

0006



CONSOL ENERGY™

**COPY**

Consolidation Coal Company

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

January 26, 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

ENCLOSING  
CO150015 OK  
Task ID #1819

Mine #	C015/0015
File	Incoming
Record #	0006
Doc. Date	1-26-04
Recd. Date	1-27-04

Re: Emery Deep Mine Permit C/015/015  
Deficiency responses to technical analysis 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. The deficiencies and responses are attached.

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

Sincerely,

John Gefferth  
Permit Coordinator

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

JAG/jag em.mrpmnd.defdec10resp.doc

RECEIVED

JAN 27 2004

DIV. OF OIL, GAS & MINING

# APPLICATION FOR COAL PERMIT PROCESSING

Permit Change  New Permit  Renewal  Exploration  Bond Release  Transfer

# COPY

**Permittee:** Consolidation Coal Company

**Mine:** Emery Mine

**Permit Number:** 015/015

**Title:** Deficiency responses 12/10/03

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

Additional deficiency responses to the Dust Control Ammendments original deficiency responses.

**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 1/22/04  
Sign Name, Position, Date

Subscribed and sworn to before me this 22 day of JANUARY, 2004

Manager, Environmental Permitting

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

**For Office Use Only:**

Assigned Tracking  
Number:

Received by Oil, Gas & Mining

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JAN 27 2004

DIV. OF OIL, GAS & MINING



**RESPONSES TO SECOND DOGM TECHNICAL ANALYSIS  
(10/10/03) OF CONSOL EMERY MINE AMMENDMENT**

**R645-103-234**, USING THE C1C2 FORM, THE PERMITTEE SHOULD INSTRUCT THE DIVISION AS TO WHERE TO PLACE THE COUNTY ENCROACHMENT PERMIT IN THE MRP.

Please refer to revised Ch. II, pg. 18 and inserted Ch. II, pg 18a thru 18d.

**R645-301-115.300 AND R645-103-234.100**, USING THE C1C2 FORM, THE PERMITTEE SHOULD INSTRUCT THE DIVISION AS TO WHERE TO PLACE THE COUNTY ENCROACHMENT PERMIT IN THE MRP.

This question is the same as the preceding question. Please refer to the answer above.

**R645-301-121-200**, (1) THE PERMITTEE MUST EITHER CHANGE NATIVE FINAL SEED MIX REFERENCES TO REFLECT THE APPROPRIATE SEE MIX OR REMOVE ALL NON-NATIVE SPECIES FROM THE THREE FINAL SEE MIXES. (2) THE WIND FENCE POLE SUPPORTS DESCRIBED IN THE NARRATIVE AND DETAILED IN THE FIGURE IN APPENDIX F MUST BE CONSISTENT.

(1) Please refer to revised pages Ch. III pg 21 and Ch. IV pg A-2a. The word 'native has been deleted.

(2) Please refer to revised Ch. X, Part C, Appendix X:C-3, pg13.

**R645-301-142**, (1) A REVISED EXHIBIT D SHOWING THE BONDED AREA EQUIVALENT TO THE 289.6 ACRE POTENTIAL SURFACE OPERATIONS AREA DETAILED IN TABLE III-2. (2) PROVIDE PLATES III-1 THROUGH III-4A LABELED WITH THE AREAS OUTLINED IN TABLE III-2 (AS MENTIONED ON PAGE 1 OF CHAPTER III).

(1) Please refer to Plate III-9, Permit Boundaries. Exhibit D has been incorporated into this map to clarify the permit area and its relationship to the surface affected area. Ch. III pg 2 has also been revised to clarify the surface disturbance area.

(2) Plate III-1 was revised in the in the previous deficiency response dated 9/12/03. Plates III-2, III-3, III-4 and III-4a have been revised to match table III-2 and Plate III-9.

**R645-301-521.133**, THE PLAN MUST INCLUDE A MAP SHOWING THE PROPOSED LOCATION OF SAMPLERS TO OBJECTIVELY MEASURE THE SUCCESS OF THE DUST CONTROL PLAN.

There are no sampling devices proposed. Please refer to inserted Ch. X, Part C, pg 5b.

**R645-301-526.220, R645-301-526.221, R645-301-526.222**, THE PLAN MUST INCLUDE THE FOLLOWING ADDITIONS: (1) DESIGNATE SOMEONE RESPONSIBLE FOR WIND DATA COLLECTION AND MAINTENANCE OF THE WEATHER STATION. (2) USE THE AVAILABLE SITE SPECIFIC DATA, THE PERMITTEE MUST DECREASE THE WINDSPEED TRIGGER POINT FROM 35 MPH TO AN ELEVATED WIND SPEED MORE TYPICAL FOR THE SITE (3) THE BEST TECHNOLOGY FOR THE SITE WOULD APPEAR TO BE A WIND FENCE EXTENDING TO GROUND LEVEL. AN EXPLANATION FOR THE GAP BETWEEN THE GROUND AND THE WIND FENCE IS REQUESTED.

- (1) Please refer to revised Ch. X Part B, page 5.
- (2) Please refer to revised Ch. X, Part C, Appendix X.C-3, pg 9.
- (3) Please refer to revised Ch. X, Part C, Appendix X.C-3, pg 13.

**R645-301-526.222, R645-301-528, AND R645-301-244.100**, (1) PROVIDE IN THE MINING AND RECLAMATION PLAN OPERATIONS SECTION A COMMITMENT TO IMPLEMENT PHASE I AND PHASE II COMPONENTS OF THE NORWEST DUST CONTROL PLAN AS DESCRIBED IN APP.X.C-3. (2) INCLUDE IN THE TEXT OF THE OPERATIONS PLAN A DESCRIPTION OF THE SUPPORTING MEASURES TO BE EMPLOYED IN PHASE II. (3) DETERMINE A METHOD TO OBJECTIVELY MEASURE OF THE SUCCESS OF PHASE I DUST CONTROL STRATEGIES AS A EMANS OF DETERMINING WHEN PHASE II WILL BE IMPLEMENTED.

- (1) Please refer to revised Ch. II Page 25 and Ch. X, Part C, Page 5a.
- (2) Please refer to revised Ch. II Page 25.
- (3) Please refer to revised Ch. X, pg 5a and inserted Ch. X, Part C, pg 5b.

**R645-301-742.300**, IN THE EVENT NO DIVERSION STRUCTURE IS CONSTRUCTED ALONG THE EAST SIDE OF THE 1.5 ACRE ADDITION BY THE COUNTY, AS THEY REBUYILD THE COUNTY ROAD, THE APPLICANT SHALL INSTALL A DIVERSION STRUCTURE (BERM OR DITCH) ALONG THE EASTERN SIDE OF THE 1.5 ACRE ADDITION (JUST WEST OF THE ROAD). ANY CHANGES WILL BE REQUIRED TO BE STABLE AND SHOWN ON MAPS.

Please refer to revised Plate II-3. A berm will be added when the road relocation is built and as-built drawings will be submitted for your review.

**R645-301-830.130 AND R645-301-830.140**, THE PERMITTEE MUST CLARIFY THE POINTS OUTLINE IN THIS SECTION OF THE TA AS THEY PERTAIN TO PRODUCTIVITY AND EQUIPMENT SELECTION.

Please refer to the midterm review question and response approved by your Department on 12/22/03.

## **UMC 784.18**

Two (2) structures, associated with underground mining activities, are located within 100 ft. of the right-of-way of County Road 9-07. The location of Borehole Pump Facility #3 and the Northwest Coal Stockpile are shown on Plates VI-18 and II-1, respectively. They were approved by the Division and subsequently constructed according to the approved plan.

~~Two~~ ~~Three~~ ~~Four~~ structures associated with the 4th East Portal site are located within 100 ft. of the right of way of County Road 9-15. These structures consist of cattle guard, berms, ~~and the~~ perimeter fencing, ~~and the~~ relocated haulroad.

Other than future access or haul roads joining the public roads, Consol does not propose any other facilities within 100 ft. of a right-of-way. To protect the general public the entrance gate will be posted with a stop sign prior to entering onto the county road from the mine property. The county road will be posted with warning signs as to the existence of the mine entrance. Flagman will be used to protect the general public and employees during construction activities where operation of large equipment or transportation of supplies may create a safety concern. The following pages 18a thru 18d is the Emery County Encroachment Permit to upgrade county road 915 and to construct an access.

No public road relocations are proposed for the permit area.

### **UMC 784.23(a), (b) (1 through 12)**

This permit renewal application contains the necessary maps, plans and cross-sections to provide compliance with the appropriate regulations.

### **UMC 784.24**

Descriptions for transportation facilities, specifically roads and conveyor systems, whether existing or proposed, have been provided previously in this part.

For the sake of continuity we are providing all design information in Chapter IV. Chapter IV also covers the designs for relocation of natural drainage ways.

### **UMC 786.21**

All existing structures have been found by the Division to be in compliance with this regulation.

### **UMC 817.150 - 176**

Detailed design information for all roads, to show compliance with these performance standards, is contained in Chapter IV.

Revised 10/2002  
Revised 9/2003  
Revised 01/2004

**R645-301-243**, THE PLAN MUST INDICATE THAT AREAS RECEIVING REPEATED APPLICATIONS OF DUST SUPPRESSANT (MGC1) SHOWN ON FIGURE 14 OF APP. X.C-3 MUST BE SAMPLED AND ANALYZED FOR SAR, PH, AND EC PRIOR TO FINAL RECLAMATION GRADING TO DETERMINE WHETHER AMENDMENTS OR SPECIAL HANDLING ARE NECESSARY.

Please refer to revised Ch. X, Part C, Appendix X.C-3, pg 24.

**R645-301-244.200**, THE PLAN MUST INDICATE MEASURES TAKEN TO DATE TO STABILIZE AREAS ALONG THE FENCE LINES AFFECTED BY VEHICLE TRAFFIC. I.E. MENTION THE AREA DISTURBED BY VEHICLE TRAFFIC DURING THE INSTALLATION OF THE TRANSMISSION LINES (ALONG THE SOUTH FENCE LINE) SEEDED ON AUGUST 19, 2003; THE AREA DISTURBED BY VEHICLE TRAFFIC DURING CONSTRUCTION OF THE WEST FENCE LINE [HYDROMULCHED (ONLY) DURING THE FALL OF 2002]; AND THE AREA ALONG THE SOUTHEAST FENCE LINE AFFECTED BY VEHICLE TRAFFIC DURING INSTALLATION OF THE TRANSMISSION LINES AND SUBSEQUENT REPAIRS TO TRANSMISSION LINES [HYDROMULCHED (ONLY) DURING THE FALL OF 2002].

Please refer to Chapter III pg. 4b

**R645-301-322-210**, THE PERMITTEE MUST CLARIFY WHETHER THEY PARTICIPATED IN THE 2003 RAPTOR SURVEY AS SUGGESTED BY THE CONSULTANT IN APPENDIX VIII-3, "SENSITIVE SPECIES SURVEY OF THE 1.5 ACRE EXPANSION AREA AT THE 4<sup>TH</sup> EAST PORTAL," PAGE 3 AND/OR PROVIDE THE RESULTS OF THE RAPTOR SURVEY CONDUCTED IN 2003.

Consol did not participate in the 2003 survey. Chapter VIII Appendix VIII-3 "Sensitive Species Survey Of the 1.5 Acre Expansion Area at the 4<sup>th</sup> East Portal," page 3 has been changed to reflect this.

**R645-301-358**, THE PERMITTEE'S MEASURE OF SUCCESS OF THE PHASE 1 CONTROLS MUST INCLUDE MONITORING IN THE AREA EAST OF THE PERMIT BOUNDARY.

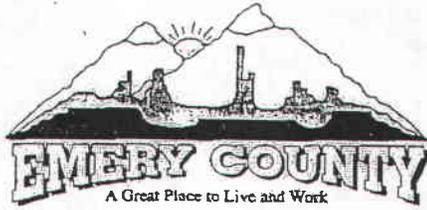
Please refer to inserted Ch. X Part C, pg 5b

**R645-301-521.100**, THE APPLICANT SHALL SUBMIT PLATE II-3 SHOWING A DIVERSIONS INSTALLED ALONG THE EAST SIDE OF THE 1.5 ACRE ADDITION.

Please refer to revised Plate II-3. A berm will be added when the road relocation is built and as-built drawings will be submitted for your review.

**DUST TREATMENT PROGRAM (COAL YARD AND TRUCK RE-ROUTE)** It will be readily apparent (blowing dust) to area personnel if dust suppressant needs to be re-applied in the coal yard and the re-route areas. *The areas receiving dust suppressant outlined on Figure 14 will be sampled and analyzed for SAR, pH and EC prior to final reclamation grading.*

*Revised 1-04*



Road Department

PERMIT

Permit#200331

Application having been made by Consolidation Coal Company through Jonathan Pachter, its authorized agent, a fee of \$25.00 being paid and a Letter of Financial Assurance in lieu of a bond provided, the Application having been reviewed and accepted, permission is hereby granted Applicant to proceed with the construction of an access for the purpose of routing haul truck traffic into the 4<sup>th</sup> East Portal with proposed widening of the Cowboy Mine Road #915. Design subject to final approval by the County Engineers or Road Supervisor.

Stipulations:

1. Dust control during construction period.
2. Proper signing while construction is in effect.
3. Posting for safety during construction and traffic control (if needed).
4. Road repairs in the event of damages.
5. Final inspection upon completion of project.
6. Strict compliance with Ordinance 8-7-85A or as amended.

DATED this 16<sup>th</sup> day of September, 2003.

  
 \_\_\_\_\_  
 Supervisor

EMERY COUNTY ROAD DEPARTMENT

By   
 \_\_\_\_\_

INSPECTION AND RELEASE

The Emery County Road Department Supervisor inspected said site on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, finds the following:

Deficiencies which must be corrected before release can be considered.

Released

\_\_\_\_\_  
 Supervisor

EMERY COUNTY ROAD DEPARTMENT

By \_\_\_\_\_

Person to Contact:

Name: James Bvars

Address: P O Box 527, Emery, Utah 84522

Phone #: (435) 286-3509  
 P.O. Box 889 • 300 North 1st West • Castle Dale, Utah 84513 • Telephone (435) 381-5450 • FAX (435) 381-5239



**CONSOL Energy Inc.**

1800 Washington Road

Pittsburgh, PA 15241

phone: 412/831-4679

fax: 412/831-4774

e-mail: [Jonathanpachter@consolenergy.com](mailto:Jonathanpachter@consolenergy.com)

web: [www.consolenergy.com](http://www.consolenergy.com)

September 10, 2003

Mr. Rex Funk  
Emery County Road Department  
P.O. Box 889  
Castle Dale, UT 84513

Re: Consolidation Coal Company – Emery Mine, 4<sup>th</sup> East Portal  
Roadway Encroachment Application and Maintenance in Lieu of Bond Request

Dear Mr. Funk:

Attached please find a completed application for roadway encroachment to affect County Road (Cowboy Mine Road) 915, located to the east of CONSOL's Emery Mine 4<sup>th</sup> East Portal. As described in the application, the purpose of the encroachment is to re-route haul truck traffic. In order to accommodate haul trucks, the unpaved road will be upgraded to include widening to allow for two-way traffic, grading, providing proper drainage, applying a suitable gravel cover, and treating the gravel surface with an acceptable dust suppressant, e.g., magnesium chloride. The upgrades just described also apply to the turn-off from CR 915 onto the Emery Mine property.

In lieu of a bond, CONSOL requests that Emery County accept this letter of assurance that maintenance will be performed on the segment of CR 915 subject to encroachment. The gravel cover will be kept intact, and dust suppressant will be re-applied as necessary to maintain its effectiveness.

At the end of mine life, CONSOL understands that the county will assume maintenance of the improved segment at that time.

Please call me with any questions or concerns.

Very truly yours,

Jonathan Pachter

Manager – Environmental Permits

Attachment

cc: John Gefferth

**Applicant:** Consolidation Coal Company  
**Address:** P.O. Box 527  
Emery, Utah 84522  
**Phone:** 435-286-2301

**ROADWAY ENCROACHMENT APPLICATION**

Consolidation Coal Company (Applicant) hereby applies for a permit to encroach upon a roadway within Emery County known as Cowboy Mine Road 915 for the purpose of routing haul truck traffic into the 4th East Portal coal yard at the Emery Mine.

Said encroachment is proposed at the following location upon said roadway beginning at the north end of CMR 915 at the entrance to the 4th East Portal yard area, and proceeding about 500 feet in a southeasterly direction along the unpaved road\* and is described as the haul truck re-route. See attached map.

Applicant proposes work to begin on or about October 6, 2003 and to be completed on or before October 14, 2003. A processing fee of \$25 is tendered with this Application. Applicant agrees to comply with all laws, ordinances and regulations of all governmental agencies, including, but not limited to Emery County, as well as instructions of the Emery County Road Department Supervisor or his indicated representative. Fees in the amount of \*\* and a bond in the amount of \*\* be in force for a period of \*\* years, are hereby tendered, or will be tendered before a Permit is issued.

DATED this \_\_\_ day of \_\_\_, 20\_\_

Jonathan Pachter  
(Applicant) *Jonathan M. Pachter*

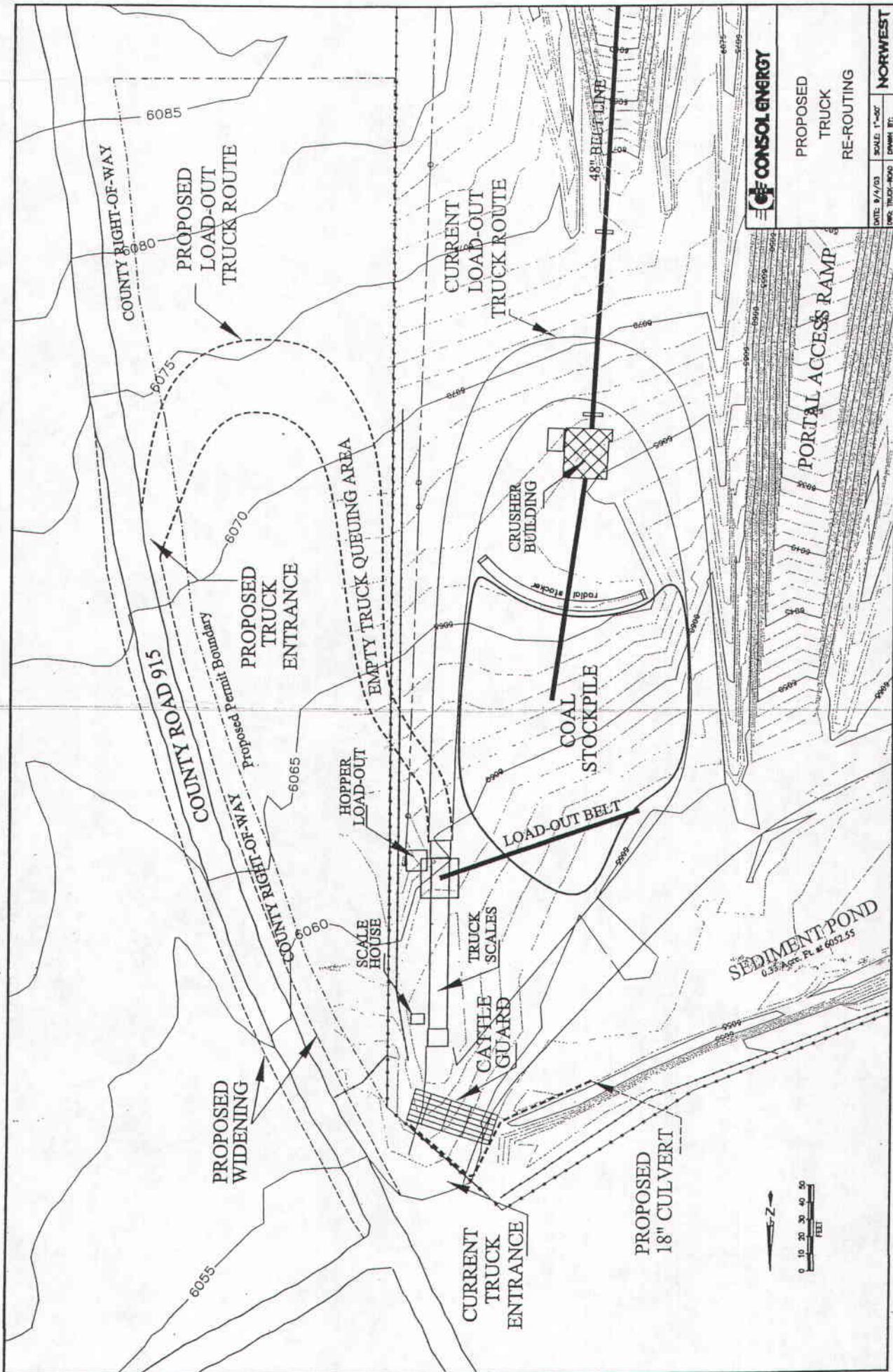
Manager - Environmental Permits  
Title

James Byars  
Person to Contact on Job Site

\* to a turn-in to CONSOL's coal yard.  
\*\* Please see attached cover and maintenance in lieu of bond letter from applicant.

see above  
Address  
435-286-3509  
Phone #

Mail completed application to:  
Emery County Road Department  
P. O. Box 889  
Castle Dale, Utah 84513



**CONSOL ENERGY**

PROPOSED  
TRUCK  
RE-ROUTING

DATE: 8/4/03  
SCALE: 1"=50'  
REV: TRUCK-REV01  
SHEET 81  
NORWEST

Topsoil material contained within stockpiles will be sampled and analyzed for soil texture, available potassium, phosphorus, total nitrogen, and pH prior to redistribution. Any cryptogamic material which was harvested during topsoil salvaging and transplanted on the topsoil stockpile needs to be reharvested prior to disturbing the stockpile. The cryptogams should be temporarily stored in a dry place until topsoil redistribution, gouging, seeding and mulching is completed.

After respreading and soil testing have been completed, the seedbed may have, fertilizer broadcasted or sprayed onto the soil. Incorporation of the fertilizer and other amendments into the rooting zone by surface roughening prior to seeding the approved seed mix described in Chapter VIII.C.4.

Reclamation of subsoil and topsoil stockpile areas will be completed in the same manner as other disturbed areas. Subsoil stockpiles will be removed to the original ground surface during grading and backfilling operations. Topsoil stockpiles will be removed until the required topsoil depth is retained over the stockpile site. Thus, topsoil respread operations need only to be conducted on the subsoil stockpile sites. Surface preparation on all subsoil and topsoil stockpile sites will be conducted as previously described.

Plates III-1, III-2, III-3, III-4 and III-4A, indicate the location of all existing and near-future disturbance areas at Emery Mine. For additional information pertaining to the topsoil quality, data, and substitution plans, please refer to Chapter VII.

During final reclamation at the 4th East Portal the topsoil will be respread to an average depth of 7 to 8 inches. This average is derived from taking the loose cubic yards placed in the topsoil stockpile of 7,840 cu. yds plus topsoil berms (1,400 cu. yds) plus and estimated 1,200 yards from the disturbed land (1.0 ac.) of the extension area (avg. 9 inch), over a total 9.0 10.0 acres of disturbed land (10 11.0 acres disturbed minus 1.0 acre of rock outcrop) where topsoil was salvaged. The 7,840 cu. yds. contained within the current topsoil stockpile was obtained from an as-built certification of the stockpile. The previous yardage reported of 12,900 cu. yds. was a rough calculation taking only a few elevations and assuming an overall average height for the stockpile. Based on the resurvey, the overall height of the stockpile was found to less than first assumed. The total 10,440 cubic yards of stored topsoil will be respread over ten (10) acres of reclaimed disturbance area. One (1) acre of the disturbed land will not be retopsoiled due to stream restoration of the original rock lined channel which transects the disturbance area. Therefore the average depth of redistributed topsoil shall be:

Area to be Retopsoiled: 10.0 acres \* 43,560 sq ft/acre = 435,600 sq ft

Volume of Material Available: 10,440 cu yds \* 27 cu ft /cu yd = 281,880 cu ft

Depth of Cover (D in ft): Area for Retopsoiling (435,600 sq ft) \* D = Available Topsoil (281,880 cu. ft.)

therefore,  $D = \frac{281,880 \text{ cu ft}}{435,600 \text{ sq ft}}$  or  $D = .64 \text{ ft or } 7.7 \text{ inches}$

The topsoiled surface will be roughened (gouged) by pocking with a backhoe or excavator. Following the roughening the site will be seeded with the appropriate warm season native seed mixture and mulch as described in Chapter VIII.C.4 and VIII.C.7.

If cryptogamic soils were harvested, they should be applied manually as a final step. They should be cryptogams shall be planted in selective locations, such as along the interior edges of gouged depressions. Areas where this material is transplanted, shall be recorded either by survey and/or marked in the field.

Inserted 10/2002  
Revised 10/2003  
Revised 1/2004

### Earthmoving Activity -

4th East development involved excavating a boxcut to ramp down to the coal seam. Ramp constructed 10% grade with depth of approximately 70 ft. The boxcut is to be backfilled and restoration of an ephemeral stream channel through the backfilled boxcut. The portal consists of three entries which will require MSHA approved seals be constructed and backfilled in accordance with MRP (refer to page 16, chapter III). Site is to be returned to approximate original contour (AOC). Backfill material to come from the stored excavation material stockpile (see Plate IV-3, Chapter IV). Fill material is to be placed in three (3') foot lifts and compacted. The fill material primarily consists of blasted rock (sandstone) from the original excavation of the boxcut. The final three (3) foot lift is not to be compacted. Travel over the final lift should be limited and avoided by heavy rubber tired equipment.

In addition all waste coal material from the stockpile area is to be placed in the bottom of the boxcut. Sedimentation Pond #9 and the Diversion ditch are to be backfilled and graded into the surrounding topography.

Sedimentation pond is partially incised 0.3 ac-ft of sediment volume. The pond bottom to be sampled for toxicity and sediment placed in the mine's refuse pile if needed. Volume incised is 460 b.c.y.

Diversion ditch measures 500 feet in length with an average depth of 5 feet, bottom width of 6 ft and side slope of 2H:1V. Volume is 1,500 b.c.y.

Ventilation shaft to be backfilled with non toxic material from the excavation stockpile. Shaft measures 16.5 ft in diameter with a depth of 70 feet.

Non topsoil berms need to be graded back into the surrounding topography. This earthwork can be included with the final grading of the backfill prior to topsoiling. Rubber liner required (300' x 14') as part of stream restoration.

### Topsoil Replacement

Topsoil stockpile is located adjacent to the excavation stockpile. The MRP requires for 7 to 8-inches of topsoil be spread over 10 acres of disturbed area where topsoil was originally salvaged. The plan notes the harvesting of cryptogams from the topsoil crust prior to disturbing for topsoiling activities, segregation of top 2-inch crust be salvaged and used for top dressing of the respread topsoil. Topsoil removal area is 9 11 acres. Refer to Plate III-1, Chapter III.

### Revegetation

Under this MRP, topsoil was saved in-place underneath the excavation stockpile. The MRP requires that this in-place topsoil along with the original surface of the topsoil stockpile be ripped. The area involves 5 acres. The ripping of 12-inches with a spacing of 2-feet is required to decompress the soil horizons. These five acres will be roughened and seeded with warm season a permanent seed mix and mulched. The 9 11 acres where topsoil is to be respread will be surface roughened prior to seeding and mulching with the warm season native seed mix. The surface roughening involves using a backhoe or excavator to develop shallow depressions randomly to the disturbed surface. Following mulching all cryptogam material shall be transplanted back into depressions formed from the roughening activity. Area of transplanting should be recorded and marked.

Barriers are widely used in industry for stockpile segregation and also for containment. Concrete barriers may also double as stockpile erosion control in general industry; they are more durable than the typical silt fence, i.e., an improvement over the typical control. Confining the base of the stockpile with barriers will reduce encroachment of product into other areas of the plant, e.g., the load out and scale areas, where the material may otherwise become pulverized under tire pressure and dispersed by wind. The concrete structure also doubles as a safety barrier for the front-end loader operator; it defines the perimeter of the raised stockpile berm, and it segregates the loader from oncoming haul trucks in the loading area.

ASARCO in East Helena, MT successfully used concrete barriers to contain open stockpiles as part of its EPA-approved State Implementation Plan (SIP) for lead.

The barriers are very durable and are considered GEP and BMP in this application.

#### **WIND FENCES**

A wind fence, *similar to the one* as shown in Figure 7, will be installed upwind of the stockpile area at the 4<sup>th</sup> East Portal. The conceptual placement of the fence is illustrated in Figure 8. A wind fence disrupts the mechanism that causes dust particles to become airborne in the first place, i.e., moving air or wind. Wind fences are upstream devices intended to deflect air movement and reduce airspeed, and are acknowledged as a control device in EPA's AP-42 (see Appendix B). When properly installed and when the wind is in proper alignment to the wind fence, wind speed is reduced up to 60%. Final placement of the fence will be determined following consultation with the vendor. The attached wind rose for Ferron, Utah (about 18 miles north of the mine) and the attached topographical map of the coal yard area will be factored into the decision. See Figure 9 and plate III-1 in the permit. The wind fence will extend to ground level.

The wind fence material will be either the Raring Corporation's WindTamer fabric mesh or Ultra Span's panel system, where panels are suspended from cables attached to upright wooden or steel poles. The WindTamer fabric is mounted directly to either steel or wooden poles using mounting brackets. The fabric is drawn tight during installation using a come along device so that the fabric does not flap in the wind. The taut fabric functions as a semi-permeable barrier and wind deflection device. Appendix F shows the basic design of the UltraSpan system that may be installed at Emery.

Emery has opted for ~~wooden telephone~~ *steel* poles as the fabric support structure. The poles will be installed in a perimeter line upwind of the stockpile at a spacing of about 15 feet. The fence length is estimated at 400 feet with a height of about 45 feet.

Although not widely used in industry, wind fences are nevertheless acknowledged in EPA's AP-42 document as a stockpile dust control mechanism, usually in tandem with one or more additional controls, such as pile wetting with water. See Appendix B.

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TABLE III-1

**SURFACE OPERATIONS AREA**  
**PRE- AND POST-MINING LAND USES**

<u>Land Use</u>	<u>Acres</u> <u>Pre-Mining</u>	<u>Acres</u> <u>Post-Mining</u>
Grazing/Wildlife	<del>415.7</del> <u>417.2</u>	<del>435.2</del> <u>436.7</u>
Industrial (Coal Mining)	19.5	0
Roads	<u>5.8</u>	<u>5.8</u>
TOTAL	<del>441.0</del> <u>442.5</u>	<del>441.0</del> <u>442.5</u>

TABLE III-2

**EXISTING AND FUTURE**  
**SURFACE DISTURBANCE AREAS**

	<u>Acres</u>	<u>%</u>
Prior to August 3, 1977 Area	19.5	4
August 3, 1977 to May 3, 1978 Area	4.7	1
May 3, 1978 to January 5, 1986 Area	17.9	4
Post January 5, 1986 Area	8.6	2
<sup>1</sup> <i>Proposed Near Future Disturbance Area</i>	<del>85.7</del> <u>86.2</u>	<del>20</del>
Post July 1, 2002 Area at 4th East Portal	<del>15.0</del> <u>16.0</u>	3
Potential Surface Operations Area	<del>289.6</del> <u>375.8</u>	<del>66</del> <u>86</u>
TOTAL	<del>441.0</del> <u>442.5</u>	100

<sup>1</sup>*Includes 7.5 8.0 acres at 4E Portal Site*

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UMC 817.100, UMC 817.101(a), UMC 817.113

A description of each item listed under Contemporaneous Reclamation in the reclamation schedule follows.

The sections of road reclaimed in 1982 were completed in conjunction with upgrading the road to borehole pump #1. Reclamation consisted of removing existing culverts across Quitchupah Creek and disking and harrowing of the roadbeds. Since no earth materials were removed and no road surfacing material was placed during construction (prior to Aug. 3, 1977) of these roads, no grading, backfilling or topsoil respreading was required. Following this the reclaimed site was seeded with the following seed mix.

<u>Species</u>	<u>Lbs PLS<sup>1</sup></u>	<u>PLS/Sq.Ft.</u>
Crested wheatgrass	0.5	10
Western wheatgrass	1.0	14
Indian ricegrass	0.5	11
Galleta	0.5	9
Streambank wheatgrass	1.0	18
Fourwing saltbush	<u>1.5</u>	<u>12</u>
TOTAL	5.0	74

Seeding was performed with a grass seed drill with disc furrow openers and press or packing wheels. No chemical soil amendments, irrigation or herbicides were necessary. Straw mulch was applied to the reclaimed areas and crimped at the rate of 1.5 tons/acre.

The reclamation of an old abandoned mine portal and associated borrow area for backfill was completed in 1986 in conjunction with fire control activities. The method utilized to seal the portal is described in Chapter III.C.2. Since the sealed portal was ripped to protect the area from erosion, no seed was applied. The reclaimed borrow area is located along Christiansen Wash approximately three hundred feet upstream of the sealed portal. It is located in an area where soils consist of gullied and alluvial land (Plate VII-1) and the vegetation is of the greasewood shrubland type (Plate VIII-1). Reclamation of the borrow area consisted of grading to approximate predisturbance conditions and broadcasting according to seed plan B (Chapter VIII.C.4). The application rate for seed plan B was doubled and the area was lightly raked to aid in covering the seeds since the seed was applied by broadcasting.

The area affected by vehicle traffic to install wooden poles along the east fence line of the 4th East Portal was seeded and hydro-mulched with native seed mix described in Chapter VIII.C.3 on August 19, 2003.

Areas affected along the south and southeast corner of the fence line by vehicle traffic during the construction of the transmission lines and subsequence repair was hydromulched only in the fall of 2002.

The area affected along the west fence line during construction of the perimeter fence was hydromulched only during the fall of 2002.

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<sup>1</sup>Pure Live Seed

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.

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

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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 raptor survey conducted by DWR and other coal operators of the area that year. The survey was conducted in Spring 2002.

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.

38-year period. Temperature extremes are shown on Tables X.B-4 and X.B-5. During the period from 1960 to 1978 winter temperatures varied from -16°F to 85°F and summer temperatures varied from 11°F to 98°F. (BLM, 1979).

Since 1978, there has not been *no a* weather station operating in the vicinity of the Emery Mine site. From 1978 thru 1986 a weather station did record precipitation, temperature and wind at a higher elevation (+1,400 feet). Therefore, the permittee will install a weather station on-site of the permit. The weather station shall record precipitation, temperature, barometric pressure, wind speed and direction. The information shall be recorded and submitted within the annual report. The initial data from this weather station is anticipated to begin in January 2003.

*The superintendent or his designated person will be responsible for wind data collection and maintenance of the weather station.*

#### References

Bureau of Land Management. 1979. EMRIA Report No. 16: Reclaimability Analysis of the emery Coal Field, Emery County, Utah. Prepared by Playa Del Rey, CA: Geoscientific Systems and Consulting for the BLM.

VTN. 1974. Environmental Assessment Report for the Emery Mine Project, Consolidation Coal Co. and Kemmerer Coal Co., Emery County, Utah. Denver: VTN for Consolidation Coal Company.

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## 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).

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*

### 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 Benetechs program for dust control on conveyor systems and downstream stockpiles

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 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 Quitcupah Creek and Christiansen Wash. The completed report from JBR is attached as Appendix IX-2.

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## 1a. 4th East Portal Site

Fugitive dust emission at the 4th East Portal will consist primarily from the coal handling and stockpiling of coal. The coal stockpile will be sprayed with water as it is discharged into the pile. In addition the stockpile will be protected to some degree by the rock stockpile located to along the west side of the boxcut. This rock stockpile will function as a wind break from the prevailing westerly winds. The rock stockpile consists primarily of cobble to boulder size sandstone.

The road to the coal loadout will be watered periodically throughout the day. Topsoil stockpile will be roughened, seeded and mulched to prevent wind and water erosion. Berms shall remain roughened and seeded. Rock or wood mulch as well as erosion control netting may be utilized as situation warrants to minimize effects of erosion.

On January 9, 2003, Notice of Violation was written for wind blown coal fines outside the permit area. To abate the violation the following Air Resource Protection shall be implemented to eliminate the generation of coal fines and provide measures to protect the surrounding environment from accumulation of coal fines should they occur.

### Dust Control Program:

- Dust treatment program (coal yard and truck re-route areas)
- Water cannon
- Concrete (Jersey) barriers
- Wind fences
- Conveyor and transfer point enclosures
- Water sprays (conveyors)
- Water truck
- Vacuum truck
- Cattle guard
- Replacement of crusher
- Haul truck re-routng
- Maintenance plan

Details for each of these engineering controls and other measures are discussed in Appendix X.C-3. Consol is committed to implementing Phase I of Norwests 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.

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