Virginia (e.g. Burton and Gerritsen 2003, Green and Swietlik 2000, Merritt and Cummins 1996, Merritt et al 1984, Morse et al a, b, O'Bara et al 1993, Rosenberg and Resh 1996 and Virginia DEQ 2006b)

The majority of studies reviewed utilized similar multi-metric indices to assess the macroinvertebrate communities. In West Virginia the West Virginia Stream Condition Index (WVSCI) has been used and in Kentucky the Kentucky Macroinvertebrate Bioassessment Index (KMBI) has been used. Both methods for bioassessment use Total Taxa, EPT (Ephemeroptera Plecoptera Trichoptera) Taxa%, % Chironomidae (midges, a family of insects that is generally tolerant to pollution), % Two dominant Taxa, and a family-level Hilsenhoff Biotic Index (HBI) to develop a numeric score that usually ranges from 0-100. This score is then compared against a reference to determine if a stream is impaired or failing to meet aquatic life use criteria.

All studies of benthic macroinvertebrates below fills found changes in the community composition. Mayflies (Ephemeroptera) were either completely eliminated or severely reduced. Additionally, Stoneflies (Plecoptera) and caddisflies (Trichoptera) also showed declines in both species richness and diversity. The percentage of species sensitive to pollution decreased and the number of pollution tolerant species increased. Several studies found significant differences in aquatic insect composition between mined and unmined watersheds with and without valley fills (e.g. Bradfield 1986, Chambers and Messinger 2001, Freund and Petty 2007, Fulk and Autrey 2003, Green and et al 2000, Hartman et al 2005, Hoke et al 2000, Maggard and Kirk 1999b, Merricks et al 2007, Palmer and Bernhart 2009, Pen Coal 2000, Pond and Mcmurray 2002, Pond 2004, and Pond et al 2008).

Age of Fills

Studies have been conducted on a range of valley fills in both eastern Kentucky and southern West Virginia but there is little information given in most studies on the exact age of fills. The date of permit issuance is given in a few studies but not the completion date of the fills. One study, Merricks et al (2007) does give specific ages of fills, which ranged from 3 to 15 years. Their results were similar to the other studies reviewed. It doesn't appear anyone has focused on older fills exclusively. One question that has been raised is; do TDS and conductivity in these streams attenuate over time? Problems to be addressed in the design of a study of older fills would be accurately determining the age of fills and whether we have pre-mining data to do a before/after comparison or if a reference stream approach should be used.

Noted Remediation

A recent testimonial given by Margret Palmer to the United States Senate Committee on Environmental and Public Works states; "*The impacts of mountaintop removal with valley fills are immense and irreversible, and there are no scientifically credible plans for mitigating these impacts.*" Additionally, studies have concluded that several mitigation techniques fail due to a variety of issues including chemical and physical barriers ranging from poor water quality to unstable stream channel design (Palmer and Bernhart 2009, Palmer and et al 2005) Despite the previous statements, there has been noted remediation attempts with marginal success on several parameters associated with mining but most notably the reduction of AMD and recreation of stream channels but the science of valley stream remediation is relatively new (Denicolla and Stapleton 2002, Hawkins 1994).

Consensus and Conclusion

With the evidence presented in this literature review, valley fills do have an adverse affect on the benthic macroinvertebrate community via degradation of the aquatic environment. The only question still lacking a definitive answer is; do these streams and watersheds attenuate over time and if so how long does it take to reverse the change and shift the community back from a pollution tolerant community to a community dominated by sensitive species? Assessment of adjacent reference streams in conjunction with the bioassessment protocols used by the majority of the studies compiled has determined the benthic macroinvertebrate community was thriving with a pollution comprised of sensitive species Ephemeroptera, Plecoptera and Trichoptera prior to any mining and a noted depletion or eradication of the community has occurred post mining. This literature review concludes that yes valley fills have been assessed and yes they do have detrimental effects but the question about attenuation over time has not been exclusively researched. Without a direct answer to this question, the true effect of valley fills on the surrounding environment cannot be completely and definitively answered.

Despite the varying opinions on the degree of degradation of the benthic community below valley fills, one conclusion is evident; there is an obvious shift from a sensitive to a pollution tolerant community and this is attributed to the poor water quality flowing from the toe of the valley fills. The poor water quality is credited to a variety of chemical parameters but the most evident and conclusive is found to be specific conductance, variable pH, unpredictable stream flow and elevated levels of TSS and TDS. In conclusion, the proportional abundance of tolerant taxa was the most sensitive indicator of nutrient enrichment and habitat, degradation, whereas Ephemeroptera richness was the most sensitive indicator of elevated metals or ion concentrations (Lester 2003).

ATTACHMENT #3 - 2009 ANPR COMMENTS

General Comments on ANPR

Appalachian Center for the Economy and the Environment (Joe Lovett and Derek Teaney)

- Stream buffer zone rule

1. Under section 201(c)(2) of SMCRA, OSM has broad rulemaking authority to carry out both the purposes and provisions of the Act. Because most of the purposes of SMCRA focus on environmental protection, OSM can adopt any rule that protects the environment from the adverse effects of mining, irrespective of the more specific environmental performance standards enumerated later in the section 515 or other provisions of the Act.

   The performance standards in SMCRA establish a floor, not a ceiling, with respect to the adoption of regulations to protect the environment. The buffer zone rule could prohibit all mining in streams and be fully consistent with the purposes of the Act. Indeed, it must do so, given the adverse environmental consequences of fills and other mining activities in streams. OSM should not—and must not—limit the scope of the stream buffer zone to the provisions of sections 515(b)(10) and (24). OSM has the statutory authority to require environmental protection standards more strict than the minimization standards established in those two provisions. It can prohibit mining where reclamation is not feasible or where OSM cannot assure that the environment will be protected from the adverse effects of mining.
2. The 2008 rule erroneously relied upon section 515(b)(22)(D) of SMCRA as evidence that Congress did not intend to prohibit the construction of excess spoil fills in streams. At most, this provision "recognizes the possibility of placing excess spoil material in waters of the United States." *Kentuckians for the Commonwealth v. Rivenburgh*, 317 F.3d 425, 443 (4th Cir. 2003) (emphasis added). However, that possibility is only a minimum standard for fill placement. It does not preclude more stringent prohibitions on fill placement that may be necessary to carry out the purposes of SMCRA.

3. There is no evidence that current reclamation practices in the coal industry can feasibly alter or reduce the conductivity levels in streams below fills to comply with water quality standards that prohibit biological impairment. Scientific studies show that ion concentrations have either remained constant or increased over time. These effects have been measured from three to fifteen years after reclamation was completed, and therefore can be expected to persist over time. In these circumstances, OSM should adopt the same policy that it adopted in 1997 for mines that are expected to discharge acid mine drainage; i.e., prohibit the approval of permit applications that would have these impacts on water quality.

   OSM is duty-bound by the purposes in paragraphs (a), (c) and (d) of section 102 of SMCRA, and by the duty in 510(b)(3) to prevent material damage to the hydrologic

balance, to use its rulemaking authority under section 201(c)(3) to issue a stream buffer zone rule that prohibits the construction of fills that cause or contribute to violations of narrative or numeric water quality standards. Because those violations are so widespread throughout Appalachia, a complete ban on the placement of valley fills in streams, and on allowing "mining through" streams by operations that will generate significant spoil that will contribute to such violations, is required.

4. In the ANPR, OSM wrongly suggests that the "water courses" mentioned in section 515(b)(22)(D) of SMCRA, which establishes requirements for the construction of excess spoil fills, must include ephemeral, intermittent, and perennial streams. This approach is inconsistent with the brief that the Government filed in the *Bragg* litigation, which states that "The Secretary of the Interior has reasonably concluded that 'springs, natural water courses or wet weather seeps' do not include intermittent or perennial streams."

5. The supplemental environmental impact statement (SEIS) should analyze an alternative to the 2008 rule that would prohibit all placement of mining spoil or waste in all types of streams (ephemeral, intermittent, and perennial) because such activities are known to cause or contribute to significant degradation and violations of water quality standards in downstream waters. This alternative would be more restrictive than the 1983 rule. The percentage of fills and mining disturbances causing those violations is so high (80-90%) that OSM must impose a blanket prohibition on their use in order to comply with the Clean Water Act. The SEIS for this alternative should investigate and document the scope and extent of stream degradation downstream from mined areas in Appalachia, with a special focus on conductivity and selenium.

6. The preferred alternative in the SEIS and proposed rule should not be based on the type of stream, because scientific studies show that ephemeral streams can be as important ecologically as intermittent or perennial streams. Ephemeral and intermittent streams are habitat or feeding-ground for a unique and diverse assemblage of organisms including salamanders, insects, fish and larger wildlife. They are also the conduits that transport water, sediments and dissolved materials from mountaintops to large river ecosystems. While stream functions take place in perennial streams, they do so at different rates and in different ways than those occurring in ephemeral and intermittent streams, and the smallest streams harbor some species that are not found in perennial reaches.

7. If OSM decides not to prohibit the placement of valley fills in all streams, it must at the very least prohibit their placement in intermittent and perennial streams and must interpret the 1983 rule to have that effect because that was the position taken by the Clinton Administration in an appeal brief filed in *Bragg v. Robertson.* Brief for the Federal Appellants at 2, *Bragg v. W. Va. Coal Ass'n*, 248 F.3d 275 (4th Cir. 2001) (No. 99-2683). The brief further stated that "fills that disturb intermittent or perennial streams may be approved only if there is a finding that activity will not adversely affect the environmental resources of the filled stream segment." *Id.* at 41.

8. The 2008 rule does not carry out the primary purpose of SMCRA because it does not prevent environmental harm. Under the existing rule, every permit approving disturbance of a perennial or intermittent stream must include a permit condition requiring that the permittee demonstrate compliance with the Clean Water Act before conducting any activities that require authorization or certification under that Act.

   However, this demonstration requirement is merely a generalized and theoretical requirement that the project applicant comply with the law. It does nothing to monitor, assess, measure or determine whether significant degradation is occurring or will occur. The rule does not contain any practical requirements (1) to monitor and measure for the type of biological impairment and elevated pollution levels that are occurring downstream from valley fills; (2) to treat conductivity or selenium discharged from valley fills or spoil on the mined area to prevent impairment of downstream reaches; or (3) to otherwise prevent discharges that cause or contribute to violations of water quality standards. Without an actual on-the-ground assessment of the effectiveness of permits and certifications to prevent stream impairment, the demonstration requirement in the existing rule is merely a paper exercise.

- Impacts of mountaintop mining

9. Mountaintop mining and construction of fills in streams result in a decline in water quality, which leads to a loss of sensitive aquatic organisms even when downstream habitats are intact. High levels of conductivity and sulfates can persist long after mining activities cease. Scientists have found no empirical evidence documenting recovery of macroinvertebrate communities in the streams impacted. The water quality impacts of mountaintop mining activities are more severe and more persistent than other land use changes within the southern Appalachians.

10. A complete prohibition on mountaintop mining and construction of fills in streams would not be inconsistent with section 102(f) of SMCRA, which provides that one of the purposes of SMCRA is to "strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy." Recent economic studies demonstrate that even a complete ban on mountaintop mining would have a relatively minor impact on the cost of electricity. The insignificance of this impact can be traced to two factors: a predicted decrease in the overall demand for coal and a predicted increase in the availability of alternative sources of energy.

11. The supplemental environmental impact statement must take into account not only the potential of the alternatives to impact the price of energy, but also the broader economic impacts on the Appalachian region, including the increase in healthcare costs, water treatment costs, and lost potential for jobs that are borne by communities close to mountaintop mining.

National Mining Association

- NMA strongly opposes eliminating the current (2008) stream buffer zone rule. Any changes could jeopardize a fragile regulatory compromise that has taken more than a decade to establish. In addition, pursuing some extreme alternatives to the current rule would open a Pandora's box of regulatory uncertainty that could unnecessarily impede, or perhaps even eliminate, significant segments of the coal mining industry.

- The extensive changes made in the excess spoil and coal mine waste rules, as well as the stream buffer zone rule and related permitting rules, in December 2008 need to be given a chance to work. They are clearly more restrictive than the prior rules and may well "significantly reduce the harmful environmental consequences of Appalachian surface coal mining operations" in a manner consistent with federal law as sought by the June 11, 2009, memorandum of understanding implementing the interagency action plan.

- OSM offers nothing to support its implications that there are problems with the 2008 SBZ regulation. To our knowledge, there have been no state regulatory authorities clamoring for OSM to repeal or revisit the SBZ rule. The only basis cited for this complete reversal of policy is the politically and ideologically-driven MOU announced on June 11, 2009.

- In proposing changes to the SBZ rule and related rules, OSM must remain cognizant of unintended regulatory consequences of its actions. Actions aimed at surface mining in Appalachia may have a significant impact on mining in other areas, or even on underground operations in the same region. For example, virtually all coal produced by underground mines in central Appalachia must be washed through a preparation plant to remove rock and other impurities. The resulting coal mine waste lacks the stability of excess spoil and must be placed in disposal areas that extend farther down into valleys than excess spoil fills in order to meet the stability requirements of SMCRA. To preclude the placement of coal mine waste disposal sites in areas that extend into perennial streams in central Appalachia is to eliminate the underground coal mine industry throughout central Appalachia, which is one of the nation's richest and highest quality underground reserves. SMCRA simply does not contemplate or authorize any such restrictions on coal mine waste placement. To the contrary, such restrictions would be inconsistent with section 102(k) of SMCRA, which states that one of the purposes of the Act is to "encourage the full utilization of coal resources through the development and application of underground extraction technologies." See also the finding in section 101(b), in which Congress states that it is "essential to the national interest to ensure the existence of an expanding and economically healthy underground coal mining industry."

- Although NMA at one time advocated more coordination between the various regulatory agencies, we now have serious concerns about the agency's establishment of such practices. Judging by our experience with the EPA's interference with the Corps' permitting process under § 404 of the Clean Water Act and the effective creation of a permit moratorium under that program, we believe that introducing personnel from EPA and the Corps into SMCRA permitting decisions of the regulatory authority is

inappropriate. Each agency has its clearly defined jurisdiction with regard to issuing permits under SMCRA and the Clean Water Act, respectively. To allow state-issued SMCRA permits to be held up in indefinite review periods by agencies that have no jurisdiction over the majority of the mine project is inappropriate. Moreover, one of the biggest problems with the 404 permit moratorium has been a complete lack of transparency by the EPA and the Corps with respect to what companies need to do in order to obtain a permit. This process has been abusive and unfair to our members, and we strongly object to any plans by the administration to institute a similar practice on the SMCRA permitting side.

Colorado Mining Association

- The impetus for the proposed rule is attributed to the need to significantly reduce harmful environmental consequences of surface coal mining in Appalachia. However, the impact of the proposed changes would extend nationwide since it virtually impossible to conduct surface mining without encountering a stream, whether perennial, intermittent, or ephemeral.

- The outcome of the proposed rulemaking appears to have been predetermined, based on the statement that the 2008 rule will be either revised or repealed. This statement indicates a predetermined course of conduct in advance of, and separate from, the rulemaking record yet to be developed and to that extent is inconsistent with the Administrative Procedure Act.

Virginia Mining Association

- The proposal to change the recently adopted SBZ rule is unnecessary and without a rational basis. The attempt to change a rule within months of its adoption demonstrates that the proposal is politically rather than scientifically driven. The existing regulation was adopted after years of careful consideration and deliberation, including an environmental impact statement.

- Some degree of regulatory certainty is necessary for rational business decisions and for obtaining financing for mining operations. It is not uncommon for mining operations in Virginia to be planned for an operational life of a decade or two. Such operations require multiple permit renewals. Without some degree of regulatory certainty companies cannot obtain or commit the financial resources to begin or continue such operations.

- Some of the alternatives in the ANPR would have effects far beyond elimination of mountaintop removal mining or even surface mining in general. Approximately two-thirds of the coal mined in Virginia is produced by underground mines. The topography of the Virginia coalfields is characterized by steep mountainsides separated by narrow creek and river bottoms. It is almost never possible to create a coal mine, even an underground mine, in Virginia without placing excavation spoil or mine refuse in or near a stream. Underground mines require flat surfaces for preparation plants, equipment

yards, offices and bath houses. Also, the mine refuse from underground mines must be put somewhere. This material is composed almost entirely of small pieces of rock. The only place to dispose of mine refuse in Virginia is in the "hollows" formed by intermittent or ephemeral streams near the mines.

Texas Mining & Reclamation Association

- The SBZ rule has far-reaching implications, applying to all intermittent and perennial streams at coal mines anywhere in the United States. New or revised rules that would prevent operations from rerouting waterways may render substantial coal reserves in Texas economically unrecoverable without any corresponding environmental benefit, given Texas operators' exemplary record with respect to restoration of water features.

Interstate Mining Compact Commission

- To be consistent with decisions of the Fourth Circuit Court of Appeals, OSM's rule should define how excess spoil can and must be placed in streams to comport with the law. It should not ban the practice. And while OSM can prescribe a national standard for accomplishing this task, it remains the responsibility of the states, as exclusive regulatory authorities where primacy programs have been approved, to apply the standard through the permitting process, in which OSM plays no role other than through appropriate federal oversight.

- The real dilemma lies not with OSM's rule, but with the practice of excess spoil disposal itself, which the courts have authorized and found to be consistent with the way SMCRA is currently written. Any significant change in direction would therefore require an amendment to SMCRA.

- As OSM continues to search for new alternatives to address this matter, two things must be kept in mind: 1) the states' implementation of this rule and its many iterations over the years has not been the stumbling block, and 2) as OSM attempts to move forward once again with a new variation on a common theme, it is critical to bring the states into the final solution given their role as sole issuers of permits that incorporate and implement the standards.

- OSM must consider how any rule will impact each state's SMCRA regulatory program in terms of both implementation and resources. The incorporation of approaches such as the "alternatives analysis" contained in the 2008 final rule will require the investment of considerable time and effort by state permitting personnel that could prove to be overwhelming. Given the current fiscal constraints under which the states are operating, attempting to accommodate these types of permitting analyses could seriously jeopardize primacy programs.

- Reading between the lines of the ANPR, what we sense is an attempt by OSM to reconcile not just its own regulatory requirements under SMCRA, but a larger, undefined

set of standards for water quality protection being advocated by EPA and the Corps. This rulemaking simply cannot be taken out of context from all the other activity that has attended the development and implementation of the June 11, 2009, interagency MOU. While much of that activity has been focused in central Appalachia, the overarching concerns regarding conductivity, total dissolved solids, and numerical and narrative biologic water quality standards have implications nationwide. And even if it is agreed that this activity resides only in Appalachia for now, there is simply no agreement among the affected federal agencies on what those standards should be.

- OSM should convene a summit of all affected state and federal agencies before proceeding with further rulemaking. The summit's purpose would be to sort out and hopefully agree upon several key issues: 1) who is taking the lead on the issues; 2) what specific regulatory standards are in play under both SMCRA and the CWA; 3) how and where these standards should be incorporated into existing regulatory programs, especially at the state level; and 4) what the expectations are for both implementation of and compliance with those standards. These types of discussions are long overdue and without some resolution with all parties at the table, rulemakings such as that regarding the SBZ rule and related issues are likely to fail.

Alaska Coal Association

- OSM should adopt the team approach in which regulators and operators from the various approved State programs are included in discussions of developing new rules or modifying existing regulations.

Ohio Coal Association

- OSM should bring stakeholders, including the coal mining industry, to the table to discuss these issues before moving forward with this rulemaking.

- Given the ramifications to the coal industry, OSM should err on the side of contemplation and pragmatism and allow time for the 2008 SBZ rule to work and be evaluated before undertaking any additional rulemaking.

Center for Biological Diversity

- Headwater streams are of tremendous importance from a hydrological and biological perspective. Small headwater streams greatly influence downstream chemical and physical properties (Rabeni 1992), and "should not be considered unimportant or ignored" (Shute et al. 1997). Appalachian headwater streams contain one of the most diverse assemblages of aquatic insects in North America, and also support diverse assemblages of fishes and salamanders (Wallace et al. 1992). Intermittent streams are of biological importance because they support many rare species, particularly crustaceans (Herrig and Shute 2002, p. 543). Many species of amphibians are most abundant in intermittent streams (Reid and Ziemer 1994). Headwater seeps and small streams in

forested habitats are required to maintain population viability in many stream salamander species (Petranka 1998).

- Studies should be undertaken to determine the cumulative extent of mining impacts on streams in Appalachia.

- An easy-to-use website database should be created so that the public can readily access information on permits.

- Surface mining in Appalachia has been especially harmful for amphibians and mussels. Amphibian diversity and abundance is lower on lands that have been mined (EPA 2005). Wood (2009) reports that salamanders in headwater stream ecosystems have been significantly negatively impacted by mountaintop coal mining. Mountaintop mining negatively impacts many salamander species, including high-elevation endemics, low-elevation cosmopolitan species, low-elevation specialist species, stream salamanders, and cave-dwelling salamanders (Gatwicke 2008). As mountain topography is altered, high-elevation habitat is lost. The flattened topography alters the soil structure and hydrology. Filling valleys with mining waste causes sedimentation downstream that may negatively affect stream salamanders (Starnes & Gasper 1995). Valley-filling activities also result in flooding, sedimentation, and aquatic pollution and alter essential ecological elements for salamanders including organic matter, cover, and the prey base (Gatwicke 2008). Gatwicke (2008) states: "Of all the mining practices in the Appalachians, mountaintop removal is the most visible and destructive for salamanders." Salamander populations may take more than 70 years to recover from disturbance from clearcutting and mining, if they recover at all (Ford et al. 2002, Williams 2003).

- Locke et al. (2006) suggest that mining-influenced tributaries are negatively affecting downstream mussels. Field and laboratory studies implicate sedimentation from mining in the decline of mussels and snails (Aldridge et al. 1987, Neves et al. 1997). Neves et al. (1997) observes that "[m]any species of mollusks have been extirpated from headwater streams where mining has been most intense" (p. 69). Numerous studies have attributed the decline in diversity and abundance of mussels to habitat loss and degradation resulting from coal mining (Neel and Allen 1964, Stansberry 1969, Ahlstedt and Brown 1979, Neves et al. 1980, Branson et al. 1984, Anderson 1989, Houp 1993, McCann and Neves 1992, Wolcott and Neves 1994, Naimo 1995, Ahlstedt and Tuberville 1997, Neves et al. 1997, Cherry et al. 2001, Ahlstedt et al. 2005, Warren and Haag 2005, Locke et al. 2006).

Trout Unlimited

- Research on brook trout in Maryland suggests that "brook trout are very sensitive to landscape alterations in Maryland and disappear at low levels of impervious land cover regardless of the specific mechanism involved." The Maryland study did not examine mountaintop removal mining areas, but the findings regarding deforestation and altered hydrology can help inform mountaintop mining decisions.

a) Brook trout were almost never found in watersheds where impervious land cover exceeded 4%.

b) Brook trout appear to only occupy streams with summer temperatures that remain less than 24°C and they prefer much cooler streams (MacCrimmon and Campbell 1969).

c) Forest cover loss was the most important factor degrading streams and that low levels of development and forest clearing are sufficient to substantially alter hydrological and biological stream conditions (Booth et al. (2002).

d) Recent brook trout declines and extirpations from many central Maryland streams appear to be correlated with relatively minor amounts (<2%) of total impervious land cover (Boward et al. 1999; Morgan et al. 2004) within a watershed (1224).

e) For every 1% increase in impervious land cover within a catchment, the odds of brook trout presence decreased by 0.599; brook trout were predicted to be absent from watersheds where impervious cover exceeded 3.3% (1227).[2]

The impervious surfaces studied in Maryland were comprised of roads, parking lots, rooftops, and other forms of development. Because of the removal of forests and topsoil and the compaction of land in previously mined areas, there are similarities in the hydrologic impacts of mountaintop removal mining. The science on brook trout indicates that impervious surfaces must be kept to no greater than two percent of a catchment area, and that forested areas should make up at least 70 percent of a subwatershed.

George McClung (WV)

- The majority of "streams" affected are little more than small ditches or drainage ways. A hard look needs to be taken in regard to what actually defines a "stream".

- Water quality standards are unjustly slanted against the coal industry, while other industries (logging, commercial development, sewage treatment, farming, and the list goes on) get very little scrutiny. I personally would much rather drink raw water from the bottom of a mountaintop removal valley fill than from the discharges associated with any of the other industries listed above.

- Selenium is little more than a tool created by coal opponents for the purpose of fighting the mining industry. Compare the limits of 4 ppb for mining with the 50 ppb allowed in drinking water.

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[2] Stranko, Scott A., Robert H. Hilderbrand, Raymond P. Morgan II, Mark W. Staley, Andrew J. Becker, Ann Roseberry-Lincoln, Elgin S. Perry. *Brook Trout Declines with Land Cover and Temperature Changes in Maryland.* North American Journal of Fisheries Management 28:1223–1232, 2008. DOI: 10.1577/M07-032.1

- New more stringent regulations affect not only surface mines, but also underground mines and coal refuse facilities. The Appalachian Region is known for its lack of flat ground away from streams and drainage ways.

International Coal Group

- Application of the SBZ rule to fills simply doesn't work and would actually block a primary accomplishment of SMCRA, which was stopping the environmentally-destructive practice of "shoot and shove" mining. Instead of simply pushing material over the hill to form a "spoil bank," SMCRA required that highwalls be backfilled and all excess earthen material be placed in fills. Surely a person can't honestly believe that Congress intended for OSM to adopt a stream buffer zone rule that would ban valley fills in favor of spoil banks, which would be a major step backward for everyone.

- Punitive regulation intended to strangle Appalachian surface mining will have severe and unacceptable economic impacts on West Virginia and Kentucky. Do not change the 2008 stream buffer zone rule, but apply it based on historic precedent.

Kentucky Waterways Alliance

- The original intent of the SBZ rule, which was to prohibit all disturbances within 100 feet of a stream, must be restored and fully enforced.

- To comply with section 702(a) of SMCRA, any SBZ rule or other rules that OSM proposes must be consistent with the Clean Water Act's primary goal, which is "to restore and maintain the chemical, physical and biological integrity of the nation's waters."

Mark Morris (WV)

- The existing SBZ rule is consistent with SMCRA and court decisions and should not be revised. Over-regulating the coal mining industry will ultimately hurt each and every American, compromise our national defense, and deprive us of coal as a bridge to energy independence. More Americans will be hurt by higher energy bills, in a time which most Americans are struggling to make ends meet. With unemployment currently higher than 10 percent, how could the Federal Government force more Americans out of work with this regulation? These actions will devastate the local Appalachian economy and hurt more than just coal miners. This one rule will halt coal mining as we understand it. Our national defense will be compromised because the United States will increasingly purchase its energy from foreign countries with citizens who are intent on doing harm to the country.

The Navajo Nation

- OSM needs to convene regional meetings to explain the analysis that OSM completed before determining that the existing rules need to be changed. The meetings should include representatives of the business community and state and local governments.

North Dakota Public Service Commission

- Some of the alternatives being considered will create a great amount of confusion and unnecessary burdens for the regulatory authorities and mining companies in states like North Dakota in which there have been no concerns or issues with the current stream protections that have been in place for many years. The ANPR indicates that the rulemaking process is being initiated to better protect the environment and the public from the impacts of Appalachian surface coal mining. Rather than initiating a nationwide rulemaking to address concerns in one region of the country, it would be better to identify the key issues and address them on a case-by-case basis in the states where the concerns exist.

Southern Environmental Law Center

- OSM must revoke the 1996 programmatic biological opinion concerning the conduct of surface coal mining and reclamation operations with respect to threatened and endangered species. In addition, the bureau must conduct permit-specific consultations under the Endangered Species Act to avoid jeopardizing any listed species or the destruction or adverse modification of designated critical habitat.

West Virginia Department of Environmental Protection

- This rulemaking provides an opportunity for OSM and other federal agencies to clarify the relationship between SMCRA and the Clean Water Act.

- There is a need to clarify that the SBZ rule applies to activities in streams throughout the country and that the rule does not preclude disposal of excess spoil in areas in which SMCRA expressly allows such disposal.

Pennsylvania Department of Environmental Protection

- OSM should not proceed with a rulemaking that would require all states to amend their programs to resolve a problem that only appears in a few states with mountaintop mining. Should OSM proceed with overly broad rulemaking, Pennsylvania would be forced to amend three statutes and four chapters of mining regulations to conform to new federal regulations, the genesis of which is a form of mining that does not occur in the state. This effort would require a significant investment of time and resources when the state budget and OSM grant are insufficient to fund even the core functions of the state SMCRA regulatory program.

- Because of the complexity of the subject, the process of developing a new SBZ rule should be accompanied by extensive interactive outreach to the states, citizen groups, and the coal mining industry.

- One matter that requires attention is striking a proper balance between maintaining appropriate boundaries among OSM, state regulatory authorities, EPA, and the Corps of Engineers and the need to coordinate permitting reviews and authorizations. Any OSM rulemaking should maintain a focus on SMCRA requirements. Clean Water Act requirements will work themselves out in the context of permitting actions by the states, EPA, and the Corps of Engineers.

United Mine Workers of America

- OSM should encourage public participation in the rulemaking process by holding hearings at times and places that are convenient to stakeholders and do not require blue-collar workers to forfeit pay and incur travel expenses. Hearings are important because blue-collar workers tend to be less comfortable with the written word.

- There should be no permitting moratorium while the rulemaking process is underway.

- The UMWA vigorously opposes any unnecessary regulation that would result in a loss of employment for union members.

- Any SBZ rule must clearly allow surface mining activities to take place within the buffer zone.

Approximately 18,000 commenters

- OSM should rely upon sound science to prohibit both valley fills and mining through streams.

Detailed Summary of Comments on Alternatives Listed in the ANPR

Note: Specific suggestions for rule revisions other than those listed in the description of the alternative itself are highlighted in yellow.

***Alternative 1*: Replace the 2008 stream buffer zone (SBZ) rules at 30 CFR 780.28, 784.28, 816.57, and 817.57 with the 1983 version of the SBZ rule at 30 CFR 816.57 and 817.57.**

- OSM should quickly and fully restore the protections present under the 1983 SBZ rule. (approx. 31,000 commenters)

- The previous SBZ rules (1977, 1979, 1983, and 2008) have not adequately ensured the protection of streams. Accordingly, stronger regulations than the 1983 rules are now necessary to protect aquatic values, and stronger enforcement is required. SMCRA

requires that natural watercourses be protected during coal mining activities, but to date it is apparent that the health of waterways has been sacrificed for coal production. (Center for Biological Diversity)

- Instead of reinstating the 1983 SBZ rule, OSM should adopt as its preferred alternative a rule that would strictly prohibit the filling or mining through of any stream segment. (SELC)

- Failing that, OSM should reinstate the 1983 SBZ rule, but expand its applicability to include ephemeral streams and make strict enforcement of this rule a condition of all state regulatory programs. In addition, OSM should apply and require that states interpret the 1983 rule in the manner set forth in the appellate brief that the Government filed in the *Bragg* litigation. Finally, OSM should reaffirm that the prohibitions and restrictions in the rule apply to the stream segment in the footprint of any proposed fill as well as to downstream reaches of the stream. (SELC)

- Replacing the 2008 SBZ rule with the 1983 version of the rule would be consistent with the intent of the MOU and should promote stream protection because the 2008 rule exempts certain activities from the buffer zone protections and does not require protection of a buffer zone for a stream segment that ceases to exist in its original location as a result of mining activities. (Corps of Engineers)

- This alternative would, in effect, maintain the status quo for all primacy states that have not amended their programs in response to the 2008 SBZ rule. (VA DMME)

- Repeal of the 2008 SBZ rule and reinstatement of the 1983 rule would be the preferred option for Pennsylvania. However, the general concept of exempting certain activities (e.g., the construction of coal mine waste disposal facilities in perennial or intermittent streams) from the prohibitions and restrictions of the SBZ rule and instead crafting specific requirements for that class of activities is also reasonable. (PADEP)

- The current North Dakota stream protection rule, which is based on the 1983 version of the SBZ rule, has been in place for nearly 25 years and is working without concerns or issues. Therefore, reinstatement of the 1983 rule should be considered. (ND PSC)

- The best course of action would be to retain the 2008 rule. Nevertheless, if OSM moves forward with a proposal to return to some version of the 1983 rule, it is imperative that the agency provide clear guidance that conducting surface coal mining activities in the stream buffer zone is not prohibited. No rational interpretation of a stream buffer zone rule could survive judicial challenge if it provided for either a *per* se or a *de facto* prohibition on filling some stream segments. (NMA)

- OSM should implement the 2008 rules and give them a chance to further improve environmental performance before even considering, let alone initiating, major regulatory

changes in an area that is in dire need of regulatory stability. (NMA, assorted mining companies, approx. 1,500 other commenters)

- The Alaska coal program has run under the 1983 version quite successfully. A return to this version would be acceptable to the Alaska Coal Association membership. (Alaska Coal Ass'n)

- OSM should not revert to the 1983 SBZ rule. The existing (2008) rule finally clarified what industry needed to do to protect streams. It would be a mistake to throw out that rule and return to the confusion and uncertainty associated with the 1983 rule. (Wyoming Mining Ass'n)

- OSM should retain the 2008 SBZ rule, which was the result of a 5-year public process and which ended years of ambiguity and uncertainty. If changes are needed to address certain mining operations in Appalachia, OSM should develop a separate SBZ rule for that region of the country. (Illinois Coal Ass'n, Indiana Coal Council)

- Reinstatement of the 1983 SBZ rule would do nothing to address the concerns raised in the MOU and would return the industry to the same uncertain interpretive quagmire that existed prior to adoption of the 2008 rule. The 1983 rule is unworkable. (Ohio Coal Ass'n)

- If the 1983 version of the SBZ rule is reinstated and its interpretation remains faithful to SMCRA, it will result in a decrease in the amount of environmental analysis and review of mining permits that are situated in or near streams. Considering the stated goals of the MOU upon which the ANPR was based, repealing a more stringent regulation in favor of a less stringent one is, at worst bizarre, and, at best, confusing. (West Virginia Coal Ass'n)

- The 1983 language is legally vague, which is one major reason why the 2008 change was made. Returning to the 1983 language would likely result in increased litigation. (Peabody)

- Legal challenges to the 1983 rule as well as difficulties in practical application of the 1983 rule are discussed in detail in the preamble to the final 2008 rule. We have experienced these difficulties first-hand and recognize that application of the rule requires greater detail than is provided in the 1983 rule. For these reasons, we object to this alternative. (D.R. Allen & Associates)

- North Dakota lignite producers worked effectively with the North Dakota regulatory authority under the 1983 SBZ rule. However, the producers have reviewed the 2008 rule and determined that they can also work well under that rule. Therefore, no change in the national 2008 rule is recommended, although states should have the discretion to revise their rules to address problems of a state or regional nature. (Lignite Energy Council)

Alternative 2: **Apply the prohibitions and restrictions of the stream buffer zone rule to all segments of all perennial and intermittent streams and to the surface of all lands within 100 feet of those streams, with the possibility of adding restrictions on disturbance of ephemeral streams.**

- Prohibiting the placement of excess spoil or coal mine waste in all segments of intermittent or perennial streams, or even imposing a rebuttable presumption that such placement is unacceptable, exceeds restrictions authorized or contemplated by SMCRA, and would be contrary to it. (NMA)

- Prohibiting placement of excess spoil in perennial and intermittent streams would destroy the surface coal mining industry, while prohibiting placement of coal mine waste in perennial and intermittent streams would destroy the underground coal mining industry in central Appalachia. (NMA)

- Close coordination on federal and state stream jurisdictional determinations will be needed to implement this alternative. (Corps of Engineers)

- Please provide clarification to distinguish between prohibition of spoil placement in perennial and intermittent streams and their buffer zones and restrictions on spoil placement in ephemeral streams and their buffer zones. (Corps of Engineers)

- This alternative would expand the prohibitions established under section 522 of SMCRA and would necessitate statutory and regulatory amendments. (VA DMME)

- This option should not be considered because it appears to conflict with section 515(b)(22)(D) of SMCRA, which allows the disposal of excess spoil in natural water courses if lateral drains are constructed to prevent the infiltration of water into the spoil. (ND PSC, others)

- The focus of protection should remain on perennial and intermittent streams because those terms are well-understood and relatively straightforward to implement. Any other alternative would be unnecessarily disruptive to state regulatory programs and would inject litigation and its associated costs and delays into the permitting process. (PADEP)

- To prohibit mountaintop mining or valley fills by regulation would be directly and clearly contrary to SMCRA and how it has been interpreted by the courts. As the 4th Circuit explained:

> SMCRA does not prohibit the discharge of surface coal mining excess spoil in waters of the United States.... It is beyond dispute that that SMCRA recognizes the possibility of placing excess spoil material in waters of the United States even though those materials do not have a beneficial purpose.

Kentuckians for the Commonwealth v. Rivenburgh, 317 F. 3d 425, 442-443 (4th Cir. 2003). (NMA)

- This alternative would result in sterilizing certain coal reserves. Valuation of federal coal for bidding purposes would become uncertain and the federal government may need to compensate operators mining existing leases where restrictions are placed on the reserve that could not be foreseen during the bidding process. (Colorado Mining Ass'n, Peabody)

- The possibility of prohibiting surface coal mining activities in ephemeral streams is particularly troubling because it would severely restrict coal production nationwide. (BHP Billiton)

- Such a blanket prohibition would be overly restrictive, is an over-reaction, removes any ability to evaluate a plan at the state level, and is counter to the preamble of SMCRA in which a balance between protection of the environment and the nation's need for coal as an energy source is required. Streams can have vastly different value, function and density in various areas of the nation. A blanket prohibition does not allow for a fair and valid case-by-case review. In areas with an extremely high drainage density, such as exists in portions of Alaska, this single alternative could prohibit coal mining in the region, even though plans and operations could readily be designed with no material damage to the regional hydrologic balance. The same could be said for coal mines in arid regions. Please drop this alternative from consideration. (Alaska Coal Ass'n)

- OSM previously considered and rejected application of the SBZ rule to ephemeral streams during both the 1983 and 2008 rulemaking processes. The arguments in Part VII of the preamble to the 2008 rule remain sufficient to justify excluding ephemeral streams from application of the rule. (D.R. Allen & Associates)

- Many intermittent streams can be of low value because of land uses such as agricultural drainage systems. Mitigation as part of the mining and reclamation operation can enhance the stream's environment, in which case it makes no sense to prohibit mining activities in those streams and their buffers. (Peabody, Colorado Mining Ass'n)

- This alternative likely would eliminate most surface mining because streams are ubiquitous and it is not reasonable economically or environmentally to mine in between them. (Peabody)

- SMCRA has never included a prohibition on mining in stream buffer zones. Therefore, OSM has no authority to adopt such a prohibition. The courts have struck down a previous attempt by OSM to extend a prohibition expressed in SMCRA beyond the distance specified in the Act. See *In re: Surface Mining Regulation Litigation*, 627 F.2d 1346, 1358-1359 (D.C. Cir. 1980). (Mettiki)

- OSM should prohibit all surface mining activities, including the placement of spoil, mine waste, and/or fill, along the entire length of perennial, intermittent, and ephemeral streams and to the surface of all lands within at least 200 feet of those streams, without exception. It has been demonstrated that 100-foot buffers are not large enough to protect aquatic values during activities that produce severe sedimentation, such as surface coal mining, and in areas with steep terrain (Wenger 1999). (Center for Biological Diversity)

- OSM should not propose or adopt the variation of this alternative that would establish a rebuttable presumption that placement of excess spoil or coal mine waste in a perennial or intermittent stream is prohibited because it would result in an unacceptable level of environmental damage. Adoption of this presumption would simply preserve the status quo and allow unwarranted and routine exceptions to the prohibitions in the SBZ rule. (SELC)

- We support this alternative to the extent that it is intended to ordinarily disallow spoil and waste disposal in streams as well as on the lands surrounding those streams. We also support extending this protection to ephemeral streams, especially since there is uncertainty as whether and to what extent those streams will receive protection under the Clean Water Act. (NRDC)

Alternative 3: **Revise 30 CFR 816.57 and 817.57 to provide that the SMCRA regulatory authority may authorize mining activities in a perennial or intermittent stream, or on the surface of land within 100 feet of such a stream, only if those activities (1) would not violate sections 401 and 402 of the Clean Water Act; (2) would not violate section 404 of the Clean Water Act; (3) would not significantly degrade the water quantity or quality or other environmental resources of the stream; and (4) would minimize disturbances and adverse impacts on fish, wildlife, and other related environmental values of the stream to the extent possible using the best technology currently available.**

- Any changes should consider and clearly explain how they will relate to TMDL reports and requirements. (VA DMME)

- This rather vague option should not be considered because it is likely to create situations in which OSM inspectors and technical reviewers will second-guess findings made by the state regulatory authority. (ND PSC)

- The federal agencies should take this opportunity to clarify the relationship between the SMCRA permit and the section 404 authorization. How can the SMCRA regulatory authority impose requirements that are in conflict with a Clean Water Act authorization? (WVDEP)

- For this alternative to be successful, concurrent evaluation of all permit applications by all regulatory authorities would be necessary. The rule should require that the SMCRA regulatory authority communicate with the Corps of Engineers with respect to compliance with section 404 of the Clean Water Act and communicate with the

applicable state NPDES permitting authority and/or EPA to determine compliance with sections 401 and 402 of the Clean Water Act. (Corps of Engineers)

- The first two criteria under this alternative are superfluous and unnecessary because, with or without such a SMCRA rule, mining operations must still comply with applicable provisions of the Clean Water Act. Including the provisions suggested in this alternative in SMCRA rules would be inappropriate because it would place the SMCRA regulatory authority in the position of making determinations on whether or not the Clean Water Act would be complied with or is even applicable. SMCRA regulatory authorities have absolutely no authority to make such determinations, nor can OSM give them such authority by regulation. Section 702(a)(3) of SMCRA states that nothing in SMCRA shall be construed as superseding, amending, modifying or repealing the Clean Water Act or its implementing regulations. Neither the Clean Water Act nor its implementing regulations provide for authorizing SMCRA regulatory authorities to make applicability or compliance determinations for sections 401, 402 or 404 of the Clean Water Act unless the delegation occurs under the Clean Water Act, not SMCRA. (NMA)

- The third criterion would need some spatial clarification such as outside the permit area or within 100 feet of the surface mining activities. Without such clarification, there will be controversy over whether this language does or does not preclude constructing an excess spoil fill in an intermittent or perennial stream, just as there was with the 1983 SBZ rule. (NMA)

- The wording of the fourth criterion is essentially identical to existing 30 CFR 816.71(a)(4) and 816.57(c)(3) as finalized in the 2008 rulemaking. Therefore, existing OSM rules already require that the regulatory authority must find that an operation will comply with these requirements before a permit can be issued. There is nothing new in this criterion that is not contained in existing rules. (NMA)

- The ambiguous language of the fourth criterion of this alternative is worrisome. How will OSM determine if disturbances or adverse impacts have been properly "minimized"? What do you consider an adverse impact? What exactly are "other related environmental values"? (D.R. Allen & Associates)

- How will minimization "to the extent possible" be interpreted? Will the need for a company to have a financial incentive to mine coal be considered? The balance between environmental protection and allowing for such a financial incentive is critical to ensuring the continued production of coal at levels necessary for sustainability of both our nation's energy supply and economy. (D.R. Allen & Associates)

- This alternative is fraught with ambiguity. Its adoption would result in a return to the very same interpretive ambiguity from which OSM emerged with the promulgation of the 2008 rule. (Ohio Coal Ass'n)

- OSM should revise 30 CFR 816.57 and 817.57 to provide that the SMCRA regulatory authority may not authorize mining activities in perennial, intermittent, or ephemeral streams under any circumstances. The best technology currently available to ensure that streams meet Clean Water Act standards is to prohibit all mining activity near streams. Given the history of lax Clean Water Act enforcement, the addition of caveats requiring Clean Water Act compliance is inadequate to protect waterways from continuing to be filled or polluted by surface mining activities. Moreover, it is known that in mining areas, current water quality criteria are not adequate to protect sensitive species or sensitive life stages of species (Neves et al. 1997, FWS 1994, 1997, 2009). (Center for Biological Diversity)

- The National Park Service supports the third criterion of this alternative, which would prohibit significant degradation of the water quantity or quality or other environmental resources of the stream outside the permit area. While section 522(e)(3) of SMCRA prohibits surface coal mining activities outside park boundaries that would adversely affect any publicly owned parks, the Service has been reluctant to raise this prohibition even though numerous units of the National Park System are downstream recipients of runoff originating on or near surface coal mining operations and therefore could be adversely affected by this nonpoint discharge. We believe that a more effective way to protect park resources from upstream discharges is by preventing significant degradation of the water quantity or quality or other environmental resources of the stream outside the surface mining permit area altogether. (NPS GRD)

***Alternative 4*: Establish numerical limits on fill size, the percentage of a watershed disturbed by mining operations at any one time, or total stream miles covered by fills in each watershed.**

- There is no new information that would justify limits of this nature. OSM should avoid a "one size fits all" approach. Determinations should be site-specific and take into consideration past mining impacts and opportunities to improve sites left unreclaimed by prior mining. (VA DMME)

- This option should not be considered because it would be very difficult to establish thresholds of this nature to cover the variety of conditions that exist in different areas. (ND PSC)

- Proposing one-size-fits-all numerical limits is impracticable and inappropriate because of differences in site-specific characteristics. (WVDEP)

- This alternative would effectively prevent Alaska from developing its coal resources in a way that maximizes resource recovery while still protecting the environment. (Alaska DNR)

- Establishing numerical limits would be very difficult. The rule should instead require an analysis of the structure and function of premining stream channels to allow regulatory

authorities to evaluate whether reclamation or mitigation is adequate to offset stream losses as a result of the mining activity. (Corps of Engineers)

- A 30-day comment period is insufficient for industry to provide the requested information concerning bright-line thresholds. (Ohio Coal Ass'n)

- Imposing numerical limits on fill size is unsound from an environmental standpoint. The laws of geometry dictate that placing 30 million cubic yards of excess spoil in 30 separate one-million-cubic-yard fills would affect substantially more total area with much greater risk of fill failure than placing that same material in six separate five-million cubic yard fills, which would, in turn, cover more total area with greater risk of failure than placing the entire 30 million cubic yards in one fill. (The surface area-to-volume ratio decreases as volume increases, which means that 30 separate one-million cubic yard fills would cover approximately 10 times the surface area that would be covered by one 30-million cubic yard fill.) (NMA)

- Imposing numerical limits on fill size is unsound from the standpoint of safety and stability. Gravity comes into play because the smaller the fill, the higher the toe of the fill would be--and the higher the toe of the fill, the steeper the slope where that toe is placed. A fill that toes out where the slope of the natural ground is less than 10 percent is orders of magnitude easier to hold in place than one where the slope of the natural ground is over 15 percent at the toe (and there would be 30 fill toes on those steeper slopes rather than six toes on a gentler slope, or one toe on a still gentler slope). (NMA)

- The courts have held that an agency seeking to change its previous holdings must provide a thorough and comprehensive statement of reasons for the decision and, in cases where the agency's rule departs from prior policy, such analysis must go beyond that which is required when the agency has not taken a position in the first instance. In this case, OSM has previously taken the position that there is neither statutory authority nor a scientific basis for establishing bright-line numerical thresholds for fills. Thus far, OSM has identified no change in its SMCRA authority nor has it produced any new scientific data to support a change in its prior findings on these issues. (NMA)

- This alternative would be inconsistent with the maximum economic recovery requirements of the Mineral Leasing Act for leased federal coal as set forth in 43 CFR 3484.1. (BHP Billiton)

- A numerical limit on the size of fills, percentage of watershed disturbed, or total miles covered by fills could never be developed for Alaska, much less nationally. Even with exhaustive scientific information gathered at the cost of tens of millions of dollars, there are no one-size-fits-all limits that could be appropriately applied. We suggest this alternative be dropped from further consideration. (Alaska Coal Ass'n)

- Limits on fill size or stream miles do not make sense in this context. Mitigation should be considered in determining what impacts are significant. Otherwise, substantial coal reserves will be sterilized. (Peabody)

- Considering the large variations in project-specific site conditions throughout the Appalachian surface coal mining states, application of even a regional limit (whether numerical, qualitative, or quantitative) to all operations is nonsensical. (D.R. Allen & Associates)

- The new rule should establish numerical limits on the percentage of a watershed or county that can be cumulatively permitted for mining activities, past or present. Whether the numerical limit is determined by watershed boundary or county boundary should be based on which delineation will result in the least amount of area that is permitted for mining. We support using county delineations because that data is already available for eastern Kentucky and West Virginia in the December 2009 Governmental Accountability Office report on surface mining in the Appalachian portions of those states. Numerous scientific studies have shown that biodiversity and water quality are negatively affected when greater than 10 percent of the surface area of a watershed has been altered (e.g., Yaun and Norton 2003, Allan 2004, Morgan and Cushman 2005).

  Based on this standard, we suggest as the most lenient standard, denial of the further issuance of surface mining permits in counties or watersheds where 10 percent of the land area has already been permitted for surface coal mining, whether the permits are active or reclaimed. With regard to a numerical limit on fill size or total stream miles covered by fills within a watershed, the limit should be set at the present amount of devastation, and no further filling of streams should be permitted, without exception. (Center for Biological Diversity)

- Numerical limits are vital to addressing cumulative impacts from surface mining and to give effect to the requirement in section 515(b)(24) of SMCRA that adverse impacts on fish, wildlife, and related environmental values be minimized to the extent possible, using the best technology currently available. There is scientific support for prohibiting all fills in streams, but, failing that, the rule should prohibit the issuance of new permits for mining through or filling a stream in any watershed in which surface coal mining operations have affected 10 percent of the watershed. (SELC)

- If a permit is issued and subsequent monitoring shows significant degradation or violation of water quality standards, the rule should require that the regulatory authority order a cessation of operations. (SELC)

Alternative 5: **Establish a quantitative or qualitative threshold beyond which further damage to water quality or aquatic life in a particular watershed would be prohibited.**

- Virginia already implements this approach through its TMDL program, which establishes protective thresholds for aquatic life on a watershed basis. Only permit applications that propose to offset their pollution loads with watershed improvements are eligible for approval. Other states should emulate Virginia's example. (VA DMME)

- Any threshold involving benthic life impairments should state specifically what species of macroinvertebrate or other biological marker organism(s) indicates impairment. For instance, does the presence or absence of a particular mayfly species when other mayfly species are present indicate impairment? Additionally, the assessment protocol, scoring method and specific score should be specified. Any in-stream water quality criteria based on benthic life impairment should not be mandated on a regional basis because Virginia's experience with TMDLs indicates that some of the most detrimental impacts on benthic life result from development and straight-pipe discharges, not coal mining. (VA DMME)

- This option should not be considered because it would be very difficult to establish this type of threshold due to the variety of conditions that exist. (ND PSC)

- Pennsylvania is not aware of any empirical data that would support a quantitative impact threshold. (PADEP)

- Guidelines for water quality standards and effluent limitations designed to protect water quality and aquatic life for specific uses have already been established under the Clean Water Act. The courts have rejected previous OSM rules that intruded into this area of Clean Water Act regulation. (WVDEP)

- This alternative would effectively prevent Alaska from developing its coal resources in a way that maximizes resource recovery while still protecting the environment. (Alaska DNR)

- This type of threshold may be difficult and impracticable to establish because it would require comprehensive analyses of the baseline conditions of all affected watersheds and their ecological carrying capacity. (Corps of Engineers)

- When assessing water quantity and quality outside the permit area, the SMCRA regulatory authority should work closely with both the EPA and other federal land managers, like the NPS, to identify downstream aquatic resource impacts and to develop appropriate water quality and quantity thresholds that promote healthy natural aquatic systems for federal trust resources. Impacts from individual operations as well as cumulative impacts need to be evaluated with regard to aquatic species, especially threatened and endangered species. These impacts also should be considered in assessing past and present conditions in the watershed. (NPS GRD)

- Establishing watershed water quality criteria (either quantitative or qualitative) is entirely beyond the scope of what is authorized by SMCRA. This approach cannot be harmonized with the Clean Water Act and would be in violation of section 702(a)(3) of SMCRA, which states that nothing in SMCRA shall be construed as superseding, amending, modifying or repealing the CWA or any rule or regulation promulgated there under. (NMA)

- Establishing an arbitrary threshold is not feasible and is beyond the scope of SMCRA authority. These concerns should be covered by the existing requirement for a cumulative hydrologic impact assessment and separate permitting processes under the Clean Water Act. (Colorado Mining Ass'n)

- Mitigation should be considered in determining impacts. (Peabody)

- Considering the large variations in project-specific site conditions throughout the Appalachian surface coal mining states, application of even a regional limit (whether numerical, qualitative, or quantitative) to all operations is nonsensical. (D.R. Allen & Associates)

- The rule must define what a watershed is for regulatory purposes. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- Cumulative impairments should be examined at multiple levels, starting with a very local scale (HUC 14) and include the small watershed scale (HUC 11) to HUC 8 scale (watershed level). Otherwise, true watershed impacts cannot be assessed. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- The development of cumulative thresholds should be evaluated across various seasonal flow regimes to establish appropriate values. In addition, criteria should be set in relation to least disturbed condition streams from nearby areas. OSM or permit applicants should fund studies to gather information on what the critical environmental thresholds should be for threatened or endangered species (water quality, percentage of local watershed disturbance). (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- OSM should consider the diversity, connectivity, and integrity of freshwater mussel communities within watersheds, especially those downstream of major mining operations. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- OSM should work directly with EPA, the U.S. Geological Survey, and scientific groups such as the North American Benthological Society, the American Fisheries Society, the Ecological Society of America, and the Freshwater Mollusk Conservation Society, to establish a framework for establishing appropriate criteria for biological thresholds. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- The cumulative effects of mining on groundwater resources must be considered as these connections are critical to the hydrological and biological integrity of watersheds. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

- Appalachian waterways have already been ravaged by surface coal mining and no further degradation of aquatic habitats should be permitted. (Center for Biological Diversity)

***Alternative 6*: Adopt by regulation the watershed approach described in the preamble to the 2008 rule, rather than making project-specific determinations.**

- Any watershed approach must properly account for pre-SMCRA and nonmining pollutional loads, as well as accurately measure those loads through data analysis. (VA DMME)

- A watershed approach could open the window to the use of offsite best management practices and offsets that would provide the most benefit to water quality and aquatic life. It should encourage offsets to NPDES pollutant loading by companies engaging in point source to non-point source offsets and not in-kind offsets such as offsets for TSS or TDS for straight-pipe removal or sewage treatment projects. (VA DMME)

- This option is quite vague and more specifics are needed to have a clearer understanding of the proposal in order to properly evaluate and comment on it. (ND PSC)

- This alternative should be implemented. The SMCRA regulatory authority should evaluate the individual and cumulative effects of past, present, and reasonably foreseeable future activities in the watershed. The rule should specify the size of the watershed that must be evaluated, using Hydrologic Unit Codes. (Corps of Engineers)

- Requiring operators to engage in watershed-scale impact analysis likely would result in the extinction of mining by many of Ohio's smaller operators. The analysis is legally tenuous and would require operators to engage in a guessing game with respect to future mining development, land use, and downstream uses and characteristics. (Ohio Coal Ass'n)

- This alternative ignores the essential point that coal mining operations differ from other industrial sites that EPA is used to regulating. Mines can only go where the minable coal is. Coal mines are, by necessity, located where minable coal reserves are located. Minable reserves are not evenly distributed, nor do they encompass only a certain percentage of each watershed. Some watersheds are full of minable reserves, while others have few or no reserves. To preclude the mining of minable reserves--particularly when the infrastructure and equipment is already in the area--simply because other mines are already in the watershed makes no sense, either from an environmental or practical perspective. It would only increase the size of the infrastructure footprint for the same amount of coal production. (NMA)

- This alternative would be contrary to SMCRA in that section 102(k) encourages the "full utilization of coal resources" by underground mining methods, and section 515(b)(1) requires that surface coal mining operations be conducted so as "to maximize the utilization and conservation of the solid fuel resource being recovered so that reaffecting the land in the future through surface coal mining can be minimized." (NMA)

- Precluding mining of readily available reserves would constitute a taking of private property requiring just compensation under the Fifth Amendment to the Constitution, especially when coal reserves are acquired years prior to mining, which is typically the case. (NMA, Colorado Mining Ass'n, Peabody)

- The SMCRA mandate for the regulatory authority to prepare a cumulative hydrologic impact assessment (CHIA) should not and cannot be shifted to the permit applicant. Further, the finding required by the regulatory authority, after preparing the CHIA, only applies to the proposed operation, not all anticipated mining. (NMA)

- Stopping mining in a watershed as opposed to providing sufficient mitigation will drive mining into greenfield locations, which would potentially be both more costly and more environmentally damaging. If mitigation is sufficient, there is no sound reason to limit mining in a watershed. (Peabody)

- All the factors mentioned in the 2008 preamble discussion of the watershed approach that EPA recommended are required under the Clean Water Act, not SMCRA. OSM has no authority to incorporate these requirements into SMCRA regulations, nor can OSM legally assume Clean Water Act duties that are reserved to EPA and its delegated states. (West Virginia Coal Ass'n)

- The rule must define what a watershed is for regulatory purposes. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

***Alternative 7a*: Define the term "material damage to the hydrologic balance."**

- This definition is needed, together with identification of actions that can be taken to ensure the material damage is prevented. (Corps of Engineers)

- The definition should require consideration of adverse on-site impacts, such as the conversion of perennial or intermittent stream segments within the permit area to ephemeral stream segments following reclamation. (Corps of Engineers)

- OSM should define the term "material damage to the hydrologic balance outside the permit area" to expressly include:

  a) exceedance of any applicable federal or state numeric water quality standard for a pollutant or condition that a surface coal mining and reclamation operation may

reasonably be expected to discharge, cause, or worsen, where the exceedance occurs in any water resource that a particular surface coal mining and reclamation operation may or does detectably affect;

b) any lesser concentration or load of a mining-related pollutant or combination of pollutants that a SMCRA or Clean Water Act regulatory authority may find to indicate or constitute an unacceptable degree of damage to a water resource that a surface coal mining and reclamation operation may or does detectably affect;

c) any condition that applicable federal or state narrative water quality standard or anti-degradation standard prohibits and that a surface coal mining and reclamation operation may reasonably be expected to cause or worsen in a water resource that the operation detectably affects;

d) any other condition that the regulatory authority determines to constitute an unacceptable degree of damage to a water resource that a surface coal mining and reclamation operation may or does detectably affect; or

e) disturbance of more than 10% of the land area of any watershed.

Section 702(a)(3) of SMCRA precludes OSM from defining "material damage to the hydrologic balance outside the permit area" in any manner that fails to recognize an exceedance of applicable water quality standards under the Clean Water Act or state statutes that implement the Clean Water Act as "material damage to the hydrologic balance." (Appalachian Center for the Economy and the Environment)

- The definition of the term "material damage to the hydrologic balance outside the permit area" must expressly include any potential exceedance of state or federal numeric or narrative water quality standards or antidegradation requirements. (SELC)

- The significant amount of hydrologic information gathered during the past 25 years demonstrates the great variability in conditions from area to area and state to state. It confirms the wisdom of OSM's 1983 decision to leave determinations of material damage to the states, rather than codifying a national definition or establishing national criteria for material damage. (VA DMME)

- If OSM decides to define material damage, the definition must be based on sound science and be site-specific. A scoring matrix of relevant factors may provide the necessary flexibility. (VA DMME)

- To be consistent with EPA actions, any definition should consider establishing a conductivity of approximately 500 micro Siemens or TDS of approximately 350 mg/l as thresholds for material damage. (VA DMME)

- Any definition of material damage that includes a benthic life component should state specifically what species of macroinvertebrate or other biological marker organism(s) will be used as a measure of impairment. For instance, does the presence or absence of a particular mayfly species, when other mayfly species are present, indicate impairment? Additionally, the assessment protocol, scoring method, and specific score should be established. (VA DMME)

- Any in-stream water-quality-based definition of material damage to benthic life should take into consideration the fact that benthic impairment results from a combination of factors (e.g., drought, development, and straight-pipe discharges) that are not all related to coal mining. (VA DMME).

- As mentioned in the ANPR, OSM did not define this term in the past because the gauges for measuring damage vary from area to area and from operation to operation. This rationale remains valid. Therefore, we strongly oppose the suggestion that "material damage" be defined by rule. When the material damage topic has come up in OSM training courses and other discussions, OSM staff has consistently stated that this needs to be evaluated and determined on a case-by-case basis. (ND PSC)

- West Virginia has already adopted a definition of this term, as has OSM in Tennessee. Both definitions are crafted to avoid potential inconsistencies with the Clean Water Act. (WVDEP)

- Given the significant differences in geology, hydrology, and terrain among the various regions of the country where surface coal mining operations occur, regulatory terms such as "material damage to the hydrologic balance" have necessarily been left to each state to define based on their unique circumstances. This is the very essence of SMCRA's design, whereby Congress vested primary governmental responsibility for developing, authorizing, issuing and enforcing regulations for surface coal mining and reclamation operations with the states so as to accommodate the diversity in terrain, climate, biologic, chemical, and other physical conditions in areas subject to mining operations. (IMCC, Ohio Coal Ass'n)

- It is difficult to imagine one nationwide definition (or nationwide criteria) for what constitutes "material damage to the hydrologic balance outside the permit area." While some generic qualitative language like the definition that OSM has approved as part of the Wyoming program might work nationwide, it is hard to see that it would add much clarity. Criteria that would be appropriate for defining material damage to the hydrologic balance outside the permit area-for a permit covering thousands of acres in the Four Corners area with annual precipitation less than 10 inches a year and no intermittent or perennial streams in the immediate area can and should be quite different than those criteria appropriate for a mountaintop operation in central Appalachia, or a large dragline operation in the flat areas of east Texas with more than 50 inches of annual precipitation. (NMA)

- If OSM does propose a definition, the phrase "outside the permit area" should be included as part of the term because it is an integral part of the finding that a regulatory authority must make. (NMA)

- If OSM deems a definition necessary, it should include the following language: "Any long-term or permanent change in the hydrologic balance caused by surface mining operations that has a significant adverse impact on the capability of the affected water resources to support existing conditions and uses." (Mettiki)

- Time and further development of science cannot override geography. (West Virginia Coal Ass'n)

- OSM is precluded from assuming any role in areas of water quality regulation that are reserved to individual states under the Clean Water Act. (West Virginia Coal Ass'n)

- It would be difficult to come up with a definition appropriate for the vastly differing hydrologic conditions where coal mining occurs, and by necessity should be determined by state programs relative to individual sites. (Colorado Mining Ass'n)

- As stated in the ANPR, in 1983, OSM decided not to propose or adopt a definition or fixed criteria for material damage to the hydrologic balance "because the gauges for measuring damage may vary from area to area and from operation to operation." This is still the case; the conclusion drawn in 1983 still applies today. For example, the tolerance for change in a highly productive aquatic habitat would be significantly different than that for a barren aquatic zone. State programs should have the flexibility and authority to judge each project on a case-by-case basis. (Alaska Coal Ass'n)

- Any definition most likely would be unworkable because it would probably conform to the current EPA stance that almost any adverse impact on aquatic communities equates to material damage to the hydrologic balance. (Clintwood Elkhorn Mining Company)

- While understanding of the relevant hydrology and associated technology have advanced since 1983, the statement in the 1983 preamble quoted in the ANPR remains relevant: "...the gauges for measuring damage may vary from area to area and operation to operation..." The large variations in project-specific site conditions (climate, geology, etc.) would make any definition of material damage ripe for legal challenge. (D.R. Allen & Associates)

Alternative 7b: **Revise the definition of "cumulative impact area" and the requirements for CHIAs and PHC determinations to incorporate elements that are consistent with the manner and standards by which the Corps of Engineers determines potential cumulative adverse impacts on waters of the United States under section 404 of the Clean Water Act.**

- OSM should align the geographic scope of the cumulative impact analysis under SMCRA with the geographic scope of NEPA to promote greater consistency between SMCRA and Clean Water Act cumulative impact analyses. (Corps of Engineers)

- OSM should not revise the definition of "cumulative impact area" to incorporate the manner and standards used by the Corps of Engineers for determinations under section 404 of the Clean Water Act. It is not necessary to invoke standards developed by another federal agency to meet provisions under a different federal act. (ND PSC)

- OSM should not incorporate elements of the Corps of Engineers' processes and standards for potential adverse impacts of fill disposal under the Clean Water Act Section 404 program into the SMCRA probable hydrologic consequences (PHC) determination and CHIA processes. As acknowledged in the ANPR, the Corps is concerned with determining adverse impacts to waters of the U.S. in relation to the discharge of fill material under Section 404 of the Clean Water Act. The CHIA process and the finding that the SMCRA regulatory authority must make is concerned with the possible impact of the entire mining operation upon the entire hydrologic balance outside the permit area (not the stream inside the permit area and not just the stream). (NMA)

- As the jurisdictional reach of the Corps of Engineers has been limited to the affected waters and adjacent riparian areas by the U.S. Court of Appeals for the Fourth Circuit in *Ohio Valley v. Aracoma Coal Co.*, No. 07-1479 (4th Cir. 2009), the differences in the scope of analysis between the section 404 and SMCRA permits warrant elimination of the portion of this alternative that would have OSM incorporate elements of the Corps of Engineers' processes and standards for potential adverse impacts of fill disposal under the Clean Water Act section 404 program into the SMCRA PHC determination and CHIA processes. (D.R. Allen & Associates)

- OSM should not revise the definition of "cumulative impact area" at 30 CFR 701.5. The definition requires regulatory authorities to delimit cumulative impact areas on the basis of scientific analysis of hydrologic data that demonstrate the geographic extent to which the effects of a proposed surface coal mining and reclamation operation may, given the particular environmental conditions adjacent to the proposed permit area, interact with the hydrologic effects of other mining operations to produce a cumulative impact on the hydrologic balance. That method of delimiting cumulative impact areas is pragmatic, wholly supportive of the purpose of CHIA analysis, easily reviewable for error, and not susceptible to manipulation by those who favor or oppose mining without regard to Congress's intent in enacting SMCRA. Properly applied, the definition works well. [Appalachian Center for the Economy and the Environment (ACEE), West Virginia Coal Ass'n]

- The Corps of Engineers' "Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material" contains scant methodology or standards for OSM to incorporate into its CHIA regulations. Other than repeated admonitions to look both individually and cumulatively at the various effects of fill placement, the "Guidelines" mention "cumulative" analysis only twice. Neither of these provisions adds anything to the CHIA process defined in OSM's current regulations and internal guidance documents. The Corps's cumulative impact methodology appears to differ from OSM's CHIA procedures only by limiting the extent of the Corps's analysis to what that agency deems "reasonable and practical," as opposed to OSM's statutory mandate to evaluate "the probable cumulative impact of all anticipated mining in the area" of a proposed mine. 30 U.S.C. § 1260(b)(3). Certainly, OSM has no authority to curtail the focus of its CHIA analysis to anything less than the extent of the agency's statutory mandate. Accordingly, OSM could not incorporate the Corps's narrower cumulative impact focus. (ACEE)

- Congress chose to elevate cumulative impact analysis from the simple mention of cumulative impact as a factor in deciding whether to issue a general permit for fill construction under the CWA to the far more elaborate and crucial test for issuance of any permit for any type of surface coal mining and reclamation operation under SMCRA. In doing so, Congress put the Secretary of the Interior, not the Secretary of the Army, in the driver's seat with respect to methodology and standards for cumulative impact analysis related to surface coal mining and reclamation operations. For that reason, if any incorporation is to be done, it is the Corps which must incorporate OSM's more detailed and stringent cumulative impact regulations rather than the other way around. (ACEE)

***Alternative 8*: Require that a SMCRA permit applicant concurrently submit the SMCRA permit application to the SMCRA regulatory authority, the National Pollutant Discharge Elimination System permitting entity, the U.S. Army Corps of Engineers, EPA, and the state agency responsible for certification under section 401 of the Clean Water Act.**

- Concurrent submittals are necessary to ensure successful interagency communication and to ensure that all agencies are evaluating the effects of the proposed mining activity on all aquatic resources that each agency regulates. (Corps of Engineers)

- The Tennessee Department of Environmental Conservation expressed support for this alternative.

- OSM should require prompt submittal of permit applications to the Fish and Wildlife Service so that threats to proposed and listed threatened and endangered species can be assessed on a permit-by-permit basis. (Center for Biological Diversity)

- Virginia's SMCRA permitting process already incorporates extensive coordination and cooperation with the listed agencies. (VA DMME)

- Electronic permitting allows simultaneous access to permit applications by all interested state and federal agencies. (VA DMME)

- We strongly oppose this option because the specific review times under SMCRA-based law and rules are likely to be very different from those of the state agency that handles the NPDES permitting and other Clean Water Act responsibilities and that of the Corps of Engineers for Section 404 authorizations that may be required. While we currently coordinate and consult with these other agencies as necessary, there should not be a mandatory requirement that the permit applications be filed at the same time. (ND PSC)

- This alternative is totally inappropriate and well beyond what is authorized by SMCRA. It just looks like permit review by a committee that includes parties that have no jurisdiction in a SMCRA permitting decision. If OSM wants to facilitate better coordination, then it should follow the pattern set by 30 CFR 780.16(c) for fish and wildlife protection. Under those rules, it is the responsibility of the SMCRA regulatory authority to provide relevant parts of the application to other agencies that have an interest. Further, the only permit application information provided to other agencies should be information that is relevant to the other agencies' jurisdiction. Also, if National Pollutant Discharge Elimination System authority has been delegated to a state, there is no reason for EPA to be involved. (NMA)

- Where is the authority under SMCRA to impose such a requirement? Such a requirement goes far beyond simple coordination or consultation. (Colorado Mining Ass'n)

- Adoption of this alternative would result in more duplication of effort both for industry and government. Integrated permitting would not assist with solving the already troubled and cumbersome permitting process under the Clean Water Act. In addition, the integrated permitting process in Ohio has been a failure. (Peabody)

- While coordinated permitting sounds attractive, there is a reason why different agencies have different permitting procedures and review parameters—those procedures and parameters are specifically tailored to their respective authorizing statutes and thereby their environmental and regulatory expertise. For example, submission of a detailed SMCRA permit application to an NPDES permitting authority will not benefit the section 402 review in any way—it will only supply volumes of irrelevant information. (West Virginia Coal Ass'n)

- West Virginia's experience with coordinated permitting initiatives shows that they quickly become obstacles to efficient and timely permit issuance under any of the programs and agencies involved, a problem that is exacerbated by the fact that additional funding rarely accompanies any of these initiatives. (West Virginia Coal Ass'n)

- In many cases, this is indeed how an applicant organizes the permit process. However, for large projects that may require an EIS or be managed under a permit coordinating agency (such as the Office of Project Management under the Alaska Department of

Natural Resources), this timing may not be in the best interest of the project or the agencies. For example, it may require incomplete applications be submitted to one agency to fulfill this requirement, only to have a modified application filed later, thus requiring additional review time. Allowing the applicant and the agencies the ability to coordinate their permit application submission and review schedules is in the best interest of all parties. No project can proceed until all applications are processed and approved, regardless of the timing of submittals. Thus, we suggest that this alternative be dropped from further consideration. (Alaska Coal Ass'n)

- Enhanced coordination that does not delay the permitting process is always welcome. However, it is not essential because no disturbance may be conducted until a permittee has obtained all necessary permits. Additionally, procedural issues with certain agencies may result in delays that would prevent submittal of all permit applications. Therefore, conditioning when a permittee may submit an application is in our opinion overly restrictive and would require revisions to not only OSM's regulations, but also the Corps of Engineers regulations as well as those of all state regulatory authorities. (D.R. Allen & Associates)

- We support a streamlined, practical approach to permitting, but to date the agencies have not been able to design such a system. Nothing in this alternative will change this reality. Each permitting authority operates on varying timelines and may request additional information and technical analyses from permit applicants. Under this alternative, those applicants then would be required to potentially submit numerous and unnecessary supplemental information to several agencies. In addition, there is no legal authority for this alternative. (Ohio Coal Ass'n)

***Alternative 9*: Establish more detailed permit application requirements and performance standards for stream-channel diversions and restoration of streams.**

- No further disturbance and diversion of streams should be permitted. Artificially-constructed stream channels do not support the same flora and fauna or fulfill the same ecological roles as natural streams, and the destruction of natural streams should be prohibited. However, because stream damage is likely to continue to be permitted, premining stream surveys should be conducted to document conditions including but not limited to: flow, temperature, conductance, turbidity, pH, dissolved oxygen, total suspended solids, total dissolved solids, and levels of nutrients and metals including nitrogen, phosphorus, sulfur, iron, selenium, arsenic, and mercury. Premining stream surveys should also include aquatic flora and fauna ranging from zooplankton and phytoplankton to aquatic macroinvertebrates, mollusks, amphibians, reptiles, and fishes. If coal mining activities are not going to be entirely prohibited in and near streams, then coal operators should be required to return streams to their premining biological condition. If these conditions cannot be met, then permits should not be issued. (Center for Biological Diversity)

- Performance bonds should not be released until restored streams fully support the forms of life which were present prior to mining. (Center for Biological Diversity)

- No additional requirements or performance standards are needed if applicants must demonstrate compliance with sections 401 and 404 of the Clean Water Act before the SMCRA permit is approved. (VA DMME)

- No additional monitoring or bond release requirements are necessary because the Corps of Engineers has adequate authority to require correction of any discrepancy found after SMCRA bond release. There is no need to require the state SMCRA regulatory authority to incur the additional inspection and administration expenses that would result from additional monitoring and bond release requirements. (VA DMME)

- This option is quite vague and more specifics are needed to have a better understanding of the proposal to properly evaluate and comment on it. (ND PSC)

- SMCRA regulatory authorities should develop stream relocation and restoration criteria that, when practical, align with mitigation requirements under the Clean Water Act. (Corps of Engineers)

- OSM should explore the practicality of requiring that the SMCRA regulatory authority hold the SMCRA performance bond until the success of stream restoration and mitigation requirements under the Clean Water Act have been demonstrated. (Corps of Engineers)

- It may be reasonable to consider adding more detailed permit application requirements for modern stream assessment and mitigation techniques and practices. (Peabody)

- Premining condition surveys would prove useless for permits subject to the arbitrary one-square-mile intermittent stream definition at 30 CFR 701.5. (Peabody)

- OSM needs to better articulate what problem it is trying to solve. It is unclear what the basis is for thinking that further rulemaking is needed on stream-channel diversions, or how this alternative is connected to central Appalachia. With no stated basis or purpose, it is simply impossible to respond without further information. In short, NMA does not believe that OSM should propose additional requirements of this nature. (NMA)

- It will be difficult to develop requirements that will properly fit all situations. State programs have the ability to request additional stream-channel details, such as Alaska has done for the proposed Chuitna Coal project, but this level of detail would not be justifiable or beneficial for all mine sites. Thus, this alternative should be dropped from further consideration. (Alaska Coal Ass'n)

- The current regulations regarding stream diversions and stream restoration are adequate. Because there can be only one mitigation plan, these regulations also would need to

conform to any requirements of the Corps of Engineers district within which the proposed project exists. (D.R. Allen & Associates)

***Alternative 10*: Adopt provisions that would apply only to mountaintop removal operations and operations on steep slopes. This may include the deletion of 30 CFR 824.11(a)(9), which limits the statutory ban on mountaintop removal operations that would damage natural watercourses to those watercourses located below the lowest coal seam to be mined.**

- Any changes to the SBZ rules should apply nationwide because mining activities in states other than central Appalachia also adversely affect streams. (Corps of Engineers)

- It does not make sense to limit the SBZ rule to states that have historically allowed mountaintop removal operations. (Tennessee Dept. of Environmental Conservation)

- This approach, based solely on topography, involves constitutional issues such as the taking of private property and interference with interstate commerce. (VA DMME)

- This alternative appears to arbitrarily ignore the fact that mining impacts streams nationwide, regardless of the presence or absence of excess spoil fills. How can the federal government impose harsher standards on some states while allowing other states much more flexibility? (WVDEP)

- OSM should focus its rulemaking efforts squarely on mountaintop mining and valley fills and avoid adopting a rule that would require other states to revise their programs. (PADEP)

- Instead of proposing additional rules pertaining to these types of operations, OSM should work with the affected states to address the issues on a case-by-case basis. (ND PSC)

- It is beyond our understanding how OSM could apply regulations to specific states in a given coal region under a statute intended to be national in scope. Any such move by OSM would place Appalachian coal mining operations at a competitive disadvantage through selective application of a national statute. If anything, OSM and the other federal agencies should more closely examine the impact of mining operations on streams outside Appalachia because much less information is available for those areas. (West Virginia Coal Ass'n)

- Deletion of 30 CFR 824.11(a)(9) is a backdoor way of prohibiting all fills in streams. It would violate the spirit and intent of SMCRA and illegally restrict mining above and beyond the Clean Water Act. (West Virginia Coal Ass'n)

- We question the rationale for limiting the application of the rule to those states with mountaintop removal or steep-slope operations. Is OSM taking the stance that streams in the Appalachian states are in some way a more valuable resource than those present in other states? (D.R. Allen & Associates)

- Any such regulations must be limited to the types of issues that SMCRA recognizes as distinct to those operations, namely those identified in paragraphs (c) and (d) of section 515 of the Act. However, OSM has not articulated any support for such rules. (NMA)

- To the extent that OSM is concerned with mountaintop removal operations, it should identify and, if necessary, address those specific concerns instead of imposing a patchwork of new ill-considered regulations on all operations in all states. (Ohio Coal Ass'n, Peabody)

- Restricting certain provisions to certain regions is a valid approach for dealing with regional issues. However, as written in the ANPR, the alternative lacks sufficient detail for further comment. If the intent is to restrict certain regulations to a region, OSM should find a legally defensible way to clearly limit those requirements to a specific region, rather than applying those requirements to all mountaintop removal operations or steep-slope mining operations. In other words, the adoption of requirements intended to address a problem in central Appalachia, but not specifically restricted to central Appalachia, could lead to unintended consequences with no net benefit to operations outside the region that exist in an entirely different environmental setting. (Alaska Coal Ass'n)

- As practiced today, mountaintop removal operations are fundamentally incompatible with the requirement in section 515(c)(4)(D) of SMCRA that, before approving a permit application for a mountaintop removal operation, the regulatory authority must find that "no damage will be done to natural watercourses." It is simply impossible to fill streams with mining refuse without damaging them. The SMCRA regulatory authority has both the authority and the duty to deny permits that perpetuate this damage. (Center for Biological Diversity)

- OSM should revise its rules to delete 30 CFR 824.11(a)(9), which limits the statutory ban on mountaintop removal operations that would damage natural watercourses to those watercourses located below the lowest coal seam to be mined. However, otherwise, any revised SMCRA rules should apply to all states, not just Kentucky, Virginia, and West Virginia. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission, SELC)

Should we revise the approximate original contour (AOC) provisions of our regulations?

- AOC is a term expressly defined in SMCRA on a national basis. Any regulatory changes to it would have to be national in scope and consistent with the statutory definition. The differences in terrain from Appalachia to the Illinois coal basin, to East Texas, to the Western states, and on to Alaska simply preclude further specificity in that definition in a way that is workable across the nation. (NMA)

- Each state program has the discretion to further clarify the nationwide definition of AOC as it applies to mining conditions in that state. If further refinement is warranted for the

specific conditions in a state, it should be done at the state (or federal program for a state) program level. (NMA)

- The permitting process for each operation constitutes the appropriate way to address any concerns that citizens or others may have about how AOC is being applied in Appalachia as well as other areas of the nation. No new national rulemaking is needed to facilitate that site-specific process. (NMA)

- Any requirements beyond those in the 2008 rule and existing policies in the central Appalachian states would somehow have to modify natural, physical mechanics of geology and the constants of engineering or compromise safety and stability. (West Virginia Coal Ass'n)

- There should be no revisions to the AOC provisions of OSM's regulations, which are well-understood and have withstood the test of time. (PADEP)

- OSM should adopt a rule similar to the Montana program provision requiring that reclaimed drainage basins, including excess spoil fills, valleys, channels, and floodplains, be constructed to:

  (a) Comply with the postmining topography map approved by the regulatory authority.

  (b) Restore the approximate original contour.

  (c) Allow the drainage channel to remain in dynamic equilibrium with the drainage basin system without the use of artificial structural controls unless approved by the regulatory authority.

  (d) Provide separation of flow between adjacent drainages and safely pass the runoff from a six-hour precipitation event with a 100-year recurrence interval, or larger event as specified by the regulatory authority.

  (e) Provide for the long-term relative stability of the landscape by creating appropriate geomorphic landforms. The term "relative" refers to a condition comparable to an unmined landscape with similar climate, topography, vegetation and land use.

  (f) Provide an average channel gradient that exhibits a concave longitudinal profile.

  (g) Establish or restore a diversity of habitats that are consistent with the approved postmining land use, and restore, enhance where practicable, or maintain natural riparian vegetation.

(h) Exhibit dimensions and characteristics that will blend with the undisturbed drainage system above and below the area to be reclaimed and that will accommodate the approved revegetation and postmining land use requirements.

Technological innovations made since the promulgation of SMCRA currently provide landform design tools that greatly facilitate the ability of coal operators to comply with these provisions. Such technologies have been successfully demonstrated and they should be implemented in accordance with the SMCRA requirement to use the best technology currently available. Previously permitted excess spoil fill designs are inherently unstable landforms that natural forces will ultimately, if not catastrophically, remove. It is time to require that coal operators seek to emulate nature, rather than control nature. Adoption of these provisions would provide a framework within which surface coal mining, and specifically the practice of mountaintop removal, could continue in Appalachia. (New Mexico MMD)

- OSM should revise its rules to clarify that approximate original contour (AOC) restoration requirements apply to excess spoil fills. The legal opinion to the contrary is flawed. (ACEE, SELC)

- OSM needs to define AOC to mean that the reclaimed area must resemble the area before mining in aspect (or slope) and elevation. A minimum difference in elevation between premining and postmining conditions should be established as an enforceable requirement in a regulation. The regulation should also require a minimum difference in premining and postmining slopes as well as describe the allowable differences between the drainage pattern of the postmining site and the premining site. For example, OSM should require the postmining site to have as many linear feet of ephemeral, intermittent and perennial streams as the premining site. It should require those streams to be similar in configuration and morphology to the original streams. To demonstrate compliance or non-compliance with these requirements, the rule should require mine operators to submit premining and postmining field surveys, GPS data, photographs and measurements of slope of stream beds, plan cross-sections and aerial photographs of the disturbed areas. (ACEE)

- OSM should adopt a regulation clarifying that when an operation cannot comply with AOC restoration requirements as a result of application of a fill optimization formula such as those in place in Kentucky and West Virginia, the operation must obtain a legitimate variance from the AOC requirement. (ACEE)

- Because the detailed, site-specific reclamation plans required by SMCRA are rarely required by permitting authorities, OSM must promulgate a rule setting out in detail the requirements for a variance from AOC. (ACEE)

- OSM should clarify that AOC requirements and variances do not override the prohibitions and restrictions in the SBZ rule. (SELC)

- OSM should seek to minimize the use of AOC variances and improve the consistency with which different states adhere to AOC requirements. The large number of vacant mountaintop removal sites indicates that variances for residential, industrial, or commercial use often are not warranted. Variances should be subject to review to consider economic feasibility and the potential that the stated postmining land use will in fact occur. It is also important that AOC standards are implemented consistently across all states. (Trout Unlimited)

What other provisions of our regulations should we consider revising to better protect the environment and the public from the impacts of Appalachian surface coal mining?

- Hydrology, geology, and aquatic biology

1. OSM should define perennial, intermittent, and ephemeral streams in a manner that is consistent with the Clean Water Act, rather than using or referencing definitions from the U.S. Geological Survey. (Corps of Engineers)

2. OSM should adopt rule language that encourages state and federal agencies to coordinate on stream jurisdictional determinations as part of the permitting process. (Corps of Engineers)

3. OSM should establish baseline aquatic life information and monitoring requirements at the genus level rather than at the family level. (Bryon Arnold)

4. OSM should adopt a multifactor approach for the SBZ rule. While a 100-foot buffer should be the absolute minimum, the regulatory authority should be required to determine whether a wider buffer is needed to protect all streams. Such a determination should be based upon information concerning adjacent slopes, geology, soil types, and existing riparian context. Whatever stream protections are adopted should apply, without exception, to any intermittent, temporary, or perennial watercourse. (Freshwater Mollusk Conservation Society, KY State Nature Preserves Commission)

5. The current recommendation for stream buffers to protect amphibian habitat is 100 meters. This fact is especially important because the Appalachian region supports the highest diversity of amphibian species in North America and amphibian species worldwide are undergoing a rapid decline, largely due to habitat loss and water pollution. (Elizabeth Summers, UT)

6. The mining of coal and disruption of surrounding strata high in selenium are common sources of selenium that can degrade water quality and biologic diversity. Any rules proposed by OSM should require regulatory authorities to include selenium monitoring as a routine sampling parameter at all mines and require establishment of numerical limits for selenium for all outfalls at any mine where an overburden core sample shows elevated selenium concentrations. OSM also should revise its rules to

specify that no permit may be issued where selenium may become a problem unless the applicant has (1) submitted a viable plan for treating selenium pollution if it becomes a problem during mining and (2) demonstrated the financial ability to implement an effective selenium treatment plan. (KY Waterways Alliance)

7. OSM should promulgate a regulation that requires (1) routine, site-specific core sampling for selenium as part of each permit application, and (2) core testing that includes leachable selenium instead of just total selenium and decreases the interval between core samples. In addition, the regulation should make clear that operations at risk for selenium discharges must, during the mining process, test the geology for selenium every time mining operations change in elevation, enter a new strata or move more than 100 feet. One method of accomplishing this may be to require testing of holes drilled to blasting. The operator should be required to submit these samples to the regulatory authority at least twice per month. [Appalachian Center for the Economy and the Environment (ACEE)]

8. OSM should promulgate a regulation requiring that if selenium is found in core samples before or during mining, an analysis must be performed to determine whether it may create a perpetual pollution discharge. If the analysis shows that selenium is present in sufficient quantities to cause perpetual material damage to the hydrologic balance (including causing violations of water quality standards), then the mining operation must cease and reclamation must begin. (ACEE)

9. OSM should require additional information on the baseline hydrology and additional characterization of the premining hydrologic balance. Specifically, OSM should amend 30 CFR 780.21(b)(1) and (2) and 784.14(b)(1) and (2) to—

   a) Expressly provide that a minimum of 12 consecutive months of water quality and quantity information is necessary to establish the seasonal flow conditions that SMCRA requires each permit applicant to demonstrate. The amended regulation should clarify that baseline monitoring of flow rates must occur daily to enable the permit applicant and the regulatory authority to distinguish between seasonal flow patterns (including base flow from ground water) and flow rates that are generated in immediate response to precipitation events.

   b) Require, throughout the minimum 12-month baseline collection period, synchronous measurements at a sufficient number of stations along each stream course to enable the permit applicant and the regulatory authority to identify when and where the stream is gaining or losing flow. This change is needed to ensure collection of adequate information on exchanges between streamflow and groundwater.

   c) Designate the pollutants and conditions currently listed there as "pollutants and conditions of concern." The PHC determination, the CHIA, the hydrologic monitoring plans, and the hydrologic reclamation plan must expressly address the potential of the proposed surface coal mining operation to cause or contribute to

an exceedance of the applicable numeric or narrative water quality standard or standards for each pollutant or condition of concern that applies to the proposed surface coal mining operation.

d) Require information on both total dissolved solids and specific conductance and to add aluminum, selenium, and sulfate as required parameters. Alternatively, OSM should require the regulatory authority to add aluminum, selenium, or sulfate as pollutants of concern wherever geologic or hydrologic baseline data indicate their presence in the permit area.

e) Require that wherever geologic or hydrologic baseline data indicate the presence of any other pollutant or condition for which there exists an applicable federal or state numeric or narrative water quality standard, such as additional metals or temperature, the regulatory authority must treat it as a pollutant or condition of concern for which the permittee must at least provide baseline information.

f) Provide that where proposed operations would introduce contaminants or potential sources of contamination to the permit area that are unrelated to geologic materials at the site–for example, explosives, fuels, coal combustion wastes, or coal processing chemicals—those pollutants also must be treated as "of concern" and the permit applicant must provide baseline information on each contaminant, including background concentrations, whenever that substance or contaminant naturally occurs in, or has previously been introduced into, the surrounding environment.

g) Provide that where a proposed operation would discharge into a water resource listed as impaired on a state's list under section 303(d) of the Clean Water Act, the regulatory authority must treat as "pollutants and conditions of concern" each pollutant or condition that is identified as a cause of impairment in question and is among the pollutants or conditions that the proposed operation may reasonably be expected to discharge, cause, or worsen.

h) Expressly require that the regulatory authority treat all applicable narrative water quality criteria for each water resource that will receive a discharge from a proposed surface coal mining operation as conditions of concern for which baseline information must be collected. The amended regulations should ensure that the regulatory authority formulates numeric standards or criteria (such as the Index of Biological Integrity) to translate each narrative "free from" into a measurable standard.

i) Expressly provide that a pollutant or condition of concern for which a permit applicant must collect and present baseline information may be eliminated from analysis in the PHC determination and CHIA and from the proposed hydrologic monitoring and reclamation plans only if baseline geologic and hydrologic information indicate to a reasonable degree of scientific certainty that discharges of that substance from the proposed permit area will not cause or contribute to an

exceedance of any applicable numeric or narrative water quality standard. (ACEE)

10. OSM should amend 30 CFR 780.21(b) and 784.14(b) to require that the regulatory authority inform each permit applicant of the minimum pollutants and conditions of concern that the PHC determination, hydrologic monitoring plan, and hydrologic reclamation plan must address, based on the regulatory authority's assessment of the baseline hydrologic information provided in the permit application or otherwise available to the regulatory authority. (ACEE)

11. OSM should amend 30 CFR 780.21(f)(3)(iv) and 784.14(e)(3)(iii) to expressly require that the PHC determination analyze the probable impact of the proposed surface coal mining operation on each pollutant or condition of concern identified pursuant to amended 30 CFR 780.21(b) or 784.14(b). (ACEE)

12. OSM should amend 30 CFR 780.21(g) and 784.14(f) to provide expressly that the regulatory authority may not conclude that a proposed surface coal mining and reclamation operation has been designed to prevent material damage to the hydrologic balance, and thus may not approve the pertinent permit application, if the proposed operation includes a new discharge to a water resource on a state's 303(d) list under the Clean Water Act for a mining-related pollutant or condition that the proposed operation would discharge or worsen, except in compliance with the requirements of 40 CFR 122.4(i) concerning available waste load allocations under a TMDL and compliance schedules covering existing dischargers. (ACEE)

13. OSM should amend 30 CFR 780.21(g) and 784.14(f) to require that each CHIA identify all pertinent material damage criteria for the proposed operation, including, at a minimum, each numeric water quality standard or translated numeric standard for a narrative water quality standard or anti-degradation standard applicable to each water resource that the proposed operation will likely affect. The amended regulation should further require the regulatory authority to notify the permittee as soon in the permit application evaluation process as practicable, through a publicly available document, of the material damage criteria applicable to the proposed operation. The amended regulation should require that each notice also direct the permittee to structure its hydrologic monitoring plans and hydrologic reclamation plan so as to detect trends toward exceedance of those criteria and to specify measures to prevent actual exceedances. (ACEE)

14. OSM should amend its water monitoring regulations at 30 CFR 780.21(i)(1) and (j)(2)(i) and 784.14(h) and (i)(2)(i) to require that—

    a) The permittee regularly monitor each pollutant and condition of concern and annually monitor each other pollutant or condition for which there is a material damage criterion.

b) Each hydrologic monitoring plan require monitoring at times and places capable of ascertaining the mine's compliance status with respect to all pollutants and conditions of concern.

c) The hydrologic monitoring plans of any permit application that includes a material handling plan meant to prevent water pollution (whether by acid mine drainage, selenium, or any other substance) contain specific measures to be taken within the permit area to indicate effectively whether the material handling plan is failing or has failed to prevent water pollution as predicted.

d) Selenium be included as a routine sampling parameter at all mines.

e) The regulatory authority establish numerical limits for selenium for all outfalls at any mine where a core sample shows elevated selenium concentrations. (ACEE)

15. OSM should amend its regulations at 30 CFR 780.21(h) and 784.14(g) concerning hydrologic reclamation plans to—

a) Provide that the "preventative and remedial measures" required by the current regulations must address specifically each pollutant or condition of concern that the regulatory authority identifies for the proposed operation. The amended regulation should require the permittee to identify, in terms of hydrologic monitoring data and any other appropriate condition, the trigger event or series of events that would prompt the permittee to implement each preventative or remedial measure proposed in the plan. The amended regulation should further require the permittee to explain how each proposed preventative or remedial measure will accomplish its purpose and how the permittee will monitor and assess the effectiveness of each measure. The suggested amendment would promote use of hydrologic monitoring data as an effective early warning system for actually preventing, rather than remediating, material damage to the hydrologic balance outside the permit area.

b) Require that the regulatory authority order a permittee to develop alternate or additional "preventative and remedial measures" for inclusion in the hydrologic reclamation plan whenever one or more of the initially approved measures fail to prevent deterioration toward material damage, prevent material damage itself, or remedy material damage to the hydrologic balance.

c) Forbid regulatory authorities from accepting any material handling plan as a component of a hydrologic reclamation plan and require that the hydrologic reclamation plan of any permit application that includes a material handling plan meant to prevent water pollution (whether by acid mine drainage, selenium, or any other substance) contain specific preventative and remedial measures to be taken if monitoring data indicate that the material handling plan is failing or has failed to prevent water pollution as predicted. (ACEE)

16. OSM should amend its permitting regulations to provide that if the regulatory authority relies to any extent on information not in the permit application, the regulatory authority must place a written copy of all such information among the publicly available decision documents for the application in question. The amended regulations should require the regulatory authority to provide the required notice at the time that the regulatory authority determines the permit application to be administratively complete. The amended regulation should authorize the regulatory authority to amend its notice of pollutants and conditions of concern based on information subsequently submitted or obtained, provided that both the amended notice and the supporting information are made immediately available for public inspection. (ACEE)

- Revegetation, topsoil, and postmining land use

1. The revegetation regulations should be modified to ban the planting of non-native species during restoration. (Center for Biological Diversity)

2. OSM must promulgate a regulation assuring that topsoil is saved unless operators can demonstrate that the proposed topsoil substitute is "the best available subsoil which is best able to support vegetation," as required by section 515(b)(6) of SMCRA. (ACEE)

3. OSM must make clear that topsoil substitutes may not be approved on sites with a postmining land use that involves woody plants unless the applicant demonstrates that the substitute will result in a soil medium that is at least as productive as the premining site. Specifically, OSM must make it clear that regulatory authorities may not permit mining operations to utilize gray sandstone as a topsoil substitute. No studies have shown gray sandstone to be the "best available in the permit area to support revegetation," nor have any studies shown that this material is "equal to, or more suitable for sustaining vegetation than, the existing topsoil," as required by 30 CFR 816.22(b). (ACEE)

4. OSM must promulgate a rule clarifying the requirements of a "higher or better use." Postmining sites used as fish and wildlife habitat, hayland or pasture, and forestland cannot measure up to SMCRA's "higher or better" use standard. (ACEE)

- Performance bonds

12. OSM should revise its bonding and reclamation regulations to effectively address the problem of long-term postmining pollutional discharges. OSM should amend its regulations to require that owners and operators of mines with the potential for long-term postmining pollutional discharges post additional financial guarantees sufficient to cover the costs of permanently treating such discharges. The revised regulations should further provide that owners and operators who do not post the additional financial guarantees will be ineligible to receive any new surface mining permits. (ACEE)

- Permit renewal requirements

  1. OSM should clarify and strengthen rules governing renewal of permits when the applicant is violating federal and state laws protecting surface water quality. First, 30 CFR 774.15(c)(1)(ii) should be amended to add the following clause to the end: "including, but not limited to, effluent limitations established in NPDES permits issued pursuant to section 402 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1342, and the rules and regulations promulgated there under." Second, 30 CFR 774.15(c)(2) should be amended to add the following sentence at the end of the existing provision: "If the opponents of renewal, including citizen opponents, establish one of the criteria in § 774.15(c)(1) of this chapter, the regulatory authority shall deny the renewal application." (ACEE)

- Violation information requirements and permit block sanction

  1. OSM should promulgate a regulation that provides that, where the surface mining regulatory authority and the water pollution regulatory authority are the same entity, "the regulatory authority, department, or agency which has jurisdiction over" violations of the Clean Water Act or permits issued there under is the U.S. Environmental Protection Agency for purposes of section 510(c) of SMCRA. (ACEE)

  2. OSM should ensure appropriate oversight of surface mining regulatory authorities by expanding the definition of "regulatory authority, department, or agency" for purposes of section 510(c) of SMCRA to include citizens that have provided notice under one of the citizen suit provisions of the federal environmental statutes to sue an operator for violation of the one of the laws referred to in section 510(c). Through those citizen suit provisions, Congress evidenced its intent for citizens to act as private attorneys general. Therefore, it is appropriate to treat them as regulatory agencies for purposes of section 510(c). (ACEE)

  3. OSM should define the terms "has been corrected" and "is in the process of being corrected" for purposes of section 510(c) of SMCRA. The term "has been corrected" should be defined to mean that "the violation at issue has completely ceased and that there is no real likelihood of its recurrence." The term "is in the process of being corrected" should be defined to mean that "the applicant is subject to a judicial decree or other judicially enforceable order compelling the applicant to achieve full compliance with no real likelihood of recurrence as soon as possible, but not to exceed one year from the date of the decree or order." (ACEE)

- Other provisions

  1. The alternatives analysis requirements for coal mine waste impoundments and refuse piles should be revised to include consideration of impacts to local residents, such as traffic, dust, and noise. (PADEP)

ATTACHEMNT #4 - REFERENCE MATERIAL

REFERENCE MATERIAL

1979 OSM-EIS-1 *Permanent Regulatory Program*

1983 OSM-EIS-1 *Supplement*

2003 DRAFT EIS *Mountain Top Mining and Valley Fills*

2005 EIS *Mountain Top Mining and Valley Fills*

2008 OSM-EIS-34 *Excess Spoil Minimization and Stream Buffer Zones*

END OF STATEMENT OF WORK

SOLICITATION – CONTINUED

SECTION E – INSPECTION AND ACCEPTANCE

52.246-4 INSPECTION OF SERVICES - FIXED-PRICE (AUG 1996)

(a) Definitions. "Services," as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.

(b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

(d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

(e) If any of the services do not conform to contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the defects in services cannot be corrected by reperformance, the Government may (1) require the Contractor to take necessary action to ensure that future performance conforms to contract requirements and (2) reduce the contract price to reflect the reduced value of the services performed.

(f) If the Contractor fails to promptly perform the services again or to take the necessary action to ensure future performance in conformity with contract requirements, the Government may (1) by contract or otherwise, perform the services and charge to the Contractor any cost incurred by the Government that is directly related to the performance of such service or (2) terminate the contract for default.

SECTION F - PERFORMANCE

F.1 Period of Performance

A base period of one-year is anticipated to begin on or about mid May and end 12 months later. Three one-year options will be included.

F.2 Place of Performance and Hours of Operations

Place of Performance: The place of performance is OSM Headquarters Building at 1951 Constitution Ave., NW, Washington, DC 20240.

Hours of Operations: Hours of operation are traditionally five days per week, with hours ranging from as early as 6:00 a.m. to as late as 7:00 p.m.. Overtime is not expected; however, may be required on a limited basis.

Federal Holidays: Federal Holidays must be covered by the contractor; compensation plan and backup included as an overhead expenditure. Contractor will not be paid for administrative leave or extra holidays given to Government employees.

F.3 Special Considerations

Contract employees are to have appropriate experience for positions.

F.3.1 Disclosure Information

Information made available to the contractor by the Government for the performance or administration of this effort shall be used only for those purposes and shall not be used in any other way without the written agreement of the Contracting Officer.

The contractor agrees to assume responsibility for protecting the confidentiality of Government records, which are not public information. Each contractor or employee of the contractor to whom information may be made available or disclosed shall be notified in writing by the contractor that such information may be disclosed only for a purpose and to the extent authorized herein. A signed Non-Disclosure Agreement (NDA) will be required.

F.3.2 Limited Use of Data

Performance of this effort may require the contractor to access and use data and information proprietary to a Government agency or Government contractor which is of such a nature that its dissemination or use, other than in performance of this effort, would be adverse to the interests of the Government and/or others.

Contractor and/or contractor personnel shall not divulge or release data or information developed or obtained in performance of this effort, until made public by the Government, except to authorize Government personnel or upon written approval of the Contracting Officer (CO). The contractor shall not use, disclose, or reproduce proprietary data that bears a restrictive legend, other than as required in the performance of this effort. Nothing herein shall preclude the use of any data independently acquired by the contractor without such limitations or prohibit an agreement at no cost to the Government between the contractor and the data owner which provides for greater rights to the contractor.

F.3.3 Section 508

The 1973 Rehabilitation Act amended in 1998 required Federal agencies to ensure that any time the Government maintains, procures, develops, or uses electronic and information technology that it is accessible to persons with disabilities. Unless an undue burden of significant difficulty or expense can be established OSM will provide reasonable accommodation for Section 508 compliance.

F.4 Contract Type.

OSM intends to award a Firm Fixed Price contract.

F.5 Travel Requirements.

The Contractor will be reimbursed, not to exceed amount for all domestic travel as described below, incurred directly and specifically in the performance of this contract, claimed by the Contractor and accepted by the Contracting Officer.

Costs for lodging, meals, and incidental expenses will be based on the Federal Travel Regulation per diem rates. Actual expenses or a combination thereof may be used provided the method used results in a reasonable charge. A written justification for use of the higher amounts will be approved by COR.

http://www.gsa.gov/Portal/gsa/ep/contentView.do?P=MTT&contentId=9646&contentType=GSA_BASIC

All travel related expenses will be charged to ODC.

F.6 Government Furnished Facilities, Property, Materials

When the contractor is working at the OSM Headquarters site located at 1951 Constitution Ave, NW, Washington, DC, the Government is responsible for providing office space and supplies, software, hardware, DOI required IT security training, and the appropriate monitoring resources for hardware and software.

F.7 Government POCs -- Contract Administrator/COR/PM

Contracting Officer's Representative:	Li-Tai BilBao Phone #: 202 208-2895 Fax # 202-219-3276 Email: lbilbao@osmre.gov
Contracting Officer:	Nancy E. Sloanhoffer Phone #: (202) 208-2902 Fax # (202) 219-3104 Email: nsloanhoffer@osmre.gov
Contract Specialist:	Tracy R. Meeker Phone #: 303-236-0330 x253 Fax #: 303-236-0340 Email: tmeeker@osmre.gov

SECTION G – CONTRACT ADMINISTRATION

INVOICE - The Contractor shall submit all invoices for services rendered to:

Office of Surface Mining
Attn: Nancy Sloanhoffer
1951 Constitution Avenue, NW
SIB, RM 336
Washington, DC 20240

SECTION H - SPECIAL CONTRACT REQUIREMENTS

The proposal shall includes a plan/statement describing how the contractor will address organizational and other conflicts of interest for subcontractors or persons who are consultants or who work for organizations with potential conflicts.

1. Progress Reports

   Monthly progress reports shall be submitted to the COR beginning one month from the date of Notice to Proceed. The monthly reports shall be concise, factual, and informal and shall include, but not be limited to:

   A. Work accomplished during the period of the report;
   B. A description of the overall progress, including data, in sufficient detail to explain the progress achieved;
   C. A description of the current problems that may impede performance with the proposed corrective actions;
   D. A description of the work to be performed during the next reporting period.

2. Mailing to Third Parties

   The Contractor shall provide appropriate envelopes and postage for all mailings under this contract. OSM shall review and approve all mailing lists before the documents are mailed. The Contractor shall be responsible for assembling documents and preparing them for mailing. The Contractor shall also be responsible for preparing all mailing lists; updating those lists as necessary; preparing mailing labels and/or envelopes; assuring that all mailings are timely, accurate, and inclusive of all required materials.

3. Drawings, Reports, and Publications

   All drawings, reports, publications, notes, and other work developed and submitted or relied on for submittals in the performance of this contract shall become the property of the Government and the Government shall have unlimited rights to their use, including the right to use the same without additional compensation to the Contractor. The Contractor hereby grants to the Government a current license to all such works to which it may assert or establish any claim under design patent or copyright laws. The Government shall be considered the "person for whom the work was prepared" for the purpose of authorship in any copyrightable work. With respect thereto, the Contractor agrees not to assert or authorize others to assert any rights nor establish a claim under the design patent or copyright laws.

4. Contractor Services

The Contractor shall furnish the necessary personnel, materials, services, equipment, facilities and otherwise do all other things necessary for an incident to the performance of the work specified in a manner consistent with accepted professional standards.

The Contractor shall be responsible for providing 3 hard copies and 15 digital copies of verbatim transcripts of the official proceedings of all public meetings held in conjunction with this contract.

Specific minimum service s to be provided by the Contractor shall include the following documents:

A. Draft Environmental Impact Statement

1. The Contractor shall assist the OSM in the preparation for and shall conduct public scoping meetings to be scheduled 45 days after Notice to Proceed. The Contractor shall prepare the invitation on behalf of the OSM, subject to review and approval by the COR. In addition, the Contractor shall in conjunction with the OSM, prepare an agenda and project summary for distribution at the meetings. Additional assistance for the preparation and conduct of scoping meetings may be requested by the OSM's contracting officer.

2. The Draft EIS shall analyze the impact of the proposed action.

3. The Contractor shall submit 3 hard copies and 30 digital copies of the preliminary DEIS.

4. After the OSM and cooperating agencies review and comment, the Contractor shall submit 3 hard copies and 50 digital copies for the OSM. In addition, the Contractor shall provide sufficient digital copies for mailing. A mailing list of proposed recipients of the Published DEIS will be approved by the OSM prior to the Contractor's mailing. It shall be the sole responsibility of the Contractor to ensure that the Draft EIS is mailed to all parties (including attendees at the Scoping Meetings) who have requested a copy, as well as those who are required to receive one. OSM will provide an appropriate transmittal letter on OSM letterhead for inclusion with the mailings.

5. The Contractor shall be responsible for printing the DEIS and consulting with the printer to ensure quality reproduction of all materials. If additional copies are needed, they shall be provided by the Contractor at their exact printing cost.

6. The Contractor will be responsible for publishing the DEIS Notice of Availability in appropriate general circulation local newspapers. OSM will assist the Contractor in determining which newspapers are to be selected.

7. Mailing of the completed DEIS shall be coordinated with the publication of the Notice of Availability in the Federal Register.

8. OSM shall be responsible for the publication of the Notice of Availability in the Federal Register.

9. During and after the close of the public review and comment period following the publication of the Notice of Availability of the DEIS in the Federal Register, the Contractor shall consult with the COR in determining which responses are substantive and must be addressed in the FEIS.

B. Final Environmental Impact Statement

The Contractor shall be responsible for the complete analysis of all significant new issues raised as a result of the DEIS review process.

1. The Contractor shall submit 3 hard copies and 30 digital copies of the proposed FEIS for OSM and cooperating agency review and approval.

2. After review by OSM and cooperating agencies, the Contractor shall submit a revised FEIS incorporating responses to comments by OSM and cooperating agencies. The Contractor shall submit 3 hard copies and 50 digital copies for the OSM. In addition, the Contractor shall provide sufficient electronic copies for mailing. A mailing list of proposed recipients of the Published FEIS will be approved by OSM prior to the Contractor's mailing. It shall be the sole responsibility of the Contractor to ensure that the FEIS is mailed to all parties (who have requested a copy), as well as those who are required to receive one. OSM will provide an appropriate transmittal letter on OSM letterhead for inclusion with the mailings.

3. The Contractor shall be responsible for printing the FEIS and consulting with the printer to ensure quality reproduction of all materials. If additional copies are needed, they shall be provided by the Contractor at their exact printing cost.

C. Submission Requirements

All documents shall be prepared on 8 ½ x 11 inch bond paper and bound in a manner agreed upon by the Contractor and COR. A cover page design for the proposed Draft and Final EISs shall accompany each of those documents for approval by the OSM. All designs have to be approved by the OSM prior to submittal.

SECTION I

52.252-02 CLAUSES INCORPORATED BY REFERENCE FEBRUARY 1998

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address (es):

Federal Acquisition Regulation clauses and provisions:
http://www.acquisition.gov/comp/far/index.htm or http://www.arnet.gov/far/loadmainre.html

CLAUSES INCORPORATED BY REFERENCE

52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions on Subcontractor Sales to the Government	SEP 2006
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	JAN 1997
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	JAN 1997
52.203-12	Limitation on Payments to Influence Certain Federal Transactions	SEP 2007
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.209-6	Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment	SEP 2006
52.212-3	Offeror Representations and Certifications—Commercial Items	
52.215-2	Audit and Records - Negotiation	JUN 1999
52.215-10	Price Reduction for Defective Cost or Pricing Data.	OCT 1997
52.215-11	Price Reduction for Defective Cost or Pricing Data - Modifications	OCT 1997
52.215-12	Subcontractor Cost or Pricing Data	OCT 1997
52.215-13	Subcontractor Cost or Pricing Data - Modifications	OCT 1997
52.215-15	Pension Adjustments and Asset Reversions	OCT 2004
52.215-16	Facilities Capital Cost of Money	JUN 2003
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions	JUL 2005
52.219-6	Notice of Total Small Business Set-Aside	JUN 2003

52.219-8	Utilization of Small Business Concerns	MAY 2004
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime Compensation	JUL 2005
52.222-21	Prohibition of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	MAR 2007
52.222-35	Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	SEPT 2006
52.222-36	Affirmative Action for Workers with Disabilities	JUN 1998
52.222-37	Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	SEPT 2006
52.222-41	Service Contract Act of 1965, as Amended	NOV 2007
52.222-43	Fair Labor Standards Act and Service Contract Act-Price Adjustment (Multiple Year and Options Contract)	NOV 2006
52.222-44	Fair Labor Standards Act and Service Contract Act-Price Adjustment	FEB 2002
52.222-50	Combating Trafficking in Persons	FEB 2009
52.223-6	Drug-Free Workplace	MAY 2001
52.223-14	Toxic Chemical Release Reporting	AUG 2003
52.225-1	Buy American Act - Supplies	FEB 2009
52.225-13	Restrictions on Certain Foreign Purchases	FEB 2006
52.227-1	Authorization and Consent	DEC 2007
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement	DEC 2007
52.228-5	Insurance-Work on a Government Installation	JAN 1997
52.229-3	Federal, State, and Local Taxes	APR 2003
52.232-8	Discounts for Prompt Payment	FEB 2002
52.232-9	Limitation on Withholding of Payments	APR 1984
52.232-11	Extras	APR 1984
52.232-17	Interest	OCT 2008
52.232-23	Assignment of Claims	JAN 1986
52.233-2	Serviced of Protest	SEP 2006
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.242-13	Bankruptcy	JUL 1995
52.242-15	Stop Work Order	AUG 1989
52.244-5	Competition in Subcontracting	DEC 1996
52.244-6	Subcontracts for Commercial Items	FEB 2009
52.245-1	Government Property	JUN 2007
52.245-2	Government Property Installation Operation Services	JUN 2007
52.245-9	Use and Charges	JUN 2007
52.246-25	Limitation of Liability - Services	FEB 1997
52.247-34	F.O.B. Destination	NOV 1991
52.253-1	Computer Generated Forms	JAN 1991
1452.203-70	Restriction on Endorsements - Department of the Interior	JUL 1996

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS (JUL 2004)

(a) When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless—

(1) The solicitation, or amended solicitation, provides a different definition;

(2) The contracting parties agree to a different definition;

(3) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or

(4) The word or term is defined in FAR Part 31, for use in the cost principles and procedures.

(b) The FAR Index is a guide to words and terms the FAR defines and shows where each definition is located. The FAR Index is available via the Internet at http://www.acqnet.gov at the end of the FAR, after the FAR Appendix.

52.204-7 CENTRAL CONTRACT REGISTRATION (APR 2008)

(a) Definitions. As used in this clause—

"Central Contractor Registration (CCR) database" means the primary Government repository for Contractor information required for the conduct of business with the Government.

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System+4 (DUNS+4) number" means the DUNS number means the number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see the FAR at Subpart 32.11) for the same concern.

"Registered in the CCR database" means that—

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR database; and

(2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record "Active". The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.

(b) (1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS or DUNS+4 number that identifies the offer or's name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) Via the internet at http://fedgov.dnb.com/webform or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Trade style, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(g)(1)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to:

(A) Change the name in the CCR database;

(B) Comply with the requirements of Subpart 42.12 of the FAR;

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the Internet at http://www.ccr.gov or by calling 1-888-227-2423, or 269-961-5757.

52.215-8 ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT (OCT 1997)

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order:

(a) The Schedule (excluding the specifications).

(b) Representations and other instructions.

(c) Contract clauses.

(d) Other documents, exhibits, and attachments.

(e) The specifications.

52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed one year. The Contracting Officer may exercise the option by written notice to the Contractor within 15 calendar days.

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 15 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed three years.

52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for—

(1) *Services (except construction).* At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.

(2) *Supplies (other than procurement from a nonmanufacturer of such supplies).* The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) *General construction.* The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) *Construction by special trade contractors.* The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

52.222-42 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (MAY 1989)

In compliance with the Service Contract Act of 1965, as amended, and the regulations of the Secretary of Labor (29 CFR Part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This Statement is for Information Only:
It is not a Wage Determination

Employee Class	**Monetary Wage -Fringe Benefits**
GS - 11	$24.10
GS - 12	$28.88
GS - 13	$34.34

52.232-1 PAYMENTS (APR 1984)

The Government shall pay the Contractor, upon the submission of proper invoices or vouchers, the prices stipulated in this contract for supplies delivered and accepted or services rendered and accepted, less any deductions provided in this contract. Unless otherwise specified in this contract, payment shall be made on partial deliveries accepted by the Government if—

(a) The amount due on the deliveries warrants it; or

(b) The Contractor requests it and the amount due on the deliveries is at least $1,000 or 50 percent of the total contract price.

52.232-19 AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR. (Apr 1984)

Funds are not presently available for performance under this contract beyond September 30, 2010. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond September 30, until funds are made available to the

Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

52.232-25 PROMPT PAYMENT (OCT 2008)

Notwithstanding any other payment clause in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer (EFT). Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(4) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) *Invoice payments* --

(1) *Due date.*

(i) Except as indicated in paragraphs (a)(2) and (c) of this clause, the due date for making invoice payments by the designated payment office shall be the later of the following two events:

(A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(ii) of this clause).

(B) The 30th day after Government acceptance of supplies delivered or services performed. For a final invoice, when the payment amount is subject to contract settlement actions, acceptance is deemed to occur on the effective date of the contract settlement.

(ii) If the designated billing office fails to annotate the invoice with the actual date of receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice; provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) *Certain food products and other payments.*

(i) Due dates on Contractor invoices for meat, meat food products, or fish; perishable agricultural commodities; and dairy products, edible fats or oils, and food products prepared from edible fats or oils are --

(A) For meat or meat food products, as defined in section 2(a)(3) of the Packers and Stockyard Act of 1921 (7 U.S.C. 182(3)), and as further defined in Pub. L. 98-181, including any edible fresh or frozen poultry meat, any perishable poultry meat food product, fresh eggs, and any perishable egg product, as close as possible to, but not later than, the 7th day after product delivery.

(B) For fresh or frozen fish, as defined in section 204(3) of the Fish and Seafood Promotion Act of 1986 (16 U.S.C. 4003(3)), as close as possible to, but not later than, the 7th day after product delivery.

(C) For perishable agricultural commodities, as defined in section 1(4) of the Perishable Agricultural Commodities Act of 1930 (7 U.S.C. 499a(4)), as close as possible to, but not later than, the 10th day after product delivery, unless another date is specified in the contract.

(D) For dairy products, as defined in section 111(e) of the Dairy Production Stabilization Act of 1983 (7 U.S.C. 4502(e)), edible fats or oils, and food products prepared from edible fats or oils, as close as possible to, but not later than, the 10th day after the date on which a proper invoice has been received. Liquid milk, cheese, certain processed cheese products, butter, yogurt, ice cream, mayonnaise, salad dressings, and other similar products, fall within this classification. Nothing in the Act limits this classification to refrigerated products. When questions arise

regarding the proper classification of a specific product, prevailing industry practices will be followed in specifying a contract payment due date. The burden of proof that a classification of a specific product is, in fact, prevailing industry practice is upon the Contractor making the representation.
(ii) If the contract does not require submission of an invoice for payment (*e.g.*, periodic lease payments), the due date will be as specified in the contract.
(3) *Contractor's invoice*. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(3)(i) through (a)(3)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt (3 days for meat, meat food products, or fish; 5 days for perishable agricultural commodities, dairy products, edible fats or oils, and food products prepared from edible fats or oils), with the reasons why it is not a proper invoice. The Government will take into account untimely notification when computing any interest penalty owed the Contractor.
(i) Name and address of the Contractor.
(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of the mailing or transmission.)
(iii) Contract number or other authorization for supplies delivered or services performed (including order number and contract line item number).
(iv) Description, quantity, unit of measure, unit price, and extended price of supplies delivered or services performed.
(v) Shipping and payment terms (*e.g.*, shipment number and date of shipment, discount for prompt payment terms). Bill of lading number and weight of shipment will be shown for shipments on Government bills of lading.
(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).
(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.
(viii) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
(ix) Electronic funds transfer (EFT) banking information.
(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (*e.g.*, 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (*e.g.*, 52.232-33, Payment by Electronic funds Transfer—Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.
(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
(x) Any other information or documentation required by the contract (*e.g.*. evidence of shipment.)
(4) *Interest penalty*. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(4)(i) through (a)(4)(iii) of this clause are met, if applicable. However,

when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.
(i) The designated billing office received a proper invoice.
(ii) The Government processed a receiving report or other Government documentation authorizing payment, and there was no disagreement over quantity, quality, or Contractor compliance with any contract term or condition.
(iii) In the case of a final invoice for any balance of funds due the Contractor for supplies delivered or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.
(5) *Computing penalty amount.* The Government will compute the interest penalty in accordance with Office of Management and Budget prompt payment regulations at 5 CFR part 1315.
(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance is deemed to occur constructively on the 7th day (unless otherwise specified in this contract) after the Contractor delivers the supplies or performs the services in accordance with the terms and conditions of the contract, unless there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. If actual acceptance occurs within the constructive acceptance period, the Government will base the determination of an interest penalty on the actual date of acceptance. The constructive acceptance requirement does not, however, compel Government officials to accept supplies or services, perform contract administration functions, or make payment prior to fulfilling their responsibilities.
(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.
(6) *Discounts for prompt payment.* The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.
(7) *Additional interest penalty.*
(i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--
(A) The Government owes an interest penalty of $1 or more;
(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and
(C) The Contractor makes a written demand to the designated payment office for additional penalty payment, in accordance with paragraph (a)(7)(ii) of this clause, postmarked no later than 40 days after the invoice amount is paid.
(ii)
(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall --

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;
(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and
(3) State that payment of the principal has been received, including the date of receipt.
(B) If there is no postmark or the postmark is illegible--
(1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or
(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.
(iii) The additional penalty does not apply to payments regulated by other Government regulations (*e.g.*, payments under utility contracts subject to tariffs and regulation).
(b) *Contract financing payments.* If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.
(c) *Fast payment procedure due dates.* If this contract contains the clause at 52.213-1, Fast Payment Procedure, payments will be made within 15 days after the date of receipt of the invoice.
(d) *Overpayments.* If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall—
(1) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the—
(i) Circumstances of the overpayment (*e.g.*, duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);
(ii) Affected contract number and delivery order number if applicable;
(iii) Affected contract line item or subline item, if applicable; and
(iv) Contractor point of contact.
(2) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER-CENTRAL CONTRACTOR REGISTRATION (OCT 2003)

(a) Method of payment.

(1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either—

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) *Contractor's EFT information.* The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) *Mechanisms for EFT payment.* The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR Part 210.

(d) *Suspension of payment.* If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Liability for uncompleted or erroneous transfers.

(1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for—

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and—

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(f) *EFT and prompt payment.* A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(g) *EFT and assignment of claims.* If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register separately in the CCR database and shall be paid by EFT in accordance with the terms of this clause. Notwithstanding any other requirement of this contract, payment to an ultimate recipient other than the Contractor, or a

financial institution properly recognized under an assignment of claims pursuant to Subpart 32.8, is not permitted. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(h) *Liability for change of EFT information by financial agent.* The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(i) *Payment information.* The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

52.233-1 DISPUTES -- ALTERNATE I (DEC 1991) (JUL 2002)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The Contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding $100,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor."

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the offer.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

52.243-1 CHANGES - FIXED-PRICE -- ALTERNATE I (APR 1984) (AUG 1987)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in any one or more of the following:

(1) Description of services to be performed.

(2) Time of performance (*i.e.,* hours of the day, days of the week, etc.).

(3) Place of performance of the services.

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

52.249-2 Termination for Convenience of the Government (Fixed-Price). (May 2004)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government—

(i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and

(ii) The completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in paragraph (b)(6) of this clause; *provided*, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in paragraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by the Government (or sold or acquired under paragraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of—

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under paragraph (g)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (g)(2)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including—

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the

Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted—

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and

expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.244-2 Subcontracts (June 2007)

(a) *Definitions*. As used in this clause—

"Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contractor a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds—

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

ALL SUBCONTRACTS.

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting—

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (b), (c), or (d) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination—

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this

contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

52.249-8 DEFAULT (FIXED-PRICE SUPPLY AND SERVICE) (APR 1984)

(a)(1) The Government may, subject to paragraphs (c) and (d) of this clause, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to—

(i) Deliver the supplies or to perform the services within the time specified in this contract or any extension;

(ii) Make progress, so as to endanger performance of this contract (but see paragraph (a)(2) of this clause); or

(iii) Perform any of the other provisions of this contract (but see paragraph (a)(2) of this clause).

(2) The Government's right to terminate this contract under subdivisions (a)(1)(ii) and (1)(iii) of this clause, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure.

(b) If the Government terminates this contract in whole or in part, it may acquire, under the terms and in the manner the Contracting Officer considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the Government for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

(c) Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, and (9) unusually severe weather. In each instance the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

(d) If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Contractor to meet the required delivery schedule.

(e) If this contract is terminated for default, the Government may require the Contractor to transfer title and deliver to the Government, as directed by the Contracting Officer, any (1) completed supplies, and (2) partially completed supplies and materials, parts, tools, dies, jigs,

fixtures, plans, drawings, information, and contract rights (collectively referred to as "manufacturing materials" in this clause) that the Contractor has specifically produced or acquired for the terminated portion of this contract. Upon direction of the Contracting Officer, the Contractor shall also protect and preserve property in its possession in which the Government has an interest.

(f) The Government shall pay contract price for completed supplies delivered and accepted. The Contractor and Contracting Officer shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The Government may withhold from these amounts any sum the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

(g) If, after termination, it is determined that the Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(h) The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

SECTION J - LIST OF ATTACHMENTS

WD 05-2103 (Rev.-8) was first posted on www.wdol.gov on 06/02/2009

****

REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Shirley F. Ebbesen, Director — Division of Wage Determinations

Wage Determination No.: 2005-2103
Revision No.: 8
Date Of Revision: 05/26/2009

States: District of Columbia, Maryland, Virginia

Area: District of Columbia Statewide
Maryland Counties of Calvert, Charles, Frederick, Montgomery, Prince George's, St Mary's
Virginia Counties of Alexandria, Arlington, Fairfax, Falls Church, Fauquier, King George, Loudoun, Prince William, Stafford

SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

In accordance with FAR 4.1201, representations and certifications shall be entered through www.bpn.gov using the ORCA system and updated annually.

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (FEB 2009)

(a) (1) The North American Industry classification System (NAICS) code for this acquisition is 541519.

(2) The small business size standard is $25.0 Million.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) Clause at 52.204-7, Central Contractor Registration, is included in this solicitation, so paragraph (d) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

[ ] (i) Paragraph (d) applies.

[ ] (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in ORCA are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed $100,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the clause at 52.204-7, Central Contractor Registration.

(iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(v) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vi) 52.214-14, Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(vii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(viii) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(ix) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(x) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xi) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xii) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA–designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xiv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA–designated items.

(xv) 52.225-2, Buy American Act Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xvi) 52.225-4, Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternate I, and Alternate II) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than $25,000, the basic provision applies.

(B) If the acquisition value is $25,000 or more but is less than $50,000, the provision with its Alternate I applies.

(C) If the acquisition value is $50,000 or more but is less than $67,826, the provision with its Alternate II applies.

(xvii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xviii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan—Certification.

(xix) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to—

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(d) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at http://orca.bpn.gov. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

DUE DILIGENCE AND INFORMATION ON THE CONTRACT - By submitting a Proposal, the Offeror represents and warrants that s/he has studied and is thoroughly familiar with the requirements and specifications of this solicitation in its entirety. This includes the documents attached to the Request for Proposal (RFP), with all current equipment, labor, material market conditions, and applicable laws, such that the Offeror accepts responsibility for and is prepared to execute and shall completely fulfill any obligations under this solicitation/contract. The Offeror also accepts that s/he will not make any claim for or have any right to damages because of any misinterpretation or misunderstanding of the solicitation/contract, or because of any information which is known or should have been known to the Offeror.

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (APR 2008)

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offer or's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet, Inc. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same concern.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number—

(i) Via the internet at http://fedgov.dnb.com/webform or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Trade style, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

52.215-1 INSTRUCTIONS TO OFFERORS-COMPETITIVE ACQUISITION (JAN 2004)

(a) *Definitions.* As used in this provision—

"Discussions" are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

"In writing," "writing," or "written" means any worded or numbered expression that can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

"Proposal modification" is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

"Proposal revision" is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

"Time," if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) *Amendments to solicitations.* If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).

(c) Submission, modification, revision, and withdrawal of proposals.

(1) Unless other methods (*e.g.,* electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

(2) The first page of the proposal must show—

(i) The solicitation number;

(ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

(iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offer or's behalf with the Government in connection with this solicitation; and

(v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(3) Submission, modification, revision, and withdrawal of proposals.

(i) Offerors are responsible for submitting proposals, and any modifications or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.

(ii)(A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and—

(1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(3) It is the only proposal received.

(B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.

(5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.

(6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

(7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

(8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

(d) *Offer expiration date.* Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).

(e) *Restriction on disclosure and use of data.* Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall—

(1) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [*insert numbers or other identification of sheets*]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(f) Contract award.

(1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and sub factors in the solicitation.

(2) The Government may reject any or all proposals if such action is in the Government's interest.

(3) The Government may waive informalities and minor irregularities in proposals received.

(4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offer or's initial proposal should contain the offer or's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

(5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.

(6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.

(7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.

(8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.

(10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.

(11) If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:

(i) The agency's evaluation of the significant weak or deficient factors in the debriefed offer or's offer.

(ii) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.

(iii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.

(iv) A summary of the rationale for award.

(v) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

(vi) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm fixed price type of contract resulting from this solicitation.

52.233-2 SERVICE OF PROTEST (SEPT 2006) - DEP. OF INT. (DEV.) (JUL 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Bureau of Land Management, Oregon State Office, Branch of Procurement Management, 333 S.W. First Avenue, Portland, Oregon, 97204.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(c) A copy of the protest served on the Contracting Officer shall be simultaneously furnished by the protester to the Department of the Interior Assistant Solicitor for Procurement and Patents, 1849 C Street, NW, Room 6511, Washington, D.C. 20240.

1452.215-71 USE AND DISCLOSURE OF PROPOSAL INFORMATION (APR 1984)

(a) Definitions. For the purposes of this provision and the Freedom of Information Act (5 U.S.C. 552), the following terms shall have the meaning set forth below:

(1) "Trade Secret" means an unpatented, secret, commercially valuable plan, appliance, formula, or process, which is used for making, preparing, compounding, treating or processing articles or materials, which are trade commodities.

(2) "Confidential commercial or financial information" means any business information (other than trade secrets) which is exempt from the mandatory disclosure requirement of the

Freedom of Information Act, 5 U.S.C. 552. Exemptions from mandatory disclosure which may be applicable to business information contained in proposals include exemption (4), which covers "commercial and financial information obtained from a person and privileged or confidential," and exemption (9), which covers "geological and geophysical information, including maps, concerning wells."

(b) If the offeror, or its subcontractor(s), believes that the proposal contains trade secrets or confidential commercial or financial information exempt from disclosure under the Freedom of Information Act, (5 U.S.C. 552), the cover page of each copy of the proposal shall be marked with the following legend:

"The information specifically identified on pages -- of this proposal constitutes trade secrets or confidential commercial and financial information which the offeror believes to be exempt from disclosure under the Freedom of Information Act. The offeror requests that this information not be disclosed to the public, except as may be required by law. The offeror also requests that this information not be used in whole or part by the Government for any purpose other than to evaluate the proposal, except that if a contract is awarded to the offeror as a result of or in connection with the submission of the proposal, the Government shall have the right to use the information to the extent provided in the contract."

(c) The offeror shall also specifically identify trade secret information and confidential commercial and financial information on the pages of the proposal on which it appears and shall mark each such page with the following legend: "This page contains trade secrets or confidential commercial and financial information which the offeror believes to be exempt from disclosure under the Freedom of Information Act and which is subject to the legend contained on the cover page of this proposal."

(d) Information in a proposal identified by an offeror as trade secret information or confidential commercial and financial information shall be used by the Government only for the purpose of evaluating the proposal, except that: (i) If a contract is awarded to the offeror as a result of or in connection with submission of the proposal, the Government shall have the right to use the information as provided in the contract, and (ii) if the same information is obtained from another source without restriction it may be used without restriction.

(e) If a request under the Freedom of Information Act seeks access to information in a proposal identified as trade secret information or confidential commercial and financial information, full consideration will be given to the offer or's view that the information constitutes trade secrets or confidential commercial or financial information. The offeror will also be promptly notified of the request and given an opportunity to provide additional evidence and argument in support of its position, unless administratively unfeasible to do so. If it is determined that information claimed by the offeror to be trade secret information or confidential commercial or financial information is not exempt from disclosure under the Freedom of Information Act, the offeror will be notified of this determination prior to disclosure of the information.

(f) The Government assumes no liability for the disclosure or use of information contained in a proposal if not marked in accordance with paragraphs (b) and (c) of this provision. If a request

under the Freedom of Information Act is made for information in a proposal not marked in accordance with paragraphs (b) and (c) of this provision, the offeror concerned shall be promptly notified of the request and given an opportunity to provide its position to the Government. However, failure of an offeror to mark information contained in a proposal as trade secret information or confidential commercial or financial information will be treated by the Government as evidence that the information is not exempt from disclosure under the Freedom of Information Act, absent a showing that the failure to mark was due to unusual or extenuating circumstances, such as a showing that the offeror had intended to mark, but that markings were omitted from the offer or's proposal due to clerical error.

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REF. (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer in lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Upon request, the Contracting Officer will make their full text available. Also, the full text of a solicitation provision may be accessed electronically at this address: www.arnet.gov/far

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any Department of the Interior Acquisition Regulation (48 CFR Chapter 14) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

L.1.0 GENERAL

Proposals which merely offer to conduct a program in accordance with the requirements of the Government's statement of work will be considered technically unacceptable to this request and will be excluded from the competitive range. The offer must submit a definitive proposal to accomplish the requirements as stated in the RFP. The technical proposal should not contain any price information. Proposals shall be submitted in two parts consisting of (1) a technical proposal and (2) a price proposal. Each part shall be separate and complete in itself so that evaluation of one may be accomplished independently of the other. Sufficient and detailed information must be presented in the technical proposal to enable the Government to evaluate the proposal fully in accordance with the Evaluation and Award Criteria contained in Section M. The Government is not obligated to ask for additional information and in the absence of appropriate information; the proposal will be rated deficient.

L.2.0 PROPOSAL SUBMITTAL

L.2.1 L.2.1 Electronic Submittal - Proposals must be submitted electronically and must be in a printable format. Pricing needs to be a separate file. Submissions shall be made to the Contracting Officer: nsloanhoffer@osmre.gov and the contract specialist: tmeeker@osmre.gov.

In accordance with FAR 4.1201, representations and certifications shall be entered through www.bpn.gov using the ORCA system and updated annually.

TECHNICAL PROPOSAL

Interested offerors shall submit their proposals in the following format:

TECHNICAL CAPABILITIES

The proposal shall show the offeror's application of expert knowledge of project management and environment impact development, quality assurance, and subcontractor management. If the offeror lacks expert knowledge in one or more of the areas, the proposal will show that the offeror has established partnerships or subcontracts with other individuals or organizations to supply the missing expertise.

SUBCONTRACTING PLAN

The Offeror shall submit a subcontracting plan which includes a detailed listing of subcontractors and their specific disciplines that will support the development of the EIS. Include by name – experience, past performance, capabilities, qualifications and certifications.

The plan shall include how the contractor will address organizational and other conflicts of interest for subcontractors or persons who are consultants or who work for organizations with potential conflicts.

PRICE

Completed Form SF 1499 and Section B.

PAST PERFORMANCE

A. List of three (3) references on comparable contracts, where your company was the prime contractor, include:
   1. Name of contract.
   2. Agency or entity issuing contract.
   3. Name and current phone number of contact.
   4. Dates of contract period of performance.
   5. Type of contract and estimated value.

6. Contract/project description

2. Past contract performance information, including:
   1. Brief summary of any defaults or issues or accolades.
   2. Reworks required.

SECTION M - EVALUATION AND AWARD FACTORS

52.217-5 Evaluation of Options. (July 1990)
Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

M.1.0 EVALUATION AND AWARD FACTORS

The OSM intends to make a single award to the responsive and responsible firm whose proposal is most advantageous to the OSM, price and non-price related factors will be considered. Proposals will be evaluated according to all of the criteria stated below. An objective evaluation will be performed on each offer or's proposal based on the information furnished and subsequent information gathered after proposals are received, such as responses from references or data from past performance databases.

M.2.0 EVALUATION FACTORS

Proposals shall be prepared in accordance with Technical Proposal Preparation Instructions, as set forth in Section L. The following major factors and sub factors shall be used in the evaluation of the proposals.

M.2.1 Technical Capabilities

a. The collective qualifications, experience, capabilities and quality of past performance of the consultants or subcontractors proposed for the Offeror's team; the appropriate proportion of work to be performed by each consultant or subcontractor, identified by name and experience, qualification, capabilities and quality of past performance of the consultant or subcontractor proposed to perform the required tasks.

b. The Offeror shall submit a subcontracting plan which includes a detailed listing of subcontractors and their specific disciplines that will support the development of the EIS.

c. Demonstrated ability of the understanding of the PWS and tasks.

M.2.2 Past Performance –

The proposal shall show the offeror's application of expert knowledge of project management and environment impact development, quality assurance, and subcontractor management. If the offeror lacks expert knowledge in one or more of the areas, the technical proposal will show that the offeror has established partnerships with other individuals or organizations to supply the missing expertise.

The proposal shall describe the offeror's relevant past and current experience in projects of comparable size, complexity, and similarity to the objectives of this requirement.

1. A list of the contracts completed during the past three years and all contracts currently in progress for services comparable to the solicitation. Degree of experience in projects comparable to this solicitation, past performance on similar projects in terms of schedule adherence, planning and implementation, and record of the ability of the organization to provide services in a timely and satisfactory a manner. Reference checks demonstrate favorable past performance on comparable contracts completed including:

a. Consistent, positive references and reputation of the company and key personnel demonstrating quality outputs and performance.
b. Record of minimal notices of non-compliance and re-work on past projects, minimal contract defaults.
c. Consistently demonstrated a commitment to delivering quality products or services.
d. Consistently demonstrated a commitment to timeliness of performance.
e. Consistently demonstrated commitment to good business relationships with their clients.

2. Include the following information:

   a. Name of Contracting Organization
   b. Contract Number (for subcontracts, provide the prime contract number and subcontract number)
   c. Contract Type
   d. Total Contract Value
   e. Description of Requirement
   f. Contracting Officer's Name and Telephone Number
   g. Project Officer's Name and Telephone Number

3. Each offeror will be evaluated on their performance under existing and prior contracts for similar services. Performance information will be used for both responsibility determinations and as an evaluation factor against which offerors' relative rankings will be compared to assure the greatest value to the Government. The Government will focus on information that demonstrates quality of performance relative to the size and complexity of the acquisition under consideration. The

Government is not required to contact all references provided by the offeror, References other than those identified by the offeror may be contacted by the Government to obtain additional information that will be used in the evaluation of an offer or's past performance.

M.2.3 PRICE Price reasonableness will be determined through price analysis in accordance with FAR 15.402. A comparison of proposed prices received in response to the solicitation. The proposed price between offers with substantially equal technical and past performance ratings will be a major factor in the selection of a proposal for award.

M.3.0 OTHER CRITERIA

The Contracting Officer shall consider several factors in the selection process which are important, but have not been assigned specific points or values, such as:

a. Proposals must respond to all the requirements of the Request for Proposal (RFP) and must include all information specifically required in all sections of the RFP.

b. Award will not be made to any offeror unless agreement can be reached on all general and special provisions.

M.4.0 CONTRACT AWARD

M.4.1 CONTRACT AWARD FACTORS

For evaluation purposes only, award will be based on the total of all listed items for the base year plus the total value of the option years. The Government will make award on an all-or-none basis in accordance with Section L.

Award will be made on a best-value basis. The Government's objective is to obtain the highest quality considered necessary to achieve the objectives with a realistic and reasonable price. Evaluation factors as a whole are more important than price. Therefore, award to a technically superior, higher-priced offeror may be made in lieu of a lower-rated, lower-priced offeror if the technical advantage merits the higher price within funds available. Award will be made on an all-or-none basis. Any unexplained inconsistency within the proposal which raises a fundamental issue of the offer or's understanding of the nature and scope of work required and of the financial ability to perform the contract, may cause the proposal to be excluded.

The Government intends to award a contract resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and sub factors in the solicitation.

The Government may reject any or all proposals if such action is in the Government's interest.

The Government may waive informalities and minor irregularities in proposals received.

The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offer or's initial proposal should contain the offer or's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

M.4.2 This request does not commit the Government to award a contract or to pay any costs incurred in developing Contractor's proposal.