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CONSOL ENERGY™

Consolidation Coal Company
Group 2- Sesser Office
Post Office Box 566
Sesser, Illinois 62884

April 6, 2001

Mr. Daron R. Haddock, Permit Supervisor
Utah Coal Regulatory Program
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Re: Permit Change, Emery Deep Mine
Permit ACT/015/015

Dear Mr. Haddock:

The enclosed "Application For Permit Change" is to address technical deficiencies identified by your department within the biology sections of the Mining and Reclamation Plan for the Emery Deep Mine. We offer the following responses to these deficiencies:

1. **R645-301-322**, THE PERMITTEE NEEDS TO UPDATE THE LIST OF THREATENED, ENDANGERED, AND CANDIDATE SPECIES THAT COULD OCCUR IN THE PERMIT AREA.

   Updated and revised listing of threatened, endangered and candidate species have been placed in the permit narrative. Page 17, Chapter VIII, Section B.4 is revised and Page 17a, Chapter VIII, Section B.4 has been added.

2. **R645-301-331**, THE PERMITTEE NEEDS TO CLARIFY WHETHER THE SPECIES LISTS IN SECTION VIII.C.3 ARE TRULY FOR CONTEMPORANEOUS RECLAMATION, IN OTHER WORDS PERMANENT RECLAMATION OCCURRING CONTEMPORANEOUSLY WITH OPERATIONS, OR IF THEY ARE FOR INTERIM REVEGETATION. IF THEY ARE NOT FOR INTERIM REVEGETATION, THE PLAN NEEDS TO SHOW WHAT SPECIES WILL BE USED FOR THIS PURPOSE. ALSO, THE PLAN NEEDS TO SHOW WHAT METHODS WOULD BE USED TO PREPARE THE SOIL, SEED, AND MULCH FOR INTERIM REVEGETATION.

   Clarification to the meaning of "contemporaneous" has been made on Page 20, Section VIII.C.3. The application narrative is modified to include "interim or temporary" vegetation seed mix.

3. **R645-301-341.100**, THE NORMAL TIME FOR SEEDING IN MOST AREAS OF UTAH IS IN THE FALL ALTHOUGH SOME MID-SUMMER SEEDING IS PROBABLY FEASIBLE IN SOME LOCATIONS TO TRY TO ESTABLISH WARM SEASON SPECIES. UNLESS THE PERMITTEE CAN SHOW THAT SEEDING AT OTHER TIMES IS FEASIBLE, THE PORTIONS OF THE PLAN DISCUSSING TIMING OF THE SEEDING OPERATIONS NEED TO BE MODIFIED.

We agree late fall seeding is definitely preferred and generally will be performed at that time. However, the permittee does maintain that the option for spring and late summer seeding be provided as part of our application.

Based on surface roughening by ripping subsoils and development of mounds and depression in the placement and fluffing of redistributed plant growth material, we feel that these options be available. The enhancement to the water harvesting characteristics for this type of reclamation may provide the additional opportunities for planting especially warm season grasses. Opportunities for planting may also increase with improvement of weather forecasting models.

The permittee acknowledges that seeding in spring and summer could be result in reseeding in late fall thus restarting the liability period.

Please refer to Page 22, Chapter III for revised narrative.

4. **R645-301-341.210**, THE AMOUNT OF YELLOW SWEET CLOVER IN THE SEED MIX NEEDS TO BE REDUCED. THE DIVISION RECOMMENDS OTHER CHANGES TO THE SEED MIXES BASED ON TEST PLOT RESULTS, AND THE PERMITTEE SHOULD CONSIDER PLANTING SEEDLINGS OF SOME SPECIES, SUCH AS FOURWING SALTBUSH AND MAT SALTBUSH.

The use of Yellow Sweet Clover (Melilotus officinalis) has been reduced to 0.5 pounds of live seed per acre.

Please refer to page 20, Chapter VIII, Section C.3 Contemporaneous (Interim) Reclamation and Page 21 and 22, Chapter VIII, Section C.4 Revegetation

5. **R645-301-341.220**, THE MINING AND RECLAMATION PLAN INDICATES SHRUB AND GRASS SEED WILL BE DRILL SEEDED, BUT DRILLING TENDS TO REDUCE SURFACE ROUGHENING WHICH THE DIVISION CONSIDERS CRITICAL AT THIS SITE. ALSO, SOME SPECIES IN THE SEED MIXES EITHER NEED TO HAVE LIGHT OR MUST BE NEAR THE SURFACE TO GERMINATE AND ESTABLISH, AND THESE REQUIREMENTS ARE NOT COMPATIBLE WITH DRILL SEEDING. THE PERMITTEE NEEDS TO PROPOSE SEEDING METHODS THAT WILL NOT REDUCE ROUGHENING OR BURY SEEDS TOO DEEPLY.

   Revised narrative to page 22, Chapter VIII, Section C.4 modifies method of seeding to include broadcast seeding. We agree that broadcast seeding is most desirable for roughened seedbed and selected seed types. Therefore, we propose to prepare the seedbed by ripping subsoils 6-12 inches in depth with a grader of dozer. The plant growth material will be respread using low ground pressure equipment to reduce compaction. The final seedbed will be roughened by gouging or pocking the oil surface. The species within the seed mix suitable for drill seeding maybe drilled with a rangeland drill. Care will be taken minimize land leveling from the drill. The other species more suitable for broadcast seeding methods will be applied. Mulch maybe applied and anchored by crimping cramming the organic mulch into the ground with bucket teeth or affix by tackifier or netting.

6. **R645-301-341.230**, THE PLAN SAYS THE STRAW OR HAY MULCH WILL BE ANCHORED BY CRIMPING BUT IT NEEDS TO SAY WHAT CRIMPING OR OTHER ANCHORING METHOD WILL BE USED. CRIMPING WITH THE TEETH OF A BACKHOE OR TRACKHOE IS NOT VERY EFFECTIVE, AND CRIMPING WITH A DISK REDUCES THE AMOUNT OF SURFACE ROUGHENING. ALTERNATIVE METHODS INCLUDE PUTTING NETTING OVER THE STRAW OR HYDROMULCHING WITH JUST ENOUGH WOOD FIBER AND TACKIFIER TO HOLD THE MULCH DOWN.

   Narrative of Page 22, Chapter III, Section F.1 and Page 23, Chapter VIII.C.7 has been revised to provide for the use of both organic and inorganic mulch. Revised text incorporates alternative methods described in the "The Practical Guide to Reclamation in Utah" developed by the Utah Division of Oil Gas and Mining.

7. **R645-301-341.250**, SECTION VIII.C.9 SAYS THREE REFERENCE AREAS WERE SET UP AS REVEGETATION SUCCESS STANDARDS FOR AREAS DISTURBED AFTER 1977, BUT SECTION VIII.A AND PLATE VIII-1 INDICATE THERE IS A FOURTH REFERENCE AREA IN A PINYON/JUNIPER COMMUNITY. THESE PORTIONS OF THE PLAN NEED TO BE CONSISTENT. ALSO, THE REFERENCE AREAS ARE NOT AS LARGE AS REQUIRED.

The fourth reference area of Pinyon/Juniper was established for the base vegetation study conducted in 1980. The proposed surface disturbance area of 441.0 acres of the permit does not contain a Pinyon/Juniper community. Therefore, a reference area was not established for Pinyon/Juniper.

The remaining three reference areas were established with assistance by DOGM in 1980 under the interim rules. These reference areas do not meet the minimum suggested size of one (1) acre as described in Appendix A- Vegetation Guidelines (February 4, 1992). We suggest that representatives of your Department and Consolidation Coal along with a representative of the Soil Conservation Service meet at the mine site to inspect the current reference areas with the intention of enlarging these reference areas. This site visit may also help to satisfy Item 9 of these deficiency responses concerning suitability of range conditions for these reference areas.

8. **R645-301-341.250**, THE PERMITTEE NEEDS TO PROPOSE SUCCESS STANDARDS FOR THE AREAS DISTURBED BY MINING BEFORE 1977.

Page 24, Chapter VIII, Section C.9 revises the narrative concerning success standards for areas disturbed prior to August 3, 1977. In accordance with standards set in R645.301.356.250, areas mined before August 3, 1977 will be a minimum, "the vegetative ground cover will not be less than the ground cover existing before redisturbance and will be adequate to control erosion".

9. **R645-301-341.250**, THE PLAN GIVES NO INDICATION WHETHER THE REFERENCE AREAS HAVE EVER BEEN CHECKED FOR RANGE CONDITION BY THE SOIL CONSERVATION SERVICE OR THE NATURAL RESOURCES CONSERVATION SERVICE. TO BE ACCEPTABLE, THEY NEED TO BE IN FAIR OR BETTER RANGE CONDITION.

Permittee is not sure if the reference areas have been checked for range conditions. Therefore, we propose to meet with representatives of the Division of Oil Gas and Mining and the Soil Conservation Service to evaluate the current reference areas. The evaluation also shall include possible enlargement of the current reference areas to be a minimum of one (1) acre.

10. **R645-301-341.250**, THE PLAN NEEDS TO CONTAIN SUCCESS STANDARDS AND METHODS FOR MEASURING DIVERSITY, SEASONALITY, AND EROSION CONTROL.

Please refer to revised pages 24, 25 and inserted pages 25a and 25b of Chapter VIII, Section C.9 for reclamation success standards for post August 3, 1977 disturbed areas.

11. **R645-301-341**, SECTION III.B.1 SAYS SOILS UNDER THE ROADS *MAY* (EMPHASIS ADDED) BE TESTED FOR PHYSICAL AND CHEMICAL PARAMETERS. NO AREA SHOULD BE EXCLUDED FROM SOIL TESTING.

Page 10 of Chapter III, Section B.1 has been revised by overstriking to exclude the word "*may*" from soil testing.

12. **R645-301-341**, THE SURFACE PREPARATION TECHNIQUES NEED TO BE REVISED. IT IS VITAL THAT THE PERMITTEE USE THE BEST METHODS AVAILABLE TO INCREASE THE AMOUNT OF AVAILABLE WATER. THIS COULD BE DONE WITH LIMITED SURFACE ROUGHENING AND IRRIGATION, BUT IF IRRIGATION IS NOT USED, IT WILL PROBABLY BE NECESSARY TO IMPLEMENT EXTREME SURFACE ROUGHENING, SUCH AS GOUGING PITS ABOUT 12-18 INCHES DEEP AND THREE FEET IN DIAMETER. THE PLAN ALSO NEEDS TO SHOW HOW COMPACTION WILL BE REDUCED AND SEED SPREAD AS SOON AS POSSIBLE AFTER SURFACE PREPARATION TECHNIQUES ARE COMPLETED IN AN AREA.

Page 22, Chapter III, Section F.1, is revised to address the use of surface roughening methods and development of water harvesting structures. Best management practices

and technology will be used to create and maintain surface roughening features for harvesting of water.

Use of irrigation is included as part Page 24 of Chapter III.G.2, Revegetation and Erosion Monitoring and Maintenance. This narrative allows for irrigation of revegetated areas for the first two years to enhance establishment of permanent vegetation.

If surface roughening is conducted in a proper and prudent manner with the use of rock and boulders to create a microcosm conducive to establishing vegetation, irrigation will not be required.

13. **R645-301-342**, THE PLAN NEEDS TO SHOW THE PERMITTEE IS USING THE BEST TECHNOLOGY CURRENTLY AVAILABLE TO ENHANCE WILDLIFE HABITAT DURING RECLAMATION. IF ENHANCEMENT IS NOT FEASIBLE, THE PLAN NEEDS TO CONTAIN A STATEMENT TO THIS EFFECT AND DISCUSS WHY IT IS NOT FEASIBLE.

Wildlife will be enhanced through the development of roughened surfaces and use of large and small rock to create an undulated grazing/rangeland. The proposed permanent seed mixes conatin a variety of grasses and shrubs native to the area. Variety of vegetation is palatable to wildlife and plant seeds provide a food source for birds and rodents. The diversity of the vegetation provide both summer and winter forage.

Refer to revised page 25, Chapter III, Section G.3

If you have any questions concerning this application, please contact me at this office.

Sincerely,

Timothy D. Kirschbaum
Environmental Engineer
(618)-625-6847

w/ enclosure
cc: S. Behling, Emery Mine

APPLICATION FOR PERMIT CHANGE

Title of Change:	Permit Number: ACT / 015 / 015
UPDATE BIOLOGY SECTIONS	Mine: Emery Mine
	Permittee: Consolidation Coal

Description, include reason for change and timing required to implement:

Required changes due to Review of Biology Sections of Emery Deep Mining and Reclamation Plan Conducted by DOGM on 1-29-2001

☐ Yes	■ No	1. Change in the size of the Permit Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	■ No	2. Change in the size of the Disturbed Area? _____ acres ☐ increase ☐ decrease
☐ Yes	■ No	3. Will permit change include operations outside the Cumulative Hydrologic Impact Area?
☐ Yes	■ No	4. Will permit change include operations in hydrologic basins other than currently approved?
☐ Yes	■ No	5. Does permit change result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes	■ No	6. Does permit change require or include public notice publication?
☐ Yes	■ No	7. Permit change as a result of a Violation? Violation #
☐ Yes	■ No	8. Permit change as a result of a Division Order? D.O. #
☐ Yes	■ No	9. Permit change as a result of other law or regulations? Explain:
☐ Yes	■ No	10. Does permit change require or include ownership, control, right-of-entry, or compliance information?
☐ Yes	■ No	11. Does the permit change affect the surface landowner or change the post mining land use?
☐ Yes	■ No	12. Does permit change require or include collection and reporting of any baseline information?
☐ Yes	■ No	13. Could the permit change have any effect on wildlife or vegetation outside the current disturbed area?
■ Yes	☐ No	14. Does permit change require or include soil removal, storage or placement?
■ Yes	☐ No	15. Does permit change require or include vegetation monitoring, removal or revegetation activities?
☐ Yes	■ No	16. Does permit change require or include construction, modification, or removal of surface facilities?
☐ Yes	■ No	17. Does permit change require or include water monitoring, sediment or drainage control measures?
☐ Yes	■ No	18. Does permit change require or include certified designs, maps, or calculations?
☐ Yes	■ No	19. Does permit change require or include underground design or mine sequence and timing?
☐ Yes	■ No	20. Does permit change require or include subsidence control or monitoring?
☐ Yes	■ No	21. Have reclamation costs for bonding been provided or revised for any change in the reclamation plan?
☐ Yes	■ No	22. Is permit change within 100 feet of a public road or perennial stream or 500 feet of an occupied building?
☐ Yes	■ No	23. Is this permit change coal exploration activity ☐ inside ☐ outside of the permit area?

■ **Attach 3 complete copies of proposed permit change as it would be incorporated into the Mining and Reclamation Plan.**

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

Edwin D. Leach, MGR of ENVR. 4/6/01
Signed - Name - Position - Date

Subscribed and sworn to before me this 6th day of April, 2001.

"OFFICIAL SEAL"
JOANN WILLMORE
Notary Public, State of Illinois
My Commission Expires 12/10/03

JoAnn Willmore
Notary Public

Mt Commision Expires: December 10, 2003

Attest: STATE OF Illinois } ss:
COUNTY OF Jefferson }

Received by Oil, Gas & Mining

ASSIGNED PERMIT CHANGE NUMBER

Application for Permit Change
Detailed Schedule of Changes to the Permit

Title of Change:
UPDATE BIOLOGY SECTIONS

Permit Number: ACT / 015 / 015

Mine: Emery Mine

Permittee: Consolidation Coal

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit change. Individually list all the maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the existing mining and reclamation plan. **Include page, section and drawing numbers as part of the description.**

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 10, Chapter III
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 20, Chapter III
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 22, Chapter III
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 17, Chapter VIII
■ ADD	☐ REPLACE	☐ REMOVE	Insert Page 17a, Chapter VIII
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 20, Chapter VIII
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 21, Chapter VIII
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 22, Chapter VIII
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 23, Chapter VIII
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 24, Chapter VIII
☐ ADD	■ REPLACE	☐ REMOVE	Replace Page 25, Chapter VIII
■ ADD	☐ REPLACE	☐ REMOVE	Insert Page 25a, Chapter VIII
■ ADD	☐ REPLACE	☐ REMOVE	Insert Page 25b, Chapter VIII
☐ ADD	■ REPLACE	☐ REMOVE	Revised Page 25, Chapter III
☐ ADD	■ REPLACE	☐ REMOVE	Revised Chapter VIII, Table of Contents
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
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Any other specific or special instructions required for insertion of this proposal into the mining and reclamation plan?