



State of Utah
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF OIL, GAS AND MINING

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September 9, 2002

TO: Internal File

THRU: Gregg A. Galecki, Sr. Reclamation Specialist/Hydrology *AG*

FROM: Stephen J. Demczak, Sr. Reclamation Specialist/Engineering *sgd by an*

RE: Refuse Pile, Canyon Fuel Company, LLC., Dugout Canyon Mine, C/007/039-SR02D-1

SUMMARY:

Canyon Fuel Company, LLC has submitted a significant revision to add a refuse pile location for the Dugout Mine. The refuse site will be used to deposit underground waste rock from mining activities. At the present time, underground mining is producing more rock (refuse) than can be stored underground.

The refuse pile will be located on property owned by Canyon Fuel Company, LLC. The site is located approximately 6.5 miles southwest of the Dugout Canyon Mine adjacent to the Carbon County road accessing the mine.

The design capacity of the refuse pile will be 73,000 tons of refuse with a life expectancy of fifteen years.

The permittee will construct the refuse site immediately after Division approval.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

TECHNICAL MEMO

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

The Identification of Interest is in the current Mining and Reclamation Plan of the Dugout Mine. This information in the MRP was reviewed and has not changed. However, the permittee has given information on Page 1-1 and 1-2 related to the applicant, operator, resident agent, contact person and the person who will pay abandoned mine reclamation fees. This is the same information provided in the MRP.

The officers, directors, and ownership information was incorporated in the MRP August 15, 2001.

The permittee will need to obtain a MSHA identification number for the refuse pile or show documentation that the refuse pile has the same ID number as Dugout Mine. This is not in the MRP as indicated on Page 1-4 of this amendment.

Findings:

The information provided has not met the minimum requirements of this section. Prior to approval, the permittee must address with the following R645 Coal Rule.

R645-301-112.700, update Page 1-4, section 112.700 with a MSHA identification number for the refuse pile or show documentation that the refuse pile has the same identification number as the Dugout Mine.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

This information is in the current Mining and Reclamation Plan. This information was last updated in May 1999. Canyon Fuel Company has received at least one violation since January 1999. This section will need to be updated.

Findings:

The permittee has not met the minimum requirements of this section. Prior to approval, the permittee must comply with the following regulation.

R645-301-113.300, The information has not been updated since May of 1999. This section of the MRP will need to be updated.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

Analysis:

Canyon Fuel Company, LLC, owns the property on which the refuse pile will be placed. However, on Page 1-28 this information is not indicated in the MRP.

Findings:

The permittee has not met the minimum requires of this section. Prior to approval, the permittee must address with the following R645 Coal Rule.

R645-301-114, the permittee must update the Right-of-Entry Information on Page 1-28 in the MRP.

LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

Analysis:

The permittee has submitted maps showing the refuse pile permit area. The permittee has shown that the permit area is the same as the disturbed area. This is shown on Plate 5-1. The permittee has advertised in the newspaper but will need to submit a copy of the advertisement to the Division. This is addressed in the Public Notice and Comment section in this review.

Findings:

The permittee has met the minimum requirements of this section.

TECHNICAL MEMO

PERMIT TERM

Regulatory References: 30 CFR 778.17; R645-301-116.

Analysis:

This information is in the MRP and has not changed.

Findings:

The permittee has met the minimum requirements of this section.

PUBLIC NOTICE AND COMMENT

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

Analysis:

Administrative Completeness by the Division has been given to the Refuse Pile amendment. The permittee has advertised in the newspaper for public comment. A copy of the advertisement must be submitted and be included in Appendix 1-2 of the MRP.

Findings:

The permittee has not met the minimum requirements of this section. Prior to approval, the permittee must address the following R645 Coal Rule.

R645-301-117.200, The permittee has not submitted a copy of the newspaper advertisement for public comment in the submittal. This information must be included in Appendix 1-2 of the MRP.

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

The permittee has complied with R645-301.120. The information is in the Mining and Reclamation Plan and this amendment.

Findings:

The permittee has met the minimum requirements of this section.

REPORTING OF TECHNICAL DATA

Regulatory Reference: 30 CFR 777.13; R645-301-130.

Analysis:

The information submitted contains names of person or organizations that collected and analyzed the data.

Findings:

The permittee has met the minimum requirements of this section.

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

The permittee has submitted maps with a scale of 1" = 100' for the permit area. The permittee has submitted maps of the location of the permit with adjacent area but no scale is given. Figures 1-1A and 1-1B do not have a distance scale associated with the map.

Findings:

The permittee has not met the minimum requirements of this section. Prior to approval, the permittee must address the following R645 Coal Rule.

R645-301-141, the permittee must have maps with scales of distance. The maps of the adjacent area will clearly show the lands and waters within those areas and be at a scale determined by the Division, but in no event smaller than 1 = 24,000.

TECHNICAL MEMO

COMPLETENESS

Regulatory Reference: 30 CFR 777.15; R645-301-150.

Analysis:

The Division has determined that the Refuse Pile significant revision is administratively complete. A determination letter dated August 2, 2002 was sent to the operator.

Findings:

The permittee has met the minimum requirements of this section.

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

GENERAL

Regulatory Reference: 30 CFR 783.12; R645-301-411, -301-521, -301-721.

Analysis:

The permittee has submitted information on existing surface and subsurface facilities and features; see Page 5-7. No buildings are located in or within 1,000 of the permit area. No underground mining activities will occur in the refuse permit area. Therefore, there will be no impacts by underground mining activities.

Findings:

The permittee has met the minimum requirements of this section.

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

There will be no surface or underground coal mining in the proposed permit area.

Findings:

The permittee has met the minimum requirements of this section.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Existing Structures and Facilities Maps

There are no existing structures at the proposed refuse site. The permittee has submitted a surface facilities projected layout of the refuse site. See Plate5-1 of this amendment. However, the permittee will have to supply the Division with an As-built surface facility map of the area after construction work is completed. This As-built map must be submitted 30-days after completion of the refuse pile area.

Existing Surface Configuration Maps

Several of the maps in the significant revision have the existing surface configuration. This information meets the requirements of this section.

Permit Area Boundary Maps

The permittee has submitted an updated permit area map with this submittal. The permit area will also be the disturbed area.

Surface and Subsurface Ownership Maps

The surface and subsurface ownership map for this area was not included in this submittal.

Surface and subsurface manmade features maps

The permittee has identified that there is no manmade surface features in or within 1,000 feet of the permit area. However, the permittee has not addressed subsurface manmade features in the submittal. The permittee will not have to produce a map if there are no subsurface features but this would need to be stated in the text.

TECHNICAL MEMO

Contour Maps

The permittee has submitted existing (Plate 5-1), operational (Plate 5-2) and final reclamation (Plate 5-3) contour maps. The difference between the operation and final reclamation contours are the thickness of the topsoil.

The maps are on a two-foot contour interval. Reviewing the refuse pile construction contours there are seven contour lines. This would indicate a minimum of a fourteen feet rise in the pile from bottom to top. Page 5-15 in the text addresses only a ten feet construction height. Also on RA Attachment 5-2 (Pile Slope Stability) uses a design of 10 feet in height. Talking to Tom Scuhoski, Engineer at EarthFax Engineering on July 11, 2002 indicated that the refuse pile is incised. The calculation on slope stability is determined by refuse material above ground level. The permittee must give additional explanation for the determination that the refuse pile height is 10 feet instead of 14 feet. This would eliminate the confusion in this section.

Findings:

The information provided is not adequate in meeting the requirements of this section. Prior to approval the permittee must address the following R645 Coal Rules.

R645-301-521.120, the permittee will need to address if subsurface features are within, passing through, or passing over, the permit area.

R645-301-521.130, The permittee must supply maps of surface and subsurface ownership map of lands contiguous to the permit area.

R645-301-521.150, The permittee will need to provide additional explanation why 10 feet is used for refuse pile height instead of 14 feet for slope stability.

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

Facilities and Structures

The permittee has submitted facilities map Plate 5-1 which includes sediment pond, storage area, access road, topsoil storage, culvert (DC-1), and refuse storage area. This map contains the necessary information. Plate 5-1 is P.E. certified.

Findings:

The permittee has met the minimum requirements of this section.

EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

Analysis:

There are no existing structures in this area.

Findings:

The permittee has met the minimum requirements of this section.

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

Analysis:

The permittee will be transporting refuse material from the Dugout Mine to the Refuse site by way of a Carbon County Road. The permittee will have to use State licensed and inspected vehicles to transport waste material from the mine to the refuse site.

Findings:

The permittee has met the minimum requirements of this section.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

Analysis:

TECHNICAL MEMO

Road Classification System

The permittee has not classified the access road from the county road to the refuse pile as a primary road. This road will be utilized throughout the year for fifteen years. The permittee has shown only a portion of the road to be reclaimed as indicated on Plate 5-3. Therefore, it is to be retained for a post-mining land use.

Plans and drawings

The permittee has not addressed a plan including a detailed description of each road to be used or maintained within the proposed permit area. The description will include a map, appropriate cross sections, and comply with R645-301-527.210, and R645-301-527.240.

The permittee must describe designs for the access road and comply with R645-301-534 thru R645-301-534.340.

Performance standards

The permittee has not addressed a maintenance plan as described in R645-301-527.230.

Primary road certification

Detailed design plans must be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer. Permittee will have to submit a road design for the access road to the refuse pile.

Findings:

Prior to approval the permittee must address the following R645 Coal Rules.

R645-301-527.100, the access road from the Carbon County road to the refuse pile must be classified as a primary road.

R645-301-527.200, the plan must include a detailed description of each road used, or maintained, within the proposed permit area. The description will include a map with the appropriate cross section.

R645-301-527.210, specification for each road width, road gradient, road surface, road cut, fill embankment, culvert, bridge, drainage ditch, and drainage structure.

R645-301-527.230, A maintenance plan describing how roads will be maintained throughout their life to meet the design standards throughout their use.

R645-301-527.240, A commitment that if a road is damaged by a catastrophic event, such as flood or earthquake, the road will be repaired as soon as practical after the damage has occurred.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Refuse piles

The permittee must comply with MSHA, 30 CFR 77.214 and 30 CFR 75.215. There has been no contact with MSHA concerning the establishment of a refuse pile at the Dugout Mine. To comply with 30 CFR 75.215 the permittee must receive an identification number from MSHA after a site visit and approval. Contacting Billy Owens from the MSHA Denver office verified this information on July 10, 2002.

The designs and their associated evaluations were based on the results of a detail foundation and laboratory analyses of soils at the refuse pile site.

The permittee has submitted a certified design on the construction of the refuse pile. This design will have a static safety factor of 7.48 in the refuse materials, which is greater than the minimum required 1.5 static safety factor. See RA Attachment 5-2 in the submittal.

Outslopes on the native alluvial soils will have a static safety factor of 1.62 for failure surfaces starting in the refuse and terminating in the underlying soils. This is still greater than the minimum requirement of 1.5 static safety factor.

Findings:

The information given does not meet the minimum requirements of this section. Prior to approval the permittee must meet the following R645 Coal Rules.

R645-301-513.400, the permittee must receive MSHA identification number and approval for the Dugout Mine refuse pile. The MSHA approval letter must be added to the MRP. MSHA number for the refuse pile must be added to R645-301-112.700 in the MRP.

TECHNICAL MEMO

SUPPORT FACILITIES AND UTILITY INSTALLATIONS

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

Analysis:

The permittee has submitted facilities map Plate 5-1 which includes sediment pond, storage area, access road, topsoil storage, culvert (DC-1), and refuse storage area. This map contains the necessary information. Plate 5-1 is P.E. certified.

Findings:

The permittee has met the minimum requirements of this section.

SIGNS AND MARKERS

Regulatory Reference: 30 CFR Sec. 817.11; R645-301-521.

Analysis:

The permittee has addressed this portion of the R645-301 Coal Rules. An identification sign will be displayed at the refuse pile. This sign will have all the required information.

Findings:

The information provided meets the minimum requirement of this section.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Affected area maps

There will be no underground mining in this area. This permitted area will only be used to store refuse material. Therefore, there will be no affected area due to underground mining.

Mining Facilities Maps

The permittee has submitted facilities map Plate 5-1 which includes sediment pond, storage area, access road, topsoil storage, culvert (DC-1), and refuse storage area. This map contains the necessary information. Plate 5-1 is P.E. certified.

Findings:

The permittee has met the minimum requirements of this section.

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

The permittee will reclaim the refuse pile area but it appears that the road from the county road will not be reclaimed. If this road will not be reclaimed, it will be considered a primary road. The sediment pond at the lower end of the refuse pile will be reclaimed.

All engineering maps related to the reclamation of the refuse pile are P.E. certified.

The refuse pile will have a 3H:1V outslope. The final controls can be seen of Figure 5-3.

The permittee has submitted a timetable to reclaim the refuse pile area. This is on RA Figure 5-1. The table is labeled "Months From Start of Reclamation". The project from start to finish of this project would take almost 24 months or two years. This would be an extremely long time to complete this project. The RA Figure 5-1 may have a typo in the title, and should be days instead of months.

TECHNICAL MEMO

Findings:

The information given does not meet the minimum requirements of this section. Prior to approval the permittee must meet the following R645 Coal Rules.

R645-301-542.100, A detailed timetable for the completion of each major step in the reclamation plan. If the timetable is correct, explain why it would take 24 months to reclaim this site.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-270, -301-271, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Analysis:

The area around the refuse pile will be reclaimed back to Approximate Original Contour. The refuse pile itself will be approximately ten feet higher than the original ground prior to placement of the refuse.

Findings:

The permittee has met the minimum requirements of this section.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

There will be some backfilling and grading to this area. The sediment pond will be breached and the embankments will be pushed into the pond, creating a gentle slope. The diversion ditches will be filled in by pushing the downstream berm into the ditches. This would create a free draining surface.

Steep Slopes

The permittee has indicated on Page 5-24 that prior to seeding all areas with a slope of 3h:1v or steeper will be roughened using a trackhoe. These slopes are most likely to appear on the refuse pile. The permittee will need to add a statement that no reclamation area will exceed a slope steeper than 2h:1v.

Findings:

The information given does not meet the minimum requirements of this section. Prior to approval the permittee must meet the following R645 Coal Rules.

R645-301-553.251, The final configuration for the refuse pile will not be steeper than 2h:1v (50 percent).

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

Analysis:

Reclamation

The permittee will reclaim a portion of the road to the refuse pile. It appears that 600 ft. from the County road will not be reclaimed. This section of road will be used in the post-mining land use, which is wildlife habitat and livestock.

Retention

The permittee will leave approximately 600 feet of road from the county road. This road will be considered a primary road since it will not be reclaimed and will be used in the post-mining land use (R645-301-527.123). This road has not been classified or designed as a primary road. The reviewer has written deficiencies on this topic in this document.

Findings:

The information given does not meet the minimum requirements of this section. Prior to approval the permittee must meet the following R645 Coal Rules. The reviewer has written deficiencies to address this issue under "ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES" above.

CESSATION OF OPERATIONS

TECHNICAL MEMO

Regulatory Reference: 30 CFR Sec. 817.131, 817.132; R645-301-515, -301-541.

Analysis:

Upon the permanent cessation of coal mining and reclamation operation at the Dugout Canyon Mine, Canyon Fuel Company, LLC, will close, backfill, or otherwise permanently reclaim all affected areas in accordance with the R645 regulations and this reclamation plan.

Findings:

The permittee has met the minimum requirements of this section.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Affected area boundary maps

There will be no impacts due to the fact that no mining of any type will occur in this area.

Bonded area map

The bonded area is the permit area and the permittee has met this requirement. This map is P.E. certified.

Reclamation backfilling and grading maps

The permittee has submitted Plate 5-4 giving information on the backfilling and grading for the refuse pile area.

Reclamation facilities maps

There will be no facilities after final reclamation. No map will be required.

Final Surface Configuration Maps

Plate 5-3 and 5-4 address the reclamation surface configurations. These maps are P.E. certified.

Reclamation surface and subsurface manmade features maps

There will be no surface or subsurface manmade features; therefore, this map will not be required.

Findings:

The permittee has met the minimum requirements of this section.

RECOMMENDATIONS:

This significant revision is not recommended for approval. Prior to approval, the permittee must meet the requirements as outlined above.