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File AC 7/015/025

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MEC Mangum Engineering Consultants

388 East Boynton Road • Kaysville, Utah 84037 • (801) 544-3641

Pamela Grubaugh-Littig
Permit Supervisor
Utah Division of Oil Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

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DIVISION OF
OIL, GAS & MINING

19 October 1990

Pamela:

Ref: Five-Year Permit Renewal, Response to Technical Deficiency Document, Bear Canyon Mine, Co-Op Mining Company, ACT/015/025, Emery County, Utah

Attached with this letter are 14 copies of the latest revised/updated pages of the Mine Plan. These pages shall replace previous printing. Copies of revised Plates not included with this letter will be delivered to DOGM on Monday morning, 22 Nov 1990.

Enclosed is an itemized list discussing Co-Op Mining Companies response to the comments made in the Technical Deficiency Document received from DOGM 26 Sept 1990. An effort has been made to follow the list of items as given in the T.D. Please review these items and inform me of any additional information that may be required to complete approval. I understand that some stipulations may be required. Thank you for your cooperation in this matter.

Sincerely,

Kimly C. Mangum

Kimly C. Mangum, P.E.
Permitting & Compliance Consultant.

Enclosure(s)
cc: Co-Op Mining Co.

DOGM TD

GENERAL COMMENTS

Chapter 3 Due to the many changes and reduction of redundant areas Chapter 3 has been reprinted from page 58.

COVER LETTER

Rewritten coal rules. Reference to rewritten coal rules has been noted wherever applicable. Reference to old coal rules removed or replaced.

Table of Contents. Table of Contents have been replaced where dictated by changes.

Average Annual Depletion of Surface Water. Using the value of 3.2 gal/ton of recovered coal (typical for mining in the area) and the annual coal production rate of 400,000 ton/yr; the average annual depletion of surface water is 4 acre ft.

PAGE 1

EDITORIAL COMMENTS

The following pages are included and have been updated as indicated;

3-44,9-8, 9-16, 9-21(9-22), 9-22(9-23), 9-23(9-24), 2A-3, 9A-5, 2F-9 thru 2F-14 (two leases are duplicated in their entirety, some pages are duplicated within the leases.), Appendix 2-E, 2-iii, 3D-3.

PAGE 2

R614-301-100

113.310 pp 2A-2 thru 2A-5 have been updated to include additional information about violations.

116.100 New date is 2012 and has been corrected in text.

R614-301-200

221 SCS will be on-site 23 Oct 1990 to perform a new Prime Farmland Determination survey. Section 13, W1/2 has the same restrictive environment described in the letter from SCS, p. 8C-D. Sec. 13 was apparently left out as an oversite. Results will be forwarded to the Division upon receipt.

222 SCS is also under contract to perform a Class I Soil Survey of the bonded area and are scheduled to be on-site at 8:00 am on 23 Oct 1990. They have been asked to survey the site of the proposed Bear Creek culvert extension area and proposed topsoil pile location at the same time. Although we cannot predict the completion date of the report (soil testing will take 4 to 6 weeks) SCS has been notified of the urgency.

232 Text concerning topsoil handling has been compiled in Chapter 8 and all other chapters reference the appropriate sections in Chapter 8. See Section 8.7.1. Note added Table 8.7-1.

232.100 Text corrected p. 3-8. See 232 above.

PAGE 3

233 The use of downcast material was an issue involved with NOV 90-32-3-1. It is my understanding that this issue is under resolution and the downcast material will continue to be acceptable as substitute topsoil material. Use of similar material has proven to be successful at many other mines including Trail Canyon and Mill Fork on the east side of Bear Canyon.

Review of actual acreage of disturbed areas has revealed a need for additional topsoil material. Co-Op anticipates recovery of adequate topsoil material during the relocation of the topsoil pile, with recovery of suitable subsurface materials from the proposed shower house and new topsoil pile sites. This issue has been discussed in the updated pages.

Surface layers of soils described in SCS survey Appendix 8-B are defined as "very stony" and "cobbly". Experience at Trail Canyon indicates that soil materials to be used for backfill and regrading will be suitable for plant growth material. With this data and the pre-disturbed nature of the site it is felt that 6 in. of topsoil material will provide an appropriate seedbed to meet reclamation post-mining land use standards on the existing disturbed areas.

Results of the SCS survey, to be conducted this month must be used to complete the demonstration that adequate quantities of good quality topsoil material exists. Co-Op will complete the balance calculations as soon as the survey and test results are available. Text has been revised to reflect the additional area and bonding estimates have been updated appropriately in Section 3.6.8.

234 A new as-built survey has been conducted of the existing topsoil pile. Results will be placed on Plate 8-2 and submitted to the Department on or before 31 Oct 1990.

p 3-45 The word "relative" has been deleted.
p 3D-3 The last paragraph has been rewritten.
p 8-24 p 8-25 & 8-26. Revision made as requested.
p 8D-2 Approx test plot location is now shown on Plate 2-4. Test plot was seeded and marked in 1989. See comments concerning this issue above (233).

PAGE 4

242.200
p 3-37 Text revised as requested.
p 4-13 Text revised as requested.

242.110
p 3D-3 Text revised to more accurately describe reclamation procedure. Procedure is consistent with those performed at other successfully reclaimed sites.
p 3-65 Topsoil redistribution procedures outlined in Chapter 8. See Section 8.8. Other chapters reference Chapter 8. 10 day equilibrium statement removed.
p 3D-2 Clump planting defined on p 3D-4. Involves transplanting of vegetation established on the source material.

242.200 Text corrected, much of Chapter 3 rewritten with the elimination of actual topsoil and vegetation procedures. Backfilling found in Section 3.6.4.

PAGE 5

243 See Section 8.9.

R614-301-300

321.100 The Reference Area was surveyed in 1983. The consultant does not have any additional information concerning the sample results. We recommend that the level of identification will be improved during the survey to be taken at the final Five-Year Permit renewal. SCS will perform a vegetation survey this month.

322.100 Co-Op will conduct a raptor survey over the permit area in May, 1991.

322.220 p 10-16 now includes the required statement. A similar statement has been added to Plate 10-1.

323.100 Reference area has been properly identified on Plate 9-1 in Trail Canyon, properly coordinated with the text.

323.400 Interim vegetated areas are delineated on Plate 2-4.

333.300 Coal fine impact is discussed in Section 3.5.5.2, p 3-48 and 3-48A.

341.100 See Table 9.5-1, p 9-12.

Detailed revegetation plan statement found in Section 3.6.5, p 3-77 and 9.5 p 9-11.

PAGE 6

341.210 (PLS) per acre now indicated on Table 9.5-3, p 9-23.

A new seed mix was presented to DOGM and approved by phone in conversations with Patrick Collins of Mt. Nebo Scientific. The new mixes with latest price quotes are now found in Tables 9.5-2 and 9.5-3. Bonding estimates have been revised appropriately in Section 3.6.8.

Commitment to notify the Division now found in Appendix 3-G p 3G-2 and 9.5 p 9-11.

Commitment to obtain proper seed now found in Appendix 3-G p 3G-4 and 9.5 p 9-22.

Evaluation called for in Appendix 3-G p 3G-6. Elymus salina replaced with Elymus cinerus Table 3G-1 p 3G-4.

341.220 p. 9-15 statement transferred to Section 3.6.4.3 p 3-74, 12 ft is correct.

Statement about raking etc. added in Appendix 3-G p 3G-3 and Section 9.5.3.2 p 9-14.

Roughened seedbed statement added to Section 8.2.5 p 8-24.

Mulch statement added to Section 9.5.3.1 p 9-14.

PAGE 7

353.140 Statement added to Section 3.6.5.1 p 3-78. All areas requiring erosion control matting will be included on detailed maps submitted for the final Five-Year Permit Renewal. The best available technology at the time of this final evaluation will be used.

356.110 As can be seen from proposals made this year, the extent of the disturbed area may not be finalized. With the divisions approval, Co-Op proposes to submit this partitioned vegetation sampling plan with the final Five-Year Permit Renewal. This will eliminate the possible multitude of revisions that may be required until that time. The map serves no purpose until reclamation.

The Reference Area was surveyed in 1983. The consultant does not have any additional information concerning the sample results. We recommend that the level of identification will be improved during the survey to be taken at the final Five-Year Permit renewal.

Vegetation monitoring can be found in Section 9.6. Requested statement can be found on p 9-26.

356.120 Vegetation monitoring can be found in Section 9.6. Requested statement (90 pct vs. 70 pct.) can be found on p 9-26.

356.230 Vegetation monitoring can be found in Section 9.6. The reference area standard will be verified at time of reclamation. Requested statement can be found on p 9-26 & 27.

357.100/300 Please review the regulation. The regulations do not appear to prohibit planting of seedlings within the first two years. This would still meet the 80 pct for 8 yrs rule. See also DOGM Revegetation Guidelines for Utah Coal Regulatory Program, Appendix A. Planting seedlings to supplement tree and shrub seeding has proven a valuable technique in previous reclamation. If this opinion is incorrect the text will be changed to meet regulation standards.

The 80-80 rule can be found in Section 9.6 p 9-27.

357.100 See also DOGM Revegetation Guidelines for Utah Coal Regulatory Program, Appendix A. Statement deleted.

357.220 Text corrected as requested. See p 3-59.

PAGE 8

358.200 The overlay of raptor nests will be placed on Plate 3-3 and submitted to the Department on or before 31 Oct 1990.

See new text p 10-14. p 10A-11 not changed as it is a report from a previous date by a separate consultant. The information presented on p 10A-11 is accurate.

R614-301-400

411.200 See Section 4.4.2.2 p 4-8. Available information has been included in the text.

421 Statement added to Section 11.4.2 p 11-10.

R614-301-500

512.100 The highwall shown on Plate 3-2 is actually within the "bonded area". Boundaries have been added to Plate 3-2.

512.110 Plates 3-4 and 3-4A have been certified by a qualified, registered professional engineer.

512.150 Plates 6-1 thru 6-8 have been certified by a qualified, registered professional engineer.

PAGE 9

512.200 Plate 7-2A, As-built Sediment Pond "A", has been certified by a qualified, registered professional engineer. The sediment pond has been certified and re-surveyed and documented on the new Plate 7-2A. Plate 7-2 will remain as the design drawing.

515.100 Statement existing, See Section 3.5.2.2 p 3-41

515.320 Statement added to Section 3.6.10 p 3-94.

521 The discrepancy was due to values calculated with proposed culvert extension and bath house area. New values for the actual disturbed area has been found and are discussed in the text and bonding estimates. See pp 2-9, 3-39, 3-86, 3-89, 8-12, 8-13, 8-18, 9-11, and 10-6.

Areas that are experiencing increased levels of coal fines are being added to the sediment pond controlled drainage area in relation to NOV 90-25-1-1. Additional copies of the text submitted for the NOV will be forwarded to the Division upon request.

521.100 The operator and his consultants will complete cut and fill calculations and reasonable volume estimates, along with any resulting required cross sections and maps for submission to the Division by 30 Nov. 1990. No native fill material has been removed from the site. With the volume of fill material available, covering concrete, asphalt, excess spoil ,etc. will not be a problem.

PAGE 10

pp 3-46, 3D-D, 3-75, 3-76, 4-12. Text has been deleted or rewritten to meet requirements.

521.141 Plates 2-4, 3-2 and 7-1 have been updated to include contour intervals at 5 ft rather than 25 ft. Boundaries of disturbed and undisturbed areas as well as alternate control measure areas are shown on Plate 7-1.

PAGE 11

521.165 Plate 8-3 was previously found on page 8-13, it is now included with the text as a Plate without designated page number.

527.100 Classification of roads has been changed to primary or ancillary. See p 3-7 and Appendix 3-D.

533 Appendix 3-K is included with the text as submitted previously, without new changes.

535.100 See Section 3.6.3.2, page 3-66 and 3-67.

537
Fig 3.6-4 Figure has been modified to match text.
p 3-47(46) Questioned statement has been deleted.
p 3-64 Chapter 3 modified, see Section 8.7.1.3 p 8-24, series changed to species.

PAGE 12

pp 3-68, 3-75, 3D-4, 4-12, 4-15 Text has been deleted or rewritten to meet requirements.

542.200 Plate 3-2 has been updated to include contour intervals at 5 ft rather than 25 ft.

542.800 Reclamation costs have been updated to reflect the influence of the new revegetation estimates and the new disturbed area calculations. See Section 3.6.8.2 pp 3-84 thru 3-90.

R614-301-700

722 Plates 2-4, 3-2 and 7-1 have been updated to include contour intervals at 5 ft rather than 25 ft.

724.100 See attached letter in regards to water wrights issues.

731.121 Wind borne and windblown coal fines are discussed in

Section 3.5.1.1 p 3-40 and 3.6.4 p 3-69.

<u>731.210</u> p 7-33 has been updated. Mine water surveys are done on an annual basis and will be included in the annual report. Copies of the 1990 updated Plate 7-1A and 7-1B can be forwarded to the Division when survey is complete, and again in the annual report.

<u>742.11, 112, 113</u> Text has been updated to include estimated runoff volume for each area and to reflect the new terminology. See Appendix 7-K. A commitment to monitor drainage is found on p 7K-2.