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**CONSOL ENERGY™**

**Consolidation Coal Company**

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

February 19, 2004

Mr. Lowell Braxton, Director  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

*Incoming  
C/015/0015*

Re: Emery Deep Mine Permit C/015/015  
Additional responses to the 2nd Dust Control Ammendment deficiencies dated 12/10/03.  
Amendment to MRP to abate NOV N03-39-1-1, Task ID # 1762

Dear Mr. Braxton:

Please consider these deficiency responses to the above mentioned T.A. Five copies of the responses are attached.

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

Sincerely,

John Gefferth  
Permit Coordinator

**RECEIVED**

**FEB 23 2004**

CC: James Byars – Emery Mine  
Jonathan Pachter - CONSOL Energy  
Dan Baker – C & P Coal (attachments)

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:** Deficiency responses 2/04

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

Additional deficiency responses to the second Dust Control Ammendment deficiencies dated 12/10/03.

**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 2/6/04  
Sign Name, Position, Date  
manager, Environmental Permitting

Subscribed and sworn to before me this 6 day of FEBRUARY, 2004

Jane M. Young  
Notary Public  
My commission Expires: JUNE 20, 2005  
Attest: State of PENNSYLVANIA } ss:  
County of ALLEGHENY

COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Jane M. Young, Notary Public  
Upper St. Clair Twp., Allegheny County  
My Commission Expires June 20, 2005  
Member, Pennsylvania Association of Notaries

<p><b>For Office Use Only:</b></p>	<p><b>Assigned Tracking Number:</b></p>	<p><b>Received by Oil, Gas &amp; Mining</b></p> <p style="text-align: center; font-size: 1.2em; font-weight: bold;">RECEIVED</p> <p style="text-align: center; font-size: 1.2em; font-weight: bold;">FEB 23 2004</p> <p style="text-align: center;">DIV. OF OIL, GAS &amp; MINING</p>
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### UMC 817.52

In addition to NPDES monitoring of discharge points, a monitoring program of surface and ground water sites has been established to assess mining impacts on these resources. The current operational monitoring plan is described in Sec, VI.A.5.

### UMC 817.95

Protection of air resources during operation of the mine is discussed in Part C of Chapter X. Appendix X.C-1 evaluates emissions from the proposed preparation plant. Fugitive dust (particulate) is considered the only potentially significant air pollutant generated by both facilities. Appendix X.C-2 evaluates emissions from the 4th East Portal. Appendix X.C-3, Norwest's evaluation and recommendation of engineering controls and other measures to minimize generation of dusting from the 4th East Portal. Consol is committed to implementing Phase I of Norwest's dust control plan as described in App.X.C-3 of the MRP. Consol will implement Phase II if it is determined that Phase I fails to adequately control the coal fines. Phase II controls, if necessary, will consist of a permanently installed and integrated dust suppression system, such as Benetech's program for dust control on conveyor systems and downstream stockpiles

The Phase II Benetech system as it was presented to DOGM by Norwest on August 26, 2003 has been partially installed. The pipe system for the watersprays and water cannons, and the two control boxes (flow control and electric control) are components of the Benetech designed system. If Phase II is warranted, a chemical additive station will be installed and plumbed to the existing pipes.

Control measures employed at the current operation utilize water sprays at all product transfer points, a silt fence downwind of the conical product stockpile, a water truck to wet down unpaved roads, and revegetation of topsoil and subsoil stockpiles. Measures to be used at the proposed coal preparation plant will include fully hooded conveyor belts, totally enclosed transfer points with water sprays, stacking tubes with water sprays at storage pile loading points, revegetation of topsoil and subsoil stockpiles, and water spraying of unpaved roads.

All control equipment will be properly installed, maintained, and operated such that visible emissions from the facilities will not exceed opacity limits established by the Utah Division of Environmental Health and applicable requirements of the Clean Air Act. ~~No air monitoring plan has been proposed.~~ Operator will perform opacity readings as required by the modified approval order.

### UMC 817.97

Protection of fish and wildlife during operation of the mine is discussed in Chapter IX, The discussion addresses mining impacts on these resources and mitigative measures that will be

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Revised 10/2003  
Revised 1/2004  
Revised 2/2004

employed at the mine. A study of fish and wildlife and their habitats, within the permit area, was conducted by Mine Reclamation Consultants, Inc. in 1980 and their report is attached in Appendix IX-1.

A fish and macro-invertebrate count was performed in September of 2002 by JBR Consultants. The study was conducted in Quitchupah Creek and Christiansen Wash. The completed report from JBR is attached as Appendix IX-2.

### **III.C.1. BACKFILLING AND GRADING**

#### **UMC 817.101, UMC 817.106, UMC 784.13(b)(3)**

Following completion of mining, surface debris will be removed as described in Chapter III.B.1. Prior to final reclamation grading the 4th East portal area will be sampled for SAR, PH and EC. Surface areas affected by mining operations will be graded to blend into the surrounding landscape so as to achieve the final postmining topography shown on Plate III-5, III-6, III-7, III-8. All areas will be graded to approximately pre-disturbance contours with the exception of the proposed coarse refuse disposal area and the proposed slurry impoundment.

Should rills and gullies form in areas to be respread, they will be filled and grade prior to respreading suitable plant growth material. Final grading and soil respreading on all surface affected acres will be performed along the contour where practical to minimize erosion. No highwalls exist at this operation since the existing portals of the drift mine are at the base of a natural formation. Reclamation of the proposed 4E portal is discussed in Chapter III.C.2. None of the following materials will be placed on the downslope of a steep slope during or after the reclamation process.

- (1) Spoil
- (2) Waste Materials
- (3) Debris
- (4) Abandoned or Disabled Equipment

There has been a mine at the site of the present-day Emery Mine since the 1890's. As a result, there are not topographic maps available of the pre-mining topography. As best as can be determined, the surface as it exists now does not vary radically from the premining landscape. The existing mine facilities area and the proposed preparation plant site and associate disturbance areas are projected to remain virtually the same upon completion of mining. The embankments and berms which control runoff in the existing mine yard will be removed. Some of the material utilized in the construction of these structures will be utilized as necessary for fill in the reclamation of the portals or the mine yard area. Some excess cut material from the Underground Development Waste Disposal Site may also be used for fill in the reclamation of the portals or the mine yard area. The location of the existing surface water management facilities in this area (Pond No. 2 and No. 3 and the surface water runoff control berm) are shown on Plate VI-10. These facilities will remain in place until final abandonment.

Pond No. 2 is a cross valley structure that was built with the burrow material from incised Pond No. 3. Additional embankment material was borrowed from the area adjacent to Pond No. 3. The two ponds will be graded at the same time and the fill material will be returned to its original location or used in reclamation of the portals. For detail concerning topsoil and revegetation, please refer to Chapter III.E.1 and III.F.1 respectively. Additional detail concerning the volume of material contained in the embankments of these structures can be found in Chapter IV.B.

Pond No. 1 was constructed prior to August 3, 1977. This structure will be reclaimed when it is no longer needed to treat mine discharge water. It is an incised

Revised 02/2004

future, were also considered in the survey. These species are listed on Table 2.

### Wildlife Species

Based on previous visits to the site by the State of Utah, Division of Wildlife Resources (DWR) in 2002, and the 2002 studies conducted for sensitive species at the 4<sup>th</sup> East Portal area by *Mt. Nebo Scientific, Inc.*, the only sensitive wildlife species that have the potential of being present in the study area were raptors. DWR biologists visited the site along with representatives from Consolidation Coal Company in 2002. At that meeting it was suggested that there was a low probability of raptor occurrence in the area (personal communications with S. McCourt, March 2001).

In 2002 Consolidation Coal Company committed to participate in the annual helicopter raptor survey conducted by DWR and other coal operators of the area that year. The survey was conducted in Spring 2002. The data was not submitted in the 2002 Annual Review, but can be obtained through DWR. After the 2002 flyover, DWR recommended no subsequent raptor surveys would be required unless the permittee develops into new areas.

During the sensitive species survey by *Mt. Nebo Scientific, Inc.*, a search was made for prairie dog communities at the 4<sup>th</sup> East Portal area. Prairie dog communities are known to be important habitat for burrowing owls.

Replaces Revised 1/2004

A measure of success of the Phase I controls will be accomplished by monthly monitoring of the area East of the permit boundary. This will be done by mine personnel accompanying the DOGM inspector on his regular inspection. The area in question will be inspected for accumulation of coal fines and noted in the inspection report.

Prior to production, Consol will contact NRCS for assistance in establishing a baseline on the area East of the road on Consol property. This baseline will consist of three transects, each containing three sample sites. Once The transects are in place, their location will be submitted to DOGM for inclusion in the MRP. The sample points will be clearly marked for field identification. Once production resumes and a stockpile is created these nine sample sites will be monitored monthly to calculate the % coal fines on the surface soil. The NRCS has indicated that they would instruct DOGM and mine personnel, from the Field Book for Sampling Soils, on the method to determine % cover. Records of the initial baseline and the monthly observations will be kept on site.

In addition to the above monitoring, there will be a person certified in opacity reading to conduct opacity readings at the eastern permit boundary of the stockpile monthly. These readings will be done once every fifteen seconds for six minutes. They The readings will be recorded on a Visible Emissions Recording Form, and kept on file for inspection. A digital photo of the opacity will be taken and kept on file.

The opacity readings will begin when production resumes. They will continue twice per week for the first six months. If there are no fugitive dust problems noted from the monthly checks of the soil surface, the opacity reading frequency will be reduced to once per week for one year. If after this period, there are no noted fugitive dust problems the opacity readings, and monthly transect monitoring will be terminated. This 1½ year monitoring period will be considered the cumulative time period that coal is being produced, stockpiled and/or hauled at the 4th East portal. If there is not a stockpile (i.e. production ceases) the monitoring will temporarily be halted and will not resume until coal production and/or haulage resumes..

The opacity readings will be done at the eastern permit boundary. The opacity reader will stand on either the southeastern or northeastern permit boundary, depending on the position of the sun and the sky conditions. The opacity reader will try to take the readings during the afternoon when possible.

Inserted 01/2004  
Inserted 02/2004

## WATER CANNON

One or more high volume (about 100-150 gallons per minute) water cannons will be installed near the stockpile as depicted in Figure 5. The water cannons' installed location will be determined during wind fence construction. During periods of elevated wind velocities, the cannons will be activated (*e.g., 35 MPH for greater than 15 minutes*). Water cannons designed for all-weather use will be installed. The basic manual system will be automated using a wind-speed indicator and water activation trigger device. Guidance from U.S. EPA (AP-42 Compilation of Air Pollution Emission Factors, Section 13.2) indicates that entrainment of dust from aggregate storage piles occurs at wind velocities over 12 miles per hour (mph). When sustained wind velocities exceed 12 mph, water cannons will be automatically activated. Once activated, the system will blanket the stockpile area with water for a long enough period to adequately wet the pile without causing runoff. The shut-off mechanism for the water cannons will be a timer, i.e., once the threshold wind speed is attained and sustained (e.g., 35 MPH for greater than 15 minutes), the water cannons will be activated. They will remain on for a period of several minutes (e.g., up to 15 minutes) – long enough to adequately wet the pile without causing runoff. The system will shut off after a selected period of time so that over-wetting of the pile does not occur. If elevated wind velocities persist, the water cannons will continue to be activated on a pre-set cycle (e.g., no more than one activation per hour). The operator will review historic mine weather station data as it becomes available and adjust the wind speed trigger accordingly.

When operators are onsite, there will be the option for manual override of the system, i.e., the mine superintendent will be able to activate and operate the water cannon system when he determines that conditions warrant it. Manual override will also be used to demonstrate the effectiveness of the system when required, e.g., during inspections.

The system will shut off after several minutes so that over-wetting of the pile does not occur. If elevated wind velocities persist, the water cannons will continue to be activated until wind speed subsides below the threshold level for triggering the system.

The attached technical bulletin, found in Appendix C, from Nelson Irrigation Corporation for their 100 Series Big Gun nozzle demonstrates that varying combinations of water pressure (psi), water flow rate (gpm) and nozzle diameter will provide more than adequate coverage of the stockpile area based on throw (diameter, ft) of the nozzle. The nozzles (probably two, as conceptually shown in the September 12, 2003 Mine Reclamation Plan package submitted to DOGM) will also be located on stands, probably several feet in height to maximize water distribution in the pile area. A further feature available from the manufacturer that enhances throw of water spray is a choice of angle of trajectory for the nozzle. For example, for the 100 Series nozzles the vendor offers trajectory choices of 18, 21, 24 and 43°. In addition, the nozzles will likely be arranged, as shown in the conceptual drawing in the September 12 submittal, so that the spray patterns overlap, further ensuring adequate coverage. A video clip viewable at [www.nelsonirrigation.com](http://www.nelsonirrigation.com) (click products then Big Gun sprinklers) further demonstrates the coverage capabilities of the nozzles being considered. Probably the most striking feature in the clip is that the arcing stream provides a curtain of water that blankets everything in its path. The nozzle does not simply throw a stream of water a desired distance. With the design features considered, CONSOL is confident that the water cannons will provide adequate coverage of the stockpile area.

Updated 1-21-04