

Documents responsive to the April 1, 2011, request from Chairman Hastings for documents related to the Office of Surface Mining, Stream Buffer Zone Rule

Volume: 00027094_Hastings_003

	Document Name	Pages	Document Date	Document Type	Document Title	Request1
1	OSM-WDC-B07-00001-000002	2	20110103	EML	EIS Team email (Uranowski) on Production Shift Methodology	<input checked="" type="checkbox"/>
2	OSM-WDC-B07-00001-000003	2	20110103	EML	EIS TEAm email on Production Shift Methodology	<input checked="" type="checkbox"/>
3	OSM-WDC-B07-00001-000010	3	20110131	EML	Wyoming's comments on Chapter 4 (Paul Ehret)	<input checked="" type="checkbox"/>
4	OSM-WDC-B07-00001-000047	14	20110126	EML	Craynon -Transmittal Utah's comments SPREIS Chapter 4	<input checked="" type="checkbox"/>
5	OSM-WDC-B07-00001-000048	6	20101104	EML	Dana Dean Utah's comments Chapter 3 Socioeconomics	<input checked="" type="checkbox"/>
6	OSM-WDC-B07-00001-000056	3	XXXXXXXXXX	OTH	Randy Johnson (AL) comments on Ch. 4 of the draft EIS	<input checked="" type="checkbox"/>
7	OSM-WDC-B07-00002-000007	5	20101109	EML	Ehret to Means -VA comments on EIS Ch. 3.6	<input checked="" type="checkbox"/>
8	OSM-WDC-B07-00002-000008	13	20101115	EML	Fw: Utah's EIS Ch. 3 comments (Ehret copy)	<input checked="" type="checkbox"/>
9	OSM-WDC-B07-00002-000020	4	20101116	EML	Ehret Fw: Draft EIS Review - Ch. 3, Section 3.6	<input checked="" type="checkbox"/>
10	OSM-WDC-B07-00002-000041	4	20110125	EML	Craynon transmittal SPR Draft EIS Chapter 4 review from Dave Clark	<input checked="" type="checkbox"/>
11	OSM-WDC-B07-00002-000045	26	XXXXXXXXXX	OTH	Utah SPR Draft EIS Ch. 4 comments	<input checked="" type="checkbox"/>
12	OSM-WDC-B08-00001-000001	6	20101012	EML	Ehret - Transmittal Indiana Chapter 2 EIS comments	<input checked="" type="checkbox"/>
13	OSM-WDC-B08-00001-000002	4	20101101	EML	Craynon distribution of Eaton's comments on Section 3.19 of the draft EIS	<input checked="" type="checkbox"/>
14	OSM-WDC-B08-00001-000005	21	20101101	EML	Dana Dean - Utah's comments EIS Chapter 3	<input checked="" type="checkbox"/>
15	OSM-WDC-B08-00001-000011	7	20110126	EML	Fw: Ch. 4 EIS comments from the KY Dir. of Natural Resources	<input checked="" type="checkbox"/>

	Document Name	Pages	Document Date	Document Type	Document Title	Request1
16	OSM-WDC-B08-00001-000028	12	20101101	EML	Craynon Distribution of VA's comments on Ch. 3 of the draft EIS	<input checked="" type="checkbox"/>
17	OSM-WDC-B08-00001-000040	4	20101102	EML	Craynon-Transmittal ODNr comments EIS Chapter 3 - Mike Dillman/Sue Grant	<input checked="" type="checkbox"/>
18	OSM-WDC-B08-00001-000041	6	20101101	EML	Craynon-Transmittal Virginia's comments OSM SPREIS Chapter 3	<input checked="" type="checkbox"/>
19	OSM-WDC-B08-00001-000042	4	20101012	EML	Craynon transmittal WV's comments EIS	<input checked="" type="checkbox"/>
20	OSM-WDC-B08-00001-000061	6	XXXXXXXXXX	OTH	Mike Dillman (OH) comments on Ch. 4 of the draft EIS	<input checked="" type="checkbox"/>
21	OSM-WDC-B08-00001-000062	8	XXXXXXXXXX	OTH	Bruce Stevens (IN) comments on Ch. 4 of the draft EIS	<input checked="" type="checkbox"/>
22	OSM-WDC-B08-00001-000065	3	XXXXXXXXXX	OTH	Dave Clark (NM-MMD) comments on Ch. 4 of the draft EIS	<input checked="" type="checkbox"/>
23	OSM-WDC-B08-00001-000074	4	20110125	EML	Craynon Distribution of Dave Clark's comments on Ch. 4 of the draft EIS	<input checked="" type="checkbox"/>
24	OSM-WDC-B08-00001-000075	4	20110131	EML	Ehret Distribution of Alabama's comments on Ch. 4 of the draft EIS	<input checked="" type="checkbox"/>
25	OSM-WDC-B08-00001-000078	15	20101012	EML	Lambert Virginia's comments Chapter II	<input checked="" type="checkbox"/>
26	OSM-WDC-B08-00001-000079	6	20110126	EML	Wahrer- transmittal Kentucky's comments Chapter 4 EIS	<input checked="" type="checkbox"/>
27	OSM-WDC-B08-00001-000089	4	20101101	EML	Craynon Fw of WV's comments on Ch. 3 of the draft EIS	<input checked="" type="checkbox"/>
28	OSM-WDC-B08-00001-000094	15	20101012	EML	Ehret Fw of VA comments on Ch. 2 of the EIS	<input checked="" type="checkbox"/>
29	OSM-WDC-B08-00003-000003	12	20110126	COR	Div of Mining-WVA Comments-Chapter 4 Draft EIS SPR	<input checked="" type="checkbox"/>
30	OSM-WDC-B08-00003-000007	1	20110120	EML	Calle Remarks on Ch.4 - No Action Alternative	<input checked="" type="checkbox"/>
31	OSM-WDC-B08-00003-000027	1	20110110	EML	EIS Team	<input checked="" type="checkbox"/>
32	OSM-WDC-B08-00003-000033	7	20110126	EML	Craynon transmittal Scanned from MFP-07124681	<input checked="" type="checkbox"/>
33	OSM-WDC-B08-00003-000037	1	20110301	EML	Calle Revised EIS under Alternative 2 is this correct?	<input checked="" type="checkbox"/>
34	OSM-WDC-B08-00003-000044	3	20110302	EML	Winters Mine Types by Region	<input checked="" type="checkbox"/>

	Document Name	Pages	Document Date	Document Type	Document Title	Request1
35	OSM-WDC-B08-00003-000046	1	20110301	EML	Winters revised EIS under alternative 2 is this correct?	<input checked="" type="checkbox"/>
36	OSM-WDC-B08-00003-000047	1	20110301	EML	Ehret Revised EIS under Alternative 2 is this correct?	<input checked="" type="checkbox"/>
37	OSM-WDC-B08-00003-000058	1	20100910	EML	EIS Team Email Re. PKS Demand for 90-Day Extension	<input checked="" type="checkbox"/>

Total Pages: 239

From: [Uranowski, Lois J.](#)
To: [Varvell, Stephanie L.](#); [Winters, William R. "Bill"](#)
Cc: [Craynon, John](#)
Subject: RE: Production Shift Methodology
Date: Monday, January 03, 2011 2:29:15 PM

I do not believe the OSM is no longer agreeing with the "validation" of the estimated production shifts. The step-by-step explanation of their process uses the term "Informal Elicitation Process"; one premise of which is that the basic assumptions are developed and are well understood. Without those, there is no validation. Or elicitation. I do not believe that the assumptions made have been explained fully and need further clarification before we can accept them.

The three spreadsheets that we are in need of explanations are the Impact Model, Mining Cost Impact and Mining Impact Model. If the contractor can give us a tab by tab explanation of the purpose, rationale and then give us a chance to ask questions about these numbers, I think that would be helpful.

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

From: Varvell, Stephanie L.
Sent: Monday, January 03, 2011 10:49 AM
To: Winters, William R. "Bill"; Uranowski, Lois J.
Cc: Craynon, John
Subject: FW: Production Shift Methodology

Could you give me some help here?

From: John Maxwell [<mailto:JMaxwell@polukaiservices.com>]
Sent: Monday, January 03, 2011 10:16 AM
To: Varvell, Stephanie L.; Craynon, John
Cc: Jose Sosa; Mike Stanwood; J. Steven Gardner; jmorgan@morganworldwide.com; Liz Edmondson; Jenkins, Josh; Shortelle, Ann; David Bell
Subject: Production Shift Methodology

Stephanie,

We understand that OSM has the need to understand the metrics/methods of estimating production shifts. The process has not changed from the methods proposed and accepted at the last November Lexington meetings. It would help us to prepare for tomorrow's meeting if OSM can

provide specific questions to which our team can respond. The PKS team is still working to find alternative validation in lieu of industry input that OSM had previously agreed to and has since determined not to be acceptable.

Thanks for your input.

John



John R. Maxwell
Senior Environmental Scientist
Polu Kai Services
352.258.1045

"For Official Use Only – Deliberative Process Material"

From: [Winters, William R. "Bill"](#)
To: [Varvell, Stephanie L.](#); [Uranowski, Lois J.](#)
Cc: [Craynon, John](#)
Subject: RE: Production Shift Methodology
Date: Monday, January 03, 2011 11:14:22 AM

I'll not get to detailed comments today.

A few to start with:

Step-step explanation pdf document, step 1 table – every number in the table.
Impact model spreadsheet, "Modif Production (Tons & %)+RES" tab – every number in columns B, C, D
Mining cost Impact spreadsheet, Surface cost tab – additional baseline data collection \$500,000 for every permit, material damage avg bond cost, cells F64: F70, additional monitoring cost of \$250,000 per permit, cells F 130 – 136, additional bond release cost cell F 157, F 172

Plus the corresponding areas in the "Underground cost" tab.

This should give them a start.

From: Varvell, Stephanie L.
Sent: Monday, January 03, 2011 10:49 AM
To: Winters, William R. "Bill"; Uranowski, Lois J.
Cc: Craynon, John
Subject: FW: Production Shift Methodology

Could you give me some help here?

From: John Maxwell [mailto:JMaxwell@polukaiservices.com]
Sent: Monday, January 03, 2011 10:16 AM
To: Varvell, Stephanie L.; Craynon, John
Cc: Jose Sosa; Mike Stanwood; J. Steven Gardner; jmorgan@morganworldwide.com; Liz Edmondson; Jenkins, Josh; Shortelle, Ann; David Bell
Subject: Production Shift Methodology

Stephanie,

We understand that OSM has the need to understand the metrics/methods of estimating production shifts. The process has not changed from the methods proposed and accepted at the last November Lexington meetings. It would help us to prepare for tomorrow's meeting if OSM can provide specific questions to which our team can respond. The PKS team is still working to find alternative validation in lieu of industry input that OSM had previously agreed to and has since determined not to be acceptable.

Thanks for your input.

John



John R. Maxwell
Senior Environmental Scientist
Polu Kai Services
352.258.1045

"For Official Use Only – Deliberative Process Material"

Sims, Pam

From: Ehret, Paul
Sent: Monday, January 31, 2011 3:01 PM
To: Coker, Jeffrey A. "Jeff"; Craynon, John; Calle, Marcelo; Means, Brent P.
Subject: FW: Wyoming's Comments on Chapter 4

From: Ogle, Kathy [<mailto:KOgle@wyo.gov>]
Sent: Wednesday, January 26, 2011 10:57 AM
To: Ehret, Paul
Cc: Corra, John; McKenzie, Don; Bilbrough, Carol
Subject: Wyoming's Comments on Chapter 4

Paul,

Below are Wyoming's comments on Chapter 4. They will also be sent via a letter from John Corra, our Director. However, he is at a legislative hearing this morning. I will also post these to the SharePoint Site.

Kathy Muller Ogle

We would like to take the opportunity to make limited, but important comments on the pre-draft Chapter 4 of the OSM EIS on the proposed Stream Protection Rule. On January 18, 2011, Wyoming requested a deadline extension for the review of such a lengthy, complex, and important document. We have not received a response to our request which was delivered both by mail and by email. Since we had not received a response, we are making only general comments on the limited sections that we had sufficient time to review. Two overarching comments are that the document is hard to evaluate and that the analysis is insufficient for a document of this importance.

P4-195 Lines 14-17; Alternative 5 (Preferred Alternative) – Material Damage

The provision that would not allow "material damage to the hydrologic balance" at any time during the operation and mitigation or remediation would not be allowed if the potential for material damage was demonstrated in the permit application would have significant impacts of coal mining in Wyoming. The material damage criteria are applied to both surface and groundwater in our state. In western reclamation, a backfill aquifer is developed and early in its maturation the dissolved solids concentration is often elevated above standards. However, over time those elevated concentrations decrease. This is a process that is documented in scientific research and by monitoring data collected over 25 years. Impact of this approach by OSM is SIGNIFICANT and revision is needed. The recommendation is to leave the definition of material damage to individual programs.

Throughout the document: Shift of coal production and lack of analysis of impact to electric consumers

The underlying assumption appears to be that any regulations will simply shift coal production from region to region. The document (p 4-198 and in other places) indicates that the "Northern Rocky Mountains and Great Plains", the region that includes Wyoming, will see a 15 percent increase in coal production. However, the underlying assumption that coal demand will simply transfer from one area to another is flawed. First, the markets for coal in different parts of the US are not interchangeable. Second, anything that increases the price of coal makes natural gas a stronger competitor for many electrical production markets. Therefore, increased regulation has the potential to move the energy demand from coal to natural gas, not necessarily to other coal regions. Consequently, the analysis of this issue should include the potential drop in coal production due to price increases from these regulations. Such a price increase could make natural gas a more competitive fuel

especially for electrical generation. The economic impact on the electric consumer should be addressed in this national programmatic EIS.
A new comprehensive analysis and major revision is needed.

Throughout the document: The statement that a 1.7% net national coal production increase (P 4-199 and in other places in the document) will result from these new regulations.

The basis for this result needs to be supported in detail by hard analysis of the markets for coal, not by some simple division of coal production and BTUs.
A new comprehensive analysis and major revision is needed.

We have many other individual comments throughout the document, but given the timeline imposed by OSM we were unable to complete our review.

Kathy Muller Ogle
Geological Supervisor
WyDEQ/LQD
122 West 25th Street
Herschler Building 3-W
Cheyenne, Wyoming 82002
(307) 777-7132
kmogle@wyo.gov

E-Mail to and from me, in connection with the transaction of public business, is subject to the Wyoming Public Records Act and may be disclosed to third parties.

E-Mail to and from me, in connection with the transaction of public business, is subject to the Wyoming Public Records Act and may be disclosed to third parties.

Allen, Melissa M

From: Craynon, John
Sent: Wednesday, January 26, 2011 11:59 AM
To: Ehret, Paul; Calle, Marcelo; Means, Brent P.; Coker, Jeffrey A. "Jeff"; Holmes, Christopher J
Subject: FW: SPR EIS Chapter 4 - Utah's Comments
Attachments: SPREISChapter4_UDOGMcompiled.DOCX

-----Original Message-----

From: Dana Dean [<mailto:DANADEAN@utah.gov>]
Sent: Wednesday, January 26, 2011 11:48 AM
To: Craynon, John
Cc: Ehret, Paul; Daron Haddock; Ingrid Campbell; Jim Smith; John Baza; Kevin Lundmark; Peter Brinton
Subject: SPR EIS Chapter 4 - Utah's Comments

Mr. Craynon,

Please find the State of Utah's comments regarding Chapter 4 of the Stream Protection Rule EIS.

We would again like to voice our frustrations regarding the lack of time to properly analyze this information, and the lack of feedback regarding OSM's use of comments on previous chapters. Much of this chapter seems to have either been written before our comments were given on Chapter 3, or our comments were ignored. We hope that Monday's reconciliation meeting will be fruitful and will ease some of the concerns and frustrations we are all experiencing in this process.

Please let me know if you would like any further information regarding our comments.

Thank you,

Dana Dean, P.E.
Associate Director - Mining
Utah Division of Oil, Gas, and Mining
(801) 538-5320
danadean@utah.gov

Comment Form

Title of Document	SPR EIS - Chapter 4 Comments
Contact Information	
Name	State of Utah (c/o Dana Dean or Peter Brinton)
Telephone Number	801-538-5320 or 801-538-5258
Email	danadean@utah.gov or peterbrinton@utah.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
General			<p>Following these general comments, please see DOGM's more specific comments included in the following pages.</p> <p>Since the Cooperating Agencies have not yet been provided with a clear summary of the Proposed Action and the Alternatives (such as a clear, revised Chapter 2), we are unable to provide a complete and accurate evaluation of the potential impacts of the Proposed Action and Alternatives. Until this information is available, together with clear, revised Chapter 3 correctly documenting the affected environment, the stated results of the Proposed Action and Alternatives will be questionable.</p>		
General			<p>Due to time constraints, this review of Chapter 4 has been limited to cover parts of Sections 4.0 (introductory material), 4.5 (Preferred Alternative) and 4.7 (methodology). An in-depth review of all of the reviewed sections was not possible, given time constraints. Review of other sections was generally performed opportunistically, or when required in order to understand references in the sections which were reviewed in detail.</p>		
General			<p>In addition to the following comments, Utah wishes to point out some significant concerns with assumptions and methods used to develop this EIS, all of which lead us to question the feasibility of developing an acceptable EIS of a nationwide scope in such a short time period. We apologize that we were unable to clearly identify some of these issues sooner, but some of these issues have only come to light while reviewing Chapter 4.</p>		
General			<p>This analysis does not adequately consider future coal</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>production in the Colorado Plateau region. There are future coal production areas in Utah or possibly other Colorado Plateau states that are not now active, but which are <u>expected to be active</u> during the time period in which the rules will actually be implemented. Some of these areas have been omitted entirely from the EIS scope. Most of these reserves are federal coal reserves, and some may be surface mined. We can provide additional info as requested.</p>		
General			<p>One of our general conclusions regarding the current Chapter 4 is that it cannot accurately describe foreseeable impacts to the Colorado Plateau coal-producing region because the scope used to identify the Affected Environment upon which Impact Analysis is based is incorrect, and the Proposed Action is vague. DOGM recognizes significant deficiencies in its review of sections addressing Utah. We expect that similar deficiencies of important information to exist in other Colorado Plateau areas not reviewed in as much detail. DOGM believes that the decision to analyze <u>nationwide</u> rule changes over such a short period of time has resulted (thus far) an inaccurate and inadequate document overall.</p>		
General			<p>It is noted that royalties from the mining of federal and state coal have been included in the socioeconomic analysis in Chapter 4 of the EIS. Thank you. This is an important addition to the EIS.</p> <p>In our opinion, the loss of federal and state-owned coal as a government asset has not been given enough attention in this NEPA analysis. In the Colorado Plateau region, entire coal fields with primarily federal coal reserves do not fall within the current scope of the EIS.</p>		
General			<p>The Production Shift Mathematical Model is not included with the draft document, nor are the model inputs and outputs provided for the five alternatives analyzed. The model must be provided in order for cooperating agencies to comment adequately on the draft statement's analysis.</p>		
General			<p>The public impact of potential changes to the cost of electricity is also a significant socioeconomic factor also not been discussed in this Chapter or in the EIS.</p>		
			<p>While some Chapter 3 comments from the cooperating agencies have been considered in the development of Chapter</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>4 (such as a basic analysis of royalties on federal coal), it appears that some Chapter 4 conclusions about impacts may have been prepared prior to the incorporation of Cooperating Agencies' Chapter 3 comments with additional information about the affected environment (Chapter 3).</p> <p>It is understandable that a preliminary analysis of projected impacts would be helpful - perhaps needed - in starting to develop some of the general content of Ch.4. But before the revised draft of the EIS will be ready for public scrutiny, the conclusions in Chapter 4 need to be revised to account for additional information Chapter 3 comments. Otherwise, the conclusions made in the EIS will be both incorrect and indefensible.</p>		
Global			Replace reference to Table 4.2.3-5 with reference to Table 4.3.3-2.		
4.0.2	4-1	26 - 30	<p>1. List the 11 principal elements considered and the 4 elements not considered. Reviewing Chapter 2.6, there are 3 elements described as "primarily administrative or risk-reducing in nature" which "have been eliminated from further analysis": Performance Bonds and Release (2.6.1), Financial Assurance for Long Term Discharges of Parameters of Concern (2.6.2), and Permit Coordination (2.6.3). What is the 4th element not considered?</p> <p>2. Remove the reference to Section 4.04 (sic) and replace with a correct reference for the rationale for determining "that changes to four of these principal elements would not result in any identifiable environmental impact". Section 4.0.4 provides rationale for excluding resource areas, not elements.</p>		
4.0.3	4-3	1-2	<p>It appears that the estimation of "future coal production" does not account for the significant increase in nationwide and global coal consumption (and associated increases in coal production) that are projected by the EIA and other sources (http://www.eia.doe.gov/oiaf/ieo/coal.html; http://www.tsl.uu.se/uhdsg/Publications/USA_Coal.pdf) over at least the next 25 years. The proposed rule changes would affect many of these years. The modeling of coal production shifts should account for increased production.</p>		
4.0.3	4-3	3 - 5	A statement should be made either in this section or in the Methodology section indicating how representative the 2008		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>U.S. EIA data are for describing baseline coal production (i.e., was 2008 a typical year when compared to previous years, or was 2008 an unusual year for any of the seven coal mining regions?). This is important in evaluating the current state of coal mining for Alternative 1 (no change), to which the other alternatives are compared. A combination of observed and projected coal production data from a few years surrounding 2008 would be more justifiable in creating a baseline, considering recent economic changes.</p> <p>The use of 2008 U.S. EIA data for baseline should be added as a bullet to Section 4.7.1.1</p>		
4.1.2.2	4-8	19	Fix and make uniform the reference to fill stability study, here and in following paragraphs.		
4.1.2.2	4-8	27	Fix and make uniform the reference to fill stability study.		
4.1.1	4-5	10-12	<p>We understand the 2008 Stream Buffer Zone and "excess spoil minimization" rules complicate the description of the no change Alternative 1. However, the way Section 4.1 is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things as part of the EIS (eg. "land elements under Alternative 1 would change requirements related to surface configuration and fills..." lines 6-7, p4-7). It is questionable whether the 2008 rule can be portrayed as baseline now, if it was overturned.</p> <p>It would probably help here to give additional explanation about the 2008 rule and why actions outside this EIS are currently changing the "No-Change" Alternative.</p> <p>If there are other known actions (such as pending state or federal regulations) that would cause existing conditions to change independent of this EIS, they should be clearly identified and then discussed in this section, and possibly in the Cumulative Effects section.</p>		
4.1.2.2	4-7	6-7	<p>Consider: "land elements under Alternative 1 would change requirements related to surface configuration and fills..."</p> <p>The way this section is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			as part of the EIS.		
4.1.2.2	4-7	26	Alternative 1 itself does not propose to change the previous regulations related to AOC variances. The way this section is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things as part of the EIS.		
4.1.3-2	4-14	TABLE 4.1.3-2	Headings on left are cutoff		
4.1.3.1.1.3	4-18	10-12	In western coal basins, "Recharge to the upper aquifers in the landscape takes place largely during the snowmelt period. Rainfall during winter and early spring can also be effective in recharging the upper aquifers in the landscape. <i>[Where does the quote within the quote end, and who is being quoted?]</i>		
4.1.4.1	4-33	14-16	Should this sentence be bulleted?		
4.1.4.3	4-45, 4-46	22, 40	Under current regulations, native species <u>are</u> required in site regulation unless explicitly approved by the RA. 30 CFR ~816.111 (a)(2) : Comprised of species native to the area... ~30 U.S.C. 1265 (b) (19)... and permanent vegetative cover of the same seasonal variety <u>native</u> to the area of land to be affected. Additionally, it is important to allow non-native vegetation in some cases, such as in the Western United States where in drier areas where non-native species can be beneficially used as nurse crops.		
4.1.4.3	4-47	15,16	The Simmons et al 2008 paper only assessed reclaimed mine lands in Appalachia. This statement is not true for the entire U.S. The majority of reclaimed mine land in Utah has not been converted to pastureland.		
4.1.6.1.2.2	4-59	3,6-7	Give the reason for the lack of more specific data by region (compared to that of other resources).		
4.2.1	4-77	Table 4.2.1.1	For the values shown in the first six columns of this table, suggest either rounding values showing 3 significant figures or rounding to nearest 1,000 (or greater).		
4.2.1.3	4-79	22-29	The line numbers are overlapping the table in the far right column.		
4.2.3.1.1.2	4-84	30-35	<i>Something's missing – the following lines don't make sense.</i> 30 With the essential elimination of surface mining and the requirement for material damage to		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			31 eliminate any impairments to the physical, chemical, or biological function of any streams, the 32 affected Basin, the Illinois Basin, and the Colorado Plateau regions, respectively, compared to 33 Alternative 1. Streams that have previously been affected by surface mining activities may 34 recover as the hydrologic balance and land uses become reestablished stream length may be 35 expected to be reduced by 86%, 54%, 60%, and 60% for the Northern Rocky Mountains and 36 Great Plains, the Appalachian to pre-mining land uses.		
4.2.3.1.1.3	4-85	17	"...the existing condition since mine spoils are more permeable than the in situ condition, thus..." Use of "in-situ"?		
4.2.3	4-87 to -88	Table 4.2.3-2	This table needs a description of the units, which are assumed to be percent.		
4.2.3.3.1.2	4-90	14-20	Planting trees on lands that supported grasses in the pre-mining state will result in a net loss of both surface and ground water because trees consume more water than grasses. Lines 18-20 correctly point out that some trees consume more water than others, e.g., conifers vs. deciduous trees. For example, see: Gifford, G.F., Humphries, W., Jaynes, R.A., January 1983, A Preliminary Quantification of the Impacts of Aspen Succession on Water Yield within the Colorado River Basin (A Process Aggravating the Salt Pollution Problem), Hydraulics and Hydrology Series UWRL/H-83/01, Utah Water Research Laboratory, Utah State University, Logan Utah		
4.2.4.3	4-94	28	Native species are currently required in federal regulations unless otherwise approved by the RA.		
4.2.6.4.1	4-103	11-16	It is noted that coal royalties have been included in Chapter 4 of the EIS. This is a good inclusion. However, in our opinion, the loss of federal and state-owned coal as a government asset has not been given the attention it deserves as a public resource in this NEPA analysis.		
4.2.6.4.1	4-106	12-14	The impact of these rules on Utah's coal mining industry and associated socioeconomics is <u>incorrect</u> as presently stated in these sentences. A surface coal mine with potential for several decades of mining was permitted in Kane County in 2010 and construction is well underway. This coal field was		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>not, but should have, been included within the scope of the EIS according to scope determination methods. Other coal reserves in Utah not included within the scope of this EIS are also expected to be mined by surface methods in the future.</p> <p>This analysis does not consider coal production areas in Utah that are expected to be active during the time period in which the rules will actually be implemented. Some of these reserves are likely federal coal reserves. It is suspected that Colorado may also have future reserves of surface mineable coal that would be affected as well.</p>		
4.2.6.4.2.3	4-110	25	The exact figures are not at hand, but a considerable amount of the coal mined in Utah is shipped by truck! (see: 4.3.6.4.2.3 and 4.4.6.4.2.3)		
4.4.3.1.1.2	4-165	25-27	<p>Regarding the following statement: "The 5% projected increase in surface mining in the Northern Rocky Mountains and Great Plains indicates the belief that streams in this region have been previously impaired, most likely by gas extraction activities."</p> <p>It is incorrect to assume without any concrete justification and explanation that there would be a 5% increase in production in these areas, as stated. Please include your source.</p> <p>Also, this statement belongs in the section discussing the model assumptions.</p>		
4.5.1	4-195 to - 198	General	<p>The "production Shift Mathematical Model" alluded to in Section 4.5.3.1.1.3 (page 4-201 lines 29 to 30) and vaguely described in Section 4.7.1 needs to be provided in order to comment adequately on the draft statement's analysis. There is no discussion specific to Alternative 5 describing the assumptions associated with the production shift values presented.</p> <p>From a review of the scant information provided in Section 4.7, it appears that surface mining and underground mining were evaluated as either "affected" or "unaffected" by Region for each alternative. Coal production was then adjusted such that increased production from "unaffected" regions would compensate for production lost from "affected" regions so to</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			keep constant energy production (BTUs). No summary of the "affected" and "unaffected" mining methods by region is provided in Section 4.5.1 for Alternative 5.		
4.5.1.1	4-196	10-11	Suggestion for modification: "Subsidence caused by underground longwall mining, <u>very shallow room-and-pillar mining</u> , or room-and-pillar retreat mining could dewater a stream segment <u>given specific geology, mining geometry, and other specific factors.</u> " The factors affecting subsidence should be restated here to elaborate on the phrase "mining could dewater..."		
4.5.1.1	4-196	24-27	It would not necessarily be "impossible" or too "difficult" to restore subsided elevation in all cases. The words "difficult" and "impossible" are probably overly-strong words to use, at least without some qualification. Perhaps it may be generally closer to impossible or more difficult in the eastern coal fields. Additionally it cannot be assumed that all changes in elevation caused by longwall mining would necessarily change the form and function of the stream.		
4.5.3.1.1.3	4-202	7	Replace "Projected mining in the Colorado Plateau..." with "Projected stream impacts in the Colorado Plateau..."		
4.5.3.1.1.3	4-202	10	Replace "Projected levels of mining in the Gulf Coast..." with "Projected stream impacts in the Gulf Coast..."		
4.5.3.1.1.3	4-202	18	Replace "Mining in the Northern Rocky Mountains..." with "Stream impacts in the Northern Rocky Mountains..."		
4.5.3.1.1.3	4-203	1	Replace "...mining production in the Northwest..." with "...stream impacts in the Northwest..."		
4.5.3.1.1.3	4-203	4	Replace "...mining production in the Other Western..." with "...stream impacts in the Other Western..."		
4.5.5.2	4-212	4	Change "to be proved achievable and feasible" to "financial assurance". It is currently required that a postmining land uses be proven to be achievable and feasible. 30 U.S.C. 1258(a)(4) states, "a detailed description of how the proposed postmining land use is to be achieved and necessary support activities which may be needed to achieve the proposed land use." However, financial assurances are not currently required. These "financial assurances were mentioned in Chapter 2, page 2-28, lines 16 and 17.		
4.5.5.2	4-212	5-8	This statement is <u>not</u> true in Utah. Currently, the majority of reclaimed lands are designated as wildlife habitat, grazing, or industrial uses.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.5.5.2	4-212	27-28	Preventing PMLU's such as cropland or industrial which "may be against the wishes of the landowner" (pg. 4-140 line 10) would have more adverse impacts than are analyzed. If the landowner chose to develop the land as industrial or for cropland after the bond release was achieved, nothing in SMCRA would prevent the landowner from doing so. This would then be a waste of substantial time and money reforesting an area that was going to then be re-disturbed.		
4.5.6	4-213	8-9	Remove "comparatively".		
4.5.6	4-213	8-18	A statement acknowledging the role of royalties earned from the state and federal coal production on the federal, state, and local government revenues in both the Rocky Mountain / Great Plains and the Colorado Plateau coal producing areas in Western states should be added.		
4.5.6	General	General	<p>An important socioeconomic element in this chapter that is too vague for analysis is whether jobs and revenue associated with coal-fired power plants (which are directly tied to the coal industry, and which cannot be replaced immediately) are included in this analysis.</p> <p>The socioeconomic impact of potential changes to the cost of electricity is also a significant factor apparently not currently discussed in this EIS. This should have been analyzed.</p> <p>See the following source for an idea about the impact of coal-generated electricity and coal mining in general on Utah's economy: http://www.unews.utah.edu/p/?r=070710-1</p>		
4.5.6.1.1.2	4-214	9-11	A statement explaining the reasons for using new regional areas to evaluate employment changes, instead of the original coal producing regions, should be included.		
4.5.6.1.4	4-218	17-32	Since royalties are technically not taxes, but a partial recovery of a resource that is owned by the respective state and federal government, the economic impacts associated with royalties should be included in a separate section apart from the taxes.		
4.5.6.1.4	4-218	17-32	NEPA requires environmental analysis of federal resources and impacts to them when decisions regarding their future use are proposed. Federal coal is a natural resource that will definitely be affected by proposed changes to federal coal mining rules, and the resources and impacts to these		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			resources should be more strongly considered in this EIS. Some general statement about the impact of both current and future federal coal royalties on the federal government's revenue should be included.		
4.7	4-249	General	An appendix providing model inputs, equations / calculations, and results is necessary. Add a reference to this appendix in Section 4.7. Throughout Section 4.7, examples are provided; however, these examples are typically for Alternative 4 only. Additional information on the model inputs is necessary in order to comment adequately on the draft statement's analysis.		
4.7.1.1	4-250	General	Add a bullet to the list of Major Assumptions stating that "Baseline coal production data are represented in Alternative 1 and are based on U.S. Energy Information Administration data for 2008".		
4.7.1.1	4-250	6-8	The US Energy Information Administration (part of DOE and cited elsewhere in this EIS) reports that nationwide coal consumption is expected to significantly increase through the year 2035. Without further research, it is assumed that the increase in coal consumption is expected to be provided primarily by domestic coal producers, given the countries large coal resources and existing industry. This assumption appears to be incorrect. Source: http://www.eia.doe.gov/oiaf/ieo/coal.html		
4.7.1.1	4-250	6-8	Unless valid reasons can be provided for using the static 2008 coal production numbers to help model the environmental impacts of the potential rules on system with projected dynamic coal production, this assumption contributes a significant source of error to the model results that will need to be corrected. The conclusions of the EIS would otherwise be inaccurate.		
4.7.1.1	4-250	General	Regarding the following statement from Alternative 2 (4.4.3.1.1.2, p165): "The 5% projected increase in surface mining in the Northern Rocky Mountains and Great Plains indicates the belief that streams in this region have been previously impaired, most likely by gas extraction activities." It appears that this assumption of an increase in surface mining in the N Rocky Mtn region may have been made for all		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>Alternatives as part of the model analysis. If so, this assumption should be included here.</p> <p>Without any concrete basis for this assumption, no justifiable conclusions can be made using it. Please include your source, as this assumption, if understood correctly, is critical to the model design and output.</p>		
4.7.1.1	4-250	15-17	Justification for the exemption of metallurgical coal production in this analysis should be stated here. (ie. If the production is so much lower than generation coal, this should be stated together with a reference).		
4.7.1.1	4-250	15-17	Metallurgical coal production from elsewhere in the United States (besides Appalachian coal-producing areas) would also be affected, and justification for its omission in this EIS needs to be stated as well.		
4.7.1.6	4-253 to 254	General	This section would be improved by simply stating that a deterministic model was used for the DEIS. Describing a stochastic model which has not been finished or used in the statement's analysis is confusing and detracts from the modeling that has been used for the analysis. Text / figures describing stochastic analyses should be withdrawn until the stochastic analysis has been completed and incorporated into the statement.		
4.7.1.6	4-253	14 – 16	Suggest removing discussion of Beta-PERT distributions, since these are not used for the analysis in this statement (see comment above). If maintained, then clarify the definition of the acronym PERT (which could infer Program or Project Evaluation and Review Technique).		
4.7.1.6	4-254	2	<p>The document states that the "stochastic model is still being developed". This seems to severely undermine the cooperating agencies ability to evaluate and comment on the predictive methodology and raises several questions:</p> <ol style="list-style-type: none"> 1. Why is a stochastic model still being developed AFTER the analysis section of the statement has been completed? 2. When will the stochastic model be completed, and how will its results be incorporated into the analysis? 3. What effects will the stochastic model results have on the analysis in the statement? Is the stochastic an academic exercise, or will its results affect the findings of the statement? 		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.7.1.7	4-254	General	Include a description of how representative the 2008 U.S. EIA data are for describing baseline coal production, i.e., was 2008 a typical year when compared to previous years, or was 2008 an unusual year for any of the seven coal mining regions?		
4.7.1.17	4-263 to 264	General	<p>The approach whereby affected stream length is calculated based on stream densities seems reasonable. However, this approach neglects to consider differing sensitivity to stream effects in regions with greater stream density (Appalachia) compared to regions with lower stream density (Colorado Plateau).</p> <p>Arguably, the sensitivity of a region to impacts to streams could be considered to be inversely proportional to the stream density. For example, consider areas A and B, each of equal size. Area A contains eight perennial streams and a stream density of 0.8 mi/100 acres, while Area B has one perennial stream and a stream density of 0.1 mi/100 acres. An alternative disturbing 100 acres would affect 0.8 miles of stream in Area A and 0.1 miles of stream in Area B, so there appears to be less effect on Area B. Now consider that Area B has only one perennial stream, so there is no suitable alternative source of water for drinking, aquatic wildlife, and recreation. Area B, on the other hand, may have seven other streams which remain unaffected and continue to provide water for drinking, aquatic wildlife, and recreation. Is there really less of an effect in Area B?</p> <p>An evaluation attempting to quantify such region-specific and potentially subjective criteria describing sensitivity to surface water (and groundwater) impacts may be beyond the scope of this statement. Absent such considerations, it is suggested that the stream impact analysis and results include a caveat that a unit affect on streams (mi/year) may have different impacts from region to region.</p>		
4.7.1.17	4-264	4 - 7	The text states that "an overall stream density for each coal resource region was calculated using a weighted basis" and that "[w]eighted regional average stream densities were calculated for perennial, intermittent, other and total" stream lengths. However, the weighting criteria are not described nor are weighting factors identified. Additional information on the		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			weighting approach is necessary in order to comment adequately on the draft statement's analysis.		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Gardner, Linda R. (Contractor)

From: Dana Dean [DANADEAN@utah.gov]
Sent: Thursday, November 04, 2010 10:58 AM
To: Craynon, John; Ehret, Paul
Cc: Angela Nance; April Abate; Daron Haddock; Doug Burnett; Ingrid Campbell; James Owen; Jim Smith; Joe Helfrich; John Baza; Jo Ogea; Karl Houskeeper; Kevin Lundmark; Pete Hess; Priscilla Burton; Steve Christensen; Steve Demczak; Suzanne Steab; Vickie Southwick
Subject: Utah comments on Ch. 3 socioeconomics
Attachments: SPREISCh3_Socioeconomics_UDOGMfinal.DOCX

Mr. Craynon,

Please find Utah's comments on the socioeconomic section of Chapter 3.

I would like to reiterate our concern regarding the very limited time allowed for analysis.

Our review of Chapter 3 has found that some important future coal mining areas are omitted completely from the draft analysis. We hope that OSM will include those counties in the final EIS.

Thank you,

Dana Dean, P.E.
Associate Director - Mining
Utah Division of Oil, Gas, and Mining
(801) 538-5320
danadean@utah.gov

Comment Form

Title of Document	Utah Feedback on Socioeconomics Section of Chapter 3 of Deliberative SPR EIS
Contact Information	
Name	State of Utah (C/o Dana Dean or Peter Brinton)
Telephone Number	801-538-5320 or 801-538-5258
Email	danadean@utah.gov or peterbrinton@utah.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
General Comments			<p>Kane County in southern Utah should be considered within the scope of this EIS and this Socioeconomics section since UDOGM recently issued a Utah permit for a new surface coal mine on private land in Kane County, Utah. An LBA is currently underway for adjacent coal and federal land where more extensive mining, needing a SMCRA permit is anticipated in the future. This mine will be directly affected by any new stream protection rules. Coal production from the Coal Hollow Mine in Kane County is expected to begin within a few <u>weeks</u> (not months, as originally reported in the main body of Ch3 comments). It is noted that two Montana counties with future coal mines are also being addressed within the scope of this EIS (3.0.2, page 3-4, lines 4-5). Kane County is in a similar scenario, and should be addressed.</p> <p>At this point, this section does not characterize in meaningful detail some significant socioeconomic aspects of coal mining. The reported unemployment and tax numbers are helpful. Some of the direct and indirect socioeconomic factors (direct and indirect coal mining jobs, wages, etc) of coal mining on local communities are not addressed, however. This information could be included in Chapter 4, but might fit better in Chapter 3, just as the characterization of mining itself (methods, equipment, etc) is included in Chapter 3.</p>		
3.19	3-2	13-15	<p>It is noted that two additional Montana counties with future coal production are included in the scope of this EIS. Utah's Kane County is currently not included, but it should be included in the scope of the EIS (including the economics</p>		

Comment [MSOffice1]: Should Wayne County (Henry Mountains) be included in this EIS?

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			section) since a permitted surface mine in Kane County is expected to start producing coal within a few weeks. Rule changes may affect socioeconomics of the mine, nearby towns, Kane County, and the State of Utah.		
3.19.1.2.7	3-57	1	There are conflicting tax rate data in Tables Table 3.19-17 and Table 3.19-20. In the first table, Utah, Mississippi, and Texas (and others?) are reported as having no coal severance tax (per Table 3.19-17 – State Coal Severance Taxes). The second table reports a severance tax and associated revenues (see Table 3.19-20 – 2008 State Coal Severance Tax Revenues). Some correction and/or explanation is needed.		
3.19.1.2.6 and 3.19.1.2.7	3-47 thru 3-57	---	Currently, Tables 3.19-15 through 3.19-20 (located in the Appalachian Basin section) seem out of place, since they contain data on the other coal-producing areas as well which should be referenced in other sections if significant. Creating regional or individual state tables with different categories from the individual tables might help.		
3.19.1.3	3-59	30-32	While the quality of life review covers a good range of factors, it probably should be mentioned that the Quality of Life section does not address all of the factors associated with quality of life. Other factors can include things such as job security, religion and community life, climate & geography, cost of living, community appearance, etc. (for example, http://www.economist.com/media/pdf/quality_of_life.pdf)		
3.19.2	3-68	12	The new surface coal mine in Utah's Kane County will raise the number of coal-producing counties in the Colorado Plateau from 14 to 15.		
3.19.2	3-68	12	The true socioeconomic impact of coal mining in Utah (and presumably elsewhere) extends to nearby non-producing counties. This type of relationship was recognized by the authors when they identified the American Indian entities "abutting ten coal producing counties" shown in <i>Table 3.19-33</i> . However, counties with populations connected with the coal mining industry that abut coal producing counties have not been analyzed. DOGM doesn't intend to overstate the impact of coal mining on such counties in Utah or nationwide, but suggests that this analysis should be considered, even generally, to provide a consistent evaluation.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>The direct and indirect impacts of the coal mines on Sanpete and Garfield is significant, as evidenced by their inclusion in other coal-related NEPA analyses, such as:</p> <ul style="list-style-type: none"> - <u>Alton Coal Project EIS</u> (not out for public review yet - Foster Kirby, from OSM in Denver, can provide info) (http://www.blm.gov/ut/st/en/prog/energy/coal/alton_coal_project.html) - <u>Green's Hollow Coal Lease Tract Draft EIS</u>. 3.8 Socioeconomics section (http://a123.g.akamai.net/7/123/11558/abc123/foreservic.download.akamai.com/11558/www/nepa/50297_FSPLT1_025174.pdf) <p>For example, Sanpete County (in Utah) does not yet produce coal and has relatively few reserves, but the active SUFCO mine (located mostly in Sevier County) employed over one hundred of Sanpete's 10,000 person workforce as of 2006 (Green's Hollow EIS), providing significant income to three Sanpete communities. The Skyline Mine is located much closer to Sanpete communities than SUFCO, and large numbers of the mine workforce are also known to live in those communities. Another Wasatch Plateau coal mine is also likely to employ Sanpete residents.</p> <p>Garfield County, UT (not Colorado's Garfield Co.) is adjacent to future coal-producing Kane County, and will also likely be impacted economically and socially by of coal mining. Transportation of coal through adjacent Garfield County has been a major issue during the permitting and Garfield County should also be included in the analysis of socioeconomics and environmental justice. The Henry Mountains Coal Field, where coal reserves of significant interest for future mining are located, is also in Garfield and Wayne counties.</p>		
3.19.2.1.2.1	3-68	29-34	Documentation of the socioeconomics associated with mining should be included somewhere in the EIS. This or the next section seems like the logical place to do it. "Per capita		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>income" helps report baseline data for the counties, but it doesn't describe the coal mining socioeconomics. One can't safely equate "per capita income" with mining income alone, and "per capita income" doesn't account for the variation by county of the dependence on coal mining or other socioeconomic factors.</p> <p>One way to characterize the socioeconomics of coal mining would be to compare average county, state, or even regional coal mining wages with those of other industries, such as was done in the Green's Hollow Coal Lease Tract Draft EIS. Mining wages were tabulated with other "average monthly non-agricultural payroll wages", and were compared as follows:</p> <p>"In 2006, mining in Emery, Sanpete, and Sevier counties provided 48, 66, and 53 percent higher monthly wages than the average payroll wage and 23, 8, and 26 percent higher monthly wages than the non-agricultural payroll wage, respectively." (Green's Hollow Coal Lease Tract Draft EIS) – original source: State of Utah</p>		
3.19.2.2	3-74		<p>The SPR EIS socioeconomic analysis does not attempt to discuss any specific direct or significant indirect existing socioeconomic impacts (which can be both positive and negative) that are associated with coal mining (such as numbers of mining jobs and average wages). Unless they have been already determined to be insignificant or justifiably not important for this rulemaking EIS, or are to be included in a subsequent chapter, UDOGM thinks that they should consider analyzing some of these impacts.</p> <p>MSHA or the National Mining Association might be good sources to consider for numbers of direct mining jobs.</p> <p>Some of the direct and indirect socioeconomic benefits of coal mining on the coal-producing counties in Utah are discussed in "Utah's Coal Industry: Economic Contributions and Future Prospects", a study published by the University of Utah and found at the link below:</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			http://www.bebr.utah.edu/Documents/uebr/UEBR2009/UEBR2009no4.pdf		
3.19.2.2.1	3-75	1	Data on Utah should be (but is not) included in Table 3.19-25 (Employment by Industry 2009 (by NAICS Supersector)).		
3.19.2.2.2	3-77	1	It will be more difficult to effectively evaluate the true effect of rulemaking on mining jobs if the numbers that are analyzed are the mixed agriculture, mining, forestry, and other jobs. This might be some of the most readily available data, but the limitations with the data should be acknowledged if more specific data are unavailable. Tables 3.19-26 (Workforce Characterization (Labor Force by Industry (NAICS Supersector))		
3.19.2.2.3	3-79	Table 3.19-28	The "0.0"s in the columns adjacent to the state names are confusing and should be removed.		
3.19.2.2.7	3-84	4-5	"...total tax revenue, the greatest portion was derived from sales taxes, 35.7%. At over 19%, severance taxes accounted for the <u>second</u> highest share of total tax revenue, followed by individual..." (Otherwise two "highest" shares/portions)		
3.19.2.2.8	3-84	30	The break between the Utah and New Mexico sections has been deleted, and they run together. Insert a break.		
3.19.2.3.8	3-86		Utah's coal-producing counties (Carbon, Emery, Sevier, and Kane Counties) also contain state and national parks and national monuments and recreation areas.		
3.19.2.4.2	3-87	16-25	"Per capita income" cannot be even loosely equated with the coal mining income in <u>all</u> coal-producing counties, as other socioeconomic factors exist. This fact should be acknowledged so as to not be misleading. In local NEPA analyses, other socioeconomic factors are evaluated together with those of coal.		
3.19.2.4.3 and Table 3.19-33	3-88	14-16	Also add a line for the Navajo Reservation, which abuts Kane County (where a new surface mine is starting). In Utah, the Uinta-Ouray Reservation (no "and") abuts Emery and Carbon Counties.		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Comment Form

Title of Document	PDEIS Chapter 4
Contact Information	
Name	Randall Johnson
Telephone Number	205-221-4130
Email	Randy.Johnson@asmc.alabama.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.5.3.1.1.1	4-199	36	Sentence incorrectly states that mining through intermittent and ephemeral streams would be prohibited. Should read "intermittent and perennial streams"	No	Duplicative. Accepted and addressed in another comment
4.5.3.2.2.1	4-205	9	Correct spelling of the word "grea(" to "great"	No	Duplicative. Accepted and addressed in another comment
4.5.3.3.1.1	4-205	34-36	The sentence beginning with "The" and ending with "exclusion" makes no sense.	No	Duplicative. Accepted and addressed in another comment
4.5.4.2	4-209	30-32	The final sentence in this paragraph is erroneous. Even though AOC will not be required in some cases, grading with heavy equipment will be required to some extent to achieve the post-mining land use.	Yes	Similar to comment 4.5.4.2 / pg. 4-209 / lines 27-32. Please reconcile these two comments simultaneously. The point being made is that regardless of whether AOC variance is granted or not, heavy equipment is used to reclaim the site.
4.5	All	All	General comment.:In the southern Appalachian coal fields such as Alabama, the FRA approach has not been tested fully. Much of these areas are in southern pine forest as well. The FRA has not been demonstrated successful in our state in restoring hardwood or pine forest. Many of the assumptions related to the FRA in southern Appalachia have no basis.	No	The comment is germane to the proposed rule language and should be made when the proposed rule language is made available for comment.
4.5.6.1	4-213-4-218	All	The predicted consequences in rise of unemployment rates and poverty levels; declines in personal incomes, tax income, and royalties for Appalachian states in particular point out that this proposed alternative (as well as alt. 2-4) points out the unconscionable disregard for human impacts that this proposed rulemaking exhibits. Most states and local governments are suffering from the current economic downturn. Especially hard hit are the states that will suffer the	No	Comment noted. A NEPA document is intended to evaluate impacts of alternatives. The commenter is essentially saying the rule should not go forward and the most appropriate venue for making that type comment is on the rule when it is proposed

Sims, Pam

From: Ehret, Paul
Sent: Tuesday, November 09, 2010 3:22 PM
To: Means, Brent P.
Cc: Dale, Debbie
Subject: FW: 2010-11-09 EIS 3.6 Comment form
Attachments: EIS 3.6 Comment form_Combined.doc

Brent: Thought this ought to go to you. Paul

From: Lambert, Butch (DMME) [<mailto:Butch.Lambert@dmme.virginia.gov>]
Sent: Tuesday, November 09, 2010 1:41 PM
To: Ehret, Paul; Craynon, John
Cc: gconrad@imcc.isa.us1; Vincent, Les (DMME)
Subject: 2010-11-09 EIS 3.6 Comment form

Gentlemen,
Please find attached the Virginia comments on EIS 3.6 Surface Water..

Comment Form

Title of Document	EIS Draft 3.6 Surface Water
Contact Information	
Name	Bradley C. Lambert
Telephone Number	(276) 523-8145
Email	Butch.Lambert@dmme.virginia.com

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.6			General comment: This surface water section describes similar water quality changes attributed to mining among different regions of the country. However, the Appalachian section is described in more detail and the implication is that the changes in water chemistry due to coal mining are more problematic in the Appalachians. Similar trends in water chemistry changes are practically dismissed for the other regions. This disparity should be addressed.		
3.6.0	3-1	20	Spelling "...are well documented..."		
3.6.0	3-1	21	Spelling "...chapter are refereed journal..."		
3.6.0	3-2	38-39	Reword the following "...land disturbance activities and in mines that emphasis sustainable mining practices..."		
3.6.0	3-2	38	This sentence implies that "other" mining and large land disturbing operations take additional measures for peak flow attenuation/matching. What are these measures and does this statement suggest additional measures are necessary for coal mining? If so, this statement should more clearly state that these. This statement does not take into consideration the scale of the mining operations or even the type of mining operations. In Virginia where most mining is remining often sediment control basins are relatively small on bench basins that never discharge. There is no affect on peak flows from these type basins or often small embankment basins. There is considerable difference between a 2,000 acre mountaintop removal mine that may have a 40 million yard valley fill and a 125 acre second cut contour mine or highwall miner operation. This statement is too broad. The statement also implies that		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			any change in peak flow is adverse; that is incorrect. It is the scale of the peak flow increases that would matter. A relatively small rainfall event may have a small peak flow increase that does not even become a bank full event. How is that adverse?		
3.6.1.2	3-8	7	Why was only data from stream gauge stations in Pennsylvania, Maryland and West Virginia used? This data is readily available in the other states. Throughout the document it is apparent that no data from Virginia was used to develop this EIS and as such how can it even be considered as being valid for mining in Virginia.?		
3.6.1.2	3-8	16-18	The narrative below Figure 3.6-5 states "It is worth noting that the results from the curve can be subject to large errors if data from a stream with a drainage area greater than 90 mi ² or a stream outside of the study area is used." This is an answer to the question posed in the comment above. This data is not valid for any mining operation in Virginia.		
3.6.1.2	3-8 – 3-11	all	Same comments as above no Virginia, Tennessee, Kentucky, etc. data is used.		
3.6.1.2.1	3-12	19-20	Tense "The description and sequence of surface mining methods is ...and consists..."		
3.6.1.2.1	3-12	25	No rock chimney drains are used in Virginia. Is this term intended to be something else?		
3.6.1.2.1	3-12	30 - 34	In Virginia for 2008 and 2009 the permits that had forestry as a post mining land use had 100% FRA requirements.		
3.6.1.2.1	3-13	24-36	This paragraph makes several statements regarding hollow fill effects on stream flow without qualifying the fill size, construction characteristics, type of rock in the fill, or placement of the fill within head of hollow/ephemeral reaches, intermittent reaches or perennial reaches of streams. Each of these characteristics of the fill heavily influence whether stream flows will be affected. These items should be addressed in the narrative.		
3.6.1.2.1	3-13	24-36	There is no mention in this section of the influence of abandoned deep mine discharges on water quality and whether the effects of abandoned deep mine discharges were considered in the stream quality studies.		
3.6.1.2.1	3-13	24-36	There is no mention in this section of the influence of pre-SMCRA mining on existing water quality.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.6.1.2.1	3-13	24-36	There is no differentiation of conductivity arising from AMD versus conductivity arising from non-AMD discharges and the difference in dissolved constituents from these differing sources. The dissolved ions would be different and the toxicity would be different.		
3.6.1.2.1	3-13	27	Tense "The water that does migrated into the fill enters..."		
3.6.1.2.1	3-13	28	Water only enters the fill from coal seams if in fact the fill is placed over mined coal seams and then only where the dip of the coal is toward the fill. This reads like water will always enter the fill from the coal seams all the way around the valley. This is not true. If the coal seam is dipping in toward the mountain away from the fill then no water (or very little water) will infiltrate into the fill.		
3.6.1.2.1	3-13	32-36	This should be better explained. Very large fills can attenuate peak flows by holding or storing water in the fill and releasing it over time thus converting intermittent streams into perennial or near perennial streams. The last sentence in this paragraph is too broad based. This is not always the case. In Virginia there are valley fills that are relatively small. For example between January 1, 2000 and August 17, 2009 327 new valley fills were permitted in Virginia. Of these 54 were 100,000 cubic yards (cy) or less with the smallest being 2,000 cy. 206 of the 327 fills were for 1,000,000 cy or less.		
3.6.1.3	3-13	40	It is ridiculous that only ten sites were used for TDS and Specific Conductance. There have been numerous studies and numerous sites evaluated for these parameters and some were over time. This is a too limited data set to be meaningful		
3.6.1.3	3-14	5 - 9	The draft states that the Specific conductance ranged from 10 to 26,000 $\mu\text{S}/\text{cm}$ but Table 3.6-6 shows a maximum dissolved solids value of 892 mg/L. The 26,000 $\mu\text{S}/\text{cm}$ should have a dissolved solids value higher than the maximum of 892 mg/L shown in Table 3.6-6. Is the 26,000 $\mu\text{S}/\text{cm}$ correct? It would be helpful to list the dissolved solids v. the conductivity in a table as there are only ten sites were sampled.		
3.6.1.3	3-15	1	The validity of Figure 3.6-6 is highly questionable given the limited data set. Were any Virginia sites sampled? The correlation between Dissolved Solids and Specific Conductance is questionable. It appears to be much higher than that usually shown in more extensive studies.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			Correlations of less than 0.70 are normally used; not 0.79 as shown in Figure 3.6-6.		
3.6.1.3	3-13 - 3-20	all	No Virginia data is included. Virginia Tech has published research in this area with more extensive and relevant data than is found in this document. Virginia Tech research indicates that the problematic ions in TDS/Conductivity are sulfates and bi-carbonates. Research shows that benthic communities in the Virginia coalfields are not affected at the levels proposed by the U.S. Environmental Protection Agency but rather at higher levels. The preliminary research shows that weathered spoils have lower TDS/Conductivity and thus lower sulfates and bi-carbonates. Proper spoil handling techniques can address much of this problem area similar to spoil handling of acidic spoil in mining. Why was a literature search not performed and data specific to each state used? Depositional geology in Virginia is markedly different than that of West Virginia.		
3.6.1.3	3-19 3-20	all	As far as selenium goes again no Virginia data is used. Depositional geology in Virginia is markedly different than that of West Virginia		
3.6.8	3-59	15	...can range from minimal to severe...		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

From: [Craynon, John](#)
To: [Means, Brent P.](#); [Coker, Jeffrey A. "Jeff"](#); [Calle, Marcelo](#); [Ehret, Paul](#)
Subject: FW: Utah's SPR EIS Chapter 3 Surface Water Hydrology Comments
Date: Monday, November 15, 2010 1:49:38 PM
Attachments: [SPREISCh3 3.6SurfaceWaterHydro UDOGM.DOCX](#)
Importance: High

From: Ehret, Paul
Sent: Wednesday, November 10, 2010 12:16 PM
To: Craynon, John; Means, Brent P.
Cc: Dale, Debbie
Subject: FW: Utah's SPR EIS Chapter 3 Surface Water Hydrology Comments
Importance: High

Attached are Utah's Surface Water Hydrology comments.

From: Peter Brinton [<mailto:peterbrinton@utah.gov>]
Sent: Wednesday, November 10, 2010 11:15 AM
To: Ehret, Paul
Cc: Dana Dean
Subject: Utah's SPR EIS Chapter 3 Surface Water Hydrology Comments

Paul,

Here are Utah's comments and feedback on the Surface Water Hydrology section of Chapter 3 of the SPR EIS. If either you or the contractor have any questions regarding our comments or suggestions, please don't hesitate to contact us.

Thanks.

Peter

Peter Brinton
Environmental Scientist I
Utah Division of Oil, Gas & Mining
Office Phone: 801-538-5258

Peter Brinton
Environmental Scientist I
Utah Division of Oil, Gas & Mining
Office Phone: 801-538-5258

Comment Form

Title of Document	Utah Feedback on Surface Water Hydrology Section of Chapter 3 of Deliberative SPR EIS	SPR EIS Chapter 3.6
Contact Information		Contact Information
Name	State of Utah (C/o Dana Dean or Peter Brinton)	Kevin Lundmark
Telephone Number	801-538-5320 or 801-538-5258	
Email	danadean@utah.gov or peterbrinton@utah.gov	

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
General Comments			<p>Utah Division of Oil, Gas and Mining (UDOGM) has identified some significant deficiencies and errors relating to the characterization of surface water hydrology and the other resources of the "affected environment". These deficiencies are often associated with the incorrect geographical scope originally selected for evaluation of the active coal mining areas in Utah and other parts of the Colorado Plateau coal mining region. For example, the geographic scope omits high-priority Utah coal reserve areas with active mining in the Alton and Kolob coal fields. As a result, the Chapter 3 characterization of surface water hydrology and the other environments and resources described are missing important information and are often incorrect.</p> <p>We have invested serious effort into providing OSM and the contractor with correct information and sources to facilitate the correction of inaccurate statements found in this EIS. Without some serious modifications to the current geographical scope of this EIS as it relates to the Colorado Plateau, any conclusions made in Chapter 4 about impacts to the environment and the coal mining industry in Utah (and other parts of the Colorado Plateau) will be inaccurate. Subsequent decisions dependent on this EIS and affecting Utah and parts of the Colorado Plateau region will be misinformed.</p> <p>In addition to errors noted throughout this section, the hydrology description (3.6.2.2) is so vague that it is difficult to see how it can be of real value for analyzing impacts. The generalizations presented in this section may be correct as written for some area within the Colorado Plateau Region;</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			however, the contractor has not provided references for verification. References are absolutely necessary in this section so that readers may ascertain the subject area(s) for which these generalizations were originally authored.		
Issues Unique to Western States relating to Federal Resources and NEPA			While UDOGM understands that the enormous scope of this EIS may preclude the detailed investigation of resources associated with each coal field in the United States, UDOGM insists that a greater focus on federal coal reserves and resources is essential for adequate NEPA analysis. Proposed federal actions affecting the large federal coal reserves and other extensive federally-managed resources located primarily in the Western United States constitute a significant federal nexus requiring NEPA analysis. As currently written, this EIS does not recognize current and future value of significant federal coal reserves and their associated federally-managed environments.		
Suggestions to Mitigate Errors			<p>The coal bearing regions shown in figures in the hydrology section and other sections of the EIS do not accurately describe the active coal mining regions in Utah and parts of Colorado. Refer to USGS Professional Paper 1625-B (2000) to understand why the existing affected environment boundaries are unrepresentative of Utah coal mining.</p> <p>UDOGM recommends that the authors strongly consider adopting geographic boundaries used by the USGS in their Open File Report series for evaluating coal province hydrology and for other resources. These reports were expressly written with SMCRA and federal coal leasing in mind, and they accurately characterize Utah's active coal mining areas, unlike the current EIS scope boundaries for Utah and Colorado.</p> <ul style="list-style-type: none"> • Water Resource Investigations Open-File Report 84-068 • Water Resource Investigations Open-File Report 83-38 <p>Other USGS reports in this series cover Colorado and New Mexico coal fields.</p>		
3.6.0	3-1	13-20	<p>The generalities stated in this introductory paragraph may apply to Appalachia, but do not apply to Utah. Their relevance to other western states is also in question.</p> <p>The "current interest in specific conductance with respect to</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>impact on specific biota" relates to Appalachia. DOGM is unaware of similar research into conductivity-based water quality criteria relative to biota in the western U.S.</p> <p>Acid mine drainage from coal mines has not been a problem to date in Utah; however, alkaline mine drainage containing total iron concentrations exceeding water quality standards is becoming a problem for some Utah underground coal mines (Crandall Canyon Mine, possibly Deer Creek, others). This is an issue that should be addressed by this EIS, at least for the Colorado Plateau.</p> <p>Because total-Fe contamination is an emerging problem in Utah, iron concentrations associated with Utah coal mining are not well documented. As noted in lines 2 and 3 on p. 3-2, "...there are few peer-reviewed studies of hydrology and water quality associated with coal mining within the last two decades." This describes the status of knowledge on alkaline mine drainage containing moderate concentrations of iron (1 mg/L to 5 mg/L), and relatively few case studies are available concerning treatment processes for this type of coal mine drainage in the western US.</p>		
3.6.0	3-1	16-20	<p>See previous comment for content concern with these statements. This is a grammatical comment:</p> <p>"Iron and manganese concentration concentrations associated with mining are well documented in other publications, have been regulated since the inception of SMCRA and treatment processes <u>are</u> well understood. Also, acid mine drainage has been researched for over thirty years and therefore geochemistry, overburden analysis, influence of geology, special handling and treatment processes are well document <u>documented</u> (PADEP, 1998)."</p>		
3.6.0	3-1	13-15	<p>Modify the text as follows: "Due to the current interest in specific conductance with respect to impact on specific biota in <u>Appalachian streams</u>, both specific conductance and total dissolved solids (TDS) have been emphasized along with contributing constituents of sulfate and bicarbonate. <u>Increased TDS resulting from coal mining operations can be problematic for all mining regions.</u>"</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.6.0	3-1	20	Add the following text: "Alkaline mine drainage containing moderate concentrations of iron has not been well documented, and relatively few case studies are available concerning treatment processes for this type of coal mine drainage in the western US. Both AMD and Alkaline Mine Drainage pollute surface waters and may require long-term water treatment. OSM is pursuing rulemaking to require bond coverage for long-term treatment of pollutional mine drainage."		
3.6.0	3-2	3-4	"Only very limited funding through federal, state and industry funding has been directed towards such applied research..."		
3.6.0	3-2	15	"The primary controls consists consist of water conveyance by..."		
3.6.0	3-2	20-21	Does this make more sense without the closing parenthesis after 'methods'? Is this saying that embankment ponds – and no other type of pond - are always used at the toe of 'conventional lift-type valley fills, head of hollow fills and durable rock fills'? "... (used throughout [all?] mining methods[]?) and always near the toe of conventional lift-type valley fills, head of hollow fills and durable rock fills)."		
3.6.0	3-2	24	"The hydrologic analysis for probable hydrologic [consequences?] determination traditionally emphasized only..."		
3.6.0	3-2	27, 34-37	Insert the following sentence after the first sentence: "Modeling packages, such as SEDCAD (Warner, 1998) and design procedures such as SWROA (Reference) are commonly used for hydrologic analyses." Delete this paragraph (lines 34-37) and include a reference to modeling at line 27. As written, the paragraph implies that SEDCAD is the primary program used by industry and consulting firms and there is no reference cited for this statement.		
3.6.0	3-2 and 3-3	38-40 and 1-2	Parentheses within parentheses; rewrite – suggestion: "It should be noted that in other large-scale land disturbance activities and in mines that emphasize emphasize sustainable mining practices; [colon] that simply addressing peak flow is not considered sufficient. The attempt is made throughout all		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			phases of mining and reclamation to match the pre-mining hydrologic regime: peak flow from various return period storms, runoff volume, seasonal flows, and hydrology shape (runoff temporal distribution). and that the pre-mining hydrologic regime (peak flow from various return period storms, runoff volume, hydrology shape (runoff temporal distribution) and seasonal flows) is attempted to be matched during active mining and throughout all phases of reclamation.		
3.6.2	3-20	21	This section needs an introductory paragraph clearly defining the potentially affected environment which this surface water hydrology section is attempting to describe. Are the contractors attempting to describe the coal fields within the Colorado Plateau region (shown as stippled areas on Figures 3.6-9 thru 3.6-12), or the entire Colorado Plateau? This is a major distinction and has a great effect on the following discussion in this section.		
3.6.2.1	3-20	27-28	Correction: "Mean annual precipitation ranges from about 10 to 16 less than five inches in the arid semi-arid basins to..."		
3.6.2.1	3-20	29-30	This doesn't sound right, at least not for coal producing areas of Utah; winter is the wettest season at almost all locations and elevations. "Seasonally, the semiarid lower elevations receive more precipitation during the summer [winter?] , whereas the mountains areas receive precipitation more uniformly throughout the year."		
3.6.2.1	3-20	31-33	"Winter precipitation is almost entirely in the form of snowfall associated with large storms moving from the west or northwest and is highly influenced by orographic effects (see Figure 3.6-10). " Delete reference to Figure 3.6-10, as this figure does not illustrate orographic effect, nor the direction or effect of storm paths.		
3.6.2.1	3-20	34	Recommendation: "...the rainfall associated with these storms seldom exceeds one inch, <u>although these convective thunderstorms are capable of generating localized flash flooding.</u> "		
3.6.2.1	3-20	36-37	Figure 3.6-12 (mean annual temperature) does not relate to or support the description of mean summer and winter temperatures. We recommend that you correct the statement made in the last sentence of section 3.6.2.1, and that you replace Figure 3.6-12 with a set of figures showing average		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>daily temperatures during the summer and winter. Average daily temperature in the summer exceeds 40 degrees.</p> <p>It is unclear whether this is an attempt to summarize the climate for the entire four-state area (AZ, CO, NM, UT) or just for the hatched coal regions within the Colorado Plateau province (which regions are not accurate in describing active coal producing regions in parts of Utah and Colorado).</p>		
3.6.2.1	3-22	Figure 3.6-10	Does wind speed significantly relate, for the purposes of this study, to the surface water hydrology of the Colorado Plateau coal region? Consider deleting this figure.		
3.6.2.1	3-23	Figure 3.6-11	Please check and correct the values reported in this figure. The legend indicates that mean annual evapotranspiration (ET) ranges from 0 to ~6.7 inches; however, all areas are shown to have less than 6 inches of ET. Mean annual evaporation (class A pan) ranges from 40 to 80 inches in the southern coal fields of Utah (USGS Open-File Report 84-068). These coal fields are not included within the current scope of the Colorado Plateau region, but should be, because a newly-permitted coal mine is expected to start producing within a few weeks.		
3.6.2.2	3-24 to -25	General	General comment: The hydrology description is so vague that it is of little to no value. Specific suggested edits are provided in an effort to make this section at relevant for Utah. The generalizations presented in this section may be correct as written for some area within the Colorado Plateau Region; however, the contractor has not provided references for verification. References are absolutely necessary in this section so that readers may ascertain the subject area(s) for which these generalizations were originally authored.		
3.6.2.2	3-24	4 - 5	Revise text to make it accurate for Utah hydrology: "Most annual streamflow at higher altitudes is from snowmelt runoff during late spring and early summer; irrigation diversions affect streamflow during the summer growing seasons. The average flow of streams originating in higher altitudes generally increases downstream. However, when these streams flow through low altitude areas, additional inflow may be less than losses to infiltration, evaporation, and diversions (e.g., irrigation), therefore average flows may decrease downstream (USGS OFR 83-38, USGS OFR 84-		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			068)."		
3.6.2.2	3-24	5 - 7	Provide a reference and revise text: Natural streamflow variations between basins result primarily from differences in basin physiographic and other physical characteristics, such as physiography, climate, altitude, vegetation, and geology (Reference needed).		
3.6.2.2	3-25	1 - 2	Add the following text: ...influence on stream flow variations through diversions for irrigation and use of water for livestock and domestic purposes, <u>or by the discharge of groundwater encountered by underground coal mining.</u>		
3.6.2.2	3-25	3 - 6	This sentence may (or may not?) be appropriate for the mines located in Western Colorado, but it does not accurately describe conditions in Utah coal fields. Again, the inaccurate geographic scope of this document causes hydrologic resources in coal mining regions in Utah (and in Colorado as well) to be incorrectly characterized. Consider the USGS Water Resource Investigations Open File Reports 84-068 and 83-38 for hydrologic information about Utah's active coal mining areas, including geographic boundaries proposed by DOGM for a scope representative of active coal mining areas. Other USGS reports in this coal province hydrology series cover Colorado and New Mexico coal fields. These reports were expressly written with SMCRA in mind. What is meant by "western part of the area?" It appears that this could be carry-over from copying and pasting text from an unreferenced document. <u>Revised text to make it accurate for Utah hydrology:</u> "Many coal mines <u>perform mining activities</u> are in ephemeral stream basins. most <u>Some</u> of these streams receive the majority of their average annual discharge from snowmelt, <u>although while others flow only in response to storm events such as local thunderstorms which also may result in flash-flooding and contribute a significant proportion of the annual discharge in isolated events. especially on streams in the drier western part of the area.</u> "		
3.6.2.2	3-25	10	"is" needs to be changed from subscript to normal script.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			"... miles; S ₁₆ is area of lakes and ponds, as a percentage of drainage area (plus 1 percent); P is average..."		
3.6.2.2	3-25	7 - 12	A reference is necessary for this regression equation, as well as a description of the area for which this equation was developed. If this equation is intended to cover the entire Colorado Plateau, then state so.		
3.6.2.2	3-25	12 - 13	<p><u>Insert the following text:</u></p> <p>For the Wasatch Plateau and Book Cliffs coal areas in Utah, annual discharge may be estimated as:</p> $Q = 0.000054 A^{0.81} P^{3.02}$ <p>Where Q is the average flow in cubic feet per second, A is the drainage area in square miles, and P is the normal annual precipitation for the drainage in inches from the 1963 U.S. Weather Bureau precipitation map of Utah (USGS OFR 83-38). An analogous equation is available for the Kolob and Alton coal field of Utah (USGS OFR 84-068):</p> $Q = 0.000079 A^{0.76} P^{2.91}$ <p>In addition to the equations above, the USGS has also developed regional regression equations for estimating monthly and annual streamflow statistics for ungaged sites in Utah (USGS Scientific Investigation Report 2008-5230), and the magnitude and frequency of peak flows for natural streams in Utah (USGS Scientific Investigations Report 2007-5158). The 10-year recurrence flows for ungaged streams may be calculated using regional regression equations which relate flow to geographic area, drainage area, mean basin elevation, average basin slope, and/or percent upland area covered by herbacious plants (USGS Scientific Investigations Report 2007-5158)."</p>		
3.6.2.2	3-25	13 - 16	<p>What is meant by "eastern part of the area?" Delete reference to "eastern part of the area" and revise text as follows:</p> <p>"Streams in the mountainous regions generally have a greater average annual flow per square mile than streams of the same order in the semiarid regions. This difference is due to the</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			effects on streamflow of the mountains from which most streams in the eastern part of the area flow. The major effect of the mountains is to change the altitude-precipitation relation at higher altitudes."		
3.6.2.2	3-25	14-16	<p>"... This difference is due to the effects on streamflow of the mountains from which most streams in the eastern part of the area flow. The major effect of the mountains is to change the altitude-precipitation relation at higher altitudes."</p> <p>Referring to the excerpt quoted above, what mountains are you referring to? Are you referring to hatched coal-bearing areas of the maps when you discuss eastern and western areas? If so, please specify.</p> <p>Streams in the western part of Utah's coal producing areas also flow from mountains. This omission is an example of how the original geographic boundaries defining the scope of this EIS are inadequate for analyzing coal producing regions of the Colorado Plateau.</p> <p>Also, explain how the mountains effect the altitude-precipitation relation.</p>		
3.6.2.2	3-25	17	Delete the sentence "Melting snowpacks and reservoir releases also help augment low flow on some streams", as this information is duplicated in the following sentence.		
3.6.2.2	3-25	20	Revise the text: "Most peak flows in <u>perennial streams</u> occur in the spring months as a result of snowmelt or rainfall runoff with snowmelt."		
3.6.2.3	3-25 and 3-26	The whole section	This section needs a discussion of water quality in the Utah Coal Fields		
3.6.2.3	3-25	22	This section should not be specific to northern Colorado.		
3.6.2.3	3-25 to 3-26	p. 3-25 lines 22 - 25, 35-39 and p. 3-26	The first paragraph (lines 22-27) and the third paragraph of this section say the same thing. The third paragraph seems to provide a better description of the chemistry; however, this paragraph needs to identify that AMD is not typically observed in association with coal mining operations within the Colorado Plateau region.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
		lines 1 - 2	<p>Delete the first paragraph of 3.6.2.3 and add the following line 2 of page 3-26:</p> <p>"Acid mine drainage is not typically observed in coal mining areas of the Colorado Plateau common in the study area because of the buffering capacity from alkalinity normally exceeds the acidity generated from sulfide oxidation.</p> <p>Sulfate is a ubiquitous constituent in the soils of the area, therefore caution must be used in applying sulfate concentrations as an indicator of mine drainage. Trace elements may be mobilized into surface water as a direct or indirect result of sulfide mineral oxidation; however, trace element concentrations in coal, spoil, and surface waters are generally small."</p>		
3.6.2.3	3-25	32	<p>"Regionally, dissolved solids concentrations are generally greater west of the mountains."</p> <p>What mountains does this quote refer to? There are numerous mountain ranges in the Colorado Plateau.</p>		
3.6.2.3	3-25	32-33	<p><u>Revise text:</u></p> <p>"Regionally, dissolved solids concentrations <u>in streams</u> are <u>related to geology</u>. generally greater west of the mountains. <u>The lower dissolved solids concentrations are generally found in the mountain areas, with dissolved solids increasing as surface water flows into semi-arid valley areas. Contact with geologic formations with high content of soluble minerals (e.g., the Mancos shale) can drastically increase the dissolved solids concentrations in streams.</u>"</p>		
3.6.2.3	3-25	33 - 34	<p>Please provide references for the "documented studies in the area" that "have shown that dissolved solids concentrations increase due to coal mining".</p> <p>Studies addressing the effect of coal mining on dissolved solids concentrations in Utah include the USGS Water-Resources Investigation reports 87-4186 and 90-4084.</p>		
3.6.2.3	3-25	34	<p><u>Add the following text to address (at least partially) an important omission:</u></p> <p>"Most coal mining areas within the Colorado Plateau coal</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			region lie within the Colorado River basin. Dissolved solids in streams draining or crossing coal mining areas may contribute to salinity in the Colorado River. The Colorado River and its tributaries provide municipal and industrial water to about 27 million people and irrigation water to nearly four million acres of land in the United States. The river also serves about 2.3 million people and 500,000 acres in Mexico. The threat of salinity is a major concern in both the United States and Mexico, as salinity affects agricultural, municipal, and industrial water users. (Bureau of Reclamation Salinity Control Program, http://www.usbr.gov/uc/progact/salinity/ accessed 10 November 2010)."		
3.6.2.3		General	<u>Add the following text:</u> "All surface water discharges from coal mines in Utah occur under UPDES permits, the State's program for implementing the NPDES under the CWA. UPDES permits include monitoring requirements and effluent limitations for parameters such as pH, total iron, manganese, TDS and total suspended solids (TSS). The allowable TDS concentrations for discharges from coal mines are a function of the general background levels in the receiving streams."		
3.6.2.3	3-25	36-38	"In areas of coal mining, buffering capacity is an important consideration because sedimentary rocks associated with coal deposits and the coal itself commonly contains <u>contain</u> pyrite and other sulfide minerals."		
3.6.8	3-59	2-3	In Utah, where mining often occurs at extreme depths and in certain geologic environments, longwall mining often induces no significant subsidence. The inherent assertion that subsidence <u>always</u> "damages the land above and adjacent to the mine" is also very incorrect. This sentence should read: "Underground mining, over time, usually results in some level of subsidence, which <u>may or may not</u> damages the land above and adjacent to the mine. Subsidence varies with mining method, mining depth, and geology of the overlying strata."		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			Also, what is the damage observed?		
3.6.8	3-59	14	Subsidence cracks have been observed on the ground surface in areas where overburden ranges from 800 to 900 feet thickness (USGS Water Resource Investigations Report 87-4186)		
3.6.8	3-59	15-16	"The effect from underground coal mining on hydrologic systems can range from none minimum to severe"		
3.6.8	3-59	37	"As the strata settles settle and becomes become re-compressed,..."		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Sims, Pam

From: Ehret, Paul
Sent: Tuesday, November 16, 2010 12:30 PM
To: Means, Brent P.; Coker, Jeffrey A. "Jeff"; Dale, Debbie; Calle, Marcelo
Cc: Craynon, John
Subject: Fw: Draft EIS Review, Chapter 3, Section 3.6
Attachments: EIS Comment form - Chapter 3 SW.DOCX

Somewhat late.

----- Original Message -----

From: John Caudle [<mailto:john.caudle@rrc.state.tx.us>]
Sent: Tuesday, November 16, 2010 10:20 AM
To: Craynon, John
Cc: gconrad@imcc.isa.us; Ehret, Paul; Stephanie Reed <stephanie.reed@rrc.state.tx.us>
Subject: Draft EIS Review, Chapter 3, Section 3.6

John, Here is our review of Section 3.6, surface water hydrology. I apologize for its lateness, but due to staff schedules it was just not possible to get this to you any sooner. I understand that our comments may not be considered since they are late, but I urge you to at least read them over and communicate with your contractor the vast inadequacy of the surface water hydrology section for, at a minimum, the Gulf Coast Region.

John E. Caudle, P.E., Director
Surface Mining and Reclamation Division
Railroad Commission of Texas
(512)463-6901

**DRAFT ENVIRONMENTAL IMPACT STATEMENT
SECTION 3.6 – SURFACE WATER HYDROLOGY
RAILROAD COMMISSION OF TEXAS, SURFACE MINING AND RECLAMATION DIVISION
COMMENTS, NOVEMBER 1, 2010**

The usefulness of the surface water section (Section 3.6) of draft Chapter 3 for the EIS is of great concern. This section goes into some detail (largely unsupported with valid technical references) of the genesis of the surface water regime in the Appalachian region, but offers next to nothing for other coal regions. Specifically, SMRD reviewed the introduction and Section 3.6.2 for the Gulf Coast surface water description. Other than a false impression that coal mining in Texas and other states in the identified Gulf region occurs mainly on the coast, this section offers little. It is clear that the author(s) of this section gathered little information from readily available sources, which could include USGS, state environmental agencies and data from surface mining permits that has been collected for over 30 years. Instead the author(s) laments the lack of "published" data to support a treatise on the surface water hydrologic regime within the states identified as being in the Gulf Coast Region. It is clear that a total lack of understanding of SMCRA exists within the talent pool gathered to prepare this EIS. If this were not the case, there would at least be a discussion of data that is gathered within each state to establish baseline as well as during and postmining surface water hydrologic conditions for each coal mining permit issued and as support for all bond release.

As a coordinating agency, the Surface Mining and Reclamation Division (SMRD) of the Railroad Commission of Texas (Commission) has chosen to participate in a process that, from the outset with the first coordinated conference call, seems flawed. With a near impossible time schedule, our review of the Section 3.6 has been delayed. Coordination between OSM and the coordinating agencies continues to be at a minimum in this process. Nonetheless, the SMRD continues to participate at this time, even though our patience with the process is growing thin, and offers the attached late comments on draft Section 3.6. Generally, the statements, data and assumptions provided in section 3.6 are either lacking substantiation rendering an educated review of the information infeasible or the section is devoid of any information. As with the draft Chapter 3, this section seems hastily prepared, ridden with typographical and editorial errors. The evaluations provided in the chapters appear to inconsistently characterize the Gulf Coast Region as occurring on the gulf coast line and does not represent the diverse surface water regimes encountered in Texas, let alone all of the states identified as being within the Gulf Coast Region.

Comment Form

Title of Document	Review of Draft EIS Section 3.6
Name	John E. Caudle Director, Surface Mining and Reclamation Division, Railroad Commission of Texas
Telephone Number	512.463.6901
Email	john.caudle@rrc.state.tx.us

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.6.0	3-2	24	The hydrologic analysis for probable hydrologic <u>consequences</u> determination		
		38	in mines that <u>emphasize</u>		
3.6.0	3-3	1	(runoff temporal distribution) and seasonal flows)		
3.6.1.3	3-19	1	SO ₂		
	3-26	23-24	“Average annual precipitation in the coastal mining area of Texas exceeds 56 inches.” This statement implies that mining on the coast. In addition, using the average does not adequately characterize the variation in rainfall across Texas and the Gulf Coast Region. Annual rainfall in areas of Texas where surface coal mining occurs ranges from about 20 inches in south Texas to 50 inches in northeast Texas.		
3.6.3.1	3-27		Figure title and graphic not on same page.		
	3-28		Figure doesn't support noted max rainfall on pg 3-		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			26 (no active mining in areas where rainfall exceeds 50 inches).		
	3-29		Figure legend doesn't describe units of evapotranspiration.		
3.6.3.2	3-31 and 32		Seriously? The only information that could be found was for low-flow ungauged streams in Alabama? There is considerable information published by USGS characterizing streams in states. It is not even clear why this information on stream regression is reported.		
3.6.3.3	3-32	13	Units of measurement for EC reported in dS/m rather than the more common $\mu\text{S}/\text{cm}$.		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Allen, Melissa M

From: Craynon, John
Sent: Tuesday, January 25, 2011 11:45 AM
To: Means, Brent P.; Calle, Marcelo; Ehret, Paul; Coker, Jeffrey A. "Jeff"
Subject: FW: SPR draft EIS chapter 4 review
Attachments: EIS Comment form Dave Clark-NM- Chapter 4.docx

John R. Craynon, P.E.
OSM SPR EIS Team Lead
Office of Surface Mining Reclamation and Enforcement
Washington, DC
202-208-2866
202-617-5002 cell
202-219-3276 fax
jcraynon@osmre.gov

"For Official Use Only -- Deliberative Process Material"

From: Clark, David, EMNRD [<mailto:david.clark@state.nm.us>]
Sent: Wednesday, January 19, 2011 4:42 PM
To: Craynon, John
Subject: SPR draft EIS chapter 4 review

John,

Attached are my comments on Chapter 4 of the draft EIS.

Dave Clark
NM-MMD

Comment Form

Title of Document	PDEIS Chapter 4
Contact Information	
Name	Dave Clark NM-MMD
Telephone Number	(505) 476-3416
Email	<u>david.clark@state.nm.us</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.1.2.2	9	26	...changes <u>to</u> the previous..		
4.1.4.1	30	12	most equipment on mine sites burns diesel, not gasoline		
4.1.4.1	31	18	...and <u>disturbance</u> is (<u>or impacts are</u>) to be avoided...		
4.1.4.1	33	11-16	It would be better to bullet both definitions		
4.1.4.2	40	30	I have never heard of herbicides being used for clearing land on Western US coal mines. I don't believe that this practice is "often required" in the West.		
4.1.4.3	45	33	I believe that the Harrington and Loveall (2006) study was conducted on the Molycorp molybdenum mine, not a coal mine. Nelly Stark did a lot of ponderosa pine research on MT coal mines in the 1970-80s		
4.1.5.3	53	Table 4.1.5-2	Colorado Plateau is not included in the table		
4.2.2.2	81	Footnote 2	New Mexico permits the shadow area, as well		
4.2.6.1.1.3	99	Table 4.2.6-2	Net Change in Unemployed column does not appear to be a percent		
4.2.6.4.1	106	12-13	Utah has recently permitted a surface coal mine		
4.3.6.1.1.3	143	Table 4.2.6-3	Net Change in Unemployed column does not appear to be a percent		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.4.6.1.1.3	179	Table 4.4.6-2	(%) is not indicated in column headings 1 and 3, which is inconsistent with the tables that make this comparison for Alternatives 1-3		
4.4.3.1.1.1	165	12	Should be "compared to", not "compared with in"		
4.5.1.2	197	4	Should be "emphasize on fill minimization"		
4.5.3.1.1.2	201	5	BTCA may be a better term than BMP		
4.5.3.2.2.1	205	9	grea(. Should be great.		
4.5.6.1.1.3	215	Table 4.5.6-2	(%) is not indicated in column headings 1 and 3, which is inconsistent with the tables that make this comparison for Alternatives 1-3		
4.5.8.3.6	246	Table 4.5.8-6	Column 3, Row 1: Should be "loss" not "lost"		
4.7.1.3	251	12	Should be "expert's"... "for instance" should be set off with commas		
4.7.1.3	251	13	Should be "expert's"		
4.7.1.6	253	28	"and" should be "an"		
4.7.1.13	260	8	Should be "of Alternative 4"		
4.7.1.15	261	10	Should be "(EIA),"		
4.7.4	267	17	"runoff" is not hyphenated in my dictionary (although run-on is)		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Comment Form

Title of Document	SPR EIS - Chapter 4 Comments
Contact Information	
Name	State of Utah (c/o Dana Dean or Peter Brinton)
Telephone Number	801-538-5320 or 801-538-5258
Email	danadean@utah.gov or peterbrinton@utah.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
General			<p>Following these general comments, please see DOGM's more specific comments included in the following pages.</p> <p>Since the Cooperating Agencies have not yet been provided with a clear summary of the Proposed Action and the Alternatives (such as a clear, revised Chapter 2), we are unable to provide a complete and accurate evaluation of the potential impacts of the Proposed Action and Alternatives. Until this information is available, together with clear, revised Chapter 3 correctly documenting the affected environment, the stated results of the Proposed Action and Alternatives will be questionable.</p>		
General			<p>Due to time constraints, this review of Chapter 4 has been limited to cover parts of Sections 4.0 (introductory material), 4.5 (Preferred Alternative) and 4.7 (methodology). An in-depth review of all of the reviewed sections was not possible, given time constraints. Review of other sections was generally performed opportunistically, or when required in order to understand references in the sections which were reviewed in detail.</p>		
General			<p>In addition to the following comments, Utah wishes to point out some significant concerns with assumptions and methods used to develop this EIS, all of which lead us to question the feasibility of developing an acceptable EIS of a nationwide scope in such a short time period. We apologize that we were unable to clearly identify some of these issues sooner, but some of these issues have only come to light while reviewing Chapter 4.</p>		
General			<p>This analysis does not adequately consider future coal</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			production in the Colorado Plateau region. There are future coal production areas in Utah or possibly other Colorado Plateau states that are not now active, but which are <u>expected to be active</u> during the time period in which the rules will actually be implemented. Some of these areas have been omitted entirely from the EIS scope. Most of these reserves are federal coal reserves, and some may be surface mined. We can provide additional info as requested.		
General			One of our general conclusions regarding the current Chapter 4 is that it cannot accurately describe foreseeable impacts to the Colorado Plateau coal-producing region because the scope used to identify the Affected Environment upon which Impact Analysis is based is incorrect, and the Proposed Action is vague. DOGM recognizes significant deficiencies in its review of sections addressing Utah. We expect that similar deficiencies of important information to exist in other Colorado Plateau areas not reviewed in as much detail. DOGM believes that the decision to analyze <u>nationwide</u> rule changes over such a short period of time has resulted (thus far) an inaccurate and inadequate document overall.		
General			It is noted that royalties from the mining of federal and state coal have been included in the socioeconomic analysis in Chapter 4 of the EIS. Thank you. This is an important addition to the EIS. In our opinion, the loss of federal and state-owned coal as a government asset has not been given enough attention in this NEPA analysis. In the Colorado Plateau region, entire coal fields with primarily federal coal reserves do not fall within the current scope of the EIS.		
General			The Production Shift Mathematical Model is not included with the draft document, nor are the model inputs and outputs provided for the five alternatives analyzed. The model must be provided in order for cooperating agencies to comment adequately on the draft statement's analysis.		
General			The public impact of potential changes to the cost of electricity is also a significant socioeconomic factor also not been discussed in this Chapter or in the EIS.		
			While some Chapter 3 comments from the cooperating agencies have been considered in the development of Chapter		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>4 (such as a basic analysis of royalties on federal coal), it appears that some Chapter 4 conclusions about impacts may have been prepared prior to the incorporation of Cooperating Agencies' Chapter 3 comments with additional information about the affected environment (Chapter 3).</p> <p>It is understandable that a preliminary analysis of projected impacts would be helpful - perhaps needed - in starting to develop some of the general content of Ch.4. But before the revised draft of the EIS will be ready for public scrutiny, the conclusions in Chapter 4 need to be revised to account for additional information Chapter 3 comments. Otherwise, the conclusions made in the EIS will be both incorrect and indefensible.</p>		
Global			Replace reference to Table 4.2.3-5 with reference to Table 4.3.3-2.		
4.0.2	4-1	26 - 30	<p>1. List the 11 principal elements considered and the 4 elements not considered. Reviewing Chapter 2.6, there are 3 elements described as "primarily administrative or risk-reducing in nature" which "have been eliminated from further analysis": Performance Bonds and Release (2.6.1), Financial Assurance for Long Term Discharges of Parameters of Concern (2.6.2), and Permit Coordination (2.6.3). What is the 4th element not considered?</p> <p>2. Remove the reference to Section 4.04 (sic) and replace with a correct reference for the rationale for determining "that changes to four of these principal elements would not result in any identifiable environmental impact". Section 4.0.4 provides rationale for excluding resource areas, not elements.</p>		
4.0.3	4-3	1-2	<p>It appears that the estimation of "future coal production" does not account for the significant increase in nationwide and global coal consumption (and associated increases in coal production) that are projected by the EIA and other sources (http://www.eia.doe.gov/oiaf/ieo/coal.html; http://www.tsl.uu.se/uhdsg/Publications/USA_Coal.pdf) over at least the next 25 years. The proposed rule changes would affect many of these years. The modeling of coal production shifts should account for increased production.</p>		
4.0.3	4-3	3 - 5	A statement should be made either in this section or in the Methodology section indicating how representative the 2008		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>U.S. EIA data are for describing baseline coal production (i.e., was 2008 a typical year when compared to previous years, or was 2008 an unusual year for any of the seven coal mining regions?). This is important in evaluating the current state of coal mining for Alternative 1 (no change), to which the other alternatives are compared. A combination of observed and projected coal production data from a few years surrounding 2008 would be more justifiable in creating a baseline, considering recent economic changes.</p> <p>The use of 2008 U.S. EIA data for baseline should be added as a bullet to Section 4.7.1.1</p>		
4.1.2.2	4-8	19	Fix and make uniform the reference to fill stability study, here and in following paragraphs.		
4.1.2.2	4-8	27	Fix and make uniform the reference to fill stability study.		
4.1.1	4-5	10-12	<p>We understand the 2008 Stream Buffer Zone and "excess spoil minimization" rules complicate the description of the no change Alternative 1. However, the way Section 4.1 is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things as part of the EIS (eg. "land elements under Alternative 1 would change requirements related to surface configuration and fills..." lines 6-7, p4-7). It is questionable whether the 2008 rule can be portrayed as baseline now, if it was overturned.</p> <p>It would probably help here to give additional explanation about the 2008 rule and why actions outside this EIS are currently changing the "No-Change" Alternative.</p> <p>If there are other known actions (such as pending state or federal regulations) that would cause existing conditions to change independent of this EIS, they should be clearly identified and then discussed in this section, and possibly in the Cumulative Effects section.</p>		
4.1.2.2	4-7	6-7	<p>Consider: "land elements under Alternative 1 would change requirements related to surface configuration and fills..."</p> <p>The way this section is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			as part of the EIS.		
4.1.2.2	4-7	26	Alternative 1 itself does not propose to change the previous regulations related to AOC variances. The way this section is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things as part of the EIS.		
4.1.3-2	4-14	TABLE 4.1.3-2	Headings on left are cutoff		
4.1.3.1.1.3	4-18	10-12	In western coal basins, "Recharge to the upper aquifers in the landscape takes place largely during the snowmelt period. Rainfall during winter and early spring can also be effective in recharging the upper aquifers in the landscape. [Where does the quote within the quote end, and who is being quoted?]		
4.1.4.1	4-33	14-16	Should this sentence be bulleted?		
4.1.4.3	4-45, 4-46	22, 40	Under current regulations, native species are required in site regulation unless explicitly approved by the RA. 30 CFR ~816.111 (a)(2) : Comprised of species native to the area... ~30 U.S.C. 1265 (b) (19)...and permanent vegetative cover of the same seasonal variety native to the area of land to be affected. Additionally, it is important to allow non-native vegetation in some cases, such as in the Western United States where in drier areas where non-native species can be beneficially used as nurse crops.		
4.1.4.3	4-47	15,16	The Simmons et al 2008 paper only assessed reclaimed mine lands in Appalachia. This statement is not true for the entire U.S. The majority of reclaimed mine land in Utah has not been converted to pastureland.		
4.1.6.1.2.2	4-59	3,6-7	Give the reason for the lack of more specific data by region (compared to that of other resources).		
4.2.1	4-77	Table 4.2.1.1	For the values shown in the first six columns of this table, suggest either rounding values showing 3 significant figures or rounding to nearest 1,000 (or greater).		
4.2.1.3	4-79	22-29	The line numbers are overlapping the table in the far right column.		
4.2.3.1.1.2	4-84	30-35	<i>Something's missing – the following lines don't make sense.</i> 30 With the essential elimination of surface mining and the requirement for material damage to		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			31 eliminate any impairments to the physical, chemical, or biological function of any streams, the 32 affected Basin, the Illinois Basin, and the Colorado Plateau regions, respectively, compared to 33 Alternative 1. Streams that have previously been affected by surface mining activities may 34 recover as the hydrologic balance and land uses become reestablished stream length may be 35 expected to be reduced by 86%, 54%, 60%, and 60% for the Northern Rocky Mountains and 36 Great Plains, the Appalachian to pre-mining land uses.		
4.2.3.1.1.3	4-85	17	"...the existing condition since mine spoils are more permeable than the in situ condition, thus..." Use of "in-situ"?		
4.2.3	4-87 to -88	Table 4.2.3-2	This table needs a description of the units, which are assumed to be percent.		
4.2.3.3.1.2	4-90	14-20	Planting trees on lands that supported grasses in the pre-mining state will result in a net loss of both surface and ground water because trees consume more water than grasses. Lines 18-20 correctly point out that some trees consume more water than others, e.g., conifers vs. deciduous trees. For example, see: Gifford, G.F., Humphries, W., Jaynes, R.A., January 1983, A Preliminary Quantification of the Impacts of Aspen Succession on Water Yield within the Colorado River Basin (A Process Aggravating the Salt Pollution Problem), Hydraulics and Hydrology Series UWRL/H-83/01, Utah Water Research Laboratory, Utah State University, Logan Utah		
4.2.4.3	4-94	28	Native species are currently required in federal regulations unless otherwise approved by the RA.		
4.2.6.4.1	4-103	11-16	It is noted that coal royalties have been included in Chapter 4 of the EIS. This is a good inclusion. However, in our opinion, the loss of federal and state-owned coal as a government asset has not been given the attention it deserves as a public resource in this NEPA analysis.		
4.2.6.4.1	4-106	12-14	The impact of these rules on Utah's coal mining industry and associated socioeconomics is <u>incorrect</u> as presently stated in these sentences. A surface coal mine with potential for several decades of mining was permitted in Kane County in 2010 and construction is well underway. This coal field was		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>not, but should have, been included within the scope of the EIS according to scope determination methods. Other coal reserves in Utah not included within the scope of this EIS are also expected to be mined by surface methods in the future.</p> <p>This analysis does not consider coal production areas in Utah that are expected to be active during the time period in which the rules will actually be implemented. Some of these reserves are likely federal coal reserves. It is suspected that Colorado may also have future reserves of surface mineable coal that would be affected as well.</p>		
4.2.6.4.2.3	4-110	25	The exact figures are not at hand, but a considerable amount of the coal mined in Utah is shipped by truck! (see: 4.3.6.4.2.3 and 4.4.6.4.2.3)		
4.4.3.1.1.2	4-165	25-27	<p>Regarding the following statement: "The 5% projected increase in surface mining in the Northern Rocky Mountains and Great Plains indicates the belief that streams in this region have been previously impaired, most likely by gas extraction activities."</p> <p>It is incorrect to assume without any concrete justification and explanation that there would be a 5% increase in production in these areas, as stated. Please include your source.</p> <p>Also, this statement belongs in the section discussing the model assumptions.</p>		
4.5.1	4-195 to - 198	General	<p>The "production Shift Mathematical Model" alluded to in Section 4.5.3.1.1.3 (page 4-201 lines 29 to 30) and vaguely described in Section 4.7.1 needs to be provided in order to comment adequately on the draft statement's analysis. There is no discussion specific to Alternative 5 describing the assumptions associated with the production shift values presented.</p> <p>From a review of the scant information provided in Section 4.7, it appears that surface mining and underground mining were evaluated as either "affected" or "unaffected" by Region for each alternative. Coal production was then adjusted such that increased production from "unaffected" regions would compensate for production lost from "affected" regions so to</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			keep constant energy production (BTUs). No summary of the "affected" and "unaffected" mining methods by region is provided in Section 4.5.1 for Alternative 5.		
4.5.1.1	4-196	10-11	Suggestion for modification: "Subsidence caused by underground longwall mining, <u>very shallow room-and-pillar mining</u> , or room-and-pillar retreat mining could dewater a stream segment <u>given specific geology, mining geometry, and other specific factors.</u> " The factors affecting subsidence should be restated here to elaborate on the phrase "mining could dewater..."		
4.5.1.1	4-196	24-27	It would not necessarily be "impossible" or too "difficult" to restore subsided elevation in all cases. The words "difficult" and "impossible" are probably overly-strong words to use, at least without some qualification. Perhaps it may be generally closer to impossible or more difficult in the eastern coal fields. Additionally it cannot be assumed that all changes in elevation caused by longwall mining would necessarily change the form and function of the stream.		
4.5.3.1.1.3	4-202	7	Replace "Projected mining in the Colorado Plateau..." with "Projected stream impacts in the Colorado Plateau..."		
4.5.3.1.1.3	4-202	10	Replace "Projected levels of mining in the Gulf Coast..." with "Projected stream impacts in the Gulf Coast..."		
4.5.3.1.1.3	4-202	18	Replace "Mining in the Northern Rocky Mountains..." with "Stream impacts in the Northern Rocky Mountains..."		
4.5.3.1.1.3	4-203	1	Replace "...mining production in the Northwest..." with "...stream impacts in the Northwest..."		
4.5.3.1.1.3	4-203	4	Replace "...mining production in the Other Western..." with "...stream impacts in the Other Western..."		
4.5.5.2	4-212	4	Change "to be proved achievable and feasible" to "financial assurance". It is currently required that a postmining land uses be proven to be achievable and feasible. 30 U.S.C. 1258(a)(4) states, "a detailed description of how the proposed postmining land use is to be achieved and necessary support activities which may be needed to achieve the proposed land use." However, financial assurances are not currently required. These "financial assurances were mentioned in Chapter 2, page 2-28, lines 16 and 17.		
4.5.5.2	4-212	5-8	This statement is <u>not</u> true in Utah. Currently, the majority of reclaimed lands are designated as wildlife habitat, grazing, or industrial uses.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.5.5.2	4-212	27-28	Preventing PMLU's such as cropland or industrial which "may be against the wishes of the landowner" (pg. 4-140 line 10) would have more adverse impacts than are analyzed. If the landowner chose to develop the land as industrial or for cropland after the bond release was achieved, nothing in SMCRA would prevent the landowner from doing so. This would then be a waste of substantial time and money reforesting an area that was going to then be re-disturbed.		
4.5.6	4-213	8-9	Remove "comparatively".		
4.5.6	4-213	8-18	A statement acknowledging the role of royalties earned from the state and federal coal production on the federal, state, and local government revenues in both the Rocky Mountain / Great Plains and the Colorado Plateau coal producing areas in Western states should be added.		
4.5.6	General	General	<p>An important socioeconomic element in this chapter that is too vague for analysis is whether jobs and revenue associated with coal-fired power plants (which are directly tied to the coal industry, and which cannot be replaced immediately) are included in this analysis.</p> <p>The socioeconomic impact of potential changes to the cost of electricity is also a significant factor apparently not currently discussed in this EIS. This should have been analyzed.</p> <p>See the following source for an idea about the impact of coal-generated electricity and coal mining in general on Utah's economy: http://www.unews.utah.edu/p/?r=070710-1</p>		
4.5.6.1.1.2	4-214	9-11	A statement explaining the reasons for using new regional areas to evaluate employment changes, instead of the original coal producing regions, should be included.		
4.5.6.1.4	4-218	17-32	Since royalties are technically not taxes, but a partial recovery of a resource that is owned by the respective state and federal government, the economic impacts associated with royalties should be included in a separate section apart from the taxes.		
4.5.6.1.4	4-218	17-32	NEPA requires environmental analysis of federal resources and impacts to them when decisions regarding their future use are proposed. Federal coal is a natural resource that will definitely be affected by proposed changes to federal coal mining rules, and the resources and impacts to these		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			resources should be more strongly considered in this EIS. Some general statement about the impact of both current and future federal coal royalties on the federal government's revenue should be included.		
4.7	4-249	General	An appendix providing model inputs, equations / calculations, and results is necessary. Add a reference to this appendix in Section 4.7. Throughout Section 4.7, examples are provided; however, these examples are typically for Alternative 4 only. Additional information on the model inputs is necessary in order to comment adequately on the draft statement's analysis.		
4.7.1.1	4-250	General	Add a bullet to the list of Major Assumptions stating that "Baseline coal production data are represented in Alternative 1 and are based on U.S. Energy Information Administration data for 2008".		
4.7.1.1	4-250	6-8	The US Energy Information Administration (part of DOE and cited elsewhere in this EIS) reports that nationwide coal consumption is expected to significantly increase through the year 2035. Without further research, it is assumed that the increase in coal consumption is expected to be provided primarily by domestic coal producers, given the countries large coal resources and existing industry. This assumption appears to be incorrect. Source: http://www.eia.doe.gov/oiaf/ieo/coal.html		
4.7.1.1	4-250	6-8	Unless valid reasons can be provided for using the static 2008 coal production numbers to help model the environmental impacts of the potential rules on system with projected dynamic coal production, this assumption contributes a significant source of error to the model results that will need to be corrected. The conclusions of the EIS would otherwise be inaccurate.		
4.7.1.1	4-250	General	Regarding the following statement from Alternative 2 (4.4.3.1.1.2, p165): "The 5% projected increase in surface mining in the Northern Rocky Mountains and Great Plains indicates the belief that streams in this region have been previously impaired, most likely by gas extraction activities." It appears that this assumption of an increase in surface mining in the N Rocky Mtn region may have been made for all		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>Alternatives as part of the model analysis. If so, this assumption should be included here.</p> <p>Without any concrete basis for this assumption, no justifiable conclusions can be made using it. Please include your source, as this assumption, if understood correctly, is critical to the model design and output.</p>		
4.7.1.1	4-250	15-17	Justification for the exemption of metallurgical coal production in this analysis should be stated here. (ie. If the production is so much lower than generation coal, this should be stated together with a reference).		
4.7.1.1	4-250	15-17	Metallurgical coal production from elsewhere in the United States (besides Appalachian coal-producing areas) would also be affected, and justification for its omission in this EIS needs to be stated as well.		
4.7.1.6	4-253 to 254	General	This section would be improved by simply stating that a deterministic model was used for the DEIS. Describing a stochastic model which has not been finished or used in the statement's analysis is confusing and detracts from the modeling that has been used for the analysis. Text / figures describing stochastic analyses should be withdrawn until the stochastic analysis has been completed and incorporated into the statement.		
4.7.1.6	4-253	14 – 16	Suggest removing discussion of Beta-PERT distributions, since these are not used for the analysis in this statement (see comment above). If maintained, then clarify the definition of the acronym PERT (which could infer Program or Project Evaluation and Review Technique).		
4.7.1.6	4-254	2	<p>The document states that the "stochastic model is still being developed". This seems to severely undermine the cooperating agencies ability to evaluate and comment on the predictive methodology and raises several questions:</p> <ol style="list-style-type: none"> 1. Why is a stochastic model still being developed AFTER the analysis section of the statement has been completed? 2. When will the stochastic model be completed, and how will its results be incorporated into the analysis? 3. What effects will the stochastic model results have on the analysis in the statement? Is the stochastic an academic exercise, or will its results affect the findings of the statement? 		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.7.1.17	4-254	General	Include a description of how representative the 2008 U.S. EIA data are for describing baseline coal production, i.e., was 2008 a typical year when compared to previous years, or was 2008 an unusual year for any of the seven coal mining regions?		
4.7.1.17	4-263 to 264	General	<p>The approach whereby affected stream length is calculated based on stream densities seems reasonable. However, this approach neglects to consider differing sensitivity to stream effects in regions with greater stream density (Appalachia) compared to regions with lower stream density (Colorado Plateau).</p> <p>Arguably, the sensitivity of a region to impacts to streams could be considered to be inversely proportional to the stream density. For example, consider areas A and B, each of equal size. Area A contains eight perennial streams and a stream density of 0.8 mi/100 acres, while Area B has one perennial stream and a stream density of 0.1 mi/100 acres. An alternative disturbing 100 acres would affect 0.8 miles of stream in Area A and 0.1 miles of stream in Area B, so there appears to be less effect on Area B. Now consider that Area B has only one perennial stream, so there is no suitable alternative source of water for drinking, aquatic wildlife, and recreation. Area B, on the other hand, may have seven other streams which remain unaffected and continue to provide water for drinking, aquatic wildlife, and recreation. Is there really less of an effect in Area B?</p> <p>An evaluation attempting to quantify such region-specific and potentially subjective criteria describing sensitivity to surface water (and groundwater) impacts may be beyond the scope of this statement. Absent such considerations, it is suggested that the stream impact analysis and results include a caveat that a unit effect on streams (mi/year) may have different impacts from region to region.</p>		
4.7.1.17	4-264	4 - 7	The text states that "an overall stream density for each coal resource region was calculated using a weighted basis" and that "[w]eighted regional average stream densities were calculated for perennial, intermittent, other and total" stream lengths. However, the weighting criteria are not described nor are weighting factors identified. Additional information on the		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			weighting approach is necessary in order to comment adequately on the draft statement's analysis.		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Comment Form

Title of Document	SPR EIS - Chapter 4 Comments
Contact Information	
Name	State of Utah (c/o Dana Dean or Peter Brinton)
Telephone Number	801-538-5320 or 801-538-5258
Email	danadean@utah.gov or peterbrinton@utah.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
General			<p>Following these general comments, please see DOGM's more specific comments included in the following pages.</p> <p>Since the Cooperating Agencies have not yet been provided with a clear summary of the Proposed Action and the Alternatives (such as a clear, revised Chapter 2), we are unable to provide a complete and accurate evaluation of the potential impacts of the Proposed Action and Alternatives. Until this information is available, together with clear, revised Chapter 3 correctly documenting the affected environment, the stated results of the Proposed Action and Alternatives will be questionable.</p>		
General			<p>Due to time constraints, this review of Chapter 4 has been limited to cover parts of Sections 4.0 (introductory material), 4.5 (Preferred Alternative) and 4.7 (methodology). An in-depth review of all of the reviewed sections was not possible, given time constraints. Review of other sections was generally performed opportunistically, or when required in order to understand references in the sections which were reviewed in detail.</p>		
General			<p>In addition to the following comments, Utah wishes to point out some significant concerns with assumptions and methods used to develop this EIS, all of which lead us to question the feasibility of developing an acceptable EIS of a nationwide scope in such a short time period. We apologize that we were unable to clearly identify some of these issues sooner, but some of these issues have only come to light while reviewing Chapter 4.</p>		
General			<p>This analysis does not adequately consider future coal</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>production in the Colorado Plateau region. There are future coal production areas in Utah or possibly other Colorado Plateau states that are not now active, but which are <u>expected to be active</u> during the time period in which the rules will actually be implemented. Some of these areas have been omitted entirely from the EIS scope. Most of these reserves are federal coal reserves, and some may be surface mined. We can provide additional info as requested.</p>		
General			<p>One of our general conclusions regarding the current Chapter 4 is that it cannot accurately describe foreseeable impacts to the Colorado Plateau coal-producing region because the scope used to identify the Affected Environment upon which Impact Analysis is based is incorrect, and the Proposed Action is vague. DOGM recognizes significant deficiencies in its review of sections addressing Utah. We expect that similar deficiencies of important information to exist in other Colorado Plateau areas not reviewed in as much detail. DOGM believes that the decision to analyze <u>nationwide</u> rule changes over such a short period of time has resulted (thus far) an inaccurate and inadequate document overall.</p>		
General			<p>It is noted that royalties from the mining of federal and state coal have been included in the socioeconomic analysis in Chapter 4 of the EIS. Thank you. This is an important addition to the EIS.</p> <p>In our opinion, the loss of federal and state-owned coal as a government asset has not been given enough attention in this NEPA analysis. In the Colorado Plateau region, entire coal fields with primarily federal coal reserves do not fall within the current scope of the EIS.</p>		
General			<p>The Production Shift Mathematical Model is not included with the draft document, nor are the model inputs and outputs provided for the five alternatives analyzed. The model must be provided in order for cooperating agencies to comment adequately on the draft statement's analysis.</p>		
General			<p>The public impact of potential changes to the cost of electricity is also a significant socioeconomic factor also not been discussed in this Chapter or in the EIS.</p>		
			<p>While some Chapter 3 comments from the cooperating agencies have been considered in the development of Chapter</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>4 (such as a basic analysis of royalties on federal coal), it appears that some Chapter 4 conclusions about impacts may have been prepared prior to the incorporation of Cooperating Agencies' Chapter 3 comments with additional information about the affected environment (Chapter 3).</p> <p>It is understandable that a preliminary analysis of projected impacts would be helpful - perhaps needed - in starting to develop some of the general content of Ch.4. But before the revised draft of the EIS will be ready for public scrutiny, the conclusions in Chapter 4 need to be revised to account for additional information Chapter 3 comments. Otherwise, the conclusions made in the EIS will be both incorrect and indefensible.</p>		
Global			Replace reference to Table 4.2.3-5 with reference to Table 4.3.3-2.		
4.0.2	4-1	26 - 30	<p>1. List the 11 principal elements considered and the 4 elements not considered. Reviewing Chapter 2.6, there are 3 elements described as "primarily administrative or risk-reducing in nature" which "have been eliminated from further analysis": Performance Bonds and Release (2.6.1), Financial Assurance for Long Term Discharges of Parameters of Concern (2.6.2), and Permit Coordination (2.6.3). What is the 4th element not considered?</p> <p>2. Remove the reference to Section 4.04 (sic) and replace with a correct reference for the rationale for determining "that changes to four of these principal elements would not result in any identifiable environmental impact". Section 4.0.4 provides rationale for excluding resource areas, not elements.</p>		
4.0.3	4-3	1-2	It appears that the estimation of "future coal production" does not account for the significant increase in nationwide and global coal consumption (and associated increases in coal production) that are projected by the EIA and other sources (http://www.eia.doe.gov/oiaf/leo/coal.html ; http://www.tsl.uu.se/uhdsg/Publications/USA_Coal.pdf) over at least the next 25 years. The proposed rule changes would affect many of these years. The modeling of coal production shifts should account for increased production.		
4.0.3	4-3	3 - 5	A statement should be made either in this section or in the Methodology section indicating how representative the 2008		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>U.S. EIA data are for describing baseline coal production (i.e., was 2008 a typical year when compared to previous years, or was 2008 an unusual year for any of the seven coal mining regions?). This is important in evaluating the current state of coal mining for Alternative 1 (no change), to which the other alternatives are compared. A combination of observed and projected coal production data from a few years surrounding 2008 would be more justifiable in creating a baseline, considering recent economic changes.</p> <p>The use of 2008 U.S. EIA data for baseline should be added as a bullet to Section 4.7.1.1</p>		
4.1.2.2	4-8	19	Fix and make uniform the reference to fill stability study, here and in following paragraphs.		
4.1.2.2	4-8	27	Fix and make uniform the reference to fill stability study.		
4.1.1	4-5	10-12	<p>We understand the 2008 Stream Buffer Zone and "excess spoil minimization" rules complicate the description of the no change Alternative 1. However, the way Section 4.1 is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things as part of the EIS (eg. "land elements under Alternative 1 would change requirements related to surface configuration and fills..." lines 6-7, p4-7). It is questionable whether the 2008 rule can be portrayed as baseline now, if it was overturned.</p> <p>It would probably help here to give additional explanation about the 2008 rule and why actions outside this EIS are currently changing the "No-Change" Alternative.</p> <p>If there are other known actions (such as pending state or federal regulations) that would cause existing conditions to change independent of this EIS, they should be clearly identified and then discussed in this section, and possibly in the Cumulative Effects section.</p>		
4.1.2.2	4-7	6-7	<p>Consider: "land elements under Alternative 1 would change requirements related to surface configuration and fills..."</p> <p>The way this section is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			as part of the EIS.		
4.1.2.2	4-7	26	Alternative 1 itself does not propose to change the previous regulations related to AOC variances. The way this section is currently written, it appears that the "No-Change" Alternative 1 might actually be changing things as part of the EIS.		
4.1.3-2	4-14	TABLE 4.1.3-2	Headings on left are cutoff		
4.1.3.1.1.3	4-18	10-12	In western coal basins, "Recharge to the upper aquifers in the landscape takes place largely during the snowmelt period. Rainfall during winter and early spring can also be effective in recharging the upper aquifers in the landscape. <i>[Where does the quote within the quote end, and who is being quoted?]</i>		
4.1.4.1	4-33	14-16	Should this sentence be bulleted?		
4.1.4.3	4-45, 4-46	22, 40	Under current regulations, native species are required in site regulation unless explicitly approved by the RA. 30 CFR ~816.111 (a)(2) : Comprised of species native to the area... ~30 U.S.C. 1265 (b) (19)...and permanent vegetative cover of the same seasonal variety native to the area of land to be affected. Additionally, it is important to allow non-native vegetation in some cases, such as in the Western United States where in drier areas where non-native species can be beneficially used as nurse crops.		
4.1.4.3	4-47	15,16	The Simmons et al 2008 paper only assessed reclaimed mine lands in Appalachia. This statement is not true for the entire U.S. The majority of reclaimed mine land in Utah has not been converted to pastureland.		
4.1.6.1.2.2	4-59	3,6-7	Give the reason for the lack of more specific data by region (compared to that of other resources).		
4.2.1	4-77	Table 4.2.1.1	For the values shown in the first six columns of this table, suggest either rounding values showing 3 significant figures or rounding to nearest 1,000 (or greater).		
4.2.1.3	4-79	22-29	The line numbers are overlapping the table in the far right column.		
4.2.3.1.1.2	4-84	30-35	<i>Something's missing – the following lines don't make sense.</i> 30 With the essential elimination of surface mining and the requirement for material damage to		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			31 eliminate any impairments to the physical, chemical, or biological function of any streams, the 32 affected Basin, the Illinois Basin, and the Colorado Plateau regions, respectively, compared to 33 Alternative 1. Streams that have previously been affected by surface mining activities may 34 recover as the hydrologic balance and land uses become reestablished stream length may be 35 expected to be reduced by 86%, 54%, 60%, and 60% for the Northern Rocky Mountains and 36 Great Plains, the Appalachian to pre-mining land uses.		
4.2.3.1.1.3	4-85	17	"...the existing condition since mine spoils are more permeable than the in situ condition, thus..." Use of "in-situ"?		
4.2.3	4-87 to -88	Table 4.2.3-2	This table needs a description of the units, which are assumed to be percent.		
4.2.3.3.1.2	4-90	14-20	Planting trees on lands that supported grasses in the pre-mining state will result in a net loss of both surface and ground water because trees consume more water than grasses. Lines 18-20 correctly point out that some trees consume more water than others, e.g., conifers vs. deciduous trees. For example, see: Gifford, G.F., Humphries, W., Jaynes, R.A., January 1983, A Preliminary Quantification of the Impacts of Aspen Succession on Water Yield within the Colorado River Basin (A Process Aggravating the Salt Pollution Problem), Hydraulics and Hydrology Series UWRL/H-83/01, Utah Water Research Laboratory, Utah State University, Logan Utah		
4.2.4.3	4-94	28	Native species are currently required in federal regulations unless otherwise approved by the RA.		
4.2.6.4.1	4-103	11-16	It is noted that coal royalties have been included in Chapter 4 of the EIS. This is a good inclusion. However, in our opinion, the loss of federal and state-owned coal as a government asset has not been given the attention it deserves as a public resource in this NEPA analysis.		
4.2.6.4.1	4-106	12-14	The impact of these rules on Utah's coal mining industry and associated socioeconomics is incorrect as presently stated in these sentences. A surface coal mine with potential for several decades of mining was permitted in Kane County in 2010 and construction is well underway. This coal field was		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>not, but should have, been included within the scope of the EIS according to scope determination methods. Other coal reserves in Utah not included within the scope of this EIS are also expected to be mined by surface methods in the future.</p> <p>This analysis does not consider coal production areas in Utah that are expected to be active during the time period in which the rules will actually be implemented. Some of these reserves are likely federal coal reserves. It is suspected that Colorado may also have future reserves of surface mineable coal that would be affected as well.</p>		
4.2.6.4.2.3	4-110	25	The exact figures are not at hand, but a considerable amount of the coal mined in Utah is shipped by truck! (see: 4.3.6.4.2.3 and 4.4.6.4.2.3)		
4.4.3.1.1.2	4-165	25-27	<p>Regarding the following statement: "The 5% projected increase in surface mining in the Northern Rocky Mountains and Great Plains indicates the belief that streams in this region have been previously impaired, most likely by gas extraction activities."</p> <p>It is incorrect to assume without any concrete justification and explanation that there would be a 5% increase in production in these areas, as stated. Please include your source.</p> <p>Also, this statement belongs in the section discussing the model assumptions.</p>		
4.5.1	4-195 to - 198	General	<p>The "production Shift Mathematical Model" alluded to in Section 4.5.3.1.1.3 (page 4-201 lines 29 to 30) and vaguely described in Section 4.7.1 needs to be provided in order to comment adequately on the draft statement's analysis. There is no discussion specific to Alternative 5 describing the assumptions associated with the production shift values presented.</p> <p>From a review of the scant information provided in Section 4.7, it appears that surface mining and underground mining were evaluated as either "affected" or "unaffected" by Region for each alternative. Coal production was then adjusted such that increased production from "unaffected" regions would compensate for production lost from "affected" regions so to</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			keep constant energy production (BTUs). No summary of the "affected" and "unaffected" mining methods by region is provided in Section 4.5.1 for Alternative 5.		
4.5.1.1	4-196	10-11	Suggestion for modification: "Subsidence caused by underground longwall mining, <u>very shallow room-and-pillar mining</u> , or room-and-pillar retreat mining could dewater a stream segment <u>given specific geology, mining geometry, and other specific factors.</u> " The factors affecting subsidence should be restated here to elaborate on the phrase "mining could dewater..."		
4.5.1.1	4-196	24-27	It would not necessarily be "impossible" or too "difficult" to restore subsided elevation in all cases. The words "difficult" and "impossible" are probably overly-strong words to use, at least without some qualification. Perhaps it may be generally closer to impossible or more difficult in the eastern coal fields. Additionally it cannot be assumed that all changes in elevation caused by longwall mining would necessarily change the form and function of the stream.		
4.5.3.1.1.3	4-202	7	Replace "Projected mining in the Colorado Plateau..." with "Projected stream impacts in the Colorado Plateau..."		
4.5.3.1.1.3	4-202	10	Replace "Projected levels of mining in the Gulf Coast..." with "Projected stream impacts in the Gulf Coast..."		
4.5.3.1.1.3	4-202	18	Replace "Mining in the Northern Rocky Mountains..." with "Stream impacts in the Northern Rocky Mountains..."		
4.5.3.1.1.3	4-203	1	Replace "...mining production in the Northwest..." with "...stream impacts in the Northwest..."		
4.5.3.1.1.3	4-203	4	Replace "...mining production in the Other Western..." with "...stream impacts in the Other Western..."		
4.5.5.2	4-212	4	Change "to be proved achievable and feasible" to "financial assurance". It is currently required that a postmining land uses be proven to be achievable and feasible. 30 U.S.C. 1258(a)(4) states, "a detailed description of how the proposed postmining land use is to be achieved and necessary support activities which may be needed to achieve the proposed land use." However, financial assurances are not currently required. These "financial assurances were mentioned in Chapter 2, page 2-28, lines 16 and 17.		
4.5.5.2	4-212	5-8	This statement is <u>not</u> true in Utah. Currently, the majority of reclaimed lands are designated as wildlife habitat, grazing, or industrial uses.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.5.5.2	4-212	27-28	Preventing PMLU's such as cropland or industrial which "may be against the wishes of the landowner" (pg. 4-140 line 10) would have more adverse impacts than are analyzed. If the landowner chose to develop the land as industrial or for cropland after the bond release was achieved, nothing in SMCRA would prevent the landowner from doing so. This would then be a waste of substantial time and money reforesting an area that was going to then be re-disturbed.		
4.5.6	4-213	8-9	Remove "comparatively".		
4.5.6	4-213	8-18	A statement acknowledging the role of royalties earned from the state and federal coal production on the federal, state, and local government revenues in both the Rocky Mountain / Great Plains and the Colorado Plateau coal producing areas in Western states should be added.		
4.5.6	General	General	<p>An important socioeconomic element in this chapter that is too vague for analysis is whether jobs and revenue associated with coal-fired power plants (which are directly tied to the coal industry, and which cannot be replaced immediately) are included in this analysis.</p> <p>The socioeconomic impact of potential changes to the cost of electricity is also a significant factor apparently not currently discussed in this EIS. This should have been analyzed.</p> <p>See the following source for an idea about the impact of coal-generated electricity and coal mining in general on Utah's economy: http://www.uncws.utah.edu/p/?r=070710-1</p>		
4.5.6.1.1.2	4-214	9-11	A statement explaining the reasons for using new regional areas to evaluate employment changes, instead of the original coal producing regions, should be included.		
4.5.6.1.4	4-218	17-32	Since royalties are technically not taxes, but a partial recovery of a resource that is owned by the respective state and federal government, the economic impacts associated with royalties should be included in a separate section apart from the taxes.		
4.5.6.1.4	4-218	17-32	NEPA requires environmental analysis of federal resources and impacts to them when decisions regarding their future use are proposed. Federal coal is a natural resource that will definitely be affected by proposed changes to federal coal mining rules, and the resources and impacts to these		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			resources should be more strongly considered in this EIS. Some general statement about the impact of both current and future federal coal royalties on the federal government's revenue should be included.		
4.7	4-249	General	An appendix providing model inputs, equations / calculations, and results is necessary. Add a reference to this appendix in Section 4.7. Throughout Section 4.7, examples are provided; however, these examples are typically for Alternative 4 only. Additional information on the model inputs is necessary in order to comment adequately on the draft statement's analysis.		
4.7.1.1	4-250	General	Add a bullet to the list of Major Assumptions stating that "Baseline coal production data are represented in Alternative 1 and are based on U.S. Energy Information Administration data for 2008".		
4.7.1.1	4-250	6-8	The US Energy Information Administration (part of DOE and cited elsewhere in this EIS) reports that nationwide coal consumption is expected to significantly increase through the year 2035. Without further research, it is assumed that the increase in coal consumption is expected to be provided primarily by domestic coal producers, given the countries large coal resources and existing industry. This assumption appears to be incorrect. Source: http://www.eia.doe.gov/oiaf/ieo/coal.html		
4.7.1.1	4-250	6-8	Unless valid reasons can be provided for using the static 2008 coal production numbers to help model the environmental impacts of the potential rules on system with projected dynamic coal production, this assumption contributes a significant source of error to the model results that will need to be corrected. The conclusions of the EIS would otherwise be inaccurate.		
4.7.1.1	4-250	General	Regarding the following statement from Alternative 2 (4.4.3.1.1.2, p165): "The 5% projected increase in surface mining in the Northern Rocky Mountains and Great Plains indicates the belief that streams in this region have been previously impaired, most likely by gas extraction activities." It appears that this assumption of an increase in surface mining in the N Rocky Mtn region may have been made for all		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>Alternatives as part of the model analysis. If so, this assumption should be included here.</p> <p>Without any concrete basis for this assumption, no justifiable conclusions can be made using it. Please include your source, as this assumption, if understood correctly, is critical to the model design and output.</p>		
4.7.1.1	4-250	15-17	Justification for the exemption of metallurgical coal production in this analysis should be stated here. (ie. If the production is so much lower than generation coal, this should be stated together with a reference).		
4.7.1.1	4-250	15-17	Metallurgical coal production from elsewhere in the United States (besides Appalachian coal-producing areas) would also be affected, and justification for its omission in this EIS needs to be stated as well.		
4.7.1.6	4-253 to 254	General	This section would be improved by simply stating that a deterministic model was used for the DEIS. Describing a stochastic model which has not been finished or used in the statement's analysis is confusing and detracts from the modeling that has been used for the analysis. Text / figures describing stochastic analyses should be withdrawn until the stochastic analysis has been completed and incorporated into the statement.		
4.7.1.6	4-253	14 – 16	Suggest removing discussion of Beta-PERT distributions, since these are not used for the analysis in this statement (see comment above). If maintained, then clarify the definition of the acronym PERT (which could infer Program or Project Evaluation and Review Technique).		
4.7.1.6	4-254	2	<p>The document states that the "stochastic model is still being developed". This seems to severely undermine the cooperating agencies ability to evaluate and comment on the predictive methodology and raises several questions:</p> <ol style="list-style-type: none"> 1. Why is a stochastic model still being developed AFTER the analysis section of the statement has been completed? 2. When will the stochastic model be completed, and how will its results be incorporated into the analysis? 3. What effects will the stochastic model results have on the analysis in the statement? Is the stochastic an academic exercise, or will its results affect the findings of the statement? 		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.7.1.7	4-254	General	Include a description of how representative the 2008 U.S. EIA data are for describing baseline coal production, i.e., was 2008 a typical year when compared to previous years, or was 2008 an unusual year for any of the seven coal mining regions?		
4.7.1.17	4-263 to 264	General	<p>The approach whereby affected stream length is calculated based on stream densities seems reasonable. However, this approach neglects to consider differing sensitivity to stream effects in regions with greater stream density (Appalachia) compared to regions with lower stream density (Colorado Plateau).</p> <p>Arguably, the sensitivity of a region to impacts to streams could be considered to be inversely proportional to the stream density. For example, consider areas A and B, each of equal size. Area A contains eight perennial streams and a stream density of 0.8 mi/100 acres, while Area B has one perennial stream and a stream density of 0.1 mi/100 acres. An alternative disturbing 100 acres would affect 0.8 miles of stream in Area A and 0.1 miles of stream in Area B, so there appears to be less effect on Area B. Now consider that Area B has only one perennial stream, so there is no suitable alternative source of water for drinking, aquatic wildlife, and recreation. Area B, on the other hand, may have seven other streams which remain unaffected and continue to provide water for drinking, aquatic wildlife, and recreation. Is there really less of an effect in Area B?</p> <p>An evaluation attempting to quantify such region-specific and potentially subjective criteria describing sensitivity to surface water (and groundwater) impacts may be beyond the scope of this statement. Absent such considerations, it is suggested that the stream impact analysis and results include a caveat that a unit effect on streams (mi/year) may have different impacts from region to region.</p>		
4.7.1.17	4-264	4 - 7	The text states that "an overall stream density for each coal resource region was calculated using a weighted basis" and that "[w]eighted regional average stream densities were calculated for perennial, intermittent, other and total" stream lengths. However, the weighting criteria are not described nor are weighting factors identified. Additional information on the		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			weighting approach is necessary in order to comment adequately on the draft statement's analysis.		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Sims, Pam

From: Ehret, Paul
Sent: Tuesday, October 12, 2010 3:20 PM
To: Barchenger, Ervin; Joseph, Bill
Subject: FW: comments
Attachments: Indiana Chapter 2 EIS Comments2.docx

-----Original Message-----

From: Craynon, John
Sent: Tuesday, October 12, 2010 3:09 PM
To: Coker, Jeffrey A. "Jeff"; Ehret, Paul; Means, Brent P.; Calle, Marcelo
Subject: FW: comments

-----Original Message-----

From: Phillips, David I. [<mailto:dphillips@dnr.IN.gov>]
Sent: Tuesday, October 12, 2010 11:35 AM
To: Craynon, John
Subject: comments

Mr Craynon: Here are IN's comments on Ch 2. Please notify me of the details of the reconciliation call in.
thanks, Dave Phillips.

Comment Form

Title of Document	Chapter 2 EIS Draft
Contact Information	
Name	Indiana DNR, Bruce Stevens
Telephone Number	(812) 665-2207
Email	bstevens@dnr.IN.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
Overall	-	-	<p>There is no clear statement of the problem being addressed. One can identify a "cafeteria" approach and disconnect the various elements, however if all of the elements are not developed in the context of a problem statement anything can be rationalized. Unfortunately the end result is unlikely to produce coherent policy.</p> <p>Land use planning and restoration of the land on a large scale are basic components of SMCRA. The other Federal agencies that are currently expanding their role in defining drainage ways and proscribing practices to construct drainage ways are not concerned with the general post-mining land use issues that are a cornerstone of SMCRA. All of the Federal agencies with a role in this process, including NRCS, need to address the balance that Congress identified when SMCRA was passed with broad Federal agency concurrence over 30 years ago.</p> <p>Drainage ways and their significance in steep wooded terrain conveying cold water ultimately capable of supporting a trout fishery are drastically different in function and value than drainage ways in the agricultural mid-west that serve primarily to convey water effectively, with minimal sediment transport, away from productive farmland. It doesn't take 2 years of water quality and water quantity monitoring to ascertain what NRCS has known for years and has developed practices to address. Moreover the removal of productive agricultural land to create a "stream" and adjacent riparian zone is counter to SMCRA tenants.</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>Clearly there is a rush to produce a document. Unfortunately it is not based on a clear problem statement. This rush leads to inadequate review time for the cooperating agencies exacerbated by a document that was delayed in delivery and still contains many typos making review more difficult.</p> <p>The arduous timeframes imposed upon cooperating agencies for review complicate the ability of the Department to provide comprehensive comment on all aspects of this Chapter. All staff needed to review have not been present due to previous commitments and delays in OSM providing the draft to cooperating agencies for review. Lack of comment on any conceptual element contained within the draft does not necessarily indicate agreement with that concept by the Department.</p>		
2.4.3	2-6	22	The statement in this section stops short of the discussion in Section 2.5.5.3. This section indicates material damage will be defined as a measurable adverse impact on water quality or quantity. Section 2.5.5.3 indicates material damage will occur when the mining operation has affected the quality or quantity of the water so that the water body could no longer be used for its designated use. We support the use consideration and suggest revising Section 2.4.3 to make clear the intent of a measurable adverse impact on the quantity or quality of the water so that the water body could no longer be used for its designated use.		
2.5.5.4	2-26	41	This section discusses establishment of a 300 foot buffer area for intermittent and perennial streams on an off the permit area. The concept of mandating requirements for off permit areas needs careful consideration as it could be difficult to enforce activities conducted on off permit areas, particularly in the event of third party disturbances.		
2.5.5.5	2-27	9	SMCRA already requires bonding for all affected areas, including those on which stream restorations will occur. We are not aware of any studies indicating additional bonds would be necessary.		
2.5.5.6	2-27	20	This section states that monitoring cannot be waived by the regulatory authority. Moreover, as in the sections dealing with baseline data requirements, an expanded suite of chemical		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			constituents must be analyzed. Consideration should be given for a regulatory authority to suspend monitoring for certain chemical constituents after a demonstration has been made that those constituents have not been prevalent in monitoring during baseline and active operations.		
2.5.5.6	2-27	15	This section indicates adopting the same standards for monitoring under alternative two with certain exceptions. It is not clear if the inspection plan in section 2.5.2.6, line 39 concerning inspection following a 10-year storm event and report preparation and submission by a professional engineer within 48 hours is also required as a part of the preferred approach. If so, consideration must be given concerning this requirement given the burdensome nature and the fact that some companies would have numerous inspections and reports that must be completed in a short time frame and the fact many companies do not have the multitude of professional engineers available that would be necessary to perform this function.		
2.5.5.7	2-27	28	This section states a quarterly review of monitoring data would be required to determine whether material damage thresholds are being approached. It does not indicate if this requirement is placed upon the regulatory authority or if it is a report generated by the permittee and reviewed by the regulatory authority.		
2.5.5.8	2-28	1	This section discusses post mine landforms and approximate original contour configurations. It indicates tolerances would be defined to allow AOC to be met in certain circumstances where the pre-mining elevations would be exceeded. Any outcomes of these considerations must take into account swell factors of overburden as a normal result of the mining operations. This is especially of importance to Midwest mining operations occurring in areas with little topographic relief.		
2.5.5.10	2-28	24	This section indicates a reforestation requirement to emphasize "original organic material". It is not clear what is intended by this statement or precisely what is intended by "original". If this means that topsoil from the same area must be utilized then consideration needs given to the fact that topsoil is not present at all areas as a result of either previous disturbances or historic erosion. Also, in some cases, an alternative material may be better suited for revegetation		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Gardner, Linda R. (Contractor)

From: Craynon, John
Sent: Monday, November 01, 2010 3:24 PM
To: Coker, Jeffrey A. "Jeff"; Ehret, Paul; Means, Brent P.; Calle, Marcelo
Subject: Fw: SPR EIS Ch. 3.19
Attachments: Stream Protection Rule EIS Comment form, Ch. 3.19, Eaton.docx

From: Eaton, Ethel (DHR) [<mailto:Ethel.Eaton@dhr.virginia.gov>]
Sent: Friday, October 29, 2010 11:39 AM
To: Craynon, John
Cc: Coker, Jeffrey A. "Jeff"
Subject: SPR EIS Ch. 3.19

Attached please find our comments on Chapter 3, section 19.

Thank you.

Ethel

Ethel R. Eaton, Ph.D., Senior Policy Analyst
Division of Resource Services and Review
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221
(804) 367-2323, ext. 112
(804) 367-2391 (fax)

** Learn more about DHR's ePIX - Electronic Project Information Exchange**

Comment Form

Title of Document	SPR EIS Ch. 3
Contact Information	
Name	Ethel R. Eaton
Telephone Number	804-367-2323, ext. 112
Email	ethel.eaton@dhr.virginia.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.19	3-2	10	<p>This section needs an introduction which describes the Environmental Justice Executive Order (E.O. 12898) and includes as well as OSM's own policies, such as : . <i>The Environmental Justice guidance on Indian lands includes such measures as providing local tribal chapters or other recognized groups with copies of all public notices published by OSM or the coal operator; easily understandable descriptions and maps of the proposed action; location of any related materials for public examination; radio announcements on local-language radio stations; advertising meetings and hearings on local newspapers and on local radio stations; holding meetings at a local convenient to affected populations; providing translators for non-English speaking participants; providing native-language educational materials on mining and reclamation operations; and involving local communities in development of post-mining land uses.</i></p> <p>http://www.doi.gov/oepec/ej_examples.html and the April 1, 2010 Memorandum Improving EPA Review of Appalachian Coal Mining Operations Under the Clean Water Act, National Environmental Policy Act , and the Environmental Justice Executive Order.</p> <p>We also note that because it is a process of consultation, Section 106 of the NHPA can help to resolve environmental justice issues.</p>		
3.19	3-65	24	<p>The" Jefferson National Park" referred to is in fact the campgrounds of the George Washington and Jefferson National Forests..</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Gardner, Linda R. (Contractor)

From: Dana Dean [DANADEAN@utah.gov]
Sent: Monday, November 01, 2010 12:01 PM
To: Craynon, John; Ehret, Paul
Cc: Angela Nance; April Abate; Daron Haddock; Doug Burnett; Ingrid Campbell; James Owen; Jim Smith; Joe Helfrich; John Baza; Jo Ogea; Karl Houskeeper; Kevin Lundmark; Pete Hess; Priscilla Burton; Steve Christensen; Steve Demczak; Suzanne Steab; Vickie Southwick
Subject: Utah's Comments on EIS Chapter 3
Attachments: SPREISCh3_compiled DOGM commentsnew2.DOCX

Mr. Craynon:

I have attached Utah's comments regarding Chapter 3 of the Stream Protection Rule Environmental Impact Statement.

We have dedicated as much time as possible to these comments, but we feel that our comments were limited by the short amount of time allowed for review. The information that we were supposed to receive early on October 25th actually arrived late in the afternoon that same day. There were several errors that were changed and the document resent late in the afternoon of the 26th. By not extending our deadline to respond, you seem not to have considered the states' need for adequate time to review.

We strongly suggest you make changes to the geologic information regarding the coal resources in Utah. Much of the information included in Chapter 3 is erroneous, and omits a large amount of federal reserves that are contemplated for surface mining. In particular, the Alton Coal Field in Kane County where a surface mine is slated to begin operations on private land in the next month. The BLM is currently considering a Lease By Application for a large parcel of federal coal adjacent to the current project.

These rule changes are very important to us, because they could facilitate our ability to prevent negative environmental impacts to water resources, if the language is precise and takes into account some of the unique situations created by the geology, geography, and climate of the western states. If things are too focused on climatic and environmental conditions encountered in more easterly states, it could significantly hamper our abilities.

We very much appreciate the opportunity to comment as a Cooperating Agency, and hope that our comments will be carefully considered, and of aid to you in crafting the final EIS document.

Please let me know if you have any questions or concerns regarding our comments.

Thank you,

Dana Dean, P.E.
Associate Director - Mining
Utah Division of Oil, Gas, and Mining
(801) 538-5320
danadean@utah.gov

Comment Form

Title of Document	Utah Feedback on Chapter 3 of Deliberative SPR EIS
Contact Information	
Name	State of Utah (C/o Dana Dean or Peter Brinton)
Telephone Number	801-538-5320 or 801-538-5258
Email	<u>danadean@utah.gov</u> or <u>peterbrinton@utah.gov</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
General Comments			<p>Utah Division of Oil, Gas, and Mining (UDOGM) has some significant concerns with the scope of this EIS as it pertains to Utah coal fields. These concerns are here explained and simple suggestions are made which should be relatively easy to implement in the EIS.</p> <p>First, UDOGM recently issued a SMCRA permit for a proposed surface mine in an area of southern Utah (Kane County) where production is expected to begin within a few months. UDOG believes that Kane County should be considered within the scope of this EIS because the future surface coal mine will be directly affected by any proposed stream protection rules. It is noted that two Montana counties with future coal mines are also being addressed within the scope of this EIS (3.0.2, page 3-4, lines 4-5).</p> <p>Second, after OSM-approved UDOGM consultation with a coal expert from the Utah Geological Survey (a state sister agency), UDOGM believes that the Utah's active coal mines and coal reserves should be analyzed separately from those of Colorado for reasons discussed in UDOGM's comments. The "Uinta Basin" section (3.2.....) does not adequately (or accurately) describe Utah coal geology, and subsequent sections evaluating other resources using (loosely) this geographical area are unrepresentative of Utah's "affected environment."</p> <p>UDOGM proposes a simple way for the contractor to effectively evaluate both of these important coal bearing areas</p>		<p>https://fs.ogm.utah.gov/PUB/MINES/Coal_RelatecAPS/pubrecmap.pdf Significant Federal coal reser in the western states, including Utah (%) (UGS)</p> <p>The BLM would be a good cooperating agency to involve, especially for the Mineral Resources secti of both Chapters 4 and 3.</p>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>of Utah. With SMCRA permitting in mind, the general coal mining areas in Utah were defined and analyzed in three USGS water resources investigative reports that provide defined geographical boundaries conducive to additional resource analysis. The two areas of concern are covered in two of these reports and a third geologic assessment report:</p> <ul style="list-style-type: none"> - Hydrology of Area 56, Northern Great Plains and Rocky Mountain Coal Provinces, Utah (Open-File Report 83-38) - Hydrology of Area 57, Northern Great Plains and Rocky Mountain Coal Provinces, Utah and Arizona (Open-File Report 84-068) - Geologic Assessment of Coal in the Colorado Plateau: Arizona, Colorado, New Mexico, and Utah (Kirschbaum, Roberts, and Biewick, 2000) <p><u>A third general concern</u> is the relative lack of detail given to coal resources in the Colorado Plateau, so much of which are federally-owned, and which the federal government relies on for revenue. The Bureau of Land Management would be a good resource to consult with about many of the resources evaluated in the EIS.</p>		
General Comments			<p>Uniformity of structure and naming still needs work. For example, some sections have an explicitly named and numbered "0" section (often either "Background" or "Introduction"), but sometimes it is unnumbered and unnamed.</p> <p>Additionally, subsections are sometimes named "Colorado Plateau", "Colorado Plateau Region", and "Colorado Plateau Basin". Where possible, consistency (one name) is preferable.</p>		
3.0.2	3-2	14	"...see Section 3.1 for a detailed description..."		
3.0.2	3-2; 3-3	29-30; 5-6	<p>The "vast majority" statement (lines 29-30) conflicts with coal production data shown in Table 3.1-28 on page 3-55. The tabulated Colorado Plateau production data indicate that most of the produced coal in this region is <u>underground</u> coal. The "vast majority of coal [being surface mined]" statement better</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			describes the Northern Rocky Mountain Region (page 3-3, lines 5-6), based on that area's production shown in table (and visa versa) The vast majority of coal mined in Utah historically has been by underground methods, although surface mining has and will occur (one permitted surface mine is about to begin production).		
3.0.2	3-2 to 3-3		General – A figure is needed which clearly shows the seven coal mining regions. Figure 3.1-1 could be adapted by adding lines and labels denoting the limits of the seven coal mining regions.		
3.0.2	3-4	2	Utah currently has 3 counties with active mining operations (Emery, Carbon, and Sevier). A list of the counties analyzed should probably be included as an appendix.		
3.0.2	3-4	4-5	Like Montana, Utah has an additional county (Kane County in southern Utah) where surface coal mining will occur in the near future that is not included within the present scope of the EIS. It is a large county with no previous SMCRA permitted mines, and should be considered in this EIS.		
3.1.1.3	3-8	25	BLM-Utah reported a maximum depth of 2800 – 3000 ft. at the Utah Coal Symposium at the Western Energy Training Center, Helper UT (10/27/2010.), although limited coal mining deeper than 3000 feet has occurred in Utah.		
3.1.1.3	3-8	30-31	"...very thick coal bed with a shallow depth would be more economical to mine than a very thin shallow coal bed with a greater depth."		
3.1.1.3	3-9	18-19	Consider both sides of technology. Technological developments expand resources; restrictions limit them. The development of the longwall is one obvious example of technology that expanded reserves dramatically in underground mining because it increased recovery. Suggested modification: " Technological Restrictions: In addition, technological restrictions <u>and developments</u> also <u>either limit or expand</u> resource recovery, primarily in relation to underground mining."		
3.1.1.3	3-9	32-33	"Inclusion of dilution and partings material lowers is low in Btus/lb and thus decreases the quality of the mined coal."		
3.1.1.3	3-9	footnote 3	"These include ... National Forests, ..." This is unclear; coal mining is generally <u>not</u> excluded on National Forest lands.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.1.1.5	3-10	10	"the DBR <u>DRB</u> to measure..."		
3.1.2	3-14	8-9	"Of the estimated demonstrated coal reserves in the of U.S., approximately 68%, is <u>are</u> mineable by underground methods, while the remaining 32% are mineable by surface methods." Also, "estimated demonstrated" sounds contradictory.		
3.1.3.1	3-15	Fig 3.1-8	The different types of underground mining are not, but should be, specified. The legend for this bar graph (only one entry – orange) does not correspond to the bar colors in the graph (blue and red). Also, this figure should be updated to agree with and present each of the 7 coal producing regions described in this chapter. The graph also needs a label for the y-axis.		
3.1.3.1	3-16	Fig 3.1-9	Figure title should be "Typical Cross Section", not "Type Cross Section"		
3.1.3.3	3-20		1 st paragraph 1 st sentence: "...which are explained in detail below."		
3.1.3.4	3-21	15	Coal doesn't always need to be blasted. Clarify this: "The cut coal face <u>may be blasted if necessary to free the coal...</u> "		
3.1.3.8	3-26	4	Add the following sentence: "Subsidence can also affect the hydrologic balance above and adjacent to mined areas by altering surface water and groundwater conditions." In the western states, potential impacts to hydrologic features (like springs) from subsidence are of significant concern.		
3.1.5	3-28	8-13	The requirement to achieve approximate AOC is not unique to surface mining. Achieving approximate AOC is also required for reclamation of underground mines.		
3.1.6	3-39		Last sentence: "...and are explained in detail below."		
3.1.7.6	3-43	30	"..." (redistribution of the spoil from <u>from</u> one part of the fill to another..."		
3.1.7.6	3-43	34	"(e.g. not more that <u>than</u> one bench on the fill face)"		
3.1.7.6	3-44	29	"...(8) additional studies of completed fills; and, [no comma]..."		
3.1.7.7	3-46 to -47		The subsection titled "3.1.7.7 Mine Reclamation" seems out of place within Section 3.1.7 Excess Spoil.		
3.1.7.7	3-46	4	"Mine reclamation is the process of backfilling, regarding <u>regarding</u> and planting vegetation on a disturbed"		
3.1.8	3-50	24	"Phase 1 bond releases are granted after satisfactory backfilling and regarding <u>regarding</u> regrading have been completed on		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			the disturbed area.”		
3.1.8	3-53	2	UDOGM has interpreted the revegetation success rules as requiring less time to achieve bond release in the case of industrial/commercial post mining land use. i.e. For industrial uses within 2 years of grading, vegetation success equals the vegetation cover necessary to control erosion.		
3.1.9	3-53 thru 3-74	Starting with 20	<p>The content of this section does not reflect its title “Mineral Resources and Mining by Region”, as it infers both minerals and mining operations other than coal. Unless non-coal minerals were previously determined to be insignificant or unimpacted by the proposed rulemaking, other mineral resources should be discussed to some degree under this section, particularly considering federal mineral interests in western states.</p> <p>Oil, natural gas, and coalbed methane resources are usually more closely tied to coal geology than other mineral resources. In federal lands in Utah, coal and oil and gas resources often overlap, and unless previously determined to be insignificant, should (at least) be considered for evaluation with the other resources, since they have significant economic value. In Utah and other western states, the Bureau of Land Management would be a good source for this type of information.</p>		
3.1.9	3-54	1	The pie chart showing production by region is very helpful. This would be a logical place to show a similar pie chart documenting reserves by region.		
3.1.9	3-55	5 (Fig 3.1-29)	The legend for this figure is incomplete - Appalachian Basin and Colorado Plateau labels are missing.		
3.1.9.1.4	3-57; 3-58	31-37; 1-10	Include recovery % as in the Extraction Method section for the Colorado Plateau		
3.1.9.1.6	3-59	7	<p>The use of the term utilization can be confusing. “The mines of the [Appalachian] region utilized 79% of underground production and 74% of surface production for a total utilization of 77% of the resource. (p. 3-59)”</p> <p>Is the statement about the Appalachian mines a reference to utilization of production capacity? If so, the mines themselves don’t utilize the coal - they produce it. The public uses the coal.</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.1.9.2	3-59	14	Replace "The Colorado Plateau is located in the Four Corners region of Colorado, Utah, New Mexico, and Arizona" with "The Colorado Plateau coal region comprises coal reserves in Colorado, Utah, New Mexico, and Arizona". The "Four Corners Region" generally refers to the area surrounding the four corners and does not describe the entire four-state area.		
3.1.9.2.1	3-60	Fig 3.1-32	Add a legend to the figure identifying what the colored areas denote. If they represent reserves, it is not accurate, as coal reserves currently being mined in the Book Cliffs (located east of the San Rafael Swell are not shown at all. The Wasatch Plateau Coal Field is much more extensive than shown in the figure, extending east and north from the area shown. The Alton Coal Field with a soon-to-be permitted mine is also not shown. Since mines in these areas will fall under SMCRA rules, these areas should be evaluated. Also, although it is a large coal resource conducive to underground mining, much of the Kaiparowits Plateau is not typically included in reserve assessments because of National Monument status. The states also need to be labeled, and the shape of the states should be corrected.		
3.1.9.2.1	3-60	4	"The coal-bearing regions in the Colorado Plateau are predominantly located in eastern western Colorado."		
3.1.9.2.1	3-60	5-6	Correction: "some of the significant coal beds fields in the region include the Wasatch Plateau, Book Cliffs, Alton, and Kaiparowits Plateau in Utah, the San Juan Basin..." Explanation: Figure 3.1-32 inaccurately shows the Wasatch and Kaiparowits Plateaus as being the only coal-bearing areas in Utah. Kaiparowits coal is not accessible to mine because it is within the boundaries of Escalante National Monument. The Book Cliffs is also a coal producing area, as well as the Alton-Kolob Coal fields, along with the Wasatch Plateau, all have permitted mines. These coal fields are not the only coal fields in Utah, and none of them should be categorized with Colorado coal fields, since there are distinct geologic boundaries between the two.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>Coal mining in other fields (e.g. Henry Mountains) in Utah is also foreseen after the more-readily mineable Utah coal reserves are mined.</p> <p>Also, at least for Utah, the equivilation of "coal beds" with two "plateau" is awkward, since coal beds, while located in the plateau and in the plateau's coal field, are not the plateaus themselves. Using the term "coal fields" is probably more accurate than "coal beds" in Utah. The use of "coal beds" for coal in other Colorado Plateau states might be acceptable.</p>		
3.1.9.2.1	3-60	17-18	This is just one example of many found throughout the EIS; tonnage should be described consistently, either as 'million short tons' or 'thousands of short tons', rather than mixing the two, especially in the same sentence. "In 1997, about 30 percent (330 million short tons) of coal mined in the United States came from Federal lands, 52,180 thousands of short tons of which came from the Colorado Plateau region,..."		
3.1.9.2.2	3-60	18	Not very clear: 52,180 thousands of short tons of which 52.18 million short tons came from the Colorado Plateau region,		
3.1.9.2.6	3-61	22	General: Suggested source of coal production/reserves etc. data for the State of Utah can be found at: http://geology.utah.gov/emp/energydata/coaldata.htm		
3.1.9.2.6	3-62	Figure 3.1-33	Include units of production in figure title or on Y axis.		
3.1.9.3.1	3-63	Figure 3.1-34	Incomplete legend. i.e. what does black color represent?		
3.1.9.4.1	3-66	Figure 3.1-36	Legend?		
3.1.9.5.5	3-70	29	"These 14 mines produced 70% of the coal in the entire nation in 2008." Figure 3.1-6 shows less than 50% comes from the entire Northern Rocky Mountain Region.		
3.1.9.7.4	3-73	18	"Mining methods in the Western Interior Region includes include both area surface mining and"		
3.1.9.7.5	3-74	5-6	"Mine Size The Other Western Interior Region consisted of 12 surface mines with 220 total employees and 2 surface <u>underground</u> ? mines with 140 total employees in 2008."		
3.2	3-2	7-8	"Some of the coal regions encompass large areas requiring some geological descriptions to be generalized (see Figure		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>3.2-1)." In the State of Utah, at least, greater (and sometimes more accurate) detail is needed than is presently provided under the Colorado Plateau coal geology section (see notes in section 3.2.1.3.3).</p> <p>Consider using the USGS-designated hydrology areas 56 and 57 to accurately portray resources in the areas potentially affected by coal mining since previous boundaries in the scope of this EIS provide inaccurate analysis of resources possibly affected by coal mining.</p>		
3.2.2			General – The section heading numbers for this section are fouled. This section would logically be numbered 3.2.2 (not 3.3.2) and subsections would be 3.2.2.1, 3.2.2.2, etc. (not 3.2.1.3, 3.2.1.4, etc.)		
3.3.2 (should be 3.2.2)		Figure 3.2-4	Figure should match description		
3.3.2 (should be 3.2.2)	3-11	19	"coal fields including the Uita <u>Uinta</u> Region, Tongue Mesa Field, Canon City Field, Henry Mountains" Common spelling error that Spell Checkers won't catch, and if set for Auto-Correct, they will replace the correct spelling with the incorrect version.		
3.3.2 (should be 3.2.2)	3-11	20	Several smaller coal fields in Utah are inappropriately lumped together with the "Uinta Coal Basin". The Book Cliffs Coal Field has active coal mining. The Southwestern coal field known as the Alton-Kolob Coal field should be included since a new surface mine was recently permitted here.		
3.3.2 (should be 3.2.2)	3-12	2-6	Figure 3.2-4 is misplaced below the Colorado Plateau header		
3.2.1.3.3 (should be 3.2.2.1.3)	3-14	6-22	<p>The text for this section of the EIS in its entirety was taken from an EPA coalbed methane paper, and contains inherent errors as a result when applied to coal mining. The map associated with this inappropriate description in the original source is also incompatible with the maps generated for this EIS. Hence the incorrect word description.</p> <p>For a more accurate map of coal resources and reserves, please see the 2000 USGS report entitled "Geologic Assessment of Coal in the Colorado Plateau: Arizona, Colorado, New Mexico, and Utah" (Professional Paper 1625-</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>B).</p> <p>The statement that "a very small portion of the basin is in northwestern Colorado" is incorrect, and is a good example of how this description of the Uinta Basin is inadequate for purposes of coal reserves and mining.</p> <p>In Utah, most of the coal mining takes place on the far west end of what is called the "Uinta Coal Basin."</p>		
3.2.1.3.3	3-14	15-17	These two depth estimates are close on the shallow number but not on the deep one. This is likely due to the source – a coalbed methane appendix.		
3.2.1.3.3	3-14		A discussion of the geology of the Southwestern Utah Region (Kaiparowits Plateau) is necessary: the Utah program recently approved a plan for a surface mine in this region and anticipates an application to substantially expand that mine.		
3.2.1.3.3	3-14	20-21	The term "targeted" is incorrect when applied to coal mining. It was taken from a source used in describing coalbed methane production, not coal mining. In Utah and very possibly worldwide, coal mining has occurred at a maximum depth of just over 3,000 ft.		
3.2.3	3-23	4 - 6	<p>The description and map showing the Northern Rocky Mountains and Great Plains Region in Section 3.2.3 does not agree with the description and map in Section 3.1.9.5.1. Are Utah, Idaho, and New Mexico part of the Northern Rocky Mountains / Great Plains Region or in the Colorado Plateau Region?</p> <p>If the Figure 3.2-11 is correct, then replace text with: "The Northern Rocky Mountains and Great Plains Region encompasses the coal-bearing areas of the states of Idaho, Montana, North Dakota, South Dakota, and Wyoming and selected coal-bearing areas in Colorado, New Mexico, and Utah. This region is subdivided into many basins, regions or fields (see Figure 3.2-11)."</p>		
3.3.2	3-41	2, and 6	Spelling correction, "Mollisols"		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.3.2	3-41	2	Include Alfisols in this list.		
3.3.2	3-41	7	Mollisols predominant on high country plateaus and ridge tops.		
3.3.2	3-41	7	Alfisols predominant in forested high country.		
3.3.2	3-41	13	Generally formed in colluvium, not alluvium.		
3.3.2	3-41	18	Ecological areas should include Great Basin and Range, High Desert . I think Section 3.12.2, Figure 3.12-3 and Table 3.12-5 present the ecological areas in more familiar terms that could be used in this section as well.		
3.3.2	3-41	18-40	Seven ecological areas are listed, but the subsequent discussion does not cover the same seven ecological areas. ie. North Central Highland is identified in the topic paragraph, but South Central Highland areas are discussed in paragraphs below. White Mountains are not identified as an ecological area, but are discussed. Range and High Desert ecological area important to Utah.		
Table 3.3-2	3-42		Relevance of this table is questionable. Tavaputs Plateau is missing a percentage. Total percentage should add up to 100%.		
3.3.2.1	3-43	9	Any reclaimed acreage in New Mexico?		
3.3.2.1	3-43	9-11	The source of these numbers should be included, but our records for overall total reclaimed and overall total disturbed acres are very similar to yours.		
3.3.2.1	3-43	15	Disagree with this statement. Revegetation with native species can be achieved within the bond release period of 10 years. Establishment of cryptogams may require 20 years.		
3.3.2.1	3-43	16	Primary reason for low reclamation potential is lack of precipitation during growing season.		
3.4.0.1	3-53	25	"The model accurately predicted over 90 percent of the perennial streams"		
3.4.0.1	3-54	Table 3.4-2	'NHD' needs to be defined or identified (it is in Table 3.4-11 on p. 3-87).		
3.4.0.2.2	3-60	3-4	Double-check the source for this definition. "With regards to perennial streams, these systems were defined to have flow for most to all of the year with a streambed above below the water table."		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.4.0.3.1	3-63	26	What's an RBP? "...maintaining the basic concept of the RBP." OK, I see; it's defined in line 29 – should be up in line 26.		
3.4.0.3.1.5	3-72	38	Typo... "large" woody material		
3.4.0.5.1.6	3-84	25	e.g. forested wetland or low precipitation areas in the Western U.S.		
3.4.0.5.1.6	3-84	26	Correct typo 'is" should be "in."		
3.4.2	3-91		Only stream characteristics typical to New Mexico are discussed. Include some research conducted on stream types in Utah and Colorado.		
3.4.2	3-91	2 – 4	<p>The description of the "Colorado Plateau" does not agree with the description of the "Colorado Plateau Coal Region" included in other sections of the document. Inconsistent introductory sections within the Chapter 2 sections dealing with the Colorado Plateau Coal Region are confusing for readers. The term "Colorado Plateau Coal Region" should be used exclusively in this Chapter to avoid confusion with the Colorado Plateau physiographic province.</p> <p>A map is necessary to show the relationship of the Navajo Canyonlands, Tavaputs Plateau, White Mountain-San Francisco Peaks-Mogollon Rim, South-Central Highlands, North-Central Highlands and Rocky Mountains, and Green River Basin relative to the coal resources of the Colorado Plateau Coal Region. These sub-classifications should be referenced or explained – are these subdivisions based on geology, ecology, or hydrology?</p>		
3.4.2			No information is provided for Utah or Arizona in this section. Consider using the USGS-designated hydrology areas 56 and 57 to accurately portray resources in the areas potentially affected by coal mining since previous boundaries in the scope of this EIS provide inaccurate analysis of resources possibly affected by coal mining.		
3.4.2.2?	3-94	5-6	Should this be Table 3.4-18? "Table 3.4-16 lists regional hydraulic geometry relationship curves for the Colorado Plateau Region."		
3.5.1.2	3-5	8-13	'Is' or 'Are'? 'Sufficient' or 'sufficiently'? "Mountain-top removal or Area mining methods would be		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			considered in both steep slope and median sloped areas if the coal seam depth is economical and there is <u>are sufficient</u> sufficiently contiguous coal reserves to warrant substantial capital investment. Underground mining methods would be considered when surface mining is uneconomical due to excessive coal seam depth, if property (mineral) rights have issues, and there <u>are sufficient</u> contiguous coal reserves to warrant substantial capital investment."		
3.5.1.3.1	3-5	17-18	"SMCRA regulations require that all highwalls will be <u>are</u> eliminated and that spoil material <u>will be</u> placed on the mine bench in a configuration that adheres to AOC... "		
3.5.1.3.3.2	3-6	24-26	Sentence revision needed: suggestion. "With proper placement and compaction of <u>excess spoil material from mining operations</u> , [comma] the old mine benches could be restored to AOC and also minimize the number and size of valley fills <u>minimized</u> . to accommodate the excess spoil material from mining operations"		
3.5.1.3.5	3-8	24-25	"The policies also define how much higher the deck of a valley fill must be raised above the elevation of the lowest seam mined." To someone unfamiliar with valley fills, an illustration would probably be a big help.		
3.5.2.2			Add the following: Surface facilities for most underground coal mines in Utah are located in deeply incised canyons.		
3.5.2.3.1			Add the following: In Utah, restoration to AOC is a requirement for both surface and underground coal mines. For underground mines, restoration of AOC typically includes backfilling to eliminate highwalls developed at surface entries.		
3.5.2.3.3			Add the following: Several coal slurry impoundments have been developed at underground mines in Utah. These slurry cells are being re-mined as waste fuel.		
3.7	3-21 and 3-22	33 and 1	"About <u>67 percent</u> of fresh groundwater withdrawals in 2005 were for irrigation, and <u>18 percent</u> were for public supply. More than half of fresh groundwater withdrawals in the United States in 2005 occurred in <u>six States</u> . In California, Texas, Nebraska, Arkansas, and Idaho, most of the fresh groundwater withdrawals were for irrigation.." <u>Questions:</u> What about the other 15 percent? Which six states? Are they coal producers? Are the five listed included in the six?		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.7.1.1.3	3-27	11	Extraneous 'g' "...600 feet and g the Berea locally exceeds 100 feet."		
3.7.2	3-38		<p>The major aquifer systems described in this section are mostly not applicable to permitting hydrology and the effects of coal mining in Utah because of the geologically-inaccurate grouping of Utah's active coal mining areas with those of Colorado.</p> <p>Consider using the USGS-designated hydrology areas 56 and 57 to accurately portray resources in the areas potentially affected by coal mining since previous boundaries in the scope of this EIS provide inaccurate analysis of resources possibly affected by coal mining.</p> <p>It is critical that this section identify that local (perched) groundwater flow systems as part of the affected environment. The following text should be added to this section:</p> <p>"In the more mountainous areas of the Colorado Plateau Coal Region, much of the alluvium in the stream valleys is too thin, narrow, and discontinuous to be considered a major aquifer, even though some of the larger of the mountain alluvial deposits, such as those near the Sevier River in central Utah and in the Uinta Basin of northeastern Utah, contain locally important surficial aquifers (USGS Ground Water Atlas HA-730C). Groundwater springs are an important source of water supply in Utah's coal resource areas. Springs are used for public water supplies and irrigation; provide water for livestock and wildlife; and provide the major source of baseflow to perennial streams (USGS Water Resources INvestigation Open-File Report 83-38). Although not part of of the major aquifer systems described later in this section, springs in mountain areas of Utah are a vulnerable and carefully protected resource."</p>		
3.7.2.1	3-42	Fig 3.7-2	Coal reserves of the Colorado Plateau Coal Region should be shown in this figure, overlain on the aquifers. The major regional aquifers (Mesaverde, Uinta-Animas, Dakota-Glen Canyon, Coconino-De Chelly) should be clearly identified and labeled individually on the map. The map title should be changed to "Primary Regional Aquifer Systems of the		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			Colorado Plateau Coal Region".		
3.7.2.1.3	3-42		No mention of the over-appropriation of ground water in the region.		
3.7.2.3.2	3-44	37	Extraneous 't' "... "In general, areas of the aquifer ‡ recharged by infiltration from precipitation..."		
Fig 3.7-5	3-72		The colors on this map need to cover a broader spectrum; it is very difficult to distinguish the different aquifers with the color scheme that has been used. Actually, this applies to all the aquifer maps.		
3.7.5.8.1	3-78	12-15	It isn't clear exactly which aquifers are constrained to Yellowstone. "The aquifers are mostly within the boundaries of Yellowstone National Park. Accordingly, the potential to develop these aquifers is lacking. "		
3.8.0.3	3-99 to - 100		The following should be added to the bulleted list of potential long term hydrologic impacts: <ul style="list-style-type: none"> • Alteration or loss of streams and springs due to subsidence from underground mining • Contamination of surface and groundwater by exposure to acid-forming and toxic materials 		
3.9	3-2	1 - 3	Suggest deleting "Radionuclide" from title and introduction to this section. Discussion of radionuclides does not appear warranted based on the information presented later in the section. Even "Chemical" in the title may be misleading, as suspended solids are described in this section and suspended solids are not considered a "chemical contaminant". Might portions of this section be better for an appendix?		
3.9.1	3-2	16	Add the following sentence: Similar processes also produce CMD from underground coal mining operations.		
3.9.1.1	3-3	5 - 6	Replace "particles" with "species" in the following sentence: In AMD, there are far more dissolved acidic particles [species] than alkaline particles [species].		
3.9.1.3	3-9	30	Wyoming workshops in 2004 resulted in regionally accepted overburden analysis and handling requirements to keep selenium enriched overburden out of surface and groundwater. Utah references this Wyoming document as Attachment 1 to the Utah Overburden and Topsoil Management Guidelines.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.9.1.5	3-13 to -14		Delete this section. The material presented in the radionuclide section does not provide any explanation or rationale for including radionuclide transport in this EIS. If consideration of radionuclides is mandatory as part of the EIS process, then this section should be reworked to state that data on radionuclides in coal is sparse, but the available data suggest that radionuclide content of coal is generally near background levels and that radionuclide transport will not be evaluated further in the EIS.		
Table 3.9-2	3-16	5	This table indicates "n/a" for Impaired stream miles in Utah due to underground mining. This table should more clearly be titled, "Impaired Perennial Stream Miles due to CMD." If this table relates all impaired stream miles, then the Utah row should account for approximately 1,500 ft. of impaired ephemeral drainage in Whiskey Creek, not due to CMD, and several miles of perennial Mud Creek that were entrenched due to extreme flows in 2002 from Skyline mine discharge.		
3.9.3	3-17	1-6	This section discusses impaired water bodies within the State of Utah. Data showing which water bodies impaired do not distinguish which water bodies were impaired due to coal mining or other mining activities. Furthermore, Figure 3.9-3 provided does not show these water bodies, or they are difficult to locate.		
3.9.3	1-6	3-17	General – perhaps a more general discussion on expected baseline/background surface water parameters listed in 3.9.1.2 would be more relevant.		
3.9.3	3-17		<p>What is the intention of this section? Does "Baseline" refer to pre-mining or pre-SPR EIS? An introductory section is needed. Groundwater quality was previously described in the groundwater section (Section 3.7) and it seems to follow that surface water quality will also be described in it's respective section (3.6, not yet provided).</p> <p>UDOGM recognizes that a detailed discussion of baseline conditions for each of the seven coal mining regions would be a tremendous undertaking and unachievable under the mandatory schedule of the SPR EIS process. Nonetheless, the Water Quality Baseline material presented in Section 3.9 fails to provide any information useful for describing the Affected Environment or for evaluating potential impacts of the</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>proposed alternatives. Specific to Section 3.9.3, the following information is lacking:</p> <p>1) Table 3.9-2 does not identify which water quality parameters are responsible for 303(d) listings. 2) Table 3.9-2 fails to provide any context – for example what percentage of stream miles are impacted? 3) Using 303(d) listings as criteria does not account for groundwater conditions. If groundwater is not to be evaluated, then the section should be re-titled as “Surface Water Quality Baseline” and an explanation should be provided why groundwater is not presented. 4) Using the 303(d) listing for presenting water quality baseline conditions establishes a binary condition for evaluating water quality – does it meet criteria or not.</p>		
Figure 3.9-3	3-18		This figure is not clear. Scofield Reservoir in Carbon County Utah should be shown as an impaired water body (not due to mining).		
3.10.0	3-18	31	Define BACT the first time it is used.		
3.10.2.1.4	3-35	1	Are National Monuments included in Class I areas?		
3.10.2.4	3-37	15	Noise is also associated with underground mining intake and exhaust fans.		
3.11.3	3-4	34	Delete “and”.		
3.11.3.1.2	3-6	13	Change “it underlain” to “is underlain”		
Table 3.11-2	3-14		There must be a small percentage of emergent herbaceous wetlands associated with the drainages in the mining regions of Utah. i.e. Sink Valley in the permit area of the newly-permitted Alton Mine in Kane County, Winter Quarters perennial stream in the vicinity of Skyline Mine surface disturbance, Price River runs through the Wellington Preparation Plant, Quitchupah Creek runs through the permit area of the Emery Mine, Crandall Creek runs through the Crandall Canyon Mine, Bear Canyon Creek runs through the Bear Canyon Mine disturbed area, etc.		
3.12.2.3.1	3-60	34	This sentence includes the unknown word, “manyse”. Could mean “many of these” but not sure.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.13.2.8	3-154	30-32	The Gunnison Sage Grouse (<i>Centrocercus minimus</i>) is also listed as a candidate species and located in the Colorado Plateau coal region.		
3.13.5.8	3-162	24	The Golden Eagle (<i>Aquila chrysaetos</i>) is not a federally listed species. If it is included in this analysis as a species protected under the MBTA, then it needs to be included in the Colorado Plateau region as well, where it has significant amount of habitat within coal producing areas.		
3.13.5.9	3-163	6	Delete "Listed". It is duplicated in the sentence.		
3.15.2	3-15	4	Reference to table is incorrect (should be 3.15-10 ?)		
3.15.2.4	3-19	11-12	<p>Although a large amount of coal deposits are in the Uinta basin, most of it is not considered minable, and very little has been developed for mining recently. (see 3.2.1.1)</p> <p>This affected environment analysis should consist of areas that will be developed for mining. The majority of coal mines in Utah do not lie in the Uinta or Vernal Basin. There are many oil and gas developments in this area, but zero coal mines. Coal mines are located within the bookcliffs which are south of the boundary for the unita basin according to the USGS.</p>		
3.15.2.4	3-19	19-20	Recreation areas mentioned in this section should include those that are located within or near coal producing regions, not Steinaker and red fleet. These recreation areas could be: Green River State Park, Scofield Reservoir state park, or the San Rafael Swell.		
3.15.2.4	3-19	11-20	<p>The recreation biography for the coal resource areas of Utah is incorrectly focused and mostly deficient. For example, the Uinta Mountains and Flaming Gorge lie significantly outside of the coal fields shown in Figure 3.15-4. A description of the recreation associated with the Wasatch Plateau and Book Cliffs and some of the southern Utah national parks and monuments (e.g. Bryce Canyon) would be more pertinent for Utah.</p> <p>The Bureau of Land Management would be able to effectively identify the recreational resources that exist in or significantly close to Region 2 coal field areas in Utah (and also in other</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			states like Colorado, NM, etc).		
3.16.1.2	3-52, 3-53	23-39, 1-36	This section should be moved from where it is in the Appalachian section to the preceding subsection (not numbered explicitly) under 3.16. It is pertinent to many of the coal basins, not just the Appalachian section.		
3.16.2.1	3-58, 3-59	27-39; 1-4	Some explanation is needed to explain how the resources listed in this section are or contain visual resources.		
3.16.2.2	3-59	6-40	This explanation of how visual resources are analyzed is good. It might be helpful to reference section 3.16.1.2, since the Colorado Plateau has so much BLM and Forest Service land.		
3.17.3			General – perform a global replacement to correct “Colorado Plateau Basin” to read “Colorado Plateau Coal Region”		
3.17.3.1	3-77, 3-78	10	This is an good table, but you need to include source (Table 3.17-5).		
3.17.3.1.3	3-79	36-40	A new mine (Coal Hollow) is being permitted in Kane County to the south, and will rely on road transport.		
3.18.0.3	3-98	21	Sentence does not make sense. Was the word ‘by’ left out? “...consultation is usually conducted (by) federal agencies as part of...”		
3.18.2.1.4	3-106	30-33	Fossils and a mammoth (Huntington) have been found in areas of Utah with coal resources, at very least in areas of the Wasatch Plateau.		
3.18.2.2	3-106	36	The phrase that resources “undoubtedly... may be encountered” seems contradictory. Traditional cultural resources unquestionably exist in the Colorado Plateau region. Stating that the resources exist logically infers that they may be “encountered” by actions associated with the Alternatives. If they are not defined as such yet, there are still existing resources that have been defined as such. This suggestion applies to a number of the summaries of resources for other coal producing regions as well. Findings from other NEPA documents in Region 2 would document the existence of these resources and what might be found. Consulting with the Bureau of Land Management about this and other resources in Region 2 would be helpful.		
3.18.2.2	3-107	3	The phrase “simple, not modified by human beings location” is confusing to read and has questionable grammar. Perhaps “simple location not modified by human beings”.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.18.2.2	3-107	14	"Cultural resources associated with this period may include"		
3.18.2.2	3-107	17	Change the word 'begins' to the word 'began'.		
3.18.2.2	3-107	26	"Some of the anticipated cultural resources associated with this period include..."		
3.18.2.2	3-107	42	"Some of the cultural resources expected to be associated with..."		
3.18.2.2	3-108	5-6	"Sites expected from this period may include..."		
3.18.2.2	3-108	9-10	"All manner of buildings associated with the history and prehistory of the area may be expected <u>are located</u> in the region."		
3.20	3-115	23	"Production was <u>can be</u> associated" Explanation: "was" refers to past tense and certain conditions of that past that should be stated. What is the present impact of "residential proximity to heavy coal production" on human health?		
3.20.1	3-117	19	explosions (plural)		
3.20.4	3-118	13	"blasting, drilling, cutting, <u>loading, hauling</u> and transporting coal" (Add loading and hauling if you want to be more specific)		
3.20.4	3-118	14	"More dust is generated with mechanized mining than with manual methods, and sSome" Explanation: Nearly all modern mining methods are mechanized.		
3.20.4	3-118	22	"Coal mine dust causes can cause" Explanation: If it's not inhaled, it won't cause a problem.		
3.20.4	3-118	25	"There are <u>can be</u> some rheumatoid-like reactions <u>with exposure to coal mine dust as well</u> "		
3.20.5	3-118	28	Incomplete sentence. Finish with "encounter" ?	2x	
3.20	3-119	23-32	Are all of these findings associated with the same source (Hendryx and Abern, 2008)? I assume so, but don't know for sure. The way it is written, it could be understood to reference just the last sentence of the paragraph. Consider placing the reference after the period.		
3.20	3-119	33-36	This paragraph shouldn't need a reference as it is. Stating in a sentence that this section draws on a particular reference would be more correct.		
3.20.4	3-122	3	The term "physical hazards" infers much more than health hazards of noise, vibration, heat, etc. Consider replacing with		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			"physical health hazards". Otherwise, rock falls, moving equipment, and other "physical hazards" might be inferred.		
3.20.5	3-118	28	Airborne dust that miners <u>breathe</u> .		
3.20.10	3-122	2	The principal safety hazard underground in the falling of the face...		
3.20.10	3-122	4	The top five most common accident reported by MSHA		
3.20.13	3-129	11	This statement as written is technically incorrect, since there are underground mines in Arizona (but they are not coal). We suggest the addition of specifying information (coal) in this case and in a number of other such cases found in this section. Three cases of an unknown number of cases are identified below. Suggestion: "There are no underground coal mines currently in production in Arizona."		
3.20.14	3-131	7	There are no active underground coal mines in this region.		
3.20.15	3-132	4	There is no active underground coal mining in the Gulf Region.		
3.20.24	3-138	6	There are no active underground coal mines in this region.		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Allen, Melissa M

From: Craynon, John
Sent: Wednesday, January 26, 2011 12:01 PM
To: Ehret, Paul; Coker, Jeffrey A. "Jeff"; Means, Brent P.; Calle, Marcelo; Holmes, Christopher J
Subject: FW: Chapter 4 EIS Comments from Kentucky DNR
Attachments: EISCH4Com.docx

From: Wahrer, Richard (EEC) [<mailto:Richard.Wahrer@ky.gov>]
Sent: Wednesday, January 26, 2011 11:59 AM
To: Craynon, John; Ehret, Paul (EPPC DNR DMP)
Subject: Chapter 4 EIS Comments from Kentucky DNR

Comment Form

Title of Document	PDEIS Chapter 4
Contact Information	
Name	Richard Wahrer & Paul Rothman Kentucky Dept. for Natural Resources
Telephone Number	502.564.6940
Email	<u>Paul.rothman@ky.gov;</u> <u>Richard.wahrer@ky.gov</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.7.1.1	4-250	21-23	<p>General Comment: The major assumption that the impact analysis does not consider any current trends caused by EPA and associated 402, 404 permitting processes as applied to the Appalachian region should be strongly reconsidered. Please be aware that any impacts from mining that EPA is involved (in Appalachia) WILL become a national issue. The reconsideration of this assumption is need because the projected values for mining acreage, stream length affected, coal production and subsequent economic values (revenue, wages, employment, severance taxes, etc) mention in this PDEIS is flawed. Kentucky, if not the other Appalachian states) have already experienced a drastic downturn in the initiation of new operations with the last 18 months and likely the next 12 months, if not longer. These events, in turn, greatly affect the cumulative impact analysis. There will be</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			no business as usual anymore. An additional assumption in this section is that SMCRA rulemaking implementation may take 10-12 years. Be aware that EPA and state water agencies may implement changes within the same time period or sooner. All facets of mining projections in this PDEIS may be subject to severe revision.		
4.1.3.1.1.2	4-12	24	Please acknowledge the Fill Placement Optimization Process (FPOP) is a guidance document issued by the Kentucky Department for Nature Resources-Reclamation Advisory Memorandum (RAM) # 145. This would be consistent, then, with the acknowledgements of state regulatory guidance documents of New Mexico and Virginia found on page 4-124, lines 10-21.		
Table 4.1.4-2	4-34		Column heading "Range of Concentrations from Downstream of Mine Sites": More information is needed-how many sites and how far downstream? Please verify (or refute, with the correct information) that the Pond (2008) study involved 37 sites in West Virginia and then, footnote those facts.		
4.1.4.1	4-34-4-37		General Comment: In regards to the review of contaminants associated with mining: the comparison of the Pond (2008) study and the Hartman et al. (2005) study lists results that are confusing, contradictory and ambiguous against the backdrop of mined sites, un-mined		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			sites, mine-filled watersheds and reference streams. Levels of these contaminants may show no difference between mined and unmined sites though watersheds may show greater amounts and often compared to reference streams. It could be argued that an unmined site should be a reference for a mine site. Reference streams may not be subject to any activity or disturbance in the area. Mine-filled watersheds may reflect other than mining impacts. A more detailed discussion of these studies may provide much needed clarification.		
4.1.4.2	4-44	2-3	The sentence "Mining and associated activities can produce noise far above normal ambient levels" is merely stating the obvious. Normal ambient levels in many of the hollows of eastern Kentucky is extremely low due to the complete lack of noise-generating elements. Please delete this sentence.		
4.1.4.3	4-46	34-35	The sentence "...salamanders were not found on reclaimed mine sites of varying age and cover types in Appalachia.." is just completely incorrect. KYDNR invites the author and all interested parties to come see the salamanders on our reclaimed sites in Kentucky.		
4.2.2.2.	4-81	27-35	It should be noted that landforming may increase surface disturbance (of originally undisturbed area) and with the re-establishment of stream densities may result in		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			increased water-spoil interaction. Exposures of large areas, rather than certain strata to be buried and encapsulated in a fill may cause increases in TDS and conductivity.		
4.2.2.2	4-82	Foot-note 2	It should be corrected to: OSM did approve the permitting of shadow area above underground mine workings in Kentucky (May, 1982, Federal Register)		
4.2.5.2	4-96	22-25	It should be noted that the reforestation requirement may be in conflict with the wishes of a private landowner. It should also be realized that the landowner who begrudgingly accepts a required PMLU may clear trees after bond release.		
4.3.3.3.1.2	4-133	24-25	"Use of native species...is expected to further reduce erosion..." is simply incorrect. Certain introduced species, as well as invasive species, can effectively reduce erosion. Please consider deleting this sentence as it is not needed for the intent of this paragraph.		
4.5.3.3.1.1	4-205	29&38	The requirement to achieve "stream form and function" is defined as including flow-regime, chemical constituents, physical parameters, and sediment characteristics similar to pre-mining watersheds. This appears to be an expansion of the definition for stream form and function used in Chapter 2. Please clarify.		
4.5.3.3.1.1	4-205	33	Requiring that watersheds "be reestablished to a level that mimics pre-mining conditions" may have the effect of allowing mining only in		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>previously disturbed watersheds and preventing mining in undisturbed watersheds. Water quality samples collected by the US Forest Service in the late 1970's show an average TDS concentration of 265 mg/l for four mining disturbed watersheds distributed across eastern Kentucky while the average TDS concentration for undisturbed watersheds would likely be below 50 mg/l. It would likely take decades for TDS concentrations to return to the undisturbed baseline concentration of less than 50 mg/l. Under this requirement, the impacts to coal production may be greater than projected in the Draft EIS.</p>		
4.5.3.3.1.1	4-205	39	<p>Does "characteristics that are similar to pre-mining watersheds" refer to current conditions as defined by baseline sampling which could include impacts from previous mining, watersheds that are unaffected by previous mining but may have been affected by other activities such as logging, watersheds that are essentially unaffected by any disturbance, or other watershed condition? Please clarify.</p>		
Table 4.5.8-1	4-237		<p>Action: CWA TMDL Program-Future Action: The TMDL program in Kentucky, is and has been, underfunded and understaffed. An increase of TMDL determinations beyond present levels is not expected.</p>		

From: [Craynon, John](#)
To: [Coker, Jeffrey A. "Jeff"](#); [Ehret, Paul](#); [Means, Brent P.](#); [Calle, Marcelo](#)
Subject: Fw: 2010-10-30 comments re 10-22-10 draft EIS Chapter 3
Date: Monday, November 01, 2010 1:17:30 PM
Attachments: [EIS Comment form-Combined.doc](#)

From: Lambert, Butch (DMME) [<mailto:Butch.Lambert@dmme.virginia.gov>]
Sent: Monday, November 01, 2010 07:53 AM
To: Ehret, Paul; Craynon, John
Cc: gconrad@imcc.isa.us1; Lewis.a.halstead@wv.gov <Lewis.a.halstead@wv.gov>; Vincent, Les (DMME) <Les.Vincent@dmme.virginia.gov>; Davis, Jackie (DMME) <Jackie.Davis@dmme.virginia.gov>
Subject: FW: 2010-10-30 comments re 10-22-10 draft EIS Chapter 3

Gentlemen,

Please find attached Virginia's comments on Chapter 3. For the record, the information contained in this chapter is very poorly organized and written. For this reason, additional time should have been granted to review and comment. I certainly hope that an EIS is not going to be developed based on this inaccurate and incomplete information contained in this document. OSM should be concerned about this product reaching the public for their review under the OSM direction.

<<EIS Comment form-Combined.doc>>

Comment Form

Title of Document	10-22-10 draft EIS Chapter 3
Contact Information	
Name	VA DMME – Butch Lambert
Telephone Number	(276) 523-8100
Email	Butch.Lambert@dmme.virginia.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.1.1	3-6 to 10	n/a	No discussion of metallurgical coal versus steam/power generation. Also, 3 rd category: chemical basestock (Eastman)?		
3.1.3.1	3-15	1	Figure 3.1-8 is supposed to show underground mining by type but the legend only shows one category, "Other" and does not tell you what types are represented by the red and blue colors.		
3.1.3.2	3-17	8	Should list as temporary spoil storage area instead of excess spoil area		
3.1.3.2	3-18	2	Top portion of Box Cut Cross Section Figure 3.1-11 the drawing on the top left appears to be supported by nothing additional labeling recommended		
3.1.3.4	3-21	11	"Cutting of the coal allows <u>an</u> open face"		
3.1.3.4	3-21	12	" <u>coal</u> can be blasted", instead of rock.		
3.1.3.5	3-21	28	Need a period after surface.		
3.1.3.8	3-24	24	"Most surface subsidence in the United States has been attributed to the underground mining of coal." This statement is not true. Subsidence can be a result of natural karst processes, oil extraction, aquifer compaction, etc.		
3.1.3.8	3-25	6	Last word in the line should be <u>and</u>		
3.1.3.8	3-25	3	"Two types of surface features caused by mine subsidence are sinkholes and troughs." This implies that these features are only caused by mining subsidence, which is not the case, as these are also natural features in karst landscapes. As referenced in Section 3.1.3.8, page 3-24, line 24.		
3.1.4	3-26	18	The title of this section may lead one to believe that it describes disposal of wastes such as coal processing slurry		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			and AMD treatment sludge or fly ash. It appears that the intent is to describe scalp rock and gob. This ambiguity should be resolved.		
3.1.5	3-28	8 to 17	AOC discussion doesn't address watershed size, in regards to relocating watershed divides		
3.1.5.2	3-30	7	Figure 3.1-18 is labeled Area Surface Mine or Mountaintop Removal, however the narrative on line 2 states they are separate entities		
3.1.5.2	3-31	10	Change "disposal fill" to disposal area. And include "or used to reclaim existing pre-law abandon mined land highwalls adjacent to the mine"		
3.1.5.2	3-31	16	Should state "and dozers <u>are</u> then used"		
3.1.5.5	3-34	2	Photo in Figure 3.1-21 is a bucket wheel excavator and not a dozer and scraper operation		
3.1.5.6	3-35	12	Should include a sentence "However, contour mining, area mining and mountaintop removal mining are three distinct and separate types of mining"		
3.1.5.6	3-37	1-3	The accuracy of this statement depends upon the scale of the operation.		
3.1.5.6	3-34 to 3-37		GENERAL-It appears that the narrative continually tries to make Area Mining and Mountain Top Removal Mining one in the same even though they are two completely separate types of mining.		
3.1.5.6	3-35	1	Figure 3.1-22 is a cross section of a mountaintop removal operation that includes the hydrology. This section has only described the types of surface mining. The other types described do not have cross sections including the hydrology. This cross section also has stress fractures as a result of underground mining which is completely not related to the surface operation. For descriptive purposes, this diagram should only relate to mountaintop removal.		
3.1.7	3-42	16-18	Virginia information listed is misleading. Please insert a sentence to clarify relative size of fills - in Virginia, fills are typically less than <1 mcyds with small footprints.		
3.1.7.3	3-29	12-13	More commonly use sand or salt filters		
3.1.7.4	3-42	3	This type of spoil placement is not typically used anymore. Now the entire AML bench/highwall is reclaimed to avoid placing excess spoil in valley fills.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.1.7.9	3-48	9	Scalp rock is typically disposed of at or near the mine site. Refuse from coal processing is typically stored at or near the preparation plant, which may be near or off-site of the active mining operation.		
3.1.8	3-50	37	As stated, this is a federal requirement. Some state regulatory programs may differ from this requirement.		
3.1.8	3-52		GENERAL—this section may read better by separating out the different types of bonding instruments and their descriptions instead of discussing them jointly in the same paragraph or sentence.		
3.1.8.1	3-53	14	Sentence should also include “fails to complete all reclamation obligation... and available conventional bond funds (surety, letter of credit, etc.) are inadequate to complete the required reclamation. ”		
3.1.9	3-55	1	Figure 3.1-28 does not appear to correspond to Figure 3.1-29. The Appalachian Basin is listed as the second highest production region in the top figure at just under 400,000,000 short tons in 2008. The Appalachian basin is not even listed on the bottom graph for that same year. What is denoted as the Illinois Basin on this graph has the same ton production as listed on the first graph for the Appalachian Basin (which is also 4 times more than is listed for the Illinois Basin on the first graph). Have the items been mislabeled?		
3.1.9	3-56	n/a	Figure 3.1-30 Map of Appalachian Basin, but only shows north and central basin, omits southern basin, per lines 17-18.		
3.1.9.1.4	3-57	33	On line 6 of 3-36, “This DEIS does not use the term ‘mountaintop mining’...” Then on the listed page and line, “Surface mining in this region utilizes area mining and mountaintop mining methods using draglines, trucks and shovels, and front-end loaders.” It is unclear to what mountaintop mining refers.		
3.2.1.1	3-3	12 to 3	The Pennsylvanian deposition was the precursor to the last major Appalachian orogeny, the Alleghanian orogeny, that occurred in the Permian. Subsequent uplift and erosion have removed evidence of Permian sediments in the central Appalachians. Either Permian, or Late Paleozoic era, would be more accurate than saying it “culminated in the Pennsylvanian”.		
3.2.1.2	3-11	16-21	3.3.2 Colorado Plateau Region (out-of place)		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.2.1.1.4	3-7	12-14	Coal occurs in three distinct areas in Virginia. The Eastern Coalfields are Triassic basins where commercial bituminous coal mining began as early as 1748, with mining continuing for about 200 years. The last major mine closed in 1927 with sporadic mining continuing through the 1950s. Although mining has ceased, Virginia's Abandoned Mine Land program (AML) continues to evaluate problems and to conduct many reclamation projects in this area due safety issues such as to housing developments near old mine shafts. The Valley Coalfields are in the west-central Valley and Ridge part of the state. The Mississippian-age semi-anthracite coal was primarily mined from the mid-1800s to early 1900s; however, sporadic attempts at additional mining or reprocessing of mine refuse have continued to the present. The AML program also continues to conduct reclamation projects in this coalfield area. Mining in the Southwest Virginia Coalfield began in the 1880s. The coalfield consists of relatively ... (continue current 2 nd sentence)		
3.2.1.1.4	3-7	18	Russell, not Russel		
3.2.1.1.4	3-7	25	... up to 5,150 feet. Other than only a few feet of strata, marine units do not occur in the coal bearing formations.		
3.2.1.1.4	3-7	36	... secondary names, in Virginia alone. (end here, delete coal names, add following). In the 1980s, in order to provide more detailed geologic base maps and ensure consistent stratigraphic correlation, Virginia completed the mapping and publication of 7 ½ minute geologic quadrangle maps for the SW Virginia coalfield area. A coal bed's mapped "geologic name" is required in permitting; however, historic local names are also still commonly used by surface and mineral owners due the use of these names in deeds, leases and contracts.		
3.3	42	38-39	Change to: Care should be taken to salvage and properly maintain and store topsoil.		
3.3.0	3-37	38	The use of past and present tense is inconsistent. Clarify past mining versus current practices - SMCRA regulations do not allow the movement of excavated soils downslope or into streams. A mention of current practices including topsoil segregation and sediment control, i.e. basins, is needed here.		
3.3.1	3-38	7	Forestry reclamation approach is in wide use in the Appalachian basin, reducing compaction during reclamation.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.3.1	3-38	19	Delete: from slumping and landslides		
3.3.1.1	3-40	11	The Appalachian Regional Reforestation Initiative (ARRI) is providing science based reclamation practices to reclaim surface and underground mine sites to support forestland.		
3.3.1.1	3-40	1-14	This section focuses on the negativity of mountaintop removal mining and valley fills. Postmining lands can be restored to commercial, residential, recreational, agriculture, forestry or fish and wildlife habitat equal to or greater than the premining land use.		
3.3.2	3-12	1	The Appalachian Basin Region Seismic Hazard Map (Fig 3.2-4) is placed in the section about the Colorado Plateau Region.		
3.4.1	3-85	8-9	WV, KY, and Southern Appalachian... please include data from Tennessee and Virginia. Rainfall and slopes can vary considerably in this region.		
3.4.1	3-85	8	A statement regarding the conditions of many coalfield streams being pre-SMCRA impacted is needed.		
3.4.1.1	3-85	21	Median information is unreliable; there is no Rule-of-Thumb for predicting stream reaches. Site specific information must always be included.		
3.4.1.1	3-86	2	This table should have a caveat that site specific conditions will be the final determination of stream type.		
3.4.1.3	3-86	9	A subsample of only 16 non-coalfield streams in different physiographic province would not provide enough data to generalize the drainage area of perennial streams.		
3.4.1.3	3-86	5-9	The Rivenbark and Jackson, 2004 study states specifically in the "Summary and Implications" section that "The average discharge/drainage area relationship show[n] here only applies to the Blue Ridge physiographic region in the Southern Appalachian Mountains". The Hansen 2001 study is from the Chattooga River watershed also within the Blue Ridge physiographic province, which can have extremely high annual rainfall averages. These relationships are not appropriate for the Appalachian coalfields, which do not occur in the Blue Ridge physiographic province. The VADEQ Southwest Regional Office uses watersheds of approximately 1 mi ² to identify perennial streams for some permitting purposes. None of these studies account for dewatering of watersheds as a result of abandoned underground mine works.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.5.0	3-1	19	A variance from AOC can be granted for appropriate post-mining land uses.		
3.5.0	3-2	13	Include: Virginia encourages industry to use AML no-cost agreements to reclaim abandoned mined lands. These agreements allow mining companies to use excess spoil from permitted mine operations to eliminate abandoned mine highwalls that normally would not be reclaimed. In addition to reclaiming abandoned mine land highwalls, the practice also minimizes the development of new valley and hollow fills and reduces impacts to coalfield streams.		
3.5.0	3-2	21	Numbers of fills alone are misleading. Should also list percent by total fill volume and footprint acreage in each state. Volume and footprint of fills in Virginia are relatively small.		
3.5.1	3-4 to 11	n/a	Focuses on KY and WV, which comprise only part of the Appalachian Basin. Regional data is available for each state through GAO report in 2009.		
3.5.1.3.1	3-5	19	Include: <i>A lower or higher SF may be specified under certain conditions</i> at the end of sentence ..of 1.3.		
3.5.1.3.2	3-5	34	...or better economic of (or) public...		
3.5.1.3.3.1	3-6	15	... the face of the fill is (may be) terraced to an overall slope of a ration (ratio) ...		
3.5.1.3.6	3-9	23	Include: <i>for some fill types, e.g., durable rock fills.</i> After ...of 1.1.		
3.5.1.4.2	3-10	13	Website cited is an inappropriate source. State permitting agency would be a preferred source.		
3.5.1.4.2	3-10	20	Include sentence "Virginia currently has 12 active impoundments."		
3.5.1.4.2	3-11	Figure	Include Virginia in Figure 3.5-4 <i>Number and Size of Coal Waste Disposal Impoundments</i>		
3.7.1	3-22	n/a	Seems to imply that surficial aquifers are glacial only, ignores Appalachian stream alluvial aquifers		
3.7.1.1	3-22	NA	Virginia's coalfields are dominated by two aquifer systems: the alluvial system in the immediate subsurface and the fracture flow system which is a result of secondary porosity caused by stress relief fracturing.		
3.7.1.1.2	3-24	6	The predominate lithology of the Middle and Lower Pennsylvanian coal-bearing formations in the SW Virginia coalfield is sandstone that, due to quartz cement, has very little if any primary porosity or permeability. However, tectonic		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			fracturing, stress-relief fracturing from erosional unloading, and weathering have resulted in secondary permeability. This fracture-flow aquifer is further discussed in section 3.7.1.2.2 below.		
3.7.1.2.1	3-27	20-32	This section focuses only on Ohio. What about the flow of this system in the other Appalachian Basin states? Virginia data is included in the table at the conclusion of this section, but is not discussed in the narratives.		
3.7.1.2.2	3-28	37	USGS studies within the SW Virginia coalfield show the shallow fracture flow system, primarily resulting from stress-relief fracturing in the predominately sandstone strata, mimics the topography and typically occurs from the ground surface to a depth of about 100 feet with very low permeability at greater depths. However, the coal beds themselves act as aquifers at greater depths due to the fracture system within the coal beds (cleat).		
3.7.1.3.1	3-29	20	It is assumed the numeric values in parentheses here are concentration values. Units should be provided for these.		
3.7.1.3.2	3-30	6	In Kentucky and Virginia, water from wells ...		
3.7.1.4	3-35		Table 3.7-1 lists only 5 of 7 the coal producing counties in VA; Scott and Wise not listed.		
3.8.1.5	3-99	NA	The discussion of baseline water resources should note that many of these water sources are likely impacted by pre-SMCRA mining, as well as the relative abundance of straight pipes in certain areas.		
3.8.1.5	3-99	18	Statement is "MCL exceedances of coliform (TCR) and disinfection by-products (DBPs), which are largely unrelated to coal and other industrial discharges." How are these exceedances related at all?		
3.9	3-2	1 and 2	This section includes in its title "contaminant transport". I have two comments regarding the title for this section. 1). Should the ions produced by the various processes described within this section be referred to as contaminants as they are also in many cases nutrients? Contaminants could be replaced with a term such as "constituent". 2). The processes generating the dissolved ions are described in sufficient detail, but not the transport mechanisms, loadings or attenuation processes related to transport. Transport could be replaced by a term such as "generation" or narrative		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			included to describe transport.		
3.9.1	3-2	15	This description only identifies drainage from surface mining. Underground mine gravity discharges also contain mineralized water and are significant contributors of TDS load to streams.		
3.9.1.1	3-2	28	"minerals have more contact of to air..."		
3.9.1.2	3-4,5,6		General comment. This section lists some activities other than active mining that contribute to CMD, however, the contribution from AML lands is notably absent. In many cases this contribution overwhelms all other contributions in the watershed and should be included as a major contributor. AML impacts should not be included with impacts from mining conducted after SMCRA programs were in place. AML impacts/contribution should be included in this section. See table 3.9.2.		
3.9.1.3	3-7,8,9		General comment. This section lists several studies relating elevated dissolved ions in surface water to coal mining activities. These studies do not to my knowledge assess abandoned underground mine discharge impacts or AML impacts, but focus on more recent fills and surface mining conducted after 1980. Are any studies available to document contributions from underground mine discharges and AML? If so, the findings of these studies should also be included as significant TDS contributions from pre-SMCRA deep mine discharges and AML are present in some watersheds. These pre-SMCRA sources should be included as they impacted many streams prior to the Clean Water Act and the baseline condition of these affected streams has not been supportive of thriving benthic communities since that time. Table 3.9.2 indicates little information is available for underground mine impacts and that the majority of stream miles impacted in eastern coalfield states are by AML.		
3.9.2	3-14		General comment. This section should also indicate the changes in water chemistry are dependant upon the geology and depositional setting of the coal and overburden rocks. Water quality issues vary regionally and the local geology should be considered		
3.9.2	3-16	n/a	Table 3.9-2: Kentucky should be labeled "not provided" rather than "0".		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.9.2	3-15		The figure should show all impaired waters in map area. The current figure appears as if the coalfields are only impaired areas.		
3.10.0	3-28	15-16	Explain why GHG emissions are less from room and pillar underground mines than longwall and shortwall mines.		
3.10.0	3-28	22-25	States that Stream Rule change will result in GHG emission change due to change in amount of coal mined by UG and surface methods. Note that some reserves are not feasible to be mined by UG methods, and some are not feasible to be mined by surface methods.		
3.10.1.1.1	3-30	n/a	Figure: In VA & NC very old coalfields, no longer mined, are included in buffered area relative to ozone?		
3.10.1.1.2	3-31	32	Almost all Virginia coal has <1% sulfur. Also, for power generation, Appalachian coal is higher BTU than some lower-sulfur coals, so comparing by sulfur content only may not paint true picture of resulting emissions.		
3.10.1.1.2	3-31	35	Clarify "burning of coal at the mines". Typically, coal is burned at power plants, steel mills, etc., but not at the mines. Note this phrase is also used in 3.10.2.1.2 and elsewhere throughout the document.		
3.10.1.1.2	3-32	1-3	Is the estimate that 42% of the GHG produced from the coal mining industry in the United States is from Appalachia based only on the % of total tonnage produced, or were other factors such as sulfur content, etc., considered? Note that a similar calculation is included for each coal region with no explanation as to how it was calculated.		
3.10.1.1.4	3-32	14	Smoky, not Smokey		
3.10.5.2	3-49	3-6	The narrative states that the coal from this region has very high ash content and median sulfur content. The narrative then references both the high ash content and the low ash content, and makes no mention of sulfur content.		
3.10.6.1.1	3-50	9-10	Grammar: "in the Alaska within the Northwest Region".		
3.12.1.3	3-42	9	Citing two separate studies and making the comparison between ephemeral reaches and intermittent reaches then intermittent reaches with perennial streams is misleading to readers. The separate studies do not in fact suggest that the headwaters are sufficient to provide long lived taxa with habitat, nor does the hyporheic zone benefit all taxa, only a		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			small subsample of the population. Please eliminate or clarify this paragraph.		
3.12.1.3	3-43	22	An expansion of this section should be included. Many invasive aquatic species threaten native populations in the region.		
3.12.2.1	3-48	18	As in the Appalachian Region narrative, please include an average range of Total Dissolved Solids found in surface waters of the Colorado Basin and other basins.		
3.13.1	3-126	Table 3.13-3	There is a need to explain that the Mining as a "known cause" includes pre-SMCRA Abandoned Mine Land.		
3.13.1	3-126	Table 3.13-3	Please include "year listed" on the LE species; it is notable that these species were in peril long before mountaintop mining and SMCRA were enacted.		
3.13.1.1	3-149	8	Further discussion of "known causes of decline" should include that in the Appalachian Basin less than 50% of the listed species list mineral extraction as a known cause.		
3.14.1	3-169	5	Strike the word "only" from the final sentence. Over half of the states have wetland specific laws including the states that have large amounts of wetland habitat, "only" implies that there is a significant shortfall.		
3.14.3.1	3-173	26	It should be noted here, while not protected under the CWA, that other protections exist for Isolated wetlands in the Appalachian Region. Including 401 protections and Virginia-specific regulations.		
3.15	3-3,4	n/a	Table 3.15-2: Virginia's visitation numbers are suspicious. Shenandoah versus Tennessee and the Smokies?		
3.15.1	3-2	n/a	Figure 3.15-1: no table/legend for 1-7 on map		
3.15.1.6	3-10	n/a	Crooked Road should be listed		
3.16	3-51	14	<u>Strike</u> one of the "to important"		
3.16.1.1	3-52	12	Include: Through the Appalachian Regional Reforestation Initiative (ARRI), there has been an average of one million hardwood trees planted per year on active and abandoned coal mine sites in Virginia.		
3.16.1.2	3-53	10	Remove t and include <i>the</i> after by: ... determined t by VRM		
3.17	3-17	n/a	Table 3.17-3: lists Scott Co, but not Wise nor Lee		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.17.1.1	3-62	11	Include: <i>However, facilities are set up for one way movement of coal. Coal is loaded and shipped out, but tipples cannot unload rail cars.</i>		
3.17.1.3	3-65		There are no Interstates in coalfields of VA		
3.17.2.1.3	3-71	36-39	Seven western counties ... The seven counties ... add U.S. Route 460.		
3.18.1.1	3-96	6	Typographical error. "SWAPS" should be "swamps"		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Gardner, Linda R. (Contractor)

From: Craynon, John
Sent: Tuesday, November 02, 2010 10:16 AM
To: Ehret, Paul; Means, Brent P.; Coker, Jeffrey A. "Jeff"; Calle, Marcelo
Subject: Fw: EIS Chapter 3 Comments
Attachments: EIS Comment form Chapter 3 Mike Dillman.docx; EIS Comment form(Grant).docx

From: Heavilin, Brent [<mailto:Brent.Heavilin@dnr.state.oh.us>]
Sent: Tuesday, November 02, 2010 07:56 AM
To: Craynon, John
Subject: EIS Chapter 3 Comments

John,

Ohio reviewed the chapter and did not have many comments. Frankly it was because we didn't have time to give it a thorough review. Attached are a few comments.

Thank you,

Brent Heavilin
Permitting Manager
ODNR, Division of Mineral Resources Management
2050 East Wheeling Ave.
Cambridge, Ohio 43725
Office: 740-439-9079
Cell: 740-398-0987
brent.heavilin@dnr.state.oh.us

<<EIS Comment form Chapter 3 Mike Dillman.docx>> <<EIS Comment form(Grant).docx>>

Comment Form

Title of Document	Draft Stream Protection EIS Chapter 3
Contact Information	
Name	Mike Dillman
Telephone Number	614-265-6628
Email	Mike.Dillman@dnr.state.oh.us

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.0	3-1	7	"state" should be "states" since the verb is related to "Section 1502.15."		
3.0.2	3-2		What about the anthracite region in Pennsylvania?		
3.1.1.2	3-8		In the Coal Bed Thickness section, the word "technological" should apparently be "technology."		
3.1.1.2	3-8		In the Stripping Ratio section, the word "shallow" at the end of the second to last line should apparently be "thin."		
3.1.1.2	3-9		In the Restrictions on Mining section, the figure reference is incorrect.		
3.1.2	3-11		Subbituminous is reported to have a lower price than lignite. Is that correct?		
3.9.2	3-16	Table 3.9-2	The data sources and values are questionable and confusing. It appears that states may have interpreted the various categories differently. The meaning of "impacted" should be clarified. Does the "Abandoned Mines" category include both underground and surface mining?		
3.9.1.4	3-11		The discussion regarding the relationship between SMCRA and the CWA is very helpful.		
3.9.1.5	3-13		The discussion regarding radionuclides in coal should be expanded to include potential for release into air and water from both surface and underground mining.		
Overall document			Very thorough, descriptive, and enlightening discussion		

Comment Form

Title of Document	Draft Stream Protection EIS Chapter 3
Contact Information	
Name	Sue Grant
Telephone Number	(614) 265-6773
Email	Sue.grant@dnr.state.oh.us

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.5.1.3.2	3-5		"equal or better economic of public use" – replace "of" with "or" to be consistent w/ 30 CFR 816.133(d)(4)		
3.5.1.3.4	3-7		Figure 3.5-3 (KY valley fill statistics) would appear to be inconsistent with Stream Miles Impaired nos. in Section 3.9.2, page 16, Table 3.9-2		
3.5.1.4.2	3-11		Figure 3.5-4 (Coal Waste Disposal Impoundments) would appear to be inconsistent (spec. for KY) w/ Stream Miles Impaired nos. in Section 3.9.2, page 16, Table 3.9-2		
3.15.1	3-2 thru 3-6		Figure 3.15-1 and Table 3.15-6 appear to exclude Muskingum River and Lake Milton State Parks in Ohio		
3.16	3-55		555 (a)(3)(b) should read 522 (a)(3)(b)		

Gardner, Linda R. (Contractor)

From: Craynon, John
Sent: Monday, November 01, 2010 3:24 PM
To: Coker, Jeffrey A. "Jeff"; Ehret, Paul; Means, Brent P.; Calle, Marcelo
Subject: Fw: OSM SPR EIS, Ch. 3
Attachments: Stream Protection Rule EIS Comment form, Ch. 3 Eaton.docx

From: Eaton, Ethel (DHR) [<mailto:Ethel.Eaton@dhr.virginia.gov>]
Sent: Friday, October 29, 2010 09:45 AM
To: Craynon, John
Cc: Coker, Jeffrey A. "Jeff"
Subject: OSM SPR EIS, Ch. 3

Please find our comments on Ch. 3

Thank you.

Ethel

Ethel R. Eaton, Ph.D., Senior Policy Analyst
Division of Resource Services and Review
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221
(804) 367-2323, ext. 112
(804) 367-2391 (fax)

** Learn more about DHR's [ePIX](#) - Electronic Project Information Exchange **

Comment Form

Title of Document	Chapter 3 Affected Environment
Contact Information	
Name	Ethel R. Eaton
Telephone Number	804-367-2323, ext. 112
Email	ethel.eaton@dhr.virginia.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.18	3-92	3	Historic and cultural resources are often used interchangeably. However, this sentence appears to make a distinction between "historic" and "archaeological" resources when in fact historic resources (or cultural) resources is a broad category that includes archaeological sites, both historic and prehistoric. The term "cultural resources" is not defined in NEPA, or any other federal law. It may be broadly interpreted to refer to culturally valued aspects historic properties, other culturally valued pieces of real property, cultural use of the biophysical environment, and such "intangible" sociocultural attributes as social cohesion, social institutions, lifeways, religious practices, and other cultural institutions(NPI <i>Tools for CRM</i> . http://www.npi.org/NEPA/whatare.html). The term "historic property" does have a legal definition. The regulations implementing Section 106 of the National Historic Preservation Act at 36 CFR Part 800.16(l)(1), define <i>historic property</i> as follows: <i>Historic property</i> means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria. It would helpful to mention landscapes, both ethnographic and historical, including battlefields.		
3.18	3-92	12	Recommend adding to surrounding communities, including Native American communities. Moreover we suggest adding		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>The remnants of historic mining activity may themselves be historic properties. As stated in the National Register Bulletin 42, <i>Guidelines for Identifying, Evaluating, and Registering Historic Mining Properties</i> The physical remains of mines may include standing buildings, structures, and other architectural remains; machinery; archeological remains; and landscape features such as mine waste rock dumps, mill tailings, water delivery systems, open pits, and roads. Archeological remains, which may be the most abundant, typically include prospects, privy pits, wells, cellar holes, building foundations and platforms, dugouts, domestic and industrial trash dumps, isolated artifacts, collapsed headframes, machine pads and platforms, depressions, roads, ditches, pathways, and bulldozer cuts. (National Register Bulletin 42. <i>Guidelines for Identifying, Evaluating, and Registering Historic Mining Properties</i>).</p>		
3.18.03	3-93	22-30	<p>Sentence appears incomplete and for that reason does not make sense. We suggest: Section 106 of the requires Federal agencies to take into account the effects of their undertakings on historic properties, and afford the another federal agency, the Advisory Council on Historic Preservation a reasonable opportunity to comment. I suggest deleting a reference to the Alabama Historical Commission. The Advisory Council provides guidance documents under Working with Section 106 on its web site: http://www.achp.gov/aboutachp.htmlhttp://www.achp.gov/work106.html.</p>		
3.18.0.3	3-94	10-17	<p>This section is confusing. I think the intent is to mention the participants in the Section 106 process, and yes, the State Historic Preservation Officer (SHPO) plays a big role. However, The important point to make is that Section 106 is not triggered by the presence of an historic property but by the involvement of a federal agency. Section 106 is the responsibility of the federal agency, not the SHPO (and in reading this section one might get that impression). It is very important to note a process of consultation, and not just consultation with the SHPO. The consulting parties include the SHPO, Indian tribes, local governments, and applicants for federal assistance, permits, licenses or other federal</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>approvals. Others with a demonstrated interest in the undertaking as well as the public must also be included.</p> <p>The role of the SHPO in this section should focus on Section 106, rather than getting into CLGs, etc. The SHPO's role is to advise and assist the federal agency in meeting its 106 responsibilities.</p>		
3.18.0.3	3-94	18	<p>I think some words are missing from this sentence. It is the responsibility of the agency official to make a reasonable and good faith effort to identify Indian tribes that should be consulted in the section 106 process. Consultation with an Indian tribe must recognize the government-to government relationship (not "undertaking" as appears in the draft) between the Federal Government and Indian tribes. This is an affirmative responsibility and the word generally should be deleted. The Advisory Council's guidance entitled <i>Consultation with Indian Tribes in the Section 106 Process: A Handbook</i> (November 2008) provides a summary of the legal requirements up to 2008 on pages 3-5. In addition there is the 2009 Presidential memorandum regarding tribal consultation. And note that these requirements apply to all mining states and are not limited to those states with resident federally recognized tribes. Frequently historic properties of religious and cultural significance are located on ancestral, aboriginal, or ceded lands of Indian tribes and federal agencies need to should consider that when complying with the procedures in (36 CFR Part 800.2(c) (2)(ii)(D)). It is a common misunderstanding is that tribal consultation is only required for undertakings on tribal lands, when, in fact, consultation is also required for undertakings that occur off tribal lands. Tribal consultation for projects off tribal lands is required because the NHPA does not restrict tribal consultation to tribal lands alone and those off tribal lands may be the ancestral homelands of an Indian tribe or tribes, and thus may contain historic properties of religious and cultural significance to them. Section 106 requires that agencies make a <i>reasonable and good-faith effort</i> to identify Indian tribes that may attach religious and cultural significance to historic properties that may be affected by the undertaking, even if tribes now are located a great distance away from such properties and</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>undertakings. This is because many Indian tribes were removed from their homelands, while others traditionally moved from place to place. For this reason an Indian tribe may very well attach significance to historic properties located in an area where they may not have physically resided for many years. As an example from the east coast, the state of Virginia has at present no resident federally recognized tribes. Nevertheless there are 16 federally recognized tribes actively consulting on undertakings on what was once their ancestral lands in Virginia. Guidance of how to identify such tribes is given in the Advisory Council's <i>Handbook</i> referenced above.</p>		
3.18.03	3-94	22	<p>Very good to mention TCPs, but it would make more sense to include this with the earlier discussion of cultural resources in the introductory paragraph of 3.18, p. 2-92.</p>		
3.18.1.2	3-97ff		<p>The summary statements on archaeology are really not helpful. A more regional approach to prehistory would make more sense. We agree that discussing expected TCP resources in each state is not feasible. (p. 3-105) And yes, historic archaeological resources reflect the state's history. Does this need to be repeated each time?</p>		

Allen, Melissa M

From: Craynon, John
Sent: Tuesday, October 12, 2010 4:07 PM
To: Coker, Jeffrey A. "Jeff"; Means, Brent P.; Calle, Marcelo; Ehret, Paul
Subject: FW:
Attachments: EIS Comment form sent(2).docx

FYI

From: Halstead, Lewis A [<mailto:Lewis.A.Halstead@wv.gov>]
Sent: Tuesday, October 12, 2010 12:19 PM
To: Craynon, John
Subject:

John,

Attached are WV's comments. If you have questions please call or email. My biggest comment, just between you and I, is that I deplore working on holidays.

Later

Lewis A. Halstead

Comment Form

Title of Document	EIS Chapter 2
Contact Information	
Name	Lewis Halstead or Russ Hunter
Telephone Number	(304)926-0499 x1525 or 1537
Email	<u>lewis.a.halstead@wv.gov</u> or <u>russ.m.hunter@wv.gov</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
2			West Virginia reserves the right to comment on the EIS as a whole, especially after more specifics on each of the elements and how the chapters fit together. The whole document over generalizes to the point that meaningful comment is speculative.		
2			Most of the "Mining through streams" element alternatives appear to severely curtail mining, without providing any meaningful environmental benefit.		
2			Cites to federal statute or regulations should be provided throughout the document, particularly with regard to the no action alternative where reference to unspecified cites causes the reviewer to guess at what the OSM proposes to change..		
2			Details pertaining to Key concepts and proposed actions are lacking such that any analysis as to what those terms and concepts mean is difficult, making it difficult to provide meaningful comments. We had expected OSM to take a more transparent approach.		
2			The use of particular post mining land uses and AOC variances would affect the landowners and the states ability to apply needed land use planning and development to many steep slope areas, thus thwarting economic expansion.		
2			The prescribed format for commenting is focused on line-by line comments does not allow comment on OSM's overall approach.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
2.2.1	2-1	31	Also, OSM met with the State Regulatory authorities.		
2.2.6	2-3	3	Add OSM to agency experts.		
2.2.4	2-2	25-26	Why was it "subsequently decided" to expand the scope? The reason is missing from the purpose and need. Actually, there is no reason at all for this EIS or rulemaking outlined in the first chapter.		
2.3.2	2-3	29	Insert the word "federal" before interagency discussions.		
2.3.1	2-3	14	Most of the elements are interrelated.		
2.3.2	2-3	36-	What type of financial assurance are we talking about here? West Virginia is doing OK in this area. Few other states have evaluated all bond forfeitures since 1977 and implemented a program to treat water.		
2.4.3	2-6	14	Insert OSM after Current.		
2.5.1.1	2-10	33-35	West Virginia already has a stream delineation policy to determine the point of the intermittent/ephemeral point that incorporates some biological information.		
2.5.1.3	2-11	38	West Virginia already has a definition of material damage.		
2.5.2.7	2-16		TMDLs developed under the Clean Water Act have similar goals. OSM is at risk of unlawfully conflicting with the CWA.		
2.5.3.3	2-18	19	Define "unabatable".		
2.5.3.5	2-18	34-35			
2.5.2.1	2-14	3,7-9	You mention banning mining through or in all streams (including ephemeral streams) yet ephemeral streams do not have some of the characteristics you mentioned as criteria for defining a stream.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
2.5.22	2-14	29	There is no flow most of the time in ephemeral streams.		
		31	What biological conditions would you expect in an ephemeral stream?		
2.5.2.4	2-15	14-28	This alternative would ban surface mining, not just substantially increase the potential impacts to industry. Dry arroyos out West would be included in this as well.		
2.5.2.6	2-15	31-32	NPDES permits already require bimonthly or more frequent sampling. Why not make discharge monitoring consistent with NPDES? When and where does SMCRA require more extensive monitoring than the CWA.		
		34	Define "adverse trends."		
	2-16	10-11	Define "fully restored" stream community.		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Comment Form

Title of Document	PDEIS Chapter 4
Contact Information	
Name	Mike Dillman
Telephone Number	614-265-6628
Email	Mike.Dillman@dnr.state.oh.us

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.5.1.1	4-196	1-34	<p>I've included below the section on which I am commenting. This section is at the beginning of the Alternative 5 (Preferred Alternative) section. The expected negative impacts on longwall mining that are stated need to be seriously considered. Significant amounts of Ohio coal are produced by the longwall method. The examples (such as stated in lines 24 to 27) of stream impact from longwall mining happen frequently. Therefore, it is reasonable to presume that most longwall permits would not get issued. I am not taking sides on that aspect, but do want to point out what appears to be an acknowledged significant impact on longwall mining. This needs to be considered in more than a passing manner.</p> <p>In addition, it is stated that excess spoil fills would be permitted under certain circumstances (line 16), but the conditions under which they would be allowed (lines 17 to 24), that is, restoring function OF THE STREAM</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>SEGMENT, are precluded by the presence of the excess spoil fill.</p> <p><i>“4.5.1.1 Water Elements</i></p> <p>2 Material damage under this alternative would be defined as a measurable adverse impact on</p> <p>3 water quality and quantity resulting in degraded physical or biological conditions that would</p> <p>4 preclude the designated use or reasonably foreseeable use of that waterbody. Impacts from</p> <p>5 underground mining, such as subsidence, would not be allowed to cause material damage at any</p> <p>6 time during the operation, and if material damage is a reasonably foreseeable consequence due to</p> <p>7 mining operations, a permit might not be issued by the RA. This could curtail surface mining</p> <p>8 methods that use excess spoil disposal fills and underground mining methods that cause</p> <p>9 subsidence. Fill areas, by their very nature, would alter any designated use of the stream</p> <p>10 segment that is covered by the fill footprint. Subsidence caused by underground longwall</p> <p>11 mining or room-and-pillar retreat mining could dewater a stream segment, which would also</p> <p>12 alter the designated pre-mining use of that stream. Therefore it is predicted that surface mining</p> <p>13 practices using fill areas and longwall operations could be negatively impacted in those regions</p> <p>14 that contain high populations of intermittent and perennial streams.</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>15 Mining activities would be restricted within 100 feet of intermittent and perennial streams under</p> <p>16 Alternative 5, but excess spoil disposal fills would be allowed under certain circumstances. If</p> <p>17 the applicant can demonstrate that the mining activity would not preclude any pre-mining or</p> <p>18 designated use of the affected stream segment, then those activities may be allowed. In addition,</p> <p>19 the applicant would have to show that stream form and function could be restored, and that the</p> <p>20 operations would not have more than a de minimis effect on the ecological function of the stream</p> <p>21 after reclamation, and would not cause material damage or contribute to a violation of water</p> <p>22 quality standards. Again, this alternative relies on the applicant's ability to restore form and</p> <p>23 function to a stream segment, which may or may not be possible depending on the specific</p> <p>24 stream conditions and mining method utilized. For example, if it is predicted that a longwall</p> <p>25 operation under a stream would cause that stream to experience a decrease in elevation, it would</p> <p>26 be reasonable to assume that returning the stream to pre-mining elevation would be difficult if</p> <p>27 not impossible. Therefore, the RA would not issue a permit for the longwall operation. It is</p> <p>28 anticipated that those regions with high perennial and intermittent stream frequencies, such</p>		

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Comment Form

Title of Document	Chapter 4
Contact Information	
Name	Indiana DNR, Bruce Stevens
Telephone Number	(812) 665-2207
Email	bstevens@dnr.IN.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.1.3.1.1.2	4-14	13, 15	This section refers to Table 4.1.3-2 titled "Predicted Regional Stream Impacts (mi/yr) by Alternative". First, the table contains the word "Impacts" while line 13 indicates the table presents the predicted stream "loss". An "impact" does not equate to a "loss" in all instances and this section should be revised to indicate it as such. Second, the number of miles per year of regional stream impact is perplexing. Specifically, for the Illinois Basin, a slightly less number of perennial stream impact is shown than that estimated for intermittent. A very small number of "other" is stated. We are not aware of "other" as a stream type defined within SMCRA and assume this to account for ephemeral streams. Moreover, assuming "other" takes into account ephemeral streams, the numbers appear to be significantly misrepresentative of the Illinois Basin. The public notices for U.S. Army Corps of Engineers 404 permit applications routinely show a much higher percentage of linear feet of ephemeral stream for Indiana coal mining operations than does this table. It is our position this information should again be researched and reconsidered in order to put forth numbers representative of the Illinois Basin.		
4.1.3.1.1.3	4-15	11 – 13	This section discusses underground mining affecting groundwater levels primarily through blasting activity and subsidence. It goes on to state that blasting breaks up the impermeable layers of rock material above the coal seam, thus providing additional flow paths and resulting in dewatering of the aquifer located above the coal seam into the underground mine voids. We are perplexed at this statement. Illinois Basin underground mining activities do not utilize blasting activities to break up impermeable layers of rock material above the		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			coal seam. We are not clear if this was an unintentional mixing of information relevant to surface mining activities or if it is a lack of knowledge as to how underground mining activities occur. Obviously an underground coal miner would not want blasting, or any activity, to break up the overlying materials to assist in removal of the coal seam, This section needs clarified or revised.		
4.1.4.3	4-45	20	This line states "Topsoil does not necessarily have to be reused on site." We are confused as to the meaning of this sentence as all topsoil must be removed and replaced in the permitted area. If topsoil does not have to be reused on site currently then what other areas does OSM believe topsoil can be utilized?		
4.1.4.3	4-47	4	Reclamation activities typically entail backfilling, regrading, soil replacement, and revegetation. This section does not indicate soil replacement as being necessary. This is a very important requirement for reclamation activities in the Illinois Basin and a again shows a focus on other regions of the country yet applicability to all even though circumstances are different region to region.		
4.1.4.3	4-47	15 – 16	These lines state the most common use of reclaimed mine lands is hay and grass pastureland because the constructed soil is often a poor medium for plant growth. The reference is to a publication by Simmons et al., 2008. This again seems to be a statement being made relative to coal mining operations in other areas of the nation. Although we are not familiar with this publication, this section should be revised because not all regions are similar. In particular, the predominate land use in Indiana is prime cropland and nearly three decades of proof of productivity demonstrates replaced soil materials are not a poor medium for plant growth.		
4.2.1.1	4-78	8 – 10	This section includes discussion indicating the area above an underground mine (shadow area) is typically not a part of the SMCRA permit area and surface impacts may be considered off permit material damage. In Indiana ,while the shadow area is not permitted as a surface disturbance (see discussion beneath Section 4.5.1.1), it is still within the permit area and any impacts that may occur to the surface must be mitigated. As a result, this narrative needs revised.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.4.4.3	4-174	12	Please refer to the comment at Section 4.1.4.3.		
4.5.1.1	4-196	1 – 34	<p>Chapter 4 frequently addresses the impacts to streams resulting from subsidence of underground mining, particularly longwall mining and room and pillar retreat mining. But, Chapter 1, titled Purpose and Need for the Federal Action, under the section headed Notice of Intent- Stream Protection Rule, states that “On April 30, 2010, OSMRE published notice of its intent to prepare an EIS to analyze the effects of potential revision to its rules and regulations under SMCRA to improve the protection of streams from the adverse impacts of <u>surface coal mining operations</u> (emphasis added). The federal regulation at 30 CFR 761.200(a) states as follows: “(a) Interpretation of 761.11- Areas where mining is prohibited or limited. Subsidence due to underground coal mining is not included in the definition of <u>surface coal mining operations</u> (emphasis added) under section 701(28) of the Act and Sec. 700.5 of this chapter and therefore is not prohibited in areas protected under section 522(e) of the Act. This interpretation was upheld by the United States Court of Appeals in its decision concerning Citizens Coal Council v. Gail A. Norton, June 3, 2003. Therefore, the intent of the draft EIS must preclude consideration of impacts from “subsidence due to underground coal mining”. As a result, the draft must be modified to eliminate the consideration of impacts from “subsidence due to underground coal mining”.</p> <p>The draft continues to appear focused on past experiences in areas other than the Illinois Basin. In this case, apparently other areas in which longwall methods are employed that are outside the Illinois Basin where stream flow loss has sometimes been a result. As a consequence of this focus and the selected language, it would also preclude planned subsidence under streams in the Illinois Basin where stream loss has not occurred. Because of the physical properties of thick, near surface unconsolidated materials, surface stream flow quantity has not occurred from longwall subsidence of Midwest streams. It would be very difficult to conduct longwall mining in the Illinois Basin without undermining and thus subsiding intermittent or perennial streams. Illinois Basin</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>experience has shown that changes in stream bed elevations do not preclude the mitigation of stream flow and restoration of stream use after subsidence. These unique geologic and topographic conditions that better accommodate subsidence without stream loss in the Illinois Basin appear to be ignored. The magnitude of this prohibition is unknown as it will be directly correlated to the yet to be established definitions of ephemeral, intermittent, and perennial streams and establishment of success standards concerning form and function.</p> <p>Line 31 indicates that longwall mining of extremely deep coal seams would avoid subsidence. There is no depth of coal great enough in the Illinois Basin, and possibly not in the nation, to preclude surface movements if current longwall mining practices are conducted unless unrealistic and impractical panel widths are incorporated, none of which has been discussed in this draft.</p> <p>Table 2-1, page 2-20 describes all five alternatives. For Alternative 5, Activities in or Near Streams, it is stated "A prohibition of mining activities within 100 feet of intermittent and perennial streams, with an allowance for fills under certain circumstances". Under Mining through Streams, the table states "Allowance of mining through intermittent and perennial streams if stream form and function can be restored". Yet this section (4.5.1.1), implies that subsidence from longwall mining would have such a negative impact to the stream that it should not be allowed. To disallow subsidence induced elevation changes in a stream bed with no opportunity to present anticipated impacts and a stream subsidence mitigation plan is without basis. In the Illinois Basin, it would seem counter intuitive to allow streams to be surface mined if the success of stream restoration can be demonstrated, yet preclude subsidence operations that lower a stream even though the use, biology, and ecology may not be disrupted.</p>		
4.5.1.1	4-198	1	<p>This table provides final production impacts for Alternative 5. When compared to the status quo figures from Section 4.1.1-1, the table shows a slight increase in coal production for the Illinois Basin. The narrative discussion Section 4.5.6.2.2</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>states production in Indiana is expected to decrease 2% while Illinois production is expected to increase 33% beneath Alternative 5. It does not appear sufficient thought has been put into these projections given the previous discussion at Section 4.5.1.1 concerning longwall operations, and the fact that approximately 80% of Illinois production today is from underground techniques and a large percentage of increased production would be by longwall operations. The statements pertaining to stream use and potential inabilities of a regulatory authority to approve a longwall application if any decrease in the level of an intermittent or perennial stream may not be possible could have a significant impact upon Alternative 5's projected Illinois increase and the overall national prediction of a slight increase in production using Alternative 5. Moreover, there is no specific discussion as to the rationale and assumptions used in making these determinations of production impacts region to region. Should this rule be implemented, the overall impact to the production and ability to attain the constant coal production for electricity generation for the next fifty years, as stated in Section 4.7.1.1, is questionable.</p>		
4.5.1.3	4-197	29	<p>This sentence refers to "composed" topsoil. We suspect this is a typographical error and instead was intended to be "composted". If that is the case, we question the necessity of composting topsoil material in all regions and are curious what scientific literature indicates this is an appropriate practice for thick soils of the Illinois Basin. The topsoil of the Illinois Basin is typically high in organic matter. Normally this is the case for prime and non-prime soils. Forest type soils are often high in organic content as well in the Illinois Basin. There is no justification for composting to be necessary and the opinions of experts in the field of soil science and agronomy should be employed before making the leap to require the composting of topsoil materials in all regions.</p>		
4.5.1.3	4-197	30	<p>This line states wildlife habitat would be enhanced inside and outside the permit area. This section should clearly state if the habitat enhancement outside the permit area is the result of the activity or activities within the permit area or if something else is considered. Jurisdiction for mitigation and enhancement beneath SMCRA stops at the permit line and</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			therefore any intentions of requiring off-permitted site mitigation as a part of the SMCRA permit, if that is the intent of this statement, would not be possible.		
4.5.3.1.1.1	4-199	36 – 37	This section states "mining through intermittent and ephemeral streams would be prohibited unless restoration of stream form and ecological function could be demonstrated". It is questioned if the word "ephemeral" was intended to be "perennial" and if not, how prohibitions concerning perennial streams would be applied in this section as perennial streams are not mentioned. Moreover, it is difficult to provide substantive comments in regard to an evaluation of re-establishment of form and function without additional information as to how that evaluation would actually take place.		
4.5.3.3.1.1	4-205	all	Discussion in this section covers a plethora of issues that are again difficult to provide substantive comment upon given the manner in which they are put forth. There are many ideas and new initiatives listed that without specific information as to how they would be employed, and what the success standards are, make it impossible to have a grasp of its overall impact to Illinois Basin mining operations or regulatory agencies. Parts of this section are unclear such as the statements that the monitoring period lasts only through the bonding period when compared to the statement that form and function will have to be established within the bonding period. Without knowledge of success standards and methodologies required to be employed to meet these standards it is difficult, if not impossible, to read between the lines to gain an understanding if this means the time necessary to meet these success standards will significantly increase periods bond is held thus driving up costs and resource needs for regulatory agencies.		
4.5.4.3	4-210	22	This section indicates organic material from the site will be required to be salvaged. There is no discussion in this section explaining this sentence or what that organic material will be required to be used for. As a result, it is not possible to provide comment on potential impacts to mining operations or regulatory agencies.		
4.5.5.2	4-212	14 – 18	This section discusses documentation for AOC exceptions and includes a statement that it would be most useful for three		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			regions, one of which is the Illinois Basin. Indiana and Illinois do not approve AOC variances. As a result, the statement about AOC exceptions and documentation being pertinent to the Illinois Basin is perplexing. We suggest reference to the Illinois Basin be removed from this section.		
4.5.5.3	4-213	3 – 5	This section indicates a requirement for areas forested at the time of permit application be reestablished. It is not clear if this is intended to be the exact same areas. Flexibility must be built into any requirements to provide for reforestation to occur but not mandated to the same locales within the permit area. Operations could dictate other areas more suited for reforestation within the permit area. Landowner desires need to be considered as some landowners may want more forest while others may prefer a different land use. As a result, the ability to balance these needs should be employed.		
Overall			Chapter 4 is intended to be a comprehensive document specific to a regulatory approach to be employed across the nation. As outlined in numerous comments, the logic behind many aspects of Chapter 4 is not readily apparent and appears in many cases to be based upon erroneous assumptions, incorrect interpretations, and a lack of understanding of current programmatic practices one region to the other. Based upon these factors, and a lack of information concerning much of the stated narrative, Indiana cannot provide the substantive comments necessary for an issue of this importance. Many factors discussed such as the need for additional data measurements concerning chemistry and biology and significant regulatory reform concerning stream form and function are not provided in a manner that demonstrates or justifies need. We remain unaware of studies relevant to the Illinois Basin supporting the need for such wide sweeping regulatory changes. Our comments in no way should be construed to infer any concurrence with the content of the document or policies that may result from this process.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Comment Form

Title of Document	PDEIS Chapter 4
Contact Information	
Name	Dave Clark NM-MMD
Telephone Number	(505) 476-3416
Email	<u>david.clark@state.nm.us</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.1.2.2	9	26	...changes <u>to</u> the previous..		
4.1.4.1	30	12	most equipment on mine sites burns diesel, not gasoline		
4.1.4.1	31	18	...and <u>disturbance</u> is (<u>or impacts are</u>) to be avoided...		
4.1.4.1	33	11-16	It would be better to bullet both definitions		
4.1.4.2	40	30	I have never heard of herbicides being used for clearing land on Western US coal mines. I don't believe that this practice is "often required" in the West.		
4.1.4.3	45	33	I believe that the Harrington and Loveall (2006) study was conducted on the Molycorp molybdenum mine, not a coal mine. Nelly Stark did a lot of ponderosa pine research on MT coal mines in the 1970-80s		
4.1.5.3	53	Table 4.1.5-2	Colorado Plateau is not included in the table		
4.2.2.2	81	Footnote 2	New Mexcio permits the shadow area, as well		
4.2.6.1.1.3	99	Table 4.2.6-2	Net Change in Unemployed column does not appear to be a percent		
4.2.6.4.1	106	12-13	Utah has recently permitted a surface coal mine		
4.3.6.1.1.3	143	Table 4.2.6-3	Net Change in Unemployed column does not appear to be a percent		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.4.6.1.1.3	179	Table 4.4.6-2	(%) is not indicated in column headings 1 and 3, which is inconsistent with the tables that make this comparison for Alternatives 1-3		
4.4.3.1.1.1	165	12	Should be "compared to", not "compared with in"		
4.5.1.2	197	4	Should be "emphasize on fill minimization"		
4.5.3.1.1.2	201	5	BTCA may be a better term than BMP		
4.5.3.2.2.1	205	9	grea(. Should be great.		
4.5.6.1.1.3	215	Table 4.5.6-2	(%) is not indicated in column headings 1 and 3, which is inconsistent with the tables that make this comparison for Alternatives 1-3		
4.5.8.3.6	246	Table 4.5.8-6	Column 3, Row 1: Should be "loss" not "lost"		
4.7.1.3	251	12	Should be "expert's"... "for instance" should be set off with commas		
4.7.1.3	251	13	Should be "expert's"		
4.7.1.6	253	28	"and" should be "an"		
4.7.1.13	260	8	Should be " <u>of</u> Alternative 4"		
4.7.1.15	261	10	Should be "(EIA),"		
4.7.4	267	17	"runoff" is not hyphenated in my dictionary (although run-on is)		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

From: [Craynon, John](#)
To: [Means, Brent P.](#); [Calle, Marcelo](#); [Ehret, Paul](#); [Coker, Jeffrey A. "Jeff"](#)
Subject: FW: SPR draft EIS chapter 4 review
Date: Tuesday, January 25, 2011 9:45:24 AM
Attachments: [EIS Comment form Dave Clark-NM- Chapter 4.docx](#)

John R. Craynon, P.E.
OSM SPR EIS Team Lead
Office of Surface Mining Reclamation and Enforcement
Washington, DC
202-208-2866
202-617-5002 cell
202-219-3276 fax
jcraynon@osmre.gov

"For Official Use Only -- Deliberative Process Material"

From: Clark, David, EMNRD [<mailto:david.clark@state.nm.us>]
Sent: Wednesday, January 19, 2011 4:42 PM
To: Craynon, John
Subject: SPR draft EIS chapter 4 review

John,

Attached are my comments on Chapter 4 of the draft EIS.

Dave Clark
NM-MMD

Comment Form

Title of Document	PDEIS Chapter 4
Contact Information	
Name	Dave Clark NM-MMD
Telephone Number	(505) 476-3416
Email	david.clark@state.nm.us

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.1.2.2	9	26	...changes <u>to</u> the previous..		
4.1.4.1	30	12	most equipment on mine sites burns diesel, not gasoline		
4.1.4.1	31	18	...and <u>disturbance</u> is (<i>or impacts are</i>) to be avoided...		
4.1.4.1	33	11-16	It would be better to bullet both definitions		
4.1.4.2	40	30	I have never heard of herbicides being used for clearing land on Western US coal mines. I don't believe that this practice is "often required" in the West.		
4.1.4.3	45	33	I believe that the Harrington and Loveall (2006) study was conducted on the Molycorp molybdenum mine, not a coal mine. Nelly Stark did a lot of ponderosa pine research on MT coal mines in the 1970-80s		
4.1.5.3	53	Table 4.1.5-2	Colorado Plateau is not included in the table		
4.2.2.2	81	Footnote 2	New Mexcio permits the shadow area, as well		
4.2.6.1.1.3	99	Table 4.2.6-2	Net Change in Unemployed column does not appear to be a percent		
4.2.6.4.1	106	12-13	Utah has recently permitted a surface coal mine		
4.3.6.1.1.3	143	Table 4.2.6-3	Net Change in Unemployed column does not appear to be a percent		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.4.6.1.1.3	179	Table 4.4.6-2	(%) is not indicated in column headings 1 and 3, which is inconsistent with the tables that make this comparison for Alternatives 1-3		
4.4.3.1.1.1	165	12	Should be "compared to", not "compared with in"		
4.5.1.2	197	4	Should be "emphasize on fill minimization"		
4.5.3.1.1.2	201	5	BTCA may be a better term than BMP		
4.5.3.2.2.1	205	9	grea(. Should be great.		
4.5.6.1.1.3	215	Table 4.5.6-2	(%) is not indicated in column headings 1 and 3, which is inconsistent with the tables that make this comparison for Alternatives 1-3		
4.5.8.3.6	246	Table 4.5.8-6	Column 3, Row 1: Should be "loss" not "lost"		
4.7.1.3	251	12	Should be "expert's"..."for instance" should be set off with commas		
4.7.1.3	251	13	Should be "expert's"		
4.7.1.6	253	28	"and" should be "an"		
4.7.1.13	260	8	Should be "of Alternative 4"		
4.7.1.15	261	10	Should be "(EIA),"		
4.7.4	267	17	"runoff" is not hyphenated in my dictionary (although run-on is)		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

From: [Ehret, Paul](#)
To: [Craynon, John](#); [Coker, Jeffrey A. "Jeff"](#); [Calle, Marcelo](#); [Means, Brent P.](#)
Subject: FW: Alabama Comments on Chapter 4 PDEIS
Date: Monday, January 31, 2011 1:57:36 PM
Attachments: [EIS Comment form - Chapter 4.docx](#)

From: Johnson, Randall [mailto:Randall.Johnson@asmc.alabama.gov]
Sent: Monday, January 31, 2011 2:09 PM
To: Ehret, Paul
Subject: FW: Alabama Comments on Chapter 4 PDEIS

These are the comments I sent to John Craynon last week

Alabama Surface Mining Commission
Dr. Randall Johnson
Director
randy.johnson@asmc.alabama.gov
P.O. Box 2390
Jasper AL 35502-2390
tel: 205.221.4130
fax: 205.221.5077
mobile: 205.300.6299
Web Site: surface-mining.alabama.gov

From: Johnson, Randall
Sent: Tuesday, January 25, 2011 1:46 PM
To: 'jcraynon@osmre.gov'
Subject: Alabama Comments on Chapter 4 PDEIS

Alabama Surface Mining Commission
Dr. Randall Johnson
Director
randy.johnson@asmc.alabama.gov
P.O. Box 2390
Jasper AL 35502-2390
tel: 205.221.4130
fax: 205.221.5077
mobile: 205.300.6299
Web Site: surface-mining.alabama.gov

Comment Form

Title of Document	PDEIS Chapter 4
Contact Information	
Name	Randall Johnson
Telephone Number	205-221-4130
Email	Randy.Johnson@asmc.alabama.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.5.3.1.1.1	4-199	36	Sentence incorrectly states that mining through intermittent and ephemeral streams would be prohibited. Should read "intermittent and perennial streams"		
4.5.3.2.2.1	4-205	9	Correct spelling of the word "grea(" to "great"		
4.5.3.3.1.1	4-205	34-36	The sentence beginning with "The" and ending with "exclusion" makes no sense.		
4.5.4.2	4-209	30-32	The final sentence in this paragraph is erroneous. Even though AOC will not be required in some cases, grading with heavy equipment will be required to some extent to achieve the post-mining land use.		
4.5	All	All	General comment.:In the southern Appalachian coal fields such as Alabama, the FRA approach has not been tested fully. Much of these areas are in southern pine forest as well. The FRA has not been demonstrated successful in our state in restoring hardwood or pine forest. Many of the assumptions related to the FRA in southern Appalachia have no basis.		
4.5.6.1	4-213-4-218	All	The predicted consequences in rise of unemployment rates and poverty levels; declines in personal incomes, tax income, and royalties for Appalachian states in particular point out that this proposed alternative (as well as alt. 2-4) points out the unconscionable disregard for human impacts that this proposed rulemaking exhibits. Most states and local governments are suffering from the current economic downturn. Especially hard hit are the states that will suffer the most from the rule changes. At a time when this administration is attempting to create jobs and stimulate the economy, this proposed action is simply wrong.		

Allen, Melissa M

From: Lambert, Butch (DMME) [Butch.Lambert@dmme.virginia.gov]
Sent: Tuesday, October 12, 2010 9:17 AM
To: Craynon, John
Cc: Davis, Jackie (DMME); Vincent, Les (DMME); Dye, Jr., Ian B.; Thomas, John (DMME); earl.bandy@osmre.gov; Ehret, Paul
Subject: Chapter II Comments
Attachments: EIS Comment form.doc

John,
Please find attached the Virginia comments on Chapter II of the EIS. Also, will the rest of the schedule for submitting the other chapters to partners and time for submitting comments be revised based upon the failure to receive chapter II on time?

Comment Form

Title of Document	Comments on Draft EIS Chapter 2
Contact Information	
Name	Bradley C. Lambert
Telephone Number	(276) 523-8145
Email	Butch.Lambert@dmme.virginia.com

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
2.3.2.2	2-4	26 - 40	The grouping of the Full Suite of Alternatives implies that only Alternative 2, 3, 4, etc. within each element will be the Alternatives analyzed for the EIS. This should be clarified that different level Alternatives could be grouped together such as Alternative 3 form one Element with Alternative 2 in another Element, etc. to come up with the final set of Alternatives to be analyzed and as the Preferred Alternative. Full-Suite Alternative 2 would be catastrophic for the coal mining industry, the AML fund; coal availability for coal fueled power plants, etc. If this is proposed as an Alternative in the draft EIS then the ripple effect should be clearly explained and analyzed as to all possible effects to the economy, energy production, higher energy costs and the effect that will have across the economy, lost jobs not just direct jobs from coal mining but from support industries and in businesses that depend upon mining jobs and support industry jobs as a customer base.		
2.4.2	2-5	34 -35	"Sampling over a 24 month period for a full suite of chemicals; continuous flow measurements; and documentation of sediment, meteorology, stream form and function" is excessive. The list of what constitutes a full suite of chemicals should be clarified. Continuous flow measurements are impractical and not necessary to document the stream conditions. Under CWA 404 permitting neither the CORPS nor EPA requires this much data. The goal under SMCRA and CWA is to minimize disturbance, i.e. make the footprints smaller if possible. A permittee who proposes a smaller mining operation will not be able to economically permit the smaller site. This alternative promotes larger operations with more		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			impacts rather than minimization. The increased regulatory staff time required to review this huge increase in data must be considered as well. Is enough value added to the process to justify the expense to the permittee and to the additional resources needed by the regulatory authority.		
2.4.2	2-6	1-7	Same comment as for section 2.4.2, page 2-5, and lines 34 – 35.		
2.4.3	2-6	17 - 18	"Defining "material damage" as any impairment of a physical, chemical, or biological function of any stream (including ephemeral streams);" This is overly restrictive. An impairment can be considered any impact. SMCRA and the CWA allow some impacts such as the discharge of pollutants under a NPDES permit as long as it does not violate effluent limitations. The CWA does not consider exceedance of an effluent limit as a stop mining mandate. Any definition of impairment should acknowledge that violations of effluent limits may occur. Impairment of an ephemeral stream should not be considered material damage. OSM's preamble does not support that scenario. Material damage is intended to consist of damage to a wider regional area. Impairment of a 150 ft or 200 ft of ephemeral stream should not constitute material damage.		
2.4.3	2-6	19	"Defining "material damage" as an unabatable impairment of a stream" Should clarify that this means cannot be repaired or restored effluent violations are unabatable as the discharge has occurred and the pollution has entered the stream. The discharge can be stopped or treated to bring the discharge into compliance but the pollutant remains in the stream.		
2.4.3	2-6	20-21	"Defining "material damage" as a rebuttable presumption based on a percentage of stream miles that are or may be adversely affected;" This will be extremely difficult to regulate. OSM's rebuttable presumption of subsidence damage within a set angle of draw was a miserable failure. Unless there are clear and reasonable guidelines on how "adversely affected" is to be defined/determined this would cause confusion and lead to challenges from all sides.		
2.4.3	2-6	22 - 23	"Defining "material damage" as a measurable adverse impact on water quality or quantity in an intermittent or perennial stream" This is a more realistic definition if realistic and reasonable measures are established for the threshold to		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			determine material damage has or can occur.		
2.4.4	2-6	29 - 30	<p>"An absolute prohibition of activities within 100 feet of all streams, including ephemeral streams" This alternative is absolutely not supported by SMCRA nor is it realistic or reasonable. Under current CORPS JDs flowing channels on AML benches are considered jurisdictional. Under this alternative a permittee could not remine and reclaim adverse AML features. AML highwalls have severed upland reaches of streams that flow over the highwall then down the bench following the bench gradient and eventually flow over the bench down a drain or a gully that has formed over the years. Remining these areas and reestablishing the stream segments helps the stream quality. In Virginia many areas have previous AML mining that has spoiled into stream and the streams flow though and under AML spoil piles. This alternative would preclude remining and reclaiming these stream segments and adjacent riparian zones. If any surface mining is conducted even for a deep mine face up excess spoil will be generated and for deep mines the material to backfill the face-up highwall will need to be stored. It is physically impossible to always place all excess spoil into the backfill area. It is not feasible to place all this excess spoil and deep mine face-up material into side hill fills and ridge tops. By necessity some will need to be placed in streams as now designated jurisdictional by the CORPS.</p>		
2.4.4	2-6	31 - 33	Same comment as for Section 2.4.2, page 2-5, lines 34 – 35		
2.4.4	2-6	37 - 38	<p>"A prohibition on mining activities within 100 feet of intermittent and perennial stream, with an allowance for fills under certain circumstances." This Alternative sets up for the same scenario where West Virginia, EPA and the CORPS where no fill could be placed in drainages in excess of 250 acres. This resulted in many small fills impacting headwater streams rather than a few larger fills impacting fewer headwaters. In discussions with EPA recently they indicated that they wanted to ensure that they didn't create a situation where many small fills were constructed instead of a few larger ones. That is the purpose of FPOP in Kentucky and AOC plus in West Virginia to maximize fill minimization. OSM's alternatives appear to be negating the progress made in this area.</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
2.4.5	2-7	7	"A prohibition on all fills in or within 100 feet of all streams". This Alternative appears miss-worded or misplaced the section is Titled "Mining Through Streams" and not placement of fills. However our comment is the same as for Section 2.4.4, page 2-6, lines 37 – 38.		
2.4.5	2-7	8	"Allowance of mining activities near or through streams if CWA standards can be met" This Alternative and the one In line 9 of this Section should be combined into the Preferred Alternative used for the EIS. OSM should not usurp the CWA and the authority of the CORPS and the Section 402 NPDES permitting agencies.		
2.4.5	2-7	9	"Allowance of mining if the stream was impaired or impacted prior to mining activities" This Alternative should be promoted as it provides for a holistic watershed restoration approach as discussed in the comment to Section 2.4.4, page 2-6, lines 29 - 30		
2.4.5	2.7	10 - 11	Mining through intermittent and perennial streams should be allowed if the proper CW 402 and 404 permits can be obtained.		
2.4.6	2-7	20-25	"Monitoring of surface and ground waters for a full suite of parameters, consistent with that collected during baseline sampling; quarterly basis until restoration of the stream community is demonstrated, with review midway through permit period and during renewal; no waiver allowed prior to bond release; biological monitoring would comply with CWA protocols, assessed annually and continued until no adverse trends are detected for six months prior to bond release;" Monitoring ground water quality quarterly for a full suite of parameters is not indicative of stream community quality or restoration. This is not consistent with CWA requirements. OSM should defer to CWA agencies. Given surface mining is bonded for often 10 to 15 years this is excessive monitoring. OSM is setting up monitoring requirements that is conflicting with the CWA.		
2.4.6	2-7	29 - 31	"Similar to 2nd bullet above, except that monitoring would be for parameters related to material damage rather than for the full suite of chemicals, biological components, or other elements;" SMCRA requires prevention of material damage to the hydrologic balance outside the permit. This alternative is within the authority of SMCRA, OSM should avoid trying to be		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			a second guessing CWA agency.		
2.4.7	2-8	1 - 3	<p>“Corrective Action Thresholds would be set based on the impacts of all human activity in 2 a watershed, regardless of whether the impacts are caused by mining operations or are within the mining operator’s control; data would be reviewed quarterly” This Alternative is extremely problematic when taken in conjunction with the Full-Suite discussion in section 2.5.2.3, page 2-15, lines 6 -12; which states “Under Alternative #2, “material damage to the hydrologic balance outside the permit area” would be defined as any impairment of a physical, chemical or biological function of any stream (including ephemeral streams) based on state water quality standards (functional assessment approach and definition of impairment to be developed) or impairment of designated uses. Unlike the other Alternatives, this standard would be applied to all streams, including ephemeral streams, substantially increasing the potential impacts to the mining industry.” Streams that have been listed as impaired on the 303(d) list are so listed because they have been determined as not meeting their designated use. Under this Alternative by definition material damage would have occurred prior to the permit being issued if it is within a 303(d) watershed. Does that make the permittee liable for the Implementation Plan developed as part of a Total Maximum Daily Load (TMDL) report to address the impairments that have caused the stream to be listed as impaired? Having a Corrective Action Threshold implies the permittee will be required to take action to ensure the impaired stream is no longer impaired even if as the alternative states “regardless of whether the impacts are caused by mining operations or are within the mining operator’s control”. This raises legal problems both for a permittee and the SMCRA regulatory authority. How can the RA require the permittee to address problems they did not cause and how would right of entry be obtained. This will prove counter productive as well. Within TMDL watershed DMME requires permittees to provide offsets through the 402 NPDES permitting process which consists of addressing these outside impacts to a 303(d)/TMDL watershed. OSM should not venture into the CWA Section 402 NPDES permitting</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			authorities. That is between the 402 NPDES state permitting agency and EPA, not OSM.		
2.4.7	2-8	8 - 9	"Corrective Action Thresholds would be defined in terms of numerical water quality thresholds based on physical, chemical, and biological criteria in each region," This would be a more realistic and reasonable approach. It is doubtful that any RA can hold a permittee liable for activities that impair a stream over which they have no control or ability to address or correct.		
2.4.8	2-8	22	"Ban all excess fill placement in all streams, including ephemeral streams;" This Alternative is not feasible and goes beyond the authority of SMCRA. SMCTA has no provision that provides for this ban and under CWA Section 404 permits fills can be placed in streams with proper Section 404 permits. If any surface mining is conducted even for a deep mine face up excess spoil will be generated and for deep mines the material to backfill the face-up highwall will need to be stored. It is physically impossible to always place all excess spoil into the backfill area. It is not feasible to place all this excess spoil and deep mine face-up material into side hill fills and ridge tops. By necessity some will need to be placed in streams as now designated jurisdictional by the CORPS.		
2.4.8	2-8	23 - 26	"Similar to the 1st bullet above, except that compliance with land forming principles would be required; end dumping and wing dumping would be prohibited; AOC would include +/- 15% or the 50-foot rule; and post mining elevation could exceed pre-mining elevations in order to restore topographic landforms" Should clarify what +/-15% is a percentage of elevation or depth of cut at a given location. If it is of elevation then that is impractical as 15% of 1800 ft of elevation is 270' and if it is depth of cut that is impractical 15% or a 80' cut is only 12'.		
2.4.8	2-8	27 - 28	"Regulatory authorities would set fill optimization policies based on topography and other site specific issues" This or a similar language should be the preferred alternative. It should also allow exceeding the original elevation by a small amount if it blends in and matches land forms in the area.		
2.4.9	2-9	3	"Ban on all variances from returning the mined areas to AOC;" This violates SMCTA and eliminates opportunities for economic development. Adequate controls are in place to		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			ensure AOC variances are not abused. Virginia is working with county IDAs to provide level ground for economic development. Dickenson County has recently approached DMME to seek a site for an industrial development area as their industrial park has run out of room. OSM will face major opposition and litigation if this is put forward as the preferred alternative.		
2.4.9	2.9	4 - 11	"Allow AOC exceptions as is done currently, but place limitations on existing exceptions. For an AOC exception for mountaintop removal operations, the applicant would have to show that mining impacts with an AOC exception would be no greater than if the site was returned to AOC. For steep-slope AOC exception, the applicant would have to show the AOC exception would result in lesser impacts to aquatic ecology in the watershed than if restored to AOC. PMLU requirements would be more stringent, and the regulatory authority would have to make a determination that the PMLU are achievable and feasible and backed by financial assurances;" This alternative is not justified and is impractical. A PMLU of industrial use will by necessity not have a hardwood forest as the post mining land use thus the leaf litter and energy input associated with a headwater stream will not be available for the aquatic community. OSM does not have the authority to ban industrial development through this type of rule.		
2.4.9	2.9	12 - 13	"Regulatory authorities would set limitations on exceptions from AOC requirements based on regional regulations and conditions" This should be the preferred alternative.		
2.4.10	2.9	22 - 23	"Reforestation of forest communities to the level of mature trees; establishes a bonding requirement that is triggered when deciduous hardwoods are not reestablished". This alternative is impractical. As noted in Full-Suite 2.5.2.10 "This Alternative would require reforestation of forest communities and would ensure full restoration occurs to the level of mature trees by establishing bonding requirements that are triggered when deciduous hardwoods are not reestablished" As it will take decades for a deciduous hardwood forest to mature how will the bond be administered, how will the forest be inspected/monitored and who will provide the resources to administer this program potentially for 40 of 50 years. What will be the standard to determine success? What authority		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			does OSM have to require a deciduous hardwood forest? If alternate PMLU is approved how could this be required? What if instead of a deciduous hardwood forest a landowner wants a fast growing forestland crop such as pines or hybrid poplar in order to achieve a faster return on investment. OSM does not appear to recognize forestland as cash crop but rather a permanent environmental enhancement. With the construction of the Virginia City Hybrid Energy Center in St. Paul, VA there will be a demand for bio-mass fuels which will drive the PMLU on future permits. This may include crops such as switch grass. OSM should support the use of renewable energy sources such as bio-mass fuels as part of the PMLU. Failing to do so will be contrary to the current administration's push for renewable energy sources.		
2.4.10	2.9	24 - 28	"Revegetation with native species consistent with reestablishing the climax native plant community regardless of the PMLU and reforestation of excess spoil fills; salvage original organic material; demonstration that topsoil substitutes are necessary and appropriate; reforest and minimize forest fragmentation if the area was forested before mining or within the five year period prior to mining" Same comment as for Section 2.4.10, lines 22 – 23.		
2.4.10	2.9	31 - 32	"Success of the vegetative growth would be evaluated no sooner than the end of the third growing season, and bond release could occur thereafter". OSM should justify the need for changing to three growing seasons. Does OSM have data to support the need to go to three growing seasons? This contradicts the provision in SMCRA Section 515(b)(20)(B) which states that the bonding on remaining areas is for a minimum period of two years "on lands eligible for remaining assume the responsibility for successful revegetation for a period of two full years after the last year of augmented seeding, fertilizing, irrigation, or other work in order to assure compliance with the applicable standards"		
2.4.11	2.10	9 - 12	"This should be the preferred alternative. There is little that can be done in most ephemeral streams as required by Alternative 2. Similar to 2nd bullet above, except the enhancement requirements would relate to mining 10 activities that impact intermittent and perennial streams. Enhancement activities could occur in the same watershed, on the permitted area, a		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			different watershed, or a CWA mitigation project off the permit area"		
2.4.1	2-5	26	"The CWA definition, "waters of the U.S.," favored by the EPA and USACE". This should be the preferred alternative or else there will be two sets of stream definitions. The CWA sets out the definition of streams and is used by the CORPS and EPA for CWA Section 404 permits. Since SMCRA permits incorporate (at least in Virginia) the 404 permits there would be a conflict if there were two different definitions of a stream.		
2.5.2.2	2-14	31 - 33	"Documentation of the biological conditions of all streams (including ephemeral streams) across multiple years (at least 2 years to differentiate between wet and dry years) and multiple seasons (at least spring, summer, and fall), including upland habitat;" This is contrary to adopted state and federal Stream Condition Index which utilize spring and fall benthic sampling. Ephemeral streams are unlikely to yield meaningful data during dry periods. Two years is excessive and is not needed. This is not in accordance with CWA Sections 402 and 404 permitting benthic/biological monitoring requirements. OSM should not usurp that authority but rather should accept the data provided through that permitting process.		
2.5.2.3	2-15	6 - 11	"Under Alternative #2, "material 7 damage to the hydrologic balance outside the permit area" would be defined as any impairment 8 of a physical, chemical or biological function of any stream (including ephemeral streams) based on state water quality standards (functional assessment approach and definition of impairment to be developed) or impairment of designated uses. Unlike the other Alternatives, this standard would be applied to all streams, including ephemeral streams." Same comment as stated for Section 2.4.7, page 2-8, lines 1 – 3. Streams that have been listed as impaired on the 303(d) list are so listed because they have been determined as not meeting their designated use. Under this Alternative by definition material damage would have occurred prior to the permit being issued if it is within a 303(d) watershed. Does that make the permittee liable for the Implementation Plan developed as part of a Total Maximum Daily Load (TMDL) report to address the impairments that have caused the stream to be listed as impaired? Having a Corrective Action Threshold implies the permittee will be required to take action		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>to ensure the impaired stream is no longer impaired even if as the alternative states "regardless of whether the impacts are caused by mining operations or are within the mining operator's control". This raises legal problems both for a permittee and the SMCRA regulatory authority. How can the RA require the permittee to address problems they did not cause and how would right of entry be obtained. This will prove counter productive as well. Within TMDL watershed DMME requires permittees to provide offsets through the 402 NPDES permitting process which consists of addressing these outside impacts to a 303(d)/TMDL watershed. OSM should not venture into the CWA Section 402 NPDES permitting authorities. That is between the 402 NPDES state permitting agency and EPA, not OSM.</p>		
2.5.2.6	2-15, 2-16	32- 40 pp 2-15 1 - 6, pp 2-16	<p>"Biological monitoring would be monitored in accordance with EPA Clean Water Act protocols, assessed annually, and would continue until no adverse trends are detected for over six months prior to final bond release. The regulatory authority would review the water quality conditions and compliance with the surface water runoff plan midway through the permit period and during permit renewal cycles. This monitoring and inspection must provide sufficient data to evaluate the effectiveness of the runoff plan, including frequency of monitoring, inspection, maintenance, and reporting. The runoff plan would include an inspection of storm water (rainwater, snowmelt, etc.) control structures following a 10-year storm event and the preparation of a report by a certified Professional Engineer, to be submitted to the regulatory authority within 48 hours. The report must address the performance of the hydraulic control structures, material damage, and any remedial measures taken. The regulatory authority and the mining company would review the data to identify trends, and monitoring would not be waived before final bond release. Monitoring would continue until the mining company has shown the full restoration of the stream community." This Alternative is impractical and is beyond the scope of SMCRA. CWA permits do not require the amount of stream monitoring proposed by OSM. It will be physically impossible for all sediment control structures to be inspected, a report prepared and certified by a PE and submitted to the</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			regulatory authority within 48 hours of a 10 year storm event. There are multiple types of 10 year storm events 10- yr -24 hr, 10 year-12 hr, etc. There are not enough resources available to perform these actions within 48 hours of a 10 year storm event. It may be a half day or more before it is even known if a 10 year storm event occurred in a given area. How are the regulatory agencies supposed to track the occurrences of these storm events and how will resources being made available to the states to handle this tracking and evaluation? Does OSM have data to support the need for such inspections and reporting?		
2.5.2.7	2-16	13 - 17	"Under this Alternative, Correction Action Thresholds would be set based on the impacts of all human activities in the watershed (defined on a basin scale), regardless of whether the impacts are caused by the mining operation or are within the mining operator's control. The regulatory authority and the mining operator would be required to agree to Corrective Action Threshold criteria designed to prevent material damage to the hydrologic balance outside the permit area." Same comment as made for Section 2.4.7, page 2-8, lines 1 – 3. How can the operator and the regulatory authority be required to agree to corrective actions that are beyond the control of the permittee or in the case of bond forfeiture the regulatory authority? Will OSM obtain the necessary right of entry? Much of the impairment to streams in the Virginia coalfields are the result of straight pipe discharges. How is the permittee or the agency to address straight pipe sewage discharges from residential homes?		
2.5.2.10	2-17	7 - 8	"Unlike the No Action Alternative, Alternative #2 would require reforestation of previously forested lands regardless of the postmining land use." This Alternative explanation does not make sense. Require reforestation of previously forested lands regardless of the postmining land use; what if the approved PMLU is industrial. Will a factory have to have forestland throughout the factory complex? It is doubtful this would withstand a legal challenge and SMCRA does not authorize this level of control over PMLU as it allows a change on land use.		
2.5.2.11	2-17	15 - 16	"Alternative #2 differs from the No Action Alternative in that enhancement is not tied to practicability". How is an		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			enhancement that is not practical to be accomplished? OSM should publish practical guidance on how to achieve these impractical enhancements.		
2.3.2.2	2-4	26 - 40	The cafeteria analogy is a poor choice for demonstrating the arrangement of alternatives. This should be rewritten to better explain the format and the way alternatives can be arranged/selected.		
2.5.2	2-13	33 - 37	This Full-Suite Alternative will jeopardize all coal mining and result in major increased need for agency resources for permit review and field inspection.		
2.5.5.4	2-26	24 - 25	<p>"Alternative #5 would prohibit mining activities in intermittent and perennial streams and within 100 feet of intermittent and perennial streams, but would allow excess spoil fills and other mining activities to occur under certain circumstances. In order for mining activities to be permitted, the applicant would have to show the regulatory authority that the proposed mining activity would not limit the pre-mining uses or have an adverse effect on the pre-mining ecological functions of the intermittent and perennial stream. This means, in part, that mining operations would ensure that intermittent and perennial streams continue to have necessary amounts of base flow to remain as intermittent and perennial streams. The Applicant would also have to show that the mining activity would not significantly reduce biological conditions in the intermittent and perennial stream or result in material damage to the hydrologic balance outside the permit area.</p> <p>Alternative #5 also addresses requirements to obtain approval to construct an excess spoil fill or coal mine waste disposal facility in or near an intermittent or perennial stream. To do this, the applicant must demonstrate that there is no reasonable alternative to constructing the facility in or near an intermittent and perennial stream after considering all alternatives. If these conditions are met, a surface runoff management plan must be developed and the establishment of a 300-foot forested (or other native species) buffer zone for intermittent and perennial streams on and off the permit area must be developed as part of the reclamation plan."</p> <p>This alternative would virtually prohibit contour mining as well</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			as remining and reclaiming of AML highwalls and benches. As noted previously AML benches have streams flowing along them due to severed headwater stream segments emptying flow over the highwalls onto the benches. It will be counter productive by prohibiting remining and reclaiming and restoring the severed stream reaches. This will be impossible to meet as any mining above the streams will result in deforestation and the loss of the associated leaf litter and energy inputs into the stream. Mining will change the base flows to some degree which can result in a change of benthic family and genus present in the streams. This does not mean the stream has been adversely affected but rather there has been a shift in the benthic population but this will be the basis for legal challenges of this is adopted as a rule.		
2.5.5.5	2-27	6 - 9	"Under Alternative #5, mining through intermittent and perennial streams would be prohibited unless the restoration of stream form and function could be demonstrated. This alternative would include expanded fish and wildlife protection and enhancement requirements for all operations and would require bonding for stream restoration" This bonding requirement appears duplicative of CWA Section 404 financial assurance requirements. The Virginia program already works with the CORPS to address the 404 requirement of asked. This only needs to be a bonding increment that is coordinated through the joint permit review with the CORPS and not a separate SMCRA requirement. Double bonds are not needed.		
2.5.5.7	2-27	27 - 29	"A corrective action plan would be developed either on a programmatic or permit specific basis. A quarterly review of monitoring data would be required to determine whether material damage thresholds are being approached." There should be clarification as to what point the monitoring and review will cease. It is virtually impossible that material damage would occur after either a Phase 1 or Phase 2 bond release.		
2.5.5.11	2-28	30 - 34	"Enhancement activities, as described in and included as conditions of the permit, must be within the same watershed and on the permitted area and would not extend beyond the watershed or permit areas, as allowed under Alternative #3. Alternative #5 also does not adopt Alternative #4 reliance on the presence of state or federal listed species as a trigger for		

Allen, Melissa M

From: Wahrer, Richard (EEC) [Richard.Wahrer@ky.gov]
Sent: Wednesday, January 26, 2011 12:01 PM
To: Ehret, Paul
Subject: FW: Chapter 4 EIS Comments from Kentucky DNR
Attachments: EISCH4Com.docx

Already sent these to Craynon.

Despite all my rage, I am still just a rat in a cage.

Richard

Comment Form

Title of Document	PDEIS Chapter 4
Contact Information	
Name	Richard Wahrer & Paul Rothman Kentucky Dept. for Natural Resources
Telephone Number	502.564.6940
Email	<u>Paul.rothman@ky.gov;</u> <u>Richard.wahrer@ky.gov</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.7.1.1	4-250	21-23	<p>General Comment: The major assumption that the impact analysis does not consider any current trends caused by EPA and associated 402, 404 permitting processes as applied to the Appalachian region should be strongly reconsidered. Please be aware that any impacts from mining that EPA is involved (in Appalachia) WILL become a national issue. The reconsideration of this assumption is need because the projected values for mining acreage, stream length affected, coal production and subsequent economic values (revenue, wages, employment, severance taxes, etc) mention in this PDEIS is flawed. Kentucky, if not the other Appalachian states) have already experienced a drastic downturn in the initiation of new operations with the last 18 months and likely the next 12 months, if not longer. These events, in turn, greatly affect the cumulative impact analysis. There will be</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			no business as usual anymore. An additional assumption in this section is that SMCRA rulemaking implementation may take 10-12 years. Be aware that EPA and state water agencies may implement changes within the same time period or sooner. All facets of mining projections in this PDEIS may be subject to severe revision.		
4.1.3.1.1.2	4-12	24	Please acknowledge the Fill Placement Optimization Process (FPOP) is a guidance document issued by the Kentucky Department for Nature Resources-Reclamation Advisory Memorandum (RAM) # 145. This would be consistent, then, with the acknowledgements of state regulatory guidance documents of New Mexico and Virginia found on page 4-124, lines 10-21.		
Table 4.1.4-2	4-34		Column heading "Range of Concentrations from Downstream of Mine Sites": More information is needed-how many sites and how far downstream? Please verify (or refute, with the correct information) that the Pond (2008) study involved 37 sites in West Virginia and then, footnote those facts.		
4.1.4.1	4-34-4-37		General Comment: In regards to the review of contaminants associated with mining: the comparison of the Pond (2008) study and the Hartman et al. (2005) study lists results that are confusing, contradictory and ambiguous against the backdrop of mined sites, un-mined		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			sites, mine-filled watersheds and reference streams. Levels of these contaminants may show no difference between mined and unmined sites though watersheds may show greater amounts and often compared to reference streams. It could be argued that an unmined site should be a reference for a mine site. Reference streams may not be subject to any activity or disturbance in the area. Mine-filled watersheds may reflect other than mining impacts. A more detailed discussion of these studies may provide much needed clarification.		
4.1.4.2	4-44	2-3	The sentence "Mining and associated activities can produce noise far above normal ambient levels" is merely stating the obvious. Normal ambient levels in many of the hollows of eastern Kentucky is extremely low due to the complete lack of noise-generating elements. Please delete this sentence.		
4.1.4.3	4-46	34-35	The sentence "...salamanders were not found on reclaimed mine sites of varying age and cover types in Appalachia.." is just completely incorrect. KYDNR invites the author and all interested parties to come see the salamanders on our reclaimed sites in Kentucky.		
4.2.2.2.	4-81	27-35	It should be noted that landforming may increase surface disturbance (of originally undisturbed area) and with the re-establishment of stream densities may result in		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			increased water-spoil interaction. Exposures of large areas, rather than certain strata to be buried and encapsulated in a fill may cause increases in TDS and conductivity.		
4.2.2.2	4-82	Foot-note 2	It should be corrected to: OSM did approve the permitting of shadow area above underground mine workings in Kentucky (May, 1982, Federal Register)		
4.2.5.2	4-96	22-25	It should be noted that the reforestation requirement may be in conflict with the wishes of a private landowner. It should also be realized that the landowner who begrudgingly accepts a required PMLU may clear trees after bond release.		
4.3.3.3.1.2	4-133	24-25	"Use of native species...is expected to further reduce erosion..." is simply incorrect. Certain introduced species, as well as invasive species, can effectively reduce erosion. Please consider deleting this sentence as it is not needed for the intent of this paragraph.		
4.5.3.3.1.1	4-205	29&38	The requirement to achieve "stream form and function" is defined as including flow-regime, chemical constituents, physical parameters, and sediment characteristics similar to pre-mining watersheds. This appears to be an expansion of the definition for stream form and function used in Chapter 2. Please clarify.		
4.5.3.3.1.1	4-205	33	Requiring that watersheds "be reestablished to a level that mimics pre-mining conditions" may have the effect of allowing mining only in		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>previously disturbed watersheds and preventing mining in undisturbed watersheds. Water quality samples collected by the US Forest Service in the late 1970's show an average TDS concentration of 265 mg/l for four mining disturbed watersheds distributed across eastern Kentucky while the average TDS concentration for undisturbed watersheds would likely be below 50 mg/l. It would likely take decades for TDS concentrations to return to the undisturbed baseline concentration of less than 50 mg/l. Under this requirement, the impacts to coal production may be greater than projected in the Draft EIS.</p>		
4.5.3.3.1.1	4-205	39	<p>Does "characteristics that are similar to pre-mining watersheds" refer to current conditions as defined by baseline sampling which could include impacts from previous mining, watersheds that are unaffected by previous mining but may have been affected by other activities such as logging, watersheds that are essentially unaffected by any disturbance, or other watershed condition? Please clarify.</p>		
Table 4.5.8-1	4-237		<p>Action: CWA TMDL Program-Future Action: The TMDL program in Kentucky, is and has been, underfunded and understaffed. An increase of TMDL determinations beyond present levels is not expected.</p>		

Gardner, Linda R. (Contractor)

From: Craynon, John
Sent: Monday, November 01, 2010 3:13 PM
To: Ehret, Paul; Coker, Jeffrey A. "Jeff"; Calle, Marcelo; Means, Brent P.
Subject: Fw:
Attachments: EIS Comment form chapter 3 sent.docx

From: Halstead, Lewis A [<mailto:Lewis.A.Halstead@wv.gov>]
Sent: Monday, November 01, 2010 10:26 AM
To: Craynon, John
Subject:

Once again not enough time for thoughtful review.

Lewis A. Halstead

Comment Form

Title of Document	Stream Restoration EIS
Contact Information	
Name	Lewis Halstead
Telephone Number	304-926-0490
Email	Lewis.a.halstead@wv.gov

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
Whole			Once again, and even worse than Chapter 2, WV has not had time to adequately review the voluminous chapter 3 with any thoughtful efficiency. Even with the "quick read" given to the document it was also evident that OSM and its contractors also did not have adequate time to prepare the document with omissions and inconsistencies too numerous to mention. However, some of them are documented later.		
3.15			There are few national parks in WV or the Appalachian region that are within the coal region. Mining is prohibited in the National Rivers within the park system. Those rivers had historical mining and that history is part of the popularity of the areas.		
	3-4		The acreage for some of the state parks in WV seems to be a little low. Canaan Valley's golf course is more than 163 acres.		
3.12.1.3.1.4	3-46	15	High altitude streams and headwater streams are not the same population of streams. All headwater streams are not high altitude streams. It sounds like you're trying to imply that all headwater streams are trout streams, which is not the case.		
3.15.1.7	3-11	13-14	What pertinence does the quote from the WV Tourism Guide have and why isn't this type of thing mentioned in other states and regions?		
3.5.1.3.2	3-5	33	This definition is not only for WV. Shouldn't it reference the Federal definitions? Another example of more emphasis on WV than on other states.		
3.5.0	3-2	13-14	One sentence on the Powder River Basin not achieving AOC. Do they get AOC variances and why is that not discussed in this chapter.		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
3.5.1.2	3-4	15-16	Contradictory from the previous paragraph 3.5.1.1 where Northern WV is lumped in with PA and OH. So shouldn't it be here?		
3.5.1.3.4	28		Who did you ask for this information in WV?		
			Are KY statistics for permits issued per year or fills constructed in that year?		
			Much better discription of fills in section 3.1.6 starting on page 3-38.		
			There seems to be some confusion here with respect to whether you are talking about refuse fills or excess spoil fills		
3.5.5.2	3-17	16	You say topography affected little and no AOC variances but you mention in 3.3.5.0 page 3-2 line 13-14 that that type of mining can't achieve AOC.		
3.1.7.6	3-44-3-45		Why describe KY RAM 145 and not mention WV AOC plus?		
3.1.4			The underground miming waste disposal discussion here does not seem to recognize what you call dilution or partings.		
3.1.7.8	3-47	26	"some" should be replaced with "most" as evidenced by your statement on 3-48 line 18.		
3.1.87.9	3-49	17-29	Explain in more detail.		
3.1.9.1.4	3-58	9	Highwall mining is fairly common in WV.		
3.1.9.1.5	3-58	11-16	Where did this data come from? Is it permits or mines?		
3.1.9.3.2			Why is privately owned land discussed in some sections and not others?		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition

Note: The Incorporate (Yes/No) and Proposed Disposition columns will be completed by the originating office.

Sims, Pam

From: Ehret, Paul
Sent: Tuesday, October 12, 2010 10:16 AM
To: Joseph, Bill
Subject: Virginia Comments
Attachments: EIS Comment form.doc

Follow Up Flag: Follow up
Flag Status: Flagged

From: Lambert, Butch (DMME) [<mailto:Butch.Lambert@dmme.virginia.gov>]
Sent: Tuesday, October 12, 2010 8:17 AM
To: Craynon, John
Cc: Davis, Jackie (DMME); Vincent, Les (DMME); Dye, Jr., Ian B.; Thomas, John (DMME); earl.bandy@osmre.gov; Ehret, Paul
Subject: Chapter II Comments

John,

Please find attached the Virginia comments on Chapter II of the EIS. Also, will the rest of the schedule for submitting the other chapters to partners and time for submitting comments be revised based upon the failure to receive chapter II on time?

Comment Form

Title of Document	Comments on Draft EIS Chapter 2
Contact Information	
Name	Bradley C. Lambert
Telephone Number	(276) 523-8145
Email	Butch.Lambert@dmme.virginia.com

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
2.3.2.2	2-4	26 - 40	The grouping of the Full Suite of Alternatives implies that only Alternative 2, 3, 4, etc. within each element will be the Alternatives analyzed for the EIS. This should be clarified that different level Alternatives could be grouped together such as Alternative 3 form one Element with Alternative 2 in another Element, etc. to come up with the final set of Alternatives to be analyzed and as the Preferred Alternative. Full-Suite Alternative 2 would be catastrophic for the coal mining industry, the AML fund; coal availability for coal fueled power plants, etc. If this is proposed as an Alternative in the draft EIS then the ripple effect should be clearly explained and analyzed as to all possible effects to the economy, energy production, higher energy costs and the effect that will have across the economy, lost jobs not just direct jobs from coal mining but from support industries and in businesses that depend upon mining jobs and support industry jobs as a customer base.		
2.4.2	2-5	34 -35	"Sampling over a 24 month period for a full suite of chemicals; continuous flow measurements; and documentation of sediment, meteorology, stream form and function" is excessive. The list of what constitutes a full suite of chemicals should be clarified. Continuous flow measurements are impractical and not necessary to document the stream conditions. Under CWA 404 permitting neither the CORPS nor EPA requires this much data. The goal under SMCRA and CWA is to minimize disturbance, i.e. make the footprints smaller if possible. A permittee who proposes a smaller mining operation will not be able to economically permit the smaller site. This alternative promotes larger operations with more		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			impacts rather than minimization. The increased regulatory staff time required to review this huge increase in data must be considered as well. Is enough value added to the process to justify the expense to the permittee and to the additional resources needed by the regulatory authority.		
2.4.2	2-6	1-7	Same comment as for section 2.4.2, page 2-5, and lines 34 – 35.		
2.4.3	2-6	17 - 18	"Defining "material damage" as any impairment of a physical, chemical, or biological function of any stream (including ephemeral streams);" This is overly restrictive. An impairment can be considered any impact. SMCRA and the CWA allow some impacts such as the discharge of pollutants under a NPDES permit as long as it does not violate effluent limitations. The CWA does not consider exceedance of an effluent limit as a stop mining mandate. Any definition of impairment should acknowledge that violations of effluent limits may occur. Impairment of an ephemeral stream should not be considered material damage. OSM's preamble does not support that scenario. Material damage is intended to consist of damage to a wider regional area. Impairment of a 150 ft or 200 ft of ephemeral stream should not constitute material damage.		
2.4.3	2-6	19	"Defining "material damage" as an unabatable impairment of a stream" Should clarify that this means cannot be repaired or restored effluent violations are unabatable as the discharge has occurred and the pollution has entered the stream. The discharge can be stopped or treated to bring the discharge into compliance but the pollutant remains in the stream.		
2.4.3	2-6	20-21	"Defining "material damage" as a rebuttable presumption based on a percentage of stream miles that are or may be adversely affected;" This will be extremely difficult to regulate. OSM's rebuttable presumption of subsidence damage within a set angle of draw was a miserable failure. Unless there are clear and reasonable guidelines on how "adversely affected" is to be defined/determined this would cause confusion and lead to challenges from all sides.		
2.4.3	2-6	22 - 23	"Defining "material damage" as a measurable adverse impact on water quality or quantity in an intermittent or perennial stream" This is a more realistic definition if realistic and reasonable measures are established for the threshold to		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			determine material damage has or can occur.		
2.4.4	2-6	29 - 30	<p>"An absolute prohibition of activities within 100 feet of all streams, including ephemeral streams" This alternative is absolutely not supported by SMCRA nor is it realistic or reasonable. Under current CORPS JDs flowing channels on AML benches are considered jurisdictional. Under this alternative a permittee could not remove and reclaim adverse AML features. AML highwalls have severed upland reaches of streams that flow over the highwall then down the bench following the bench gradient and eventually flow over the bench down a drain or a gully that has formed over the years. Removing these areas and reestablishing the stream segments helps the stream quality. In Virginia many areas have previous AML mining that has spoiled into stream and the streams flow through and under AML spoil piles. This alternative would preclude removing and reclaiming these stream segments and adjacent riparian zones. If any surface mining is conducted even for a deep mine face up excess spoil will be generated and for deep mines the material to backfill the face-up highwall will need to be stored. It is physically impossible to always place all excess spoil into the backfill area. It is not feasible to place all this excess spoil and deep mine face-up material into side hill fills and ridge tops. By necessity some will need to be placed in streams as now designated jurisdictional by the CORPS.</p>		
2.4.4	2-6	31 - 33	Same comment as for Section 2.4.2, page 2-5, lines 34 – 35		
2.4.4	2-6	37 - 38	<p>"A prohibition on mining activities within 100 feet of intermittent and perennial stream, with an allowance for fills under certain circumstances." This Alternative sets up for the same scenario where West Virginia, EPA and the CORPS where no fill could be placed in drainages in excess of 250 acres. This resulted in many small fills impacting headwater streams rather than a few larger fills impacting fewer headwaters. In discussions with EPA recently they indicated that they wanted to ensure that they didn't create a situation where many small fills were constructed instead of a few larger ones. That is the purpose of FPOP in Kentucky and AOC plus in West Virginia to maximize fill minimization. OSM's alternatives appear to be negating the progress made in this area.</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
2.4.5	2-7	7	"A prohibition on all fills in or within 100 feet of all streams". This Alternative appears miss-worded or misplaced the section is Titled "Mining Through Streams" and not placement of fills. However our comment is the same as for Section 2.4.4, page 2-6, lines 37 – 38.		
2.4.5	2-7	8	"Allowance of mining activities near or through streams if CWA standards can be met" This Alternative and the one In line 9 of this Section should be combined into the Preferred Alternative used for the EIS. OSM should not usurp the CWA and the authority of the CORPS and the Section 402 NPDES permitting agencies.		
2.4.5	2-7	9	"Allowance of mining if the stream was impaired or impacted prior to mining activities" This Alternative should be promoted as it provides for a holistic watershed restoration approach as discussed in the comment to Section 2.4.4, page 2-6, lines 29 - 30		
2.4.5	2.7	10 - 11	Mining through intermittent and perennial streams should be allowed if the proper CW 402 and 404 permits can be obtained.		
2.4.6	2-7	20-25	"Monitoring of surface and ground waters for a full suite of parameters, consistent with that collected during baseline sampling; quarterly basis until restoration of the stream community is demonstrated, with review midway through permit period and during renewal; no waiver allowed prior to bond release; biological monitoring would comply with CWA protocols, assessed annually and continued until no adverse trends are detected for six months prior to bond release;" Monitoring ground water quality quarterly for a full suite of parameters is not indicative of stream community quality or restoration. This is not consistent with CWA requirements. OSM should defer to CWA agencies. Given surface mining is bonded for often 10 to 15 years this is excessive monitoring. OSM is setting up monitoring requirements that is conflicting with the CWA.		
2.4.6	2-7	29 - 31	"Similar to 2nd bullet above, except that monitoring would be for parameters related to material damage rather than for the full suite of chemicals, biological components, or other elements;" SMCRA requires prevention of material damage to the hydrologic balance outside the permit. This alternative is within the authority of SMCRA, OSM should avoid trying to be		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			a second guessing CWA agency.		
2.4.7	2-8	1 - 3	<p>“Corrective Action Thresholds would be set based on the impacts of all human activity in 2 a watershed, regardless of whether the impacts are caused by mining operations or are within the mining operator’s control; data would be reviewed quarterly” This Alternative is extremely problematic when taken in conjunction with the Full-Suite discussion in section 2.5.2.3, page 2-15, lines 6 -12; which states “Under Alternative #2, “material damage to the hydrologic balance outside the permit area” would be defined as any impairment of a physical, chemical or biological function of any stream (including ephemeral streams) based on state water quality standards (functional assessment approach and definition of impairment to be developed) or impairment of designated uses. Unlike the other Alternatives, this standard would be applied to all streams, including ephemeral streams, substantially increasing the potential impacts to the mining industry.” Streams that have been listed as impaired on the 303(d) list are so listed because they have been determined as not meeting their designated use. Under this Alternative by definition material damage would have occurred prior to the permit being issued if it is within a 303(d) watershed. Does that make the permittee liable for the Implementation Plan developed as part of a Total Maximum Daily Load (TMDL) report to address the impairments that have caused the stream to be listed as impaired? Having a Corrective Action Threshold implies the permittee will be required to take action to ensure the impaired stream is no longer impaired even if as the alternative states “regardless of whether the impacts are caused by mining operations or are within the mining operator’s control”. This raises legal problems both for a permittee and the SMCRA regulatory authority. How can the RA require the permittee to address problems they did not cause and how would right of entry be obtained. This will prove counter productive as well. Within TMDL watershed DMME requires permittees to provide offsets through the 402 NPDES permitting process which consists of addressing these outside impacts to a 303(d)/TMDL watershed. OSM should not venture into the CWA Section 402 NPDES permitting</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			authorities. That is between the 402 NPDES state permitting agency and EPA, not OSM.		
2.4.7	2-8	8 - 9	"Corrective Action Thresholds would be defined in terms of numerical water quality thresholds based on physical, chemical, and biological criteria in each region;" This would be a more realistic and reasonable approach. It is doubtful that any RA can hold a permittee liable for activities that impair a stream over which they have no control or ability to address or correct.		
2.4.8	2-8	22	"Ban all excess fill placement in all streams, including ephemeral streams;" This Alternative is not feasible and goes beyond the authority of SMCRA. SMCTA has no provision that provides for this ban and under CWA Section 404 permits fills can be placed in streams with proper Section 404 permits. If any surface mining is conducted even for a deep mine face up excess spoil will be generated and for deep mines the material to backfill the face-up highwall will need to be stored. It is physically impossible to always place all excess spoil into the backfill area. It is not feasible to place all this excess spoil and deep mine face-up material into side hill fills and ridge tops. By necessity some will need to be placed in streams as now designated jurisdictional by the CORPS.		
2.4.8	2-8	23 - 26	"Similar to the 1st bullet above, except that compliance with land forming principles would be required; end dumping and wing dumping would be prohibited; AOC would include +/- 15% or the 50-foot rule; and post mining elevation could exceed pre-mining elevations in order to restore topographic landforms" Should clarify what +/-15% is a percentage of elevation or depth of cut at a given location. If it is of elevation then that is impractical as 15% of 1800 ft of elevation is 270' and if it is depth of cut that is impractical 15% or a 80' cut is only 12'.		
2.4.8	2-8	27 - 28	"Regulatory authorities would set fill optimization policies based on topography and other site specific issues" This or a similar language should be the preferred alternative. It should also allow exceeding the original elevation by a small amount if it blends in and matches land forms in the area.		
2.4.9	2-9	3	"Ban on all variances from returning the mined areas to AOC;" This violates SMCTA and eliminates opportunities for economic development. Adequate controls are in place to		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			ensure AOC variances are not abused. Virginia is working with county IDAs to provide level ground for economic development. Dickenson County has recently approached DMME to seek a site for an industrial development area as their industrial park has run out of room. OSM will face major opposition and litigation if this is put forward as the preferred alternative.		
2.4.9	2.9	4 - 11	"Allow AOC exceptions as is done currently, but place limitations on existing exceptions. For an AOC exception for mountaintop removal operations, the applicant would have to show that mining impacts with an AOC exception would be no greater than if the site was returned to AOC. For steep-slope AOC exception, the applicant would have to show the AOC exception would result in lesser impacts to aquatic ecology in the watershed than if restored to AOC. PMLU requirements would be more stringent, and the regulatory authority would have to make a determination that the PMLU are achievable and feasible and backed by financial assurances;" This alternative is not justified and is impractical. A PMLU of industrial use will by necessity not have a hardwood forest as the post mining land use thus the leaf litter and energy input associated with a headwater stream will not be available for the aquatic community. OSM does not have the authority to ban industrial development through this type of rule.		
2.4.9	2.9	12 - 13	"Regulatory authorities would set limitations on exceptions from AOC requirements based on regional regulations and conditions" This should be the preferred alternative.		
2.4.10	2.9	22 - 23	"Reforestation of forest communities to the level of mature trees; establishes a bonding requirement that is triggered when deciduous hardwoods are not reestablished". This alternative is impractical. As noted in Full-Suite 2.5.2.10 "This Alternative would require reforestation of forest communities and would ensure full restoration occurs to the level of mature trees by establishing bonding requirements that are triggered when deciduous hardwoods are not reestablished" As it will take decades for a deciduous hardwood forest to mature how will the bond be administered, how will the forest be inspected/monitored and who will provide the resources to administer this program potentially for 40 of 50 years. What will be the standard to determine success? What authority		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			does OSM have to require a deciduous hardwood forest? If alternate PMLU is approved how could this be required? What if instead of a deciduous hardwood forest a landowner wants a fast growing forestland crop such as pines or hybrid poplar in order to achieve a faster return on investment. OSM does not appear to recognize forestland as cash crop but rather a permanent environmental enhancement. With the construction of the Virginia City Hybrid Energy Center in St. Paul, VA there will be a demand for bio-mass fuels which will drive the PMLU on future permits. This may include crops such as switch grass. OSM should support the use of renewable energy sources such as bio-mass fuels as part of the PMLU. Failing to do so will be contrary to the current administration's push for renewable energy sources.		
2.4.10	2.9	24 - 28	"Revegetation with native species consistent with reestablishing the climax native plant community regardless of the PMLU and reforestation of excess spoil fills; salvage original organic material; demonstration that topsoil substitutes are necessary and appropriate; reforest and minimize forest fragmentation if the area was forested before mining or within the five year period prior to mining" Same comment as for Section 2.4.10, lines 22 – 23.		
2.4.10	2.9	31 - 32	"Success of the vegetative growth would be evaluated no sooner than the end of the third growing season, and bond release could occur thereafter". OSM should justify the need for changing to three growing seasons. Does OSM have data to support the need to go to three growing seasons? This contradicts the provision in SMCRA Section 515(b)(20)(B) which states that the bonding on remaining areas is for a minimum period of two years "on lands eligible for remaining assume the responsibility for successful revegetation for a period of two full years after the last year of augmented seeding, fertilizing, irrigation, or other work in order to assure compliance with the applicable standards"		
2.4.11	2.10	9 - 12	"This should be the preferred alternative. There is little that can be done in most ephemeral streams as required by Alternative 2. Similar to 2nd bullet above, except the enhancement requirements would relate to mining 10 activities that impact intermittent and perennial streams. Enhancement activities could occur in the same watershed, on the permitted area, a		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			different watershed, or a CWA mitigation project off the permit area"		
2.4.1	2-5	26	"The CWA definition, "waters of the U.S.," favored by the EPA and USACE". This should be the preferred alternative or else there will be two sets of stream definitions. The CWA sets out the definition of streams and is used by the CORPS and EPA for CWA Section 404 permits. Since SMCRA permits incorporate (at least in Virginia) the 404 permits there would be a conflict if there were two different definitions of a stream.		
2.5.2.2	2-14	31 - 33	"Documentation of the biological conditions of all streams (including ephemeral streams) across multiple years (at least 2 years to differentiate between wet and dry years) and multiple seasons (at least spring, summer, and fall), including upland habitat." This is contrary to adopted state and federal Stream Condition Index which utilize spring and fall benthic sampling. Ephemeral streams are unlikely to yield meaningful data during dry periods. Two years is excessive and is not needed. This is not in accordance with CWA Sections 402 and 404 permitting benthic/biological monitoring requirements. OSM should not usurp that authority but rather should accept the data provided through that permitting process.		
2.5.2.3	2-15	6 - 11	"Under Alternative #2, "material 7 damage to the hydrologic balance outside the permit area" would be defined as any impairment 8 of a physical, chemical or biological function of any stream (including ephemeral streams) based on state water quality standards (functional assessment approach and definition of impairment to be developed) or impairment of designated uses. Unlike the other Alternatives, this standard would be applied to all streams, including ephemeral streams," Same comment as stated for Section 2.4.7, page 2-8, lines 1 – 3. Streams that have been listed as impaired on the 303(d) list are so listed because they have been determined as not meeting their designated use. Under this Alternative by definition material damage would have occurred prior to the permit being issued if it is within a 303(d) watershed. Does that make the permittee liable for the Implementation Plan developed as part of a Total Maximum Daily Load (TMDL) report to address the impairments that have caused the stream to be listed as impaired? Having a Corrective Action Threshold implies the permittee will be required to take action		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			<p>to ensure the impaired stream is no longer impaired even if as the alternative states "regardless of whether the impacts are caused by mining operations or are within the mining operator's control". This raises legal problems both for a permittee and the SMCRA regulatory authority. How can the RA require the permittee to address problems they did not cause and how would right of entry be obtained. This will prove counter productive as well. Within TMDL watershed DMME requires permittees to provide offsets through the 402 NPDES permitting process which consists of addressing these outside impacts to a 303(d)/TMDL watershed. OSM should not venture into the CWA Section 402 NPDES permitting authorities. That is between the 402 NPDES state permitting agency and EPA, not OSM.</p>		
2.5.2.6	2-15, 2-16	32- 40 pp 2-15 1 - 6, pp 2-16	<p>"Biological monitoring would be monitored in accordance with EPA Clean Water Act protocols, assessed annually, and would continue until no adverse trends are detected for over six months prior to final bond release. The regulatory authority would review the water quality conditions and compliance with the surface water runoff plan midway through the permit period and during permit renewal cycles. This monitoring and inspection must provide sufficient data to evaluate the effectiveness of the runoff plan, including frequency of monitoring, inspection, maintenance, and reporting. The runoff plan would include an inspection of storm water (rainwater, snowmelt, etc.) control structures following a 10-year storm event and the preparation of a report by a certified Professional Engineer, to be submitted to the regulatory authority within 48 hours. The report must address the performance of the hydraulic control structures, material damage, and any remedial measures taken. The regulatory authority and the mining company would review the data to identify trends, and monitoring would not be waived before final bond release. Monitoring would continue until the mining company has shown the full restoration of the stream community." This Alternative is impractical and is beyond the scope of SMCRA. CWA permits do not require the amount of stream monitoring proposed by OSM. It will be physically impossible for all sediment control structures to be inspected, a report prepared and certified by a PE and submitted to the</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			regulatory authority within 48 hours of a 10 year storm event. There are multiple types of 10 year storm events 10- yr -24 hr, 10 year-12 hr, etc. There are not enough resources available to perform these actions within 48 hours of a 10 year storm event. It may be a half day or more before it is even known if a 10 year storm event occurred in a given area. How are the regulatory agencies supposed to track the occurrences of these storm events and how will resources being made available to the states to handle this tracking and evaluation? Does OSM have data to support the need for such inspections and reporting?		
2.5.2.7	2-16	13 - 17	"Under this Alternative, Correction Action Thresholds would be set based on the impacts of all human activities in the watershed (defined on a basin scale), regardless of whether the impacts are caused by the mining operation or are within the mining operator's control. The regulatory authority and the mining operator would be required to agree to Corrective Action Threshold criteria designed to prevent material damage to the hydrologic balance outside the permit area." Same comment as made for Section 2.4.7, page 2-8, lines 1 – 3. How can the operator and the regulatory authority be required to agree to corrective actions that are beyond the control of the permittee or in the case of bond forfeiture the regulatory authority? Will OSM obtain the necessary right of entry? Much of the impairment to streams in the Virginia coalfields are the result of straight pipe discharges. How is the permittee or the agency to address straight pipe sewage discharges from residential homes?		
2.5.2.10	2-17	7 - 8	"Unlike the No Action Alternative, Alternative #2 would require reforestation of previously forested lands regardless of the postmining land use." This Alternative explanation does not make sense. Require reforestation of previously forested lands regardless of the postmining land use; what if the approved PMLU is industrial. Will a factory have to have forestland throughout the factory complex? It is doubtful this would withstand a legal challenge and SMCRA does not authorize this level of control over PMLU as it allows a change on land use.		
2.5.2.11	2-17	15 - 16	"Alternative #2 differs from the No Action Alternative in that enhancement is not tied to practicability". How is an		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			enhancement that is not practical to be accomplished? OSM should publish practical guidance on how to achieve these impractical enhancements.		
2.3.2.2	2-4	26 - 40	The cafeteria analogy is a poor choice for demonstrating the arrangement of alternatives. This should be rewritten to better explain the format and the way alternatives can be arranged/selected.		
2.5.2	2-13	33 - 37	This Full-Suite Alternative will jeopardize all coal mining and result in major increased need for agency resources for permit review and field inspection.		
2.5.5.4	2-26	24 - 25	<p>"Alternative #5 would prohibit mining activities in intermittent and perennial streams and within 100 feet of intermittent and perennial streams, but would allow excess spoil fills and other mining activities to occur under certain circumstances. In order for mining activities to be permitted, the applicant would have to show the regulatory authority that the proposed mining activity would not limit the pre-mining uses or have an adverse effect on the pre-mining ecological functions of the intermittent and perennial stream. This means, in part, that mining operations would ensure that intermittent and perennial streams continue to have necessary amounts of base flow to remain as intermittent and perennial streams. The Applicant would also have to show that the mining activity would not significantly reduce biological conditions in the intermittent and perennial stream or result in material damage to the hydrologic balance outside the permit area.</p> <p>Alternative #5 also addresses requirements to obtain approval to construct an excess spoil fill or coal mine waste disposal facility in or near an intermittent or perennial stream. To do this, the applicant must demonstrate that there is no reasonable alternative to constructing the facility in or near an intermittent and perennial stream after considering all alternatives. If these conditions are met, a surface runoff management plan must be developed and the establishment of a 300-foot forested (or other native species) buffer zone for intermittent and perennial streams on and off the permit area must be developed as part of the reclamation plan."</p> <p>This alternative would virtually prohibit contour mining as well</p>		

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
			as remining and reclaiming of AML highwalls and benches. As noted previously AML benches have streams flowing along them due to severed headwater stream segments emptying flow over the highwalls onto the benches. It will be counter productive by prohibiting remining and reclaiming and restoring the severed stream reaches. This will be impossible to meet as any mining above the streams will result in deforestation and the loss of the associated leaf litter and energy inputs into the stream. Mining will change the base flows to some degree which can result in a change of benthic family and genus present in the streams. This does not mean the stream has been adversely affected but rather there has been a shift in the benthic population but this will be the basis for legal challenges of this is adopted as a rule.		
2.5.5.5	2-27	6 - 9	"Under Alternative #5, mining through intermittent and perennial streams would be prohibited unless the restoration of stream form and function could be demonstrated. This alternative would include expanded fish and wildlife protection and enhancement requirements for all operations and would require bonding for stream restoration" This bonding requirement appears duplicative of CWA Section 404 financial assurance requirements. The Virginia program already works with the CORPS to address the 404 requirement of asked. This only needs to be a bonding increment that is coordinated through the joint permit review with the CORPS and not a separate SMCRA requirement. Double bonds are not needed.		
2.5.5.7	2-27	27 - 29	"A corrective action plan would be developed either on a programmatic or permit specific basis. A quarterly review of monitoring data would be required to determine whether material damage thresholds are being approached." There should be clarification as to what point the monitoring and review will cease. It is virtually impossible that material damage would occur after either a Phase 1 or Phase 2 bond release.		
2.5.5.11	2-28	30 - 34	"Enhancement activities, as described in and included as conditions of the permit, must be within the same watershed and on the permitted area and would not extend beyond the watershed or permit areas, as allowed under Alternative #3. Alternative #5 also does not adopt Alternative #4 reliance on the presence of state or federal listed species as a trigger for		



west virginia department of environmental protection

Division of Mining and Reclamation
601 57th Street SE
Charleston, WV 25304
Office: 304-926-0490 Fax: 304-926-0456

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

January 26, 2011

John Craynon
United State Department of the Interior
Office of Surface Mining
Reclamation and Enforcement
Washington, D.C. 20240

Re: Comments on the Chapter 4 of the Draft EIS for the Stream Protection Rule

Dear Mr. Craynon:

This letter conveys the comments of the West Virginia Department of Environmental Protection, as a cooperating agency, on Chapter 4 of the draft environmental impact statement for the stream protection rule.

As with each of the previous chapters of this draft EIS, the Office of Surface Mining Reclamation and Enforcement has failed to provide the cooperating agencies with an adequate amount of time to review the draft and be able to provide meaningful comments. The WVDEP believes this practice seriously compromises the integrity and validity of the EIS. It is as if the comment process has been purposefully designed to avoid a thorough, hard look at the matters being considered.

With Chapter 4, as with previous chapters, the overall quality of the draft leaves a lot to be desired. For a document that is supposed to support a rule that that is anticipated to make sweeping changes in every technical aspect of the way coal is mined, the document displays very little depth of understanding of technical issues. This is not just the opinion of the WVDEP. We have heard similar comments from OSM technical personnel with long term experience in the regulation of coal mining in the Appalachian region as well as employees of subcontractors OSM has engages to work on the EIS. The characterization of this document as "junk" is not just one person's observation. Instead, this view seems to be universally held, outside OSM's senior management.

We at the WVDEP believe that the preferred alternative identified in Chapter 4 Probably violates OSM's enabling statute, the Surface Mine Control and Reclamation Act of 1977 in several ways. Valley fills for the disposal of excess spoil, which this alternative virtually bans, were clearly contemplated and authorized by SMCRA. Full extraction underground mining, which this alternative would greatly restrict or eliminate was also contemplated and authorized.

Promoting a healthy environment.

Above all, the projected cuts in Appalachian coal production this alternative projects are in direct conflict with one of the overarching goals and purposes of SMCRA. In SMCRA, Congress made an express finding that "expansion of coal mining to meet the Nation's energy needs makes even more urgent the establishment of appropriate standards to minimize damage to the environment . . ." 30 U.S.C. § 1201(d). Accordingly, it established that one of the express purposes of SMCRA was to:

[A]ssure that the coal supply essential to the Nation's energy requirements, and to its economic and social well-being is provided and strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy . . .

30 U.S.C. § 1202(f). First among the requirements Congress included in the performance standards section of SMCRA is a mandate that operators "conduct surface coal mining operations so as to maximize the utilization and conservation of the solid fuel source . . .". 30 U.S.C. § 1265(b)(1).

We understand that OSM's preferred alternative 5 would:

- decrease surface mine coal production in the Appalachian Basin by 30%;
- cost the Appalachian basin 10,749 jobs under the worst case scenario;
- lower an additional 29,000 people in the Appalachian Basin beneath the poverty level;
- cause a 13.1% loss in severance tax; and,
- cause a 11.7% decrease in income taxes.

Consequences like these from OSM's preferred alternative are clearly not what Congress authorized in SMCRA. The legislative history of SMCRA shows that Congress intended the statement of purpose and performance standards quoted above to have real meaning. As adopted, SMCRA was very much a product of the Energy Crisis, which was a dominant factor in the development of economic, social, and environmental policy in its time. Because the nation's most abundant domestic source of energy was and is coal, increased use of coal became the centerpiece of the national policy to gain energy independence at the time of SMCRA's adoption. Senate Report 95-128, p.52. In his energy address to Congress on April 20, 1977, President Carter called for a sixty-five percent increase in coal production over an eight year period. *Id.*; House Report 95-218, p. 186. The regulatory burden SMCRA would impose was seen as consistent with this goal. Despite the addition of this new regulatory burden on coal production, House Report No. 95-218 foresaw an increase in coal production following its adoption:

The future of the coal industry is bright. This is true for a number of sound policy reasons, including the country's need to decrease its reliance on imported oil, conserve its dwindling supply of natural gas and oil, and proceed cautiously with the development of hazardous nuclear technology.

House Report 95-218, p. 57. The Senate Report No. 95-128 forecast no significant disruption of coal production under SMCRA. Senate Report No. 95-128, p. 53. Correspondence from James R. Schlessinger, Assistant to the President, on behalf of the administration, which the committees

of both houses of Congress included in their reports, anticipated greater use of coal under SMCRA with very little of country's reserve being rendered unmineable by the new law:

This Nation cannot expect to increase its reliance on coal unless the mining and burning can be done in a healthful and environmentally sound manner. The passage of clear and effective strip mining legislation is therefore a prerequisite to greater use of coal as part of a sound energy policy.

Negative arguments have characterized the strip mining debate for too long. Adequate safeguards of the land are not in conflict with a policy of expanded coal production. The Nation's coal resource is quite large and **the portion of that resource made unavailable by this legislation is extremely small - less than 1 percent of the resource base and no more than 5 percent of total reserves.**

House Report 95-218, pp. 60, 166; Senate Report No. 95-128, p. 107 (emphasis supplied). At the ceremony President Carter hosted in the Rose Garden at the White House on August 3, 1977 to sign SMCRA into law, the President, himself, indicated a belief that coal production would not be harmed and would, in fact, increase under SMCRA: "I know many here have worked for six years, sometimes much longer, to get a Federal strip mining law which would be fair and reasonable, which would enhance the legitimate and much needed production of coal . . .". In the years preceding the adoption of SMCRA, central Appalachia was the nation's top coal producing region. See, House Report 95-218, p. 72.

In addition to the fact that OSM's preferred alternative is contrary to both OSM's express statutory mandate and the intent of Congress as expressed in the legislative history of SMCRA, OSM's whole course of action in connection with this alternative, this EIS and the rulemaking they are intended to support appears to be contrary to the direction ordained by this current administration as recently as Friday, January 21, 2011. Section 1 of Executive Order 13563, "Improving Regulation and Regulatory Review", 76 Fed. Reg. 3821, begins:

Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation. It must be based on the best available science. It must allow for public participation and an open exchange of ideas. It must promote predictability and reduce uncertainty. It must identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends. It must take into account benefits and costs, both quantitative and qualitative. It must ensure that regulations are accessible, consistent, written in plain language, and easy to understand. It must measure, and seek to improve, the actual results of regulatory requirements.

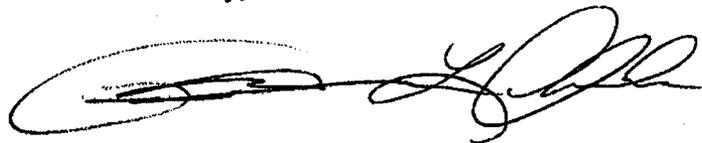
OSM's EIS and proposal eliminates jobs and economic growth in the Appalachian basin. There is no demonstrable benefit to public health, welfare, safety, or the environment OSM has identified. As discussed above, OSM's procedure is designed to eliminate the possibility of meaningful outside participation and exchange of ideas. Instead of identifying the least burdensome approach, OSM is intent on pursuing one of the most burdensome ones. Instead of making a reasoned determination that the benefits of OSM's proposed course of action justify its costs, as Executive Order 13563 further requires, OSM's draft EIS almost entirely avoids the issue.

We at the WVDEP believe that this EIS and the rulemaking OSM intends to pursue are ill advised, not justified in any way by the experience of thirty plus years of regulation of the mining industry under SMCRA and seek to achieve goals that are contrary to the basic premises of SMCRA.

Attached for your consideration are comments addressed to draft Chapter 4 on a line by line basis. As initially drafted, this set of comments had been much lengthier with many more specific comments and criticisms of this material, however, a computer glitch eliminated much of the draft and the inadequate time OSM has allowed for comment has prevented the WVDEP from recreating them.

If you have any questions, please contact me at (304) 926-0499, x 1447 or Lewis Halstead at the same phone number, x 1525.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Clarke', with a large, stylized flourish extending to the left.

Thomas L. Clarke

Comment Form

Title of Document	Chapter 4 Environmental Consequences
Contact Information	
Name	Lewis Halstead and Russ Hunter
Telephone Number	304-926-0490
Email	<u>lewis.a.halstead@wv.gov</u> or <u>russ.m.hunter@wv.gov</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.1.2.1.1	4-6	12-15	Some states have material damage criteria and/or thresholds. You make it sound as if there are none.		
4.1.2.1	4-6	19-24	"continue to be permitted in all streams" and "Because placemtn... must be avoided to the extent possible " seem contradictory. This whole section is confusing.		
4.1.2	4-7	6-7	I thought this wavs the no action alternative, but you are talking aobut changes?		
		22-30	WV has a policy that applies to contour mining. This is not a no action alternative if those changes are being proposed .		
4.1.3	4-11	16	Please explain how this normalization took place. Our calculations cannot arrive at this much difference in acres.		
4.1.3.1.1.2	4-12	4-16	These downward trends in the Appalachia are being driven by the federal government with changes in the way EPA has done business in the last two years.		
4.1.3.1.1.2	4-12	27-28	Where can the initial assessment of the FPOP be viewed?		
4.1.3.1.1.3	4-15	11	Underground mining doesn't affect groundwater primarily through blasting activity.		
4.1.4	4-29	13-16	Local extinctions of Brook Trout?		
4.5.1.1	4-196	10-14	How can you say that langwall operations could be negatively impacted in those regions that contain high populations of		



west virginia department of environmental protection

Division of Mining and Reclamation
601 57th Street SE
Charleston, WV 25304
Office: 304-926-0490 Fax: 304-926-0456

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

January 26, 2011

John Craynon
United State Department of the Interior
Office of Surface Mining
Reclamation and Enforcement
Washington, D.C. 20240

Re: Comments on the Chapter 4 of the Draft EIS for the Stream Protection Rule

Dear Mr. Craynon:

This letter conveys the comments of the West Virginia Department of Environmental Protection, as a cooperating agency, on Chapter 4 of the draft environmental impact statement for the stream protection rule.

As with each of the previous chapters of this draft EIS, the Office of Surface Mining Reclamation and Enforcement has failed to provide the cooperating agencies with an adequate amount of time to review the draft and be able to provide meaningful comments. The WVDEP believes this practice seriously compromises the integrity and validity of the EIS. It is as if the comment process has been purposefully designed to avoid a thorough, hard look at the matters being considered.

With Chapter 4, as with previous chapters, the overall quality of the draft leaves a lot to be desired. For a document that is supposed to support a rule that that is anticipated to make sweeping changes in every technical aspect of the way coal is mined, the document displays very little depth of understanding of technical issues. This is not just the opinion of the WVDEP. We have heard similar comments from OSM technical personnel with long term experience in the regulation of coal mining in the Appalachian region as well as employees of subcontractors OSM has engages to work on the EIS. The characterization of this document as "junk" is not just one person's observation. Instead, this view seems to be universally held, outside OSM's senior management.

We at the WVDEP believe that the preferred alternative identified in Chapter 4 Probably violates OSM's enabling statute, the Surface Mine Control and Reclamation Act of 1977 in several ways. Valley fills for the disposal of excess spoil, which this alternative virtually bans, were clearly contemplated and authorized by SMCRA. Full extraction underground mining, which this alternative would greatly restrict or eliminate was also contemplated and authorized.

Promoting a healthy environment.

Above all, the projected cuts in Appalachian coal production this alternative projects are in direct conflict with one of the overarching goals and purposes of SMCRA. In SMCRA, Congress made an express finding that "expansion of coal mining to meet the Nation's energy needs makes even more urgent the establishment of appropriate standards to minimize damage to the environment . . ." 30 U.S.C. § 1201(d). Accordingly, it established that one of the express purposes of SMCRA was to:

[A]ssure that the coal supply essential to the Nation's energy requirements, and to its economic and social well-being is provided and strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy . . .

30 U.S.C. § 1202(f). First among the requirements Congress included in the performance standards section of SMCRA is a mandate that operators "conduct surface coal mining operations so as to maximize the utilization and conservation of the solid fuel source . . .". 30 U.S.C. § 1265(b)(1).

We understand that OSM's preferred alternative 5 would:

- decrease surface mine coal production in the Appalachian Basin by 30%;
- cost the Appalachian basin 10,749 jobs under the worst case scenario;
- lower an additional 29,000 people in the Appalachian Basin beneath the poverty level;
- cause a 13.1% loss in severance tax; and,
- cause a 11.7% decrease in income taxes.

Consequences like these from OSM's preferred alternative are clearly not what Congress authorized in SMCRA. The legislative history of SMCRA shows that Congress intended the statement of purpose and performance standards quoted above to have real meaning. As adopted, SMCRA was very much a product of the Energy Crisis, which was a dominant factor in the development of economic, social, and environmental policy in its time. Because the nation's most abundant domestic source of energy was and is coal, increased use of coal became the centerpiece of the national policy to gain energy independence at the time of SMCRA's adoption. Senate Report 95-128, p.52. In his energy address to Congress on April 20, 1977, President Carter called for a sixty-five percent increase in coal production over an eight year period. Id.; House Report 95-218, p. 186. The regulatory burden SMCRA would impose was seen as consistent with this goal. Despite the addition of this new regulatory burden on coal production, House Report No. 95-218 foresaw an increase in coal production following its adoption:

The future of the coal industry is bright. This is true for a number of sound policy reasons, including the country's need to decrease its reliance on imported oil, conserve its dwindling supply of natural gas and oil, and proceed cautiously with the development of hazardous nuclear technology.

House Report 95-218, p. 57. The Senate Report No. 95-128 forecast no significant disruption of coal production under SMCRA. Senate Report No. 95-128, p. 53. Correspondence from James R. Schlessinger, Assistant to the President, on behalf of the administration, which the committees

of both houses of Congress included in their reports, anticipated greater use of coal under SMCRA with very little of country's reserve being rendered unmineable by the new law:

This Nation cannot expect to increase its reliance on coal unless the mining and burning can be done in a healthful and environmentally sound manner. The passage of clear and effective strip mining legislation is therefore a prerequisite to greater use of coal as part of a sound energy policy.

Negative arguments have characterized the strip mining debate for too long. Adequate safeguards of the land are not in conflict with a policy of expanded coal production. The Nation's coal resource is quite large and **the portion of that resource made unavailable by this legislation is extremely small - less than 1 percent of the resource base and no more than 5 percent of total reserves.**

House Report 95-218, pp. 60, 166; Senate Report No. 95-128, p. 107 (emphasis supplied). At the ceremony President Carter hosted in the Rose Garden at the White House on August 3, 1977 to sign SMCRA into law, the President, himself, indicated a belief that coal production would not be harmed and would, in fact, increase under SMCRA: "I know many here have worked for six years, sometimes much longer, to get a Federal strip mining law which would be fair and reasonable, which would enhance the legitimate and much needed production of coal . . .". In the years preceding the adoption of SMCRA, central Appalachia was the nation's top coal producing region. See, House Report 95-218, p. 72.

In addition to the fact that OSM's preferred alternative is contrary to both OSM's express statutory mandate and the intent of Congress as expressed in the legislative history of SMCRA, OSM's whole course of action in connection with this alternative, this EIS and the rulemaking they are intended to support appears to be contrary to the direction ordained by this current administration as recently as Friday, January 21, 2011. Section 1 of Executive Order 13563, "Improving Regulation and Regulatory Review", 76 Fed. Reg. 3821, begins:

Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation. It must be based on the best available science. It must allow for public participation and an open exchange of ideas. It must promote predictability and reduce uncertainty. It must identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends. It must take into account benefits and costs, both quantitative and qualitative. It must ensure that regulations are accessible, consistent, written in plain language, and easy to understand. It must measure, and seek to improve, the actual results of regulatory requirements.

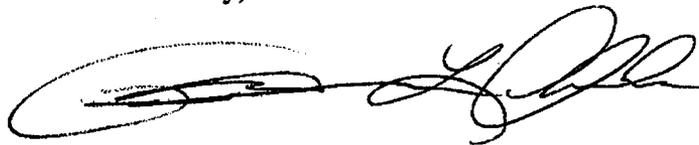
OSM's EIS and proposal eliminates jobs and economic growth in the Appalachian basin. There is no demonstrable benefit to public health, welfare, safety, or the environment OSM has identified. As discussed above, OSM's procedure is designed to eliminate the possibility of meaningful outside participation and exchange of ideas. Instead of identifying the least burdensome approach, OSM is intent on pursuing one of the most burdensome ones. Instead of making a reasoned determination that the benefits of OSM's proposed course of action justify its costs, as Executive Order 13563 further requires, OSM's draft EIS almost entirely avoids the issue.

We at the WVDEP believe that this EIS and the rulemaking OSM intends to pursue are ill advised, not justified in any way by the experience of thirty plus years of regulation of the mining industry under SMCRA and seek to achieve goals that are contrary to the basic premises of SMCRA.

Attached for your consideration are comments addressed to draft Chapter 4 on a line by line basis. As initially drafted, this set of comments had been much lengthier with many more specific comments and criticisms of this material, however, a computer glitch eliminated much of the draft and the inadequate time OSM has allowed for comment has prevented the WVDEP from recreating them.

If you have any questions, please contact me at (304) 926-0499, x 1447 or Lewis Halstead at the same phone number, x 1525.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Clarke', with a large, stylized flourish extending to the left.

Thomas L. Clarke

Comment Form

Title of Document	Chapter 4 Environmental Consequences
Contact Information	
Name	Lewis Halstead and Russ Hunter
Telephone Number	304-926-0490
Email	<u>lewis.a.halstead@wv.gov</u> or <u>russ.m.hunter@wv.gov</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.1.2.1.1	4-6	12-15	Some states have material damage criteria and 'or thresholds. You make it sound as if there are none.		
4.1.2.1	4-6	19-24	"continue to be permitted in all streams" and "Because placemetr... must be avoided to the extent possible " seem contradictory. This whole section is confusing.		
4.1.2	4-7	6-7	I thought this waws the no action alternative, but you are talking aobut changes?		
		22-30	WV has a policy that applies to contour mining. This is not a no action alternative if those changes are being proposed .		
4.1.3	4-11	16	Please explain how this normalization took place. Our calculations cannot arrive at this much difference in acres.		
4.1.3.1.1.2	4-12	4-16	These downward trends in the Appalacha are being driven by the federal government with changes in the way EPA has done business in the last two years.		
4.1.3.1.1.2	4-12	27-28	Where can the initial assessment of the FPOP be viewed?		
4.1.3.1.1.3	4-15	11	Underground mining doesn't affect groundwater primarily through blasting activity.		
4.1.4	4-29	13-16	Local extinctions of Brook Trout?		
4.5.1.1	4-196	10-14	How can you say that langwall operations could be negatively impacted in those regions that contain high populations of		

Allen, Melissa M

From: Calle, Marcelo
Sent: Thursday, January 20, 2011 7:00 PM
To: Coker, Jeffrey A. "Jeff"; Ehret, Paul; Craynon, John; Means, Brent P.; Clark, Paul
Subject: Chapter 4

Does anyone else feel that the 'shift' and associated anticipated impacts described in the **No Action Alternative** (baseline) is inconsistent, confusing for the reader and problematic? Maybe I am just easily confused?

Also, is anyone else getting tired of this cascading a priori logic....Under the No Action Alternative.....Stream morphology changes are anticipated to be closely related to fluvial processes changes that are anticipated to be closely related to changes in hydrology that are anticipated to be closely related to length of stream impacts that are anticipated to be closely related to shifts in coal production.

I bet Tom Bovard is.

Sims, Pam

From: Ehret, Paul
Sent: Monday, January 10, 2011 9:18 AM
To: Craynon, John
Cc: Coker, Jeffrey A. "Jeff"; Means, Brent P.; Calle, Marcelo
Subject: EIS Team

Importance: High

John:

Is the revised review schedule available yet? Given that Chapter 4 is scheduled to be received on Wednesday, it is very important that our cooperating agency partners as well as OSM internal review teams be notified that the schedule has been revised. Moreover, we (EIS Team) need to know so that we can begin to make travel plans for getting together to do our reviews. I presume we are still going to Guithersburg?

As an additional concern that I wanted to make you aware, the biology review team has received NOTHING from the EIS contractor for review. If you recall as a result of our Lexington meeting, we had arranged for Ann Shortelle to provide us with an advanced draft for our review and comment of the Alternative 5 – Appalachia Region impact write up. With our help, it was felt that if the contractor could get that write up correct, it would serve as a model for all the other regions and alternatives and ultimately make Chapter 4 a much better document. As it is, we have received nothing. I can only presume that we will see it along with the rest of Chapter 4 at this point. Just thought you should know.

Paul Ehret

Allen, Melissa M

From: Craynon, John
Sent: Wednesday, January 26, 2011 2:29 PM
To: Coker, Jeffrey A. "Jeff"; Ehret, Paul; Calle, Marcelo; Means, Brent P.; Holmes, Christopher J
Subject: FW: Scanned from MFP-07124681 01/26/2011 13:58
Attachments: DOC012611.pdf

-----Original Message-----

From: Halstead, Lewis A [<mailto:Lewis.A.Halstead@wv.gov>]
Sent: Wednesday, January 26, 2011 2:06 PM
To: Craynon, John
Subject: FW: Scanned from MFP-07124681 01/26/2011 13:58

John,

Here are what comments that were salvaged. I hit delete too many times and lost most of the comments on alternative 5.

Lewis

-----Original Message-----

From: Halstead, Amy L
Sent: Wednesday, January 26, 2011 2:08 PM
To: Clarke, Thomas L; Halstead, Lewis A
Subject: FW: Scanned from MFP-07124681 01/26/2011 13:58

Amy L. Halstead
Environmental Resource Specialist
WVDEP Division of Mining and Reclamation
601 57th Street SE
Charleston, WV 25304
Office: 304-926-0499 ext. 1484
Mobile: 304-881-4883
Fax: 304-926-0456
Email: Amy.L.Halstead@wv.gov

-----Original Message-----

From: copier room3137@dep.gov [<mailto:dep.copier.rm3137@dep.wv.gov>]
Sent: Wednesday, January 26, 2011 4:58 PM
To: Halstead, Amy L
Subject: Scanned from MFP-07124681 01/26/2011 13:58

Scanned from MFP-07124681.
Date: 01/26/2011 13:58
Pages:6
Resolution:200x200 DPI



west virginia department of environmental protection

Division of Mining and Reclamation
601 57th Street SE
Charleston, WV 25304
Office: 304-926-0490 Fax: 304-926-0456

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

January 26, 2011

John Craynon
United State Department of the Interior
Office of Surface Mining
Reclamation and Enforcement
Washington, D.C. 20240

Re: Comments on the Chapter 4 of the Draft EIS for the Stream Protection Rule

Dear Mr. Craynon:

This letter conveys the comments of the West Virginia Department of Environmental Protection, as a cooperating agency, on Chapter 4 of the draft environmental impact statement for the stream protection rule.

As with each of the previous chapters of this draft EIS, the Office of Surface Mining Reclamation and Enforcement has failed to provide the cooperating agencies with an adequate amount of time to review the draft and be able to provide meaningful comments. The WVDEP believes this practice seriously compromises the integrity and validity of the EIS. It is as if the comment process has been purposefully designed to avoid a thorough, hard look at the matters being considered.

With Chapter 4, as with previous chapters, the overall quality of the draft leaves a lot to be desired. For a document that is supposed to support a rule that that is anticipated to make sweeping changes in every technical aspect of the way coal is mined, the document displays very little depth of understanding of technical issues. This is not just the opinion of the WVDEP. We have heard similar comments from OSM technical personnel with long term experience in the regulation of coal mining in the Appalachian region as well as employees of subcontractors OSM has engages to work on the EIS. The characterization of this document as "junk" is not just one person's observation. Instead, this view seems to be universally held, outside OSM's senior management.

We at the WVDEP believe that the preferred alternative identified in Chapter 4 Probably violates OSM's enabling statute, the Surface Mine Control and Reclamation Act of 1977 in several ways. Valley fills for the disposal of excess spoil, which this alternative virtually bans, were clearly contemplated and authorized by SMCRA. Full extraction underground mining, which this alternative would greatly restrict or eliminate was also contemplated and authorized.

Promoting a healthy environment.

Above all, the projected cuts in Appalachian coal production this alternative projects are in direct conflict with one of the overarching goals and purposes of SMCRA. In SMCRA, Congress made an express finding that "expansion of coal mining to meet the Nation's energy needs makes even more urgent the establishment of appropriate standards to minimize damage to the environment . . ." 30 U.S.C. § 1201(d). Accordingly, it established that one of the express purposes of SMCRA was to:

[A]ssure that the coal supply essential to the Nation's energy requirements, and to its economic and social well-being is provided and strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy . . .

30 U.S.C. § 1202(f). First among the requirements Congress included in the performance standards section of SMCRA is a mandate that operators "conduct surface coal mining operations so as to maximize the utilization and conservation of the solid fuel source . . .". 30 U.S.C. § 1265(b)(1).

We understand that OSM's preferred alternative 5 would:

- decrease surface mine coal production in the Appalachian Basin by 30%;
- cost the Appalachian basin 10,749 jobs under the worst case scenario;
- lower an additional 29,000 people in the Appalachian Basin beneath the poverty level;
- cause a 13.1% loss in severance tax; and,
- cause a 11.7% decrease in income taxes.

Consequences like these from OSM's preferred alternative are clearly not what Congress authorized in SMCRA. The legislative history of SMCRA shows that Congress intended the statement of purpose and performance standards quoted above to have real meaning. As adopted, SMCRA was very much a product of the Energy Crisis, which was a dominant factor in the development of economic, social, and environmental policy in its time. Because the nation's most abundant domestic source of energy was and is coal, increased use of coal became the centerpiece of the national policy to gain energy independence at the time of SMCRA's adoption. Senate Report 95-128, p.52. In his energy address to Congress on April 20, 1977, President Carter called for a sixty-five percent increase in coal production over an eight year period. *Id.*; House Report 95-218, p. 186. The regulatory burden SMCRA would impose was seen as consistent with this goal. Despite the addition of this new regulatory burden on coal production, House Report No. 95-218 foresaw an increase in coal production following its adoption:

The future of the coal industry is bright. This is true for a number of sound policy reasons, including the country's need to decrease its reliance on imported oil, conserve its dwindling supply of natural gas and oil, and proceed cautiously with the development of hazardous nuclear technology.

House Report 95-218, p. 57. The Senate Report No. 95-128 forecast no significant disruption of coal production under SMCRA. Senate Report No. 95-128, p. 53. Correspondence from James R. Schlessinger, Assistant to the President, on behalf of the administration, which the committees

of both houses of Congress included in their reports, anticipated greater use of coal under SMCRA with very little of country's reserve being rendered unmineable by the new law:

This Nation cannot expect to increase its reliance on coal unless the mining and burning can be done in a healthful and environmentally sound manner. The passage of clear and effective strip mining legislation is therefore a prerequisite to greater use of coal as part of a sound energy policy.

Negative arguments have characterized the strip mining debate for too long. Adequate safeguards of the land are not in conflict with a policy of expanded coal production. The Nation's coal resource is quite large and **the portion of that resource made unavailable by this legislation is extremely small - less than 1 percent of the resource base and no more than 5 percent of total reserves.**

House Report 95-218, pp. 60, 166; Senate Report No. 95-128, p. 107 (emphasis supplied). At the ceremony President Carter hosted in the Rose Garden at the White House on August 3, 1977 to sign SMCRA into law, the President, himself, indicated a belief that coal production would not be harmed and would, in fact, increase under SMCRA: "I know many here have worked for six years, sometimes much longer, to get a Federal strip mining law which would be fair and reasonable, which would enhance the legitimate and much needed production of coal . . .". In the years preceding the adoption of SMCRA, central Appalachia was the nation's top coal producing region. See, House Report 95-218, p. 72.

In addition to the fact that OSM's preferred alternative is contrary to both OSM's express statutory mandate and the intent of Congress as expressed in the legislative history of SMCRA, OSM's whole course of action in connection with this alternative, this EIS and the rulemaking they are intended to support appears to be contrary to the direction ordained by this current administration as recently as Friday, January 21, 2011. Section 1 of Executive Order 13563, "Improving Regulation and Regulatory Review", 76 Fed. Reg. 3821, begins:

Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation. It must be based on the best available science. It must allow for public participation and an open exchange of ideas. It must promote predictability and reduce uncertainty. It must identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends. It must take into account benefits and costs, both quantitative and qualitative. It must ensure that regulations are accessible, consistent, written in plain language, and easy to understand. It must measure, and seek to improve, the actual results of regulatory requirements.

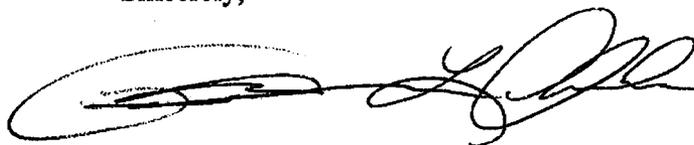
OSM's EIS and proposal eliminates jobs and economic growth in the Appalachian basin. There is no demonstrable benefit to public health, welfare, safety, or the environment OSM has identified. As discussed above, OSM's procedure is designed to eliminate the possibility of meaningful outside participation and exchange of ideas. Instead of identifying the least burdensome approach, OSM is intent on pursuing one of the most burdensome ones. Instead of making a reasoned determination that the benefits of OSM's proposed course of action justify its costs, as Executive Order 13563 further requires, OSM's draft EIS almost entirely avoids the issue.

We at the WVDEP believe that this EIS and the rulemaking OSM intends to pursue are ill advised, not justified in any way by the experience of thirty plus years of regulation of the mining industry under SMCRA and seek to achieve goals that are contrary to the basic premises of SMCRA.

Attached for your consideration are comments addressed to draft Chapter 4 on a line by line basis. As initially drafted, this set of comments had been much lengthier with many more specific comments and criticisms of this material, however, a computer glitch eliminated much of the draft and the inadequate time OSM has allowed for comment has prevented the WVDEP from recreating them.

If you have any questions, please contact me at (304) 926-0499, x 1447 or Lewis Halstead at the same phone number, x 1525.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Clarke', with a large, stylized flourish extending to the left.

Thomas L. Clarke

Comment Form

Title of Document	Chapter 4 Environmental Consequences
Contact Information	
Name	Lewis Halstead and Russ Hunter
Telephone Number	304-926-0490
Email	<u>lewis.a.halstead@wv.gov</u> or <u>russ.m.hunter@wv.gov</u>

Section	Page #s	Line #s	Comment	Incorporate (Yes/No)	Proposed Disposition
4.1.2.1.1	4-6	12-15	Some states have material damage criteria and 'or thresholds. You make it sound as if there are none.		
4.1.2.1	4-6	19-24	"continue to be permitted in all streams" and "Because placemtn... must be avoided to the extent possible " seem contradictory. This whole section is confusing.		
4.1.2	4-7	6-7	I thought this wavs the no action alternative, but you are talking aobut changes?		
		22-30	WV has a policy that applies to contour mining. This is not a no action alternative if those changes are being proposed .		
4.1.3	4-11	16	Please explain how this normalization took place. Our calculations cannot arrive at this much difference in acres.		
4.1.3.1.1.2	4-12	4-16	These downward trends in the Appalachia are being driven by the federal government with changes in the way EPA has done business in the last two years.		
4.1.3.1.1.2	4-12	27-28	Where can the initial assessment of the FPOP be viewed?		
4.1.3.1.1.3	4-15	11	Underground mining doesn't affect groundwater primarily through blasting activity.		
4.1.4	4-29	13-16	Local extinctions of Brook Trout?		
4.5.1.1	4-196	10-14	How can you say that langwall operations could be negatively impacted in those regions that contain high populations of		

Allen, Melissa M

From: Calle, Marcelo
Sent: Tuesday, March 01, 2011 2:49 PM
To: Ehret, Paul; Winters, William R. "Bill"; Coker, Jeffrey A. "Jeff"; Means, Brent P.
Subject: RE: Is this correct?

Subsidence is allowed in SMCRA including planned subsidence. I don't think we can 'prohibit' subsidence within permit even under the most stringent. So I would also say it is mis-characterized. I may be completely wrong.

From: Ehret, Paul
Sent: Tuesday, March 01, 2011 12:24 PM
To: Winters, William R. "Bill"; Coker, Jeffrey A. "Jeff"; Means, Brent P.; Calle, Marcelo
Subject: Is this correct?

The language below from the revised EIS essentially states that under Alternative 2 (the most stringent) as written reads to me that changes in topography resulting from underground mining (subsidence) would be prohibited. This approach seems to automatically presume that any and all changes in elevation (by default) equates to material damage to the hydro and is therefore not allowed as opposed to subsidence that actually cause material damage to the hydro (such as stream dewatering). By my recollection, not even alternative 2 went this far, but maybe I'm wrong.

From page 4-114:

The definition of material damage to the hydrologic balance outside the permit area under Alternative 2 would also largely eliminate changes in topography resulting from underground mining subsidence in comparison to Alternative 1 (See Section 4.1). Under Alternative 2, material damage to the hydrologic balance outside the permit area would occur where the mining activity caused any impairment of a physical, chemical or biological ecological function of any stream, including ephemeral streams, based on state water quality standards or impairment of designated uses. Thus, in practice, the regulatory authority could not approve a permit for an underground mine if the proposed operation could result in subsidence or other impacts that would dewater or otherwise materially damage any stream, including ephemeral streams that were outside the permit area. This would result in significantly less subsidence related topographic impacts than under Alternative 1.

Allen, Melissa M

From: Winters, William R. "Bill"
Sent: Wednesday, March 02, 2011 9:02 AM
To: Ehret, Paul
Subject: RE: Mine types by Region

Nice catch.

Mind if I forward this to Dianne Shawley?

From: Ehret, Paul
Sent: Wednesday, March 02, 2011 8:55 AM
To: Winters, William R. "Bill"
Subject: FW: Mine types by Region
Importance: High

Bill: Thought you might like to see this. The attached email from Steve Gardner is contrary to the statements made in the second paragraph on page 6 of the "enclosures" included with PKS 2/23/2011 cure letter response. At one point, after our November meeting in Lexington the Combined Team decided that an analysis of the impacts to specific individual mines as a method of evaluating the impact of the various alternatives. The cure letter implies that this concept is a new idea; "OSM now suggests". For whatever reason this approach was abandoned. Why this was done was never explained to me. Regardless, the idea to take this approach is not new and as you can see from Gardner's email it was an approach embraced by the contractor.

Paul

From: J. Steven Gardner [mailto:jsgardner@engrservices.com]
Sent: Monday, November 22, 2010 4:09 PM
To: Uranowski, Lois J.; Craynon, John; 'John Maxwell'; 'John Morgan'; Ehret, Paul; Winters, William R. "Bill"; Means, Brent P.; Calle, Marcelo; Clark, Paul
Cc: 'Doug Mynear'; 'Edmundo Laporte'; 'Jeff Baird'
Subject: RE: Mine types by Region

Lois,

The more the better I think. We are focusing on the regions with the highest production first. We have good examples from Central AP. Received info from AL. NAPP examples from PA, OH, or NWV would help.

Thanks,

Steve

J. Steven Gardner, P.E.
President/CEO
Engineering Consulting Services, Inc.
Civil – Environmental – Mining – Safety
340 South Broadway, Suite 200
Lexington, KY 40508

859-233-2103 (office)
859-806-5826 (cell)

859-259-3394 (fax)
jsgardner@engrservices.com
www.engrservices.com

From: Uranowski, Lois J. [mailto:luranowski@osmre.gov]
Sent: Monday, November 22, 2010 4:53 PM
To: J. Steven Gardner; Craynon, John; 'John Maxwell'; 'John Morgan'; Ehret, Paul; Winters, William R. Bill; Means, Brent P.; Calle, Marcelo; Clark, Paul
Cc: 'Doug Mynear'; 'Edmundo Laporte'; 'Jeff Baird'
Subject: RE: Mine types by Region

If I am reading your email correctly, the need for further OSM staff to generate typical mine maps for the AR sub-regions and individual mining types is no longer necessary. You now have that covered.

Is that correct?

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

From: J. Steven Gardner [mailto:jsgardner@engrservices.com]
Sent: Monday, November 22, 2010 4:14 PM
To: Craynon, John; 'John Maxwell'; 'John Morgan'; Ehret, Paul; Uranowski, Lois J.; Winters, William R. "Bill"; Means, Brent P.; Calle, Marcelo; Clark, Paul
Cc: 'Doug Mynear'; 'Edmundo Laporte'; 'Jeff Baird'
Subject: Mine types by Region

Attached is my list of Mine Types by region that we plan to analyze. Thanks to Paul Ehret, we now have an IN surface mine and IL Longwall which covers the IL Basin; AL Longwall which covers SAPP and TX Surface mine which covers the Gulf. We have the CAPP Region pretty well covered from our files. If Brent could help us with a PA Longwall and Surface mine and Marcello and Paul Clark the same from the Western Region that would be great. Not sure we need to worry about any others. thoughts?

Edmundo plans on sending the spreadsheet out this afternoon to John Craynon. We would like to discuss tomorrow afternoon after lunch. He is writing up a summary of our methodology to send out tomorrow for discussion. Researching industry reports, both from companies and analysts, the trends we have predicted so far are consistent.

After this weeks deadline, we plan to perform further analysis by applying the alternatives to the typical mine plans by region to determine how the operations, areal extents and streams on those operations would be impacted.

I believe John Morgan and Liz said they had state permit data and statistics they had collected that will be useful to review in our analysis. We continued to check on the stream lengths. Determination of ephemeral lengths by GIS would be possible, but beyond the scope of our work, both in time and budget. Hopefully the requests for data from the Corps will be successful.

John C and John M's, are you all available for a call tomorrow afternoon?

Steve

J. Steven Gardner, P.E.
President/CEO
Engineering Consulting Services, Inc.
Civil – Environmental – Mining – Safety
340 South Broadway, Suite 200
Lexington, KY 40508

859-233-2103 (office)
859-806-5826 (cell)
859-259-3394 (fax)
jsgardner@engrservices.com
www.engrservices.com

CONFIDENTIALITY NOTICE: This electronic mail and any documents or other materials attached hereto are privileged and confidential communications intended solely for the receipt, use, benefit, and information of the intended recipient, and is furthermore the private property of ECSI, LLC and Engineering Consulting Services, Inc. If you are not the intended recipient, you are hereby notified that review, disclosure, copying, distribution, or the taking of action in reliance to the contents of this electronic mail and any documents or other materials attached hereto is strictly prohibited, and may result in legal liability on your part. If you have received this electronic mail in error, please notify the sender and Engineering Consulting Services, Inc. immediately to arrange for its destruction or you may return this electronic mail to us.

If this electronic mail and any documents and materials attached hereto relate to any government project or contract, the electronic mail and said attachments are considered to be ***FOR OFFICIAL USE ONLY AND ARE DELIBERATIVE PROCESS MATERIALS***.

CONFIDENTIALITY NOTICE: This electronic mail and any documents or other materials attached hereto are privileged and confidential communications intended solely for the receipt, use, benefit, and information of the intended recipient, and is furthermore the private property of ECSI, LLC and Engineering Consulting Services, Inc. If you are not the intended recipient, you are hereby notified that review, disclosure, copying, distribution, or the taking of action in reliance to the contents of this electronic mail and any documents or other materials attached hereto is strictly prohibited, and may result in legal liability on your part. If you have received this electronic mail in error, please notify the sender and Engineering Consulting Services, Inc. immediately to arrange for its destruction or you may return this electronic mail to us.

If this electronic mail and any documents and materials attached hereto relate to any government project or contract, the electronic mail and said attachments are considered to be ***FOR OFFICIAL USE ONLY AND ARE DELIBERATIVE PROCESS MATERIALS***.

Allen, Melissa M

From: Winters, William R. "Bill"
Sent: Tuesday, March 01, 2011 2:56 PM
To: Ehret, Paul; Coker, Jeffrey A. "Jeff"; Means, Brent P.; Calle, Marcelo
Subject: RE: Is this correct?

I just read this. They are still mis-connecting changes in topography and associated elevation with MD. It is not the subsidence itself but the *effects* of the subsidence that matters – even in alternative 2. They seem not to understand that it is the effects from the subsidence and not the subsidence itself.

I've had this discussion with ECSI numerous times.

From: Ehret, Paul
Sent: Tuesday, March 01, 2011 2:24 PM
To: Winters, William R. "Bill"; Coker, Jeffrey A. "Jeff"; Means, Brent P.; Calle, Marcelo
Subject: Is this correct?

The language below from the revised EIS essentially states that under Alternative 2 (the most stringent) as written reads to me that changes in topography resulting from underground mining (subsidence) would be prohibited. This approach seems to automatically presume that any an all changes in elevation (by default) equates to material damage to the hydro and is therefore not allowed as opposed to subsidence that actually cause material damage to the hydro (such as stream dewatering). By my recollection, not even alternative 2 went this far, but maybe I'm wrong.

From page 4-114:

The definition of material damage to the hydrologic balance outside the permit area under Alternative 2 would also largely eliminate changes in topography resulting from underground mining subsidence in comparison to Alternative 1 (See Section 4.1). Under Alternative 2, material damage to the hydrologic balance outside the permit area would occur where the mining activity caused any impairment of a physical, chemical or biological ecological function of any stream, including ephemeral streams, based on state water quality standards or impairment of designated uses. Thus, in practice, the regulatory authority could not approve a permit for an underground mine if the proposed operation could result in subsidence or other impacts that would dewater or otherwise materially damage any stream, including ephemeral streams that were outside the permit area. This would result in significantly less subsidence related topographic impacts than under Alternative 1.

Allen, Melissa M

From: Ehret, Paul
Sent: Tuesday, March 01, 2011 3:14 PM
To: Calle, Marcelo; Winters, William R. "Bill"; Coker, Jeffrey A. "Jeff"; Means, Brent P.
Subject: RE: Is this correct?

That was my thinking too. The only instance in ANY of the alternatives that I understood subsidence would be prohibited, even within the 100 foot protection zone was IF it caused material damage to the hydro. AOC has never been a reason to prohibit subsidence.

From: Calle, Marcelo
Sent: Tuesday, March 01, 2011 1:49 PM
To: Ehret, Paul; Winters, William R. "Bill"; Coker, Jeffrey A. "Jeff"; Means, Brent P.
Subject: RE: Is this correct?

Subsidence is allowed in SMCRA including planned subsidence. I don't think we can 'prohibit' subsidence within permit even under the most stringent. So I would also say it is mis-characterized. I may be completely wrong.

From: Ehret, Paul
Sent: Tuesday, March 01, 2011 12:24 PM
To: Winters, William R. "Bill"; Coker, Jeffrey A. "Jeff"; Means, Brent P.; Calle, Marcelo
Subject: Is this correct?

The language below from the revised EIS essentially states that under Alternative 2 (the most stringent) as written reads to me that changes in topography resulting from underground mining (subsidence) would be prohibited. This approach seems to automatically presume that any an all changes in elevation (by default) equates to material damage to the hydro and is therefore not allowed as opposed to subsidence that actually cause material damage to the hydro (such as stream dewatering). By my recollection, not even alternative 2 went this far, but maybe I'm wrong.

From page 4-114:

The definition of material damage to the hydrologic balance outside the permit area under Alternative 2 would also largely eliminate changes in topography resulting from underground mining subsidence in comparison to Alternative 1 (See Section 4.1). Under Alternative 2, material damage to the hydrologic balance outside the permit area would occur where the mining activity caused any impairment of a physical, chemical or biological ecological function of any stream, including ephemeral streams, based on state water quality standards or impairment of designated uses. Thus, in practice, the regulatory authority could not approve a permit for an underground mine if the proposed operation could result in subsidence or other impacts that would dewater or otherwise materially damage any stream, including ephemeral streams that were outside the permit area. This would result in significantly less subsidence related topographic impacts than under Alternative 1.

From: [Craynon, John](#)
To: [Varvell, Stephanie L.](#)
Subject: RE: PKS demand for 90 day extension
Date: Friday, September 10, 2010 5:19:55 PM

This is very disturbing.....

-----Original Message-----

From: Varvell, Stephanie L.
Sent: Friday, September 10, 2010 5:14 PM
To: Sloanhoffer, Nancy E.; Owens, Glenda H.
Cc: Craynon, John; Uranowski, Lois J.; Winters, William R. "Bill"
Subject: PKS demand for 90 day extension

Nancy,

As you know we met this week to flesh out the changes to the project plan and confirm those changes needed to accommodate the contract modification to include the task of developing the alternative analysis. The meeting seemed to go well. This afternoon as a follow up to our newly agreed timeline I called John Maxwell to confirm the dates so that I could put together the new project plan. I was informed that PKS does not agree to the new plan and intends to counter with another request for an extension of 90 days. I was told it would be sent to me by COB today. As of 5:00 p.m. I have not received the demand.

This week OSM invested time and resources in a good faith effort to create a mutually satisfactory plan that would accommodate the contractor's concerns for more time and yet meet our needs. PKS was aware of our desire to come to an agreement on the plan and led me to believe through their participation that they shared that desire. Despite our willingness to task the OSM EIS team with working weekends and over Holidays to accomplish the needed turn arounds they have now reverted to the prior request for a "90 day" extension. I consider this move to be in bad faith and I have nothing good to say about this contractor. Their total lack of project management skills and disregard for our requirements is very disturbing.

I do not believe the Prime understands the seriousness of the situation. If you are of a mind to continue our relationship with this contractor I strongly suggest that OSM require them to obtain a PMP certified, experienced and knowledgeable Project Manager on their team who can manage their side of this project for them. While they want to point at OSM as being at fault regarding our failure to deliver the alternatives, in reality, a PM on their team would have observed the problem, notified the OSM PM, or COR and the issue over the alternative analysis would have been handled within the first week of the contract.

The SOW clearly required project management skills and they responded in the technical proposal suggesting they had experience in creating project plans and in earned value management. As we discussed last week we are in week twelve, on version 11 of the plan and now are being told to abandon the plan entirely. I asked John Maxwell about EVM and he clearly does not know what it is. Additionally, the write up in the technical proposal mischaracterizes EVM as a single dimensional control regarding deliverables. I know that you are aware that Project Management is more than purchasing the latest version of MicroSoft Project. I'm not convinced they know this.

Perhaps we should consider a stop work order until this matter can be resolved. At this point, continuing to meet their requests with no indication that they are considering our needs seems one sided. If there is something I can do to facilitate a solution please let me know.