0032

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DEPARTMENT OF NATURAL RESOURCES
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March 24, 1999

To: File

Thru: Joe Helfrich, Permit Supervisor, Compliance

From: Peter Hess, Reclamation Specialist III PH

RE: Topsoil Borrow Site, Cyprus Plateau Mining Company, Star Point Mine, ACT/007/006-99B, Folder #2, Carbon County, Utah

SUMMARY:

Cyprus Plateau Mining Corporation is proposing to permit a topsoil borrow area in Sections 7 and 8 of Township 15 South, Range 8 East, SLB & M on ground which is owned by the applicant. The permittee plans to strip the top ten inches of a 19.89 acre proposed disturbance (26,740 cubic yards) and stockpile the material in the NE corner of the site for reclamation of the area, pre-stripping of the lower 8.73 feet of material. This volume (216,160 cubic yards) will be made available for the reclamation of the Star Point Mine, should it be needed.

The following is a technical analysis of Chapter 5, Engineering of the applicant's submittal relative to the engineering requirements of the R645 rules.

TECHNICAL ANALYSIS:

OPERATION PLAN

ENGINEERING

Regulatory Reference: R645-301-500.

As noted above, the applicant is proposing to disturb approximately twenty acres of their property to obtain a volume of acceptable plant growth medium to assist in the reclamation of the Star Point Mine. The top ten inches stripped will be retained for the reclamation/revegetation of the disturbance. This will be done in two stages, with the top ten inches of stage two being used to recover the stage one area prior to reseeding. The lower 8.73 feet of material (216,160 cubic yards) will be utilized, if needed, for the reclamation of the Mine.

CERTIFICATION OF MAPS

Regulatory Reference: R645-301-512.120. Surface Facilities and Operations.
R645-301-521.165, Topsoil Storage Areas

Analysis:

The applicant has submitted the following maps to address the certification requirements relative to Surface Facilities and Operations.

1) Map 5-1---SOIL BORROW AREA TOPOGRAPHY/RUNOFF CONTROL STRUCTURES
2) Map 5-2---SOIL BORROW AREA TOPOGRAPHY AND STAGE 1 RECLAMATION CONTOURS
3) Map 5-3---SOIL BORROW AREA TOPOGRAPHY AND STAGE 2 RECLAMATION CONTOURS AND CROSS-SECTION LOCATIONS
4) Map 5-4---SOIL BORROW AREA CROSS-SECTIONS

All maps are P. E. certified by Mr. Richard B. White of EarthFax Engineering, Inc. and are referenced within the submittal on page 5-1 under 512.100, Cross Sections and Maps.

Findings:

The submitted maps adequately meet the certification requirements of the R645 rules regarding topsoil storage areas (surface facilities and operations).

SURFACE CONFIGURATIONS

Regulatory Reference: R645-301-512.130, -542.300.

Analysis:

Surface Configurations.
Surface Configuration after Reclamation.

As noted above, Map 5-3 shows the soil borrow area topography and stage 2 reclamation contours and cross section locations; Map 5-4 shows the soil borrow area cross sections relative to Map 5-3. Both are P. E. certified.

The cross sections shown on Map 5-4 are indicative of the fact that no variance from approximate original contour is needed.

Findings:

Maps 5-1, 5-2, 5-3 and 5-4 reflect the pre-disturbed, disturbed, and post reclamation contours of the borrow area as required by the aforementioned R645 rules.

PLANS AND ENGINEERING DESIGNS

Regulatory Reference: R645-301-512.200.

Analysis:

Plans and Engineering Designs

This submittal is relevant to stripping soil horizons from a 30 acre area to obtain plant growth medium for the reclamation of the Star Point Mine. There will not be any excess spoil, coal mine waste, durable rock fills, impoundments, or primary roads associated with this project. It will not be necessary to apply for a variance from the approximate original contour as part of the reclamation requirements of this disturbed area.

This regulation is not applicable to this project.

Findings:

This regulation is not applicable to this project.

COMPLIANCE WITH MSHA REGULATIONS/MSHA APPROVALS

Regulatory Reference: R645-301-513 et al.

Analysis:

This project is a topsoil/plant growth medium recovery area. There are no coal processing waste dams or embankments, no impoundments or sedimentation ponds, no spoil or processing waste areas, no refuse piles, no mine inflows, no surface coal mining activities, nor any coal mine waste fires associated with this project. This regulation is not applicable.

Findings:

MSHA does not have requirements relative to the design of topsoil borrow areas; no MSHA approvals are necessary for this project. The requirements of the aforementioned regulations are not applicable to this submittal.

INSPECTIONS

Regulatory Reference: R645-301-514, et al.

Analysis:

Engineering Inspections

This project is a topsoil recovery area. There are no refuse piles, embankments, or spoil areas within same that would require engineering designs necessitating compaction requirements. Water volumes, which may create or be considered a hazard, will not be impounded anywhere within this project.

Findings:

Engineering inspections by the permittee are not necessary for this topsoil recovery area project. This regulation is not applicable.

REPORTING AND EMERGENCY PROCEDURES

Regulatory Reference: R645-301-515.

Analysis:

Reporting and Emergency Procedures

Page 5-4 of the engineering section of this submittal addresses these requirements. This project is a topsoil recovery area; there are no refuse disposal areas or impounding structures or any other structures which might present a hazardous situation relative to pending environmental damage or the safety of the public. The design of the topsoil recovery area is such that no potential areas for slides exist; same does not incorporate any impoundments. Should the Star Point Mine be placed under temporary cessation, it is extremely doubtful that same would have any effect on this project. This regulation is not relative to the implementation of this project.

Findings:

This regulation is not relative to this project.

OPERATION PLAN

Regulatory Reference: R645-301-520., -521.

Analysis:

Operation Plan

Page 100-11 of the submittal contains a property description of the ground which is owned by and will be utilized by Cyprus Plateau to implement this topsoil recovery area. The 21.25 acres is considered a sub-area for which this permit amendment application has been submitted. The description is adequate to meet the requirements of 301-521.

Findings:

The property description within this submittal is adequate to meet the requirements of 301-521.

Regulatory Reference: R645-301-521.100 through 190

Analysis:

General

521.100---the property described on page 100-11 is not an area which has been previously mined; this regulation is not applicable.

521.111---the property described above contains no known active, inactive or abandoned underground mines or any mine openings relative to same. This regulation is not applicable.

521.112---the property described above contains no existing or previously surface mined areas. This regulation is not applicable.

521.121---the property described above contains no buildings within or within 1000 feet of the area which is to be disturbed. An existing, abandoned railroad grade (owned by the Utah Railway Company) bypasses the area. Cyprus has been granted use of same for a haul road to the Star Point operation. **It is not known if the granted permission will allow the applicant to install any necessary safety berms or allow watering of the roadway for fugitive dust suppression requirements, (MSHA and DEQ/BAQ).**

521.122---the property described above contains no known surface or subsurface man made features within the proposed permit area; the aforementioned railroad grade is adjacent to the proposed disturbance. This regulation is not applicable.

521.123---the property described above has no public roads within or within 100 feet of the proposed permit area. This regulation is not applicable.

521.124---the property described above does not contain nor will contain any spoil, waste, coal development waste, noncoal waste, dams, embankments or impoundments or water treatment or air pollution control facilities. This regulation is not applicable.

521.125---the property described above contains no impoundments or embankments constructed from coal processing or mine development waste. No such structures will be implemented within this permit area during the life of this project. This regulation is not applicable.

521.130, et al.---as indicated on page 1-2 of Exhibit 233, under 112.600, the owners of record for surface and mineral properties contiguous to this proposed permit area are listed in the approved M & RP and shown on Map 112.500a.

Property owners contiguous to this proposed topsoil borrow area are the U.S. of A., the State of Utah, and Donald Hatch of Salmon, Idaho. As previously noted, Utah Railway Company owns the abandoned track grade adjacent to this proposed area. This regulation has been adequately addressed.

Findings:

Aforementioned regulations which are relative to the topsoil borrow area permit amendment, as noted above, are adequate to address the requirements of the R645 regulations.

MINE MAPS AND PERMIT AREA MAPS

Regulatory Reference: R645-301-521.140,-521.141

Analysis:

Boundaries of Proposed Affected Areas

The boundaries of this proposed topsoil borrow area (affected area over estimated total life of the coal mining and reclamation operations) are accurately depicted on Map 5-1, and Map 112.500a. Page 100-11 of the text gives the legal description and deed information relative to this site.

Findings:

The submitted information is adequate to meet the requirements of 521.140 and 141.

SIGNS AND MARKERS

Regulatory Reference: R645-301-521.200, -521.240, -521.250, -521.260

Analysis:

Signs and Markers Specifications
Mine and Permit Identification Signs
Perimeter Markers
Buffer Zone Markers

A mine permit identification sign will be posted at the point of access to the topsoil borrow area site where the roadway which will be constructed to same from the Utah Railway track grade lies. Disturbed area perimeter markers will be implemented to delineate the topsoil borrow area prior to any soil removal disturbance. No streams exist in the area of the soil borrow area; the requirement relative to buffer zone markers is irrelevant. Topsoil markers will be placed on the topsoil storage pile in the NE corner of the borrow area site. All signs will meet standard specification requirements relative to durability and will be maintained until final bond release of this area. All information regarding the aforementioned can be found on Pages 5-7 and 5-8 of the submittal.

Findings:

The submitted information relative to the R645 rules regarding signs and markers, permit identification, perimeter markers, buffer zone, and topsoil storage area markers is adequate to meet the requirements of the R645 rules.

OPERATIONAL DESIGN CRITERIA AND PLANS

Regulatory Reference: R645-301-531.

Analysis:

General

This soil borrow area will be a stripping and reclamation operation only. There will be no impoundments, sediment ponds, coal processing waste dams, banks or embankments within same. This regulation is not applicable.

Findings:

R645-301-531 is not applicable to this project.

Regulatory Reference: R645-301-532.

Analysis:

Sediment Control

The methods to be implemented for the control of sediment include the installation of silt fences, berms, straw bales, or surface roughening techniques. Page 5-10 of this submittal describes the aforementioned. Map 5-1, SOIL BORROW AREA TOPOGRAPHY AND RUNOFF CONTROL STRUCTURES shows berm and silt fence locations; the reclamation drainage channel associated with this project (RC-1) is depicted on Map 5-2, SOIL BORROW AREA TOPOGRAPHY AND STAGE 1 RECLAMATION CONTOURS.

Sediment control measures for this soil borrow area are described in detail in Section 730 of the exhibit, and in the approved MRP. The runoff control structures within the borrow area have been designed to convey runoff in a non-erosive manner. Sediment yields in the borrow area will be minimized by disturbing the smallest practicable area during the construction for the shortest period and by reclaiming the area suitable for reclamation as soon as practicable following the stripping operations.

Findings:

Pages 5-9 and 5-10 of the submittal are adequate to describe the sediment controls which are to be implemented for this topsoil borrow area project; the R645 rules relative to sediment control for Operational Design Criteria and Plans have been met.

ROADS

Regulatory Reference: R645-301-534.

Analysis:

Roads

There will not be any primary roads constructed in association with this topsoil borrow area. Two temporary ancillary roads will be constructed to provide access from the Utah Railway track grade into the borrow pit. The temporary roads will be constructed and maintained according to Section 534.200 of the approved mining and reclamation plan. Same will be contoured, and revegetated during the reclamation process.

The submittal commits Cyprus to utilizing County and State standards when designing and constructing any and all roads within the permit area, thus minimizing any damage to public or private property.

No acidic or toxic materials will be used for the surfacing of any roads affiliated with this project. Road surfaces will typically consist of compacted native material, possibly with some native aggregates included. Compaction will be assisted by watering to control fugitive dust when necessary.

Findings:

The minimum regulatory requirements relative to ancillary roads in the R645 rules have been adequately addressed.

SPOIL

Regulatory Reference: R645-301-535.

Analysis:

Spoil

This project is a topsoil borrow area; soil will be removed by stripping the top 9.2 feet of earth in increments by dozer, loading same using FEL and hauling by truck. There will be no coal seams exposed or mined by this project; hence, no spoil will be generated.

Findings:

As no spoil will be generated during the implementation of this project, the R645 rules relative to spoil are not applicable.

COAL MINE WASTE

Regulatory Reference: R645-301-536.

Analysis:

Coal Mine Waste

This project is a topsoil borrow area; no coal mining will be performed. No coal mine waste will be generated. These R645 rules are not applicable.

Findings:

The R645 rules relative to coal mine waste are not applicable.

REGRADED SLOPES

Regulatory Reference: R645-301-537.

Analysis:

Regraded Slopes

Exhibit 233 addresses the requirements of 537.100 and 537.200 et al. on pages 5-12 and 5-13 of the engineering section. No mining or reclamation activities will be conducted in the soil borrow area that require Division approval for alternative specifications or for steep cut slopes. Cyprus Plateau Mining Corporation is capable of meeting the regulatory requirements relative to the protection of fish, wildlife, and related environmental values, access road design certification,

road classification, road maintenance, road specifications, and road design to ensure environmental protection and safety.

Any ancillary roads which will be constructed in association with this project will be temporary in nature. Drainage from same will report to the borrow area; there will be no flows associated with same off of the permitted area until after reclamation of the site.

The temporary roads will be reclaimed/revegetated upon completion of the soil procurement process.

Findings:

The requirements of R645-301-537, for Regraded Slopes has been adequately addressed.

RECLAMATION PLAN

Regulatory Reference: R645-301-540., -541.100, -541.400

Analysis:

Reclamation Plan
Commitment to Reclaim
Reclamation Plan for Affected Lands

Page 5-13 of Exhibit 233 commits Cyprus to submit a reclamation plan for this area within the permit area which meets the environmental protection performance standards of the State Program. Cyprus feels that Exhibit 233 honors that commitment.

Findings:

The aforementioned R645 rules have been adequately addressed by Exhibit 233.

NARRATIVES, MAPS, AND PLANS

Regulatory References: R645-301-542., -542.100, -542.200 -542.300, -542.400, -542.500, -542.600, -542.700, -542.800.

Analysis:

Reclamation Timetable
Backfilling, Grading, Compacting, Soil Stabilization
Final Surface configuration Maps and Cross Sections
Removal of Temporary Structures
Removal of Sedimentation Pond
Roads
Final Abandonment of Mine Openings and Disposal Areas
Reclamation Costs (Bond Estimate)

This analysis will cover all aforementioned regulations with the exception of 542.800, Reclamation Costs. Bond estimates should be addressed by Mr. Wayne Western, Reclamation Specialist of the DOGM SLO.

Figure 5-1, (Page 5-15) of Exhibit 233 is the reclamation timetable presented for this project. The scheduling depicted by same leaves the period from May through September vacant. The permittee plans to order seed and mulch in April; no site activities will be performed until the October through December window. This appears to be acceptable from an engineering perspective relative to the R645 rules.

Page 5-14 of Exhibit 233 indicates that upon completion of the soil salvaging activities, the site will be recontoured to the approximate proposed contours depicted on Maps 5-2 or 5-3, dependent on the degree of salvaging implemented at the site (as determined by the volume requirements necessary to reclaim the Star Point site). Upon completion of the rough grading at the borrow site, the soil which was stored in the temporary topsoil storage pile (NE corner of the borrow site) will be redistributed and prepared according to Chapter 2 of Exhibit 233.

Final surface configurations will be determined according to either Map 5-2 or 5-3, depending upon the amount of soil which is removed from the borrow. Drawing 5-4 depicts reclamation cross sections relative toMap 5-3. Although no reclamation cross sections are shown relative to Map 5-2, (Stage 1), final contours would be between the existing ground configuration shown and the reclamation contours shown for Stage 2, (Map 5-3). These maps and cross sections are adequate to meet the requirements of the R645 rules.

There are no temporary "structures" within the proposed permit area. A wildlife guzzler with a surrounding fence exists within the proposed permit area. This regulatory requirement is not applicable.

As noted previously, there are nor will there be any impoundments associated with this topsoil borrow area project. This regulatory requirement is not applicable.

All requirements relative to the R645 rules regarding roads have been previously addressed. There are no primary roads involved with this project; hence, the leaving of a road in order to support the approved post mining land use is not requested by the applicant or any of the adjacent land owners. Access to the proposed borrow area will be temporary; same will be provided by a temporary agreement with the owner of the abandoned railroad track grade, Utah Railway. Upon reclamation of the site, the temporary access will be terminated.

Should further work be required within the borrow site, post-initial reclamation activities, it will probably be necessary for the applicant to apply for another trans-travel agreement.

No underground mine openings or waste disposal areas will exist within this proposed soil borrow area. This regulatory requirement is not applicable.

Appendix 8-1 of Exhibit 233 is relative to the reclamation costs associated with this project. These are to be reviewed by the reclamation bond specialist in the Salt Lake Office of the DOGM.

Findings:

The maps, drawings and text submitted as part of Exhibit 233 as they relate to the aforementioned regulatory requirements are felt to be adequate. The minimum regulatory requirements have been met.

RECLAMATION DESIGN CRITERIA AND PLANS

Regulatory Reference: R645-301-550. -301-551., -301-552., -301-553.

Analysis:

Reclamation Design Criteria and Plans
Casing and Sealing of Underground Openings
Permanent Features
- **Small Depressions**
- **Permanent Impoundments**

Backfilling and Grading

This project is relative to the reclamation of an underground coal mine. There are no openings to underground works within the area which is proposed to be permitted.

Small depressions ranging in depth from 12 to 24 inches will be implemented to retain moisture, minimize erosion, and assist revegetation of the area. This information appears on pages 5-16 through 5-18 of Exhibit 233.

There are no impoundments associated with this topsoil borrow area.

This is a soil borrow area; the area will be graded to achieve a near original configuration upon completion of the soil stripping activities. Stockpiled "A" horizon material will then be spread, treated and revegetated as described in Section 240 of Exhibit 233 and Chapter 3 of the approved mining and reclamation plan. Small depressions or "pocks" (12 to 24 inches deep) will be implemented prior to seeding to enhance moisture retention and minimize erosion. In turn, off site sediment impacts will be reduced. Additional detail is provided in Section 760 of Exhibit 233. Exhibit 233 commits to reclaiming this soil borrow area in a manner consistent with the approved post-mining land use.

The removal of soil from this borrow area will not expose any coal seams or other acid or toxic forming materials to the environment. No spoil will be generated.

No coal processing waste will be stored or disposed of within this proposed permit area. No cut and fill terraces will be built at the site. No highwalls exist nor will any be built within the proposed soil borrow area. As previously noted, the soil borrow area has not been previously mined. No settled or revegetated fills currently exist or will exist within the proposed area to be permitted.

There is nothing in Exhibit 233 relative to thin or thick overburden; there are no coal seams relative to this operation.

Findings:

Exhibit 233 adequately address the requirements of the R645 rules mentioned above.

PERFORMANCE STANDARDS

Regulatory Reference: R645-301-560.

Analysis:

Performance Standards

Page 5-19 of Exhibit 233, section 560 relative to performance standards commits the applicant to conduct soil recovery and reclamation operations at the soil borrow area in a manner consistent with the approved permit and the performance standards applicable to the State Program. This meets the minimum regulatory requirements.

Findings:

Exhibit 233 adequately addresses the minimum regulatory requirements of the R645 rules relative to performance standards.

CONCLUSIONS AND RECOMMENDATIONS

Access to the proposed topsoil borrow area will be provided through a temporary agreement with Utah Railway Company via an abandoned track grade. It is recommended that should it be necessary for the permittee to build berms where necessary for the safety of haul trucks, some agreement be in place prior to same. Also, roadway watering of the grade may be necessary to suppress fugitive dust, both from a respiratory and visibility requirement, (MSHA).

If additional machine work is necessary in the borrow area, post-initial reclamation activities, the permittee will need to request another trespass agreement from Utah Railway.

With regard to the wildlife guzzler/fence which is currently located on the applicant's property, no mention is made (at least in the Engineering portion) in Exhibit 233 relative to the relocation of this device. It is recommended that this be done.

None of the previous recommendations are significant enough to prevent a recommendation for approval of this proposed permit amendment relative to a soil borrow area.

Findings:

Exhibit 233 adequately addresses the requirements of the R645 rules relative to engineering.

It is recommended that Exhibit 233 (ACT/007/006-99B) be approved as submitted.

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