

0014



CONSOL ENERGY™

Consolidation Coal Company

P.O. Box 566
Sesser, IL 62884
(618) 625-2041

Incoming ^{OK}
C/015/0015
Task ID #2951

March 21, 2008

Daron Haddock
Utah Division of Oil, Gas and Mining
Coal Program
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Re: Emery Deep Mine Permit C/015/015
Amendment to MRP (re-submittal of full extraction pillar splitting plan, planned subsidence 15th W, 4th E, 6th W, Zero N panels, updated Chapter VI Hydrology, updated surface property control, and updated roof & floor analysis.)

Dear Mr. Haddock:

Per your January 8, 2008 memo Task 2885 please consider this a complete re-submittal of Consol's additional full extraction areas, updated Chapter VI Hydrology (PHC), updated surface property control and Pre-Subsidence survey, additional roof & floor analysis in the 1st North area. Enclosed please find two (2) redline strikeout copies of the submittal. Also attached please find executed C1 and C-2 forms. A copy of the submittal has been forwarded to your Price field office. This re-submittal combines the original August 3rd submittal and all the subsequent deficiency responses (10/3, 10/12, 10/17, 10/26, 12/3) into one package.

Per the ongoing expansion of the Emery Mine, Consol plans to increase the resource recovery by utilizing a pillar splitting plan that would fall into the planned subsidence category. This full extraction plan is for the 15th West, 4th East, 6th West, and Zero North panels. Consol will obtain MSHA approval prior to commencing pillar splitting. The archeology and SHPO concurrence for these areas has been completed under the previously approved Federal IBC, and additional Archeology work completed under MOAC Report 7-323.

At the request of Division staff, the entire Chapter VI has been revised. The Hydrology section has been organized to follow the R645-301-700 regulations. All pertinent maps, tables and figures have been updated using all available data. Additionally a Modflow prediction model has been incorporated in the section. Several of the original Plates have been renumbered for ease of review. CH VI Table of Contents and the C2 forms lists the ones that have been changed. Under section VI, Consol has revised Plate VI-10 (Surface Drainage Control Map) and added several additional Plates depicting the drainage areas on a larger scale.

Archeology report MOAC report 7-323 and Plate X.A.1,(Permit Area Cultural Resources), were submitted with the December 7, 2007 deficiency response and still reside in the incoming file at the Division. They will be resubmitted during clean copy submittal.

Emery County Road and PacifiCorp powerline subsidence agreements have been placed in CH V, App V-6.

If you have any questions concerning this request, please call me at (618) 625-6850.

Sincerely,

John Gefferth
John Gefferth
Environmental Engineer

CC: Karl Houskeeper – DOGM-Price Field Office-with attachments
Attachments
JAG/jag_fullextracPHC.15w4e6wZN.308final.doc

file in:
C/015/0015, 2008, Incoming
Refer to:
 Confidential
 Shelf
 Expandable
Date *3/21/2008* for additional information

RECEIVED
MAR 21 2008
DIV. OF OIL, GAS & MINING

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change New Permit Renewal Exploration Bond Release Transfer

Permittee: Consolidation Coal Company

Mine: Emery Mine

Permit Number: 015/015

Title: PHC update, planned subsidence for 15th W, 4th E, 6th W ZN

Description, Include reason for application and timing required to implement:

Total PHC update, Planned Subsidence for the, 15th W, 4th E, 6th W, Zero North final def 2885

03/08

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- Yes No 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ increase decrease.
- Yes No 2. Is the application submitted as a result of a Division Order? DO# _____
- Yes No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- Yes No 4. Does the application include operations in hydrologic basins other than as currently approved?
- Yes No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes No 6. Does the application require or include public notice publication?
- Yes No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- Yes No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- Yes No 9. Is the application submitted as a result of a Violation? NOV # _____
- Yes No 10. Is the application submitted as a result of other laws or regulations or policies?
Explain: _____
- Yes No 11. Does the application affect the surface landowner or change the post mining land use?
- Yes No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- Yes No 13. Does the application require or include collection and reporting of any baseline information?
- Yes No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- Yes No 15. Does the application require or include soil removal, storage or placement?
- Yes No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- Yes No 17. Does the application require or include construction, modification, or removal of surface facilities?
- Yes No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- Yes No 19. Does the application require or include certified designs, maps or calculation?
- Yes No 20. Does the application require or include subsidence control or monitoring?
- Yes No 21. Have reclamation costs for bonding been provided?
- Yes No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- Yes No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you. (These numbers include a copy for the Price Field Office)

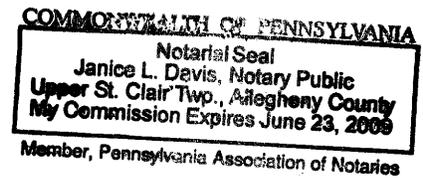
I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Jonathan M. Pachter
Print Name

Jonathan M. Pachter 3/17/08
Sign Name, Position, Date General Manager, Environmental Services

Subscribed and sworn to before me this 18th day of March, 2008

Notary Public Janice L. Davis
My commission Expires: June 23, 2009;
Attest: State of Pennsylvania } ss:
County of Allegheny



For Office Use Only: 	Assigned Tracking Number:	Received by Oil, Gas & Mining RECEIVED MAR 21 2008 DIV. OF OIL, GAS & MINING
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APPLICATION FOR COAL PERMIT PROCESSING

Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: Consolidation Coal Company

Mine: Emery Mine

Permit Number: 015/015

Title: PHC update, planned subsidence for 15th W, 4th E, 6th W, Zero North final

3/08 Page 1

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED

Add	Replace	Remove	Description
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chapter I, App I-2, pages 1,1a,2,3,3a,4,4a,5,5a,6,6a,7,7a (old surface property control)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter I, App I-2, pages 1,2,3,4,5,6,7 (new surface property control)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter V cover page for Appendix V-3
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH V, Table of Contents (adds app V-5) Updated Pre-Subsidence survey 15W,4E,6W,ZN)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter V, Pages 15a through 15e (roof & floor analysis 1st North area)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter V App V-5 (Pre Subsidence survey prior to full extraction 15W,4E,6W,ZN)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter V page 26 (Pre-Subsidence survey update commitment)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter V, page 40 (notification)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter V, page 42 (Emery Town Well)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter V, App V-6 Emery County Road subsidence mitigation agreement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter V, App V-6 PacifiCorp powerline subsidence mitigation agreement
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chapter VI pages 1 through 190 (old hydrology section text)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chapter VI Figures VI-5 (2), 6 (2), 7 (2), 8, 9(2) (old hydrograph figures)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter VI Hydrology text, tables and figures (revised hydrology section)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter X, index page
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter X, Archeology report (MOAC 07-323) (CONFIDENTIAL) See incoming file
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter I, Plate I-1, Surface and Coal Ownership
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter V, Plate V-5 Subsidence Monitoring Points and Buffer Zones (add full extract)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter VIII, Plate VIII-1, Vegetation and Landuse Map (add full extract)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter IX, Plate 10-1, Selected Wildlife Information (add full extract)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter X, Plate X.A-1, Permit Area Cultural Resources (CONFIDENTIAL add full extract)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See incoming file
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<p>Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.</p> 	<p>Received by Oil, Gas & Mining</p> <p>MAR 1 2008</p> <p>DIV. OF OIL, GAS & MINING</p>
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APPLICATION FOR COAL PERMIT PROCESSING

Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: Consolidation Coal Company

Mine: Emery Mine

Permit Number: 015/015

Title: PHC update, planned subsidence for 15th W, 4th E, 6th W, Zero North final

3/08 Page 2

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED

<input type="checkbox"/> Add	<input checked="" type="checkbox"/> Replace	<input type="checkbox"/> Remove	DESCRIPTION
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-1, Upper Ferron Sandstone potentiometric Surface (1979) (orig Plate VI-9)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-2, Lower Ferron Sandstone Potentiometric Surface (1985)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-3, Water Rights Map
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-4, Ground Water Monitoring Well and Surface Water Monitoring Site Location Map (orig Plate VI-3)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-5, Geology of the General Mine Area (orig Plate VI-2/2A)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	CH VI, Plate VI-6 Geomorphic Map
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-6, Historic and Planned Mining Sequence (orig Plate VI-6A)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-7, Upper Ferron Sandstone Potentiometric Surface (2006) (New)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-8, Lower Ferron Sandstone Potentiometric Surface (2006) (New)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-9, Misc. Surface Water Data Collection Sites (orig Plate VI-1 new name)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-10, Surface Drainage Control Index Map
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-10A, Surface Drainage Control Map
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-10B, Surface Drainage Control Map
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-10C, Surface Drainage Control Map
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CH VI, Plate VI-10D, Surface Drainage Control Map
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-1 Groundwater Monitoring-Water Quality Data (updated data)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chapter VI App VI-4 Permit renewal water samples (old water data now included in VI-5)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-4 Water Rights (inserted data)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-5 Surface Water Monitoring- Flow & Water Qual Data (updated data)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-10 Groundwater Monitoring - Water Level Data (inserted data)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-11 USGS Streamflow Data (inserted data)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-12 UPDES Monitoring Data (inserted data)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-13 Data from Misc Surface Water Qquality Studies (inserted data)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-14 Mass-Balance Estimates of Future Mine-Water Discharges (inserted)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chapter VI App VI-15 MODFLO Report (inserted data)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<p>Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.</p> 	<p style="text-align: center;">Received by Oil, Gas & Mining</p>
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Deficiency List
Task ID #2885
PHC Update and Full Extraction Pillar Splitting –
15th West, 4th East, 6th East and Zero North Panels

R645-301-121.100

Verify the Emery County 907 road realignment in Section 29 on Plate I-1 and adjust property ownership lines accordingly on Plate I-1. (PB)

County Road 907 realignment in Section 29 has been revised on Plate I-1

- Appendix I-2 lists an incorrect address and telephone number for the BLM State Office.

Refer to CH I, App I-2, page 1 for the revised address. The phone number has been deleted, R645-301-112 only requires name and address.

R645-301-121.200

County Road 906 should be labeled on Plate I-1. (PB)

County Road 906 has been labeled on Plate I-1

- Dual boundary appears incorrect between Carter and Staley in Section 21.

This boundary is correct per the Emery County data base

- Dual boundary appears incorrect between Young Investment and Emery County in Section 30.

This boundary is correct per the Emery County database

- Dual boundary appears incorrect between Consol surface in Section 30.

This boundary is correct per the Emery County database

R645-301-525.700

The required pre-subsidence landowner notification letters to landowners and irrigation companies were not referenced and could not be found. (PB)

The referenced regulation does not require the operator to reference the notification documents in the MRP, or supply them to the regulatory authority. Refer to DOGM inspection 1443 dated 10/23/07. Landowner re-notification was sent on 2/16/07 for the remaining Emery mining area. Copies were provided to both the Price field office and the Salt Lake City office. CHV pg 40 has been revised to reflect this.

R645-301-121.100

County Roads must be labeled on Figure 1, App. V-5 Pre-Subsidence survey. (PB)

County Roads have been labeled on Figure 1, App. V-5 Pre-Subsidence survey)

R645-301-624.300 and R645-301-132

Provide missing floor analysis for 1st North. (PB)

The roof and floor analysis for the general zero and 1st North area was taken in two locations. The roof sample was taken in the 1st North panel, and the floor sample was taken in the Zero North panel. The two sample sites are in adjacent panels and approximately 2000 feet apart.

- Provide missing roof analysis from 0 North.

The roof and floor analysis for the general zero and 1st North area was taken in two locations. The roof sample was taken in the 1st North panel, and the floor sample was taken in the Zero North panel. The two sample sites are in adjacent panels and approximately 200 feet apart.

- Provide the analysis of Electrical Conductivity and Sodium Adsorption [sic] Ratio for roof and floor samples from 1st North and 0 North.

This analysis was not completed on these samples

- Request all subsequent letters from the laboratory be on company letterhead to document the qualifications of the laboratory, in accordance with R645-301-132.

Refer to CHV, pg 15a for a signed copy of the lab memo on Geochemical Testing letterhead.

R645-301-525, -724

The Permittee needs to modify Figure 1 in Appendix V-5. The legend of Figure 1 depicts surveyed culverts as a solid red line. There are several solid red lines depicted on Figure 1 that do not correspond to surveyed culverts. Field investigation conducted by Division staff had not identified culverts in the locations depicted on the map by a solid red line. Upon further review and phone conversations with Consol representatives, it was determined that the solid red lines depicted on Figure 1 of Appendix V-5 are property boundaries. The Permittee should modify Figure 1 so as the property boundaries and culverts are easily distinguished from one another. (SC)

Figure 1, APP. V-5 has been revised to properly depict the culverts

R645-301-728

- The Permittee must provide more discussion/clarification as to the Ferron Sandstone's ability to recover to pre-mining levels. The previous technical analysis of this amendment by the Division (Task ID #2821, November 30th, 2007) requested a written narrative (based upon the data) as to the potential for further impacts to all three of the Ferron Sandstone layers, estimates for their recovery to pre-mining conditions, as well as the potential for altering groundwater flow directions and pressure gradients due to mining activity. The recently submitted PHC information focused almost entirely on the potential effects to the upper Ferron Sandstone layer only. The Division recognizes that the most pronounced ground water impacts to the Ferron Sandstone occur within the upper layer due to its proximity to the mined coal seam. However, the data presented in the application clearly shows that significant declines have occurred in all three layers of the Ferron Sandstone. Figure VI-7 of the application shows that water levels within the lower Ferron Sandstone have declined approximately 170 feet at well R1, declined 40 feet at the Kemmerer Well and declined 70 feet at Well H (the latter two wells located outside the permit area). The middle Ferron Sandstone has also undergone significant declines in water level. Figure VI-6 of the application demonstrates declines of approximately 200 feet at Well I, 100 feet at Well AA and approximately 500 feet at Well R2. Discussion of the middle and lower layers of the Ferron Sandstone and the potential for their recovery to pre-mining levels should be more thoroughly addressed by the Permittee. In most instances cited above, the water levels have remained fairly stable since their declines, however they have not demonstrated any increase in water level either. Given the Permittee's position that the middle and lower Ferron layers should not be significantly affected by mining, the aforementioned declines in water level and their lack of recovery should be more thoroughly examined. As with all three layers of the Ferron Sandstone, the Permittee should provide a reference and/or citation to information that demonstrates what the pre-mining ground water levels were prior to mining activity. (SC)

The PHC has been revised to more-fully address the potential impacts of mining on the middle and lower Ferron Sandstone. This revision begins on page VI-21 and extends through page VI-21b.

- The Permittee should discuss the potential impacts to ground water flow direction. Page VI-21A of the application states, "Groundwater flow directions will gradually return to approximate pre-mining conditions following the cessation of pumping". Page VI-6 of the application states, "groundwater moves generally up dip and in a southeast direction through the permit area". Is this still the case? How has the ground water flow direction been affected by mining activity? The Permittee should provide a more thorough [sic] discussion as to the extent that the cone of depression (produced within the permit area as a result of mine dewatering efforts) has influenced local ground water flow direction within the Ferron Sandstone. In addition, there should be some discussion as to the potential for groundwater flow directions to return to premining conditions. (SC)

Additional discussions of the potential impacts to groundwater flow directions are provided in the revised PHC (pages VI-21 through VI-21b).

- The Permittee should expand the discussion as to whether artesian conditions are still present in the Ferron Sandstone within the permit and adjacent area. Page VI-6 states, "Throughout most of the region, groundwater in the Ferron Sandstone west of the mine has historically been under sufficient artesian pressure to flow at the ground surface." Has mining activity caused a depressurization in the Ferron Sandstone? Discussions with town of Emery representatives have indicated that Wells #1 and #2 have not exhibited artesian pressure for decades. In addition, the Bryant and Lewis wells have both been affected by mining activity (See page VI-9 of the application) and no longer flow at the land surface. Is mining activity causing pressure gradients to change within the Ferron Sandstone and if so, to what lateral extent and what are the prospects that the pressure will return to pre-mining levels? (SC)

The potential effects of mining on water levels in the upper, middle, and lower Ferron Sandstone are discussed on pages VI-21 through VI-21b of the revised PHC.

R645-301-731.210, -220

- The Permittee should provide a discussion and table that clearly identifies all surface and groundwater-monitoring sites. On page V-25 of the application, the Permittee states, "Groundwater monitoring is conducted in the permit and adjacent areas according to the water monitoring plans presented in Table VI-17." The same language is found on page VI-26 in reference to surface water monitoring sites. Table VI-17 should be revised or a separate table generated that clearly identifies individual groundwater and surface water sites slated for monitoring and their respective sampling frequencies and protocols. (SC)

Table VI-17 has been revised to indicate the individual monitoring sites and the monitoring frequency for each location.

- The permittee should identify/discuss the groundwater monitoring to be employed at the Emery Town Wells (#1 and #2). The discussion should identify what information will be obtained from each well, as it's the understanding of the Division that there are various physical limitations to data collection on one or both of the wells. (SC)

Additional discussion regarding the potential impacts of mining on the Emery town wells has been added to pages VI-21a and VI-21b of the revised PHC. These pages also discuss the physical constraints to monitoring each of the wells. Table VI-17 has been revised to indicate the monitoring that will be implemented at the wells.

- The Permittee should add Emery Town wells #1 and #2 to the relevant text and tables that outline the groundwater-monitoring program. (SC)

A discussion of monitoring plans for the Emery town wells has been added to the revised PHC text and Table VI-17, as indicated above.

- The Permittee should provide a commitment that semi-annual reports will be provided to the Division that update and document the drawdown of the Ferron aquifer relative to the Emery Town wells. (SC)

A commitment to provide a semi-annual evaluation and report concerning the Emery town wells has been added to Table VI-17.

R645-301-731

The Permittee must review the surface drainage control maps (Plate VI-10 through Plate VI-10D) to insure their accuracy. Omissions were discovered during a concurrent permitting action. Plate VI-10D depicts the surface drainage controls employed at the 4th East Portal portion of the mining facility. Plate VI-10D does not depict two culverts utilized in controlling the surface drainage in that area (a 18" culvert at the north-east entrance road and a 12" culvert depicted between the excavation stockpile and supply yard). (SC)

All drainage maps have been updated

R645-301-525.700

The Permittee must mail a notification the water conservancy district and the owners and occupants of surface properties and structures above the underground workings at least six months before mining. (VWV)

Refer to DOGM inspection 1443 dated 10/23/07, for land owner notification.