

0004

Incoming 00150015 ok

From: "Gefferth, John" <JohnGefferth@consolenergy.com>
To: "Pam Grubaugh-Littig" <pamgrubaughlittig@utah.gov>
Date: 2/2/2007 7:11:21 AM
Subject: FW: Emery 1st Federal IBC def responses DRAFT

Pam

The attached are the responses that I sent to Priscilla on Tuesday of this week.

I was planning to submit formally on this coming Tuesday (2/6)

Priscilla told me yesterday that she would not be able to look at them until next week.

The responses should only take 15 minutes to review on her end.

Any help would be appreciated.

From: Gefferth, John
Sent: Tuesday, January 30, 2007 11:36 AM
To: Priscilla Burton
Cc: Pachter, Jonathan; Delloma, Les; Hardy, Russell
Subject: Emery 1st Federal IBC def responses DRAFT

Priscilla

Attached are your comments with DRAFT answers for your benefit.

I have included the revised CH XIII pages with those answers incorporated, and highlighted in yellow

I have not included the Plate V-5, as it is not complete yet.

Please feel free to call and discuss, as I would like to make the next submittal fly with no questions.

John Gefferth
Consol Energy

P.O. Box 566

Sesser, Illinois 62884

618-625-6850 office

618-534-5151 cell

618-625-6844 fax

www.consolenergy.com <<http://www.consolenergy.com>>

CC: "Pachter, Jonathan" <JonathanPachter@consolenergy.com>

Deficiency List

Task ID #2646
1st North Federal Lease Boundary Addition

The members of the review team include the following individuals:

Wayne H. Western [whw]
Priscilla Burton [pwb]
Joe Helfrich [jch]
Jim Smith [jds]
Steve Chistensen [skc]

R645-301-132, Please indicate the source of the information for Figure XIII-1 on the figure. [pwb]

Refer to page CH XIII page2 of the application for description of sources used to obtain soil information (Swenson, 1970). Consol has chosen to include the unpublished soils map as CH XIII-page 3a and revise CH XIII-page 2.

R645-302-314.400, For the purposes of providing baseline information, the application should provide a summary of the productivity and crops grown on the irrigated acres within the First North federal IBC. [pwb]

Consol will commit to providing crop production data in the annual report.

R645-301-624.300, Section III.C.5 of the application and section V.A.4 of the MRP should be updated with recent roof and floor analyses conducted during the past years exploration drilling. [pwb]

Drilling is not yet conducted for this information. Drilling is anticipated later this year. Information will be submitted at that time. Refer to MRP Chapter V, Section V.A.4, Page 7 for the best available information at this time.

R645-302-323.110, The irrigation system is shown on Plate V-3. The source of water for the irrigation must be indicated on the Plate as well. [pwb]

The source of water for the irrigation ditches originates from Muddy Creek. This point of diversion is approximately 23 miles from the proposed permit area, therefore it is not shown on Plate V-3. This water is covered under the water rights controlled by the Muddy Creek Irrigation Company listed within Chapter VI, Volume 1, Section VI.A.4, Page 141 of the MRP. CH XIII page 8, and plate V-3 have been updated to include this data.

Plates VI-6 and VIII-1 indicate the current land use of irrigated pasture. The acreage of irrigated land is not accurate according to the information available from the Farm Service Agency showing approximately 48 acres under irrigation. [pwb]

The information submitted by Consol came from an on site field investigation conducted September 2006 of the IBC area. Consol has contacted the Farm Service Agency and obtained copies of the information they provided to the reviewer concerning this deficiency. Consol requested from the Farm Service dates for the photographs and field designations, this data could not be provided. Per Roger Barton of the Farm Service Agency, this data changes yearly as the farmer decides which area to irrigate and which to leave dry. Please refer to revised CH XIII- Page 2 for a discussion.

MRP App. XI-2 Section 2.3.4 contains monitoring commitments for the ditch and water supply to the Jack Lewis field during operations and a topographic survey of the AVF in the upper Quitchupah Creek valley bottom prior to bond release. A similar commitment should be put into the MRP and extended to the parcels owned in T . 22 S., R. 6 E., SLBM by D.U.Company and Kenneth L . & Earlene Christiansen.

[pwb]

The correct Appendix is XI-3. Please refer to revised CH XIII- Page 12 for a discussion of the irrigation ditches

XIII.C ENVIRONMENTAL RESOURCE INFORMATION

XIII.C.1 PERMIT AREA

The lands subject to coal mining operations within the IBC area are noted on Plate I-1. It is not anticipated that individual permits will be sought for subareas within the IBC area. A discussion of cultural resources within the IBC area is provided in Appendix XII-3 of the approved MRP. This prior Class I survey, conducted in May 2005, included all of the area of the Federal Lease IBC and identified no cultural resources within that area.

XIII.C.2 SOIL RESOURCE INFORMATION

Soil resources in the IBC area are depicted in Figure XIII-1 (*Published soil survey*), and Figure XIII-1a (*unpublished NRCS soil survey*). Descriptions of these soils are provided in Appendix XIII-1. Soil series descriptions in the appendix were obtained from the U.S. Natural Resources Conservation Service (2006). Descriptions of individual map units on Figure XIII-1 were obtained from Swenson et al. (1970). *Descriptions of individual map units on Figure XIII-1a were obtained from the NRCS field office in Price. The data depicted on the map and in the table on Figure XIII-1a are not approved or published, and as such are subject to change per the NRCS office.* Soils within the IBC area tend to be fine grained, ranging generally from loam to silty clay loam. If irrigated, the soil supports alfalfa and similar crops. Otherwise, the soils mostly support rangeland plants such as shadscale, Indian ricegrass, greasewood, and/or saltgrass. Penoyer Loam and Ravola Loam are considered prime farmland when irrigated (Appendix XIII-1). *Penoyer Loam, Ravola Loam, Tusher Loam, and Minchey Loam are considered prime farmland when irrigated (Appendix XIII-1a).* Subsidence-related ground movement will be monitored *and mitigated* in accordance with Section V.B.1 of the MRP.

The vegetation map of the Federal IBC area found in Appendix XIII-2 shows the area that is irrigated pasture and areas of dry (not irrigated) pasture. This data was compiled from a field visit during the summer of 2006. The data available from the NRCS field office was compiled by looking at an aerial photo and talking to the land owners. Per the Farm Service this data is updated every few years and is subject to change. The land owner decides which fields to irrigate based on several factors, including drought conditions, pasture needs, availability of irrigation water etc.

Additional information regarding soil resources in the IBC and adjacent areas is provided in Chapter VII of the approved MRP. Impacts to soil resources are not anticipated as a result of mining under this application since no new surface disturbances are planned.

XIII.C.3 VEGETATION RESOURCE INFORMATION

Information concerning vegetation resources within the IBC area is provided in Appendix XIII-2. Three plant communities are present in the IBC area, namely greasewood, shadscale/winterfat, and pasture (both irrigated and dry land). Information presented in

solids concentration of groundwater in the *lower* Ferron Sandstone tends to be slightly less, averaging approximately 800 mg/l (see the previously noted table). This difference in salinity further suggests a hydraulic separation between the upper and lower Ferron Sandstone. Sodium and sulfate are the dominant ions in groundwater occurring in both the upper and lower Ferron Sandstone.

XIII.C.6.3 Surface Water Information

The IBC area lies within the drainage basin of Christiansen Wash, a perennial tributary to Quitcupah Creek. The only surface water courses within the IBC area are small ephemeral rills. No definitive stream channels exist within the IBC area.

Information regarding surface water resources in the vicinity of the IBC area is provided in Section VI.A.3 of the approved MRP. As indicated in that section, streamflow in Christiansen Wash generally increases in the downstream direction, primarily due to irrigation return flow and inflow from a tributary south of the IBC area that carries spring water to the wash. Peak flows in Christiansen Wash typically occur in mid to late spring as a result of snowmelt runoff and then again in mid to late summer due to thunderstorms. Irrigation return flows contribute to Christiansen Wash during the summer months.

Information regarding water rights in the vicinity of the IBC area is provided in Section VI.A.4. The data contained in that section is consistent with the State of Utah Division of Water resources data base.

The source of irrigation water in the IBC vicinity originates from Muddy Creek. This point of diversion is approximately 23 miles from the proposed IBC permit area, therefore it is not shown on Plate V-3. This water is covered under the water rights controlled by the Muddy Creek Irrigation Company listed within Chapter VI, Volume 1, Section VI.A.4, of the MRP.

Data presented in Chapter VI of the approved MRP indicate that concentrations of dissolved constituents generally increase in the downstream direction along Christiansen Wash. This is attributed to irrigation return flow seeping into the stream. The total dissolved solids concentration of Christiansen Wash ranges from about 1,000 to 5,000 mg/l and is typically indirectly related to discharge rate. Calcium, sodium, and sulfate are the dominant ions. Total suspended solids concentrations vary widely in Christiansen Wash (from less than 100 to more than 3,000 mg/l) and tend to be directly related to discharge rate.

XIII.C.6.4 Baseline Cumulative Impact Information

The Federal Lease IBC area lies within the cumulative impact area of the Emery Mine.

XIII.C.6.5 Modeling

No surface or groundwater modeling was performed for this IBC application.

XIII.C.6.6 Alternative Water Source Information

THIS IS CH XIII-PAGE 8

XIII.D.2 EXISTING STRUCTURES

No "existing structures", as defined in R645-100-200, exist in the IBC area. Structures located in other portions of the permit area that will be used during mining of the IBC area are discussed in Chapter II of the approved MRP. These structures will not be modified under this application.

Plate V-1 of Chapter V, Volume 2 delineates items #89, #90, #91, #92 and #93 as structures found within or adjacent the IBC area. Description of these items can be found in Chapter V, Volume 2, Appendix V-3.

The presubsidence survey will be updated on all surface areas depicted on Plate V-5 as planned subsidence, prior to secondary mining. If the irrigation system is still functional at the time of subsidence, Consol will visually inspect the irrigation system before and during the growing season. Mitigation of any effects to the irrigation system caused by subsidence will be agreed negotiated between Consol and the surface land owner.

XIII.D.3 COAL RECOVERY

Coal will be recovered in a manner that maximizes utilization and recovery of the resource, (planned subsidence), while maintaining environmental integrity.

XIII.D.4 SUBSIDENCE CONTROL PLAN

Subsidence control, monitoring, and mitigation within the IBC area will occur as indicated in Section V.B of the approved MRP.

XIII.D.5 HYDROLOGIC INFORMATION

Information regarding surface and groundwater resources and probable hydrologic impacts of mining in the Federal Lease IBC and adjacent areas is provided in Section XIII.C.6 of this application. A discussion of surface and groundwater monitoring programs associated with the Emery Mine is provided in Section VI.A.5 of the approved MRP. Information regarding the acid- and toxic-forming potential of the coal, overburden, and underburden is discussed in Section XIII.C.5 of this application.

No surface disturbances are planned in the IBC area. Hence, no new diversions, stream buffer zones, sediment control structures, or other treatment facilities will be installed as a result of mining in the Federal Lease IBC area.

XIII.E RECLAMATION PLAN

No new surface disturbances will occur as a result of mining in the Federal Lease IBC area. Hence, no additional land reclamation will be required as a result of this action. Information regarding reclamation of the Emery Mine surface facilities is provided in Chapter III of the approved MRP. This information includes a discussion of surface and groundwater

THIS IS CH XIII PAGE 12