0009

SWISHER COAL CO.
P. O. BOX A U
PRICE, UTAH 84501
PHONE 801-637-5050

Stamp in Plan & Map file 1 copy Rt 1 copy. Who wants principal review responsibility

RECEIVED SEP 24 1979 DIVISION OF OIL, GAS, & MINING

File in C/ACT/007/022

September 20, 1979

Mr. Ronald W. Daniels
Coordinator of Mined Land Development
State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Form MR-2
C.V. Spur Prep Plant

Dear Ron:

I have enclosed two copies of Form MR-2 Mining and Reclamation Plan for our C.V. Spur Preparation and Load-Out Facility.

If you have any questions, please contact me.

Sincerely,

Bert Jeanselme/r.h.

Bert Jeanselme,
Engineering

BJ/rh

Enclosures

Route for Comment
TJS

JWS - where has this been?

JLS.

Route to MAW
Nix on the Crested Wheat Grass —
MA
8/1/80

- 7# is rather low
- have them look at seedling as well as another grass species to replace crested wheat
- what is the clump grass on #4?

I think OSM has reviewed this + they are resubmitting.

Lee

July 30, 1980

Comments

① Has Swisher prepared any additional plans since Sept. 79.

② The haul roads should be shown to conform with Class I standards. (Incomplete)

③ The access roads for infrequent use must meet class III standards (not discussed)

④ Coal processing waste must meet criteria of UMC 817.81, 82, 83, 85, 86.

⑤ Covered by 2 feet of so must meet requirements of UMC 817.111-117. on coal processing waste bank.

(These provisions when necessary could be stipulated).

MINING APPLICATION NO. _____

Date 09-19-79

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

RECEIVED
SEP 24 1979
STATE OF UTAH
Division of Oil, Gas
& Mining

MINING AND RECLAMATION PLAN
(Other forms may be used in lieu of MR 2, provided they contain the same information)

1. Name of Applicant or Company Swisher Coal Company

2. Proposed type of operation Coal Preparation Plant & Unit Train Load-Out Facilit

3. (a) Prior Land Use(s) Zoned for agriculture use

   (b) Current Land Use(s) Zoned for industrial use

   (c) Possible or Prospective Future Land Use(s) Industrial use

4. What vegetation exists on the land proposed to be affected Sage Brush, Rabbit Brush
   Russian Thistle, Halogeton, Greasewood, Indian Rice Grass, Clump Grass
   (a) Types and Estimated Percent cover or density: _____

5. What is the pH range of soil before mining? N/A pH
   Name of Person or Agency and method of determining pH _____

6. Site elevation above sea level 5498 Feet

7. In case of coal, oil shale, and bituminous sandstone:
   Principal seam(s) and thickness(es) D.N.A.

8. Estimated duration of mining operations 40 Years

9. Has overburden, waste or rejected materials been classified as acid or alkali producing? (XX) Yes ( ) No
   Does the above material being moved have any other characteristics affecting revegetation? Very little topsoil

10. Will any underground workings or aquifers be encountered? ( ) Yes (XX) No
    Describe _____
    Is there an active discharge of water from abandoned deep mines on or crossing the land affected? ( ) Yes (XX) No If yes, describe the quality of water being discharged. _____

11. Describe specifically a detailed procedure for: (See attached)
    (a) The mining sequence
    (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.
    (c) The procedure for site preparation including removing trees and brush.
    (d) The method for removing and stockpiling topsoil or disturbed materials.
    (e) The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali-producing and toxic materials.
    (f) A procedure for final stabilization of disturbed materials.

GRADING AND REGRADING

Specifically describe: (See attached)

(a) Typical cross-section of regrading.
(b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
(c) What type of soil treatment will be utilized.
(d) The method of drainage control for the final regraded area.
(e) Maximum grading slope.

TESTING

1. Describe method for testing stability of reclamation fill material.

   No major fills are anticipated; therefore, no stability problems are expected.

   Describe method for the testing of soil that is intended to support vegetation

   Standard Fertility Test

2. Describe any soil treatment employed as an aid to revegetation _____

   Soil will be spread uniformly and properly drained

3. Describe surface preparation of areas intended to support vegetation:

   Areas will be graded to final contour and properly drained. Soil will be spread and planted; rills and gullies deeper than nine inches will be stablized.

REVEGETATION

1. Revegetation to be completed by:

   (xx) Operator
   ( ) Soil Conservation District
   ( ) Private Contractor
   ( ) Other (specify) _____

   ( ) Hydroseeding
   ( ) Aerial Seeding
   ( ) Conventional or Rangeland Drilli
   (xx) Broadcast and Drag
   ( ) Other _____

2. Will Mulch be used? ( ) Yes (XX) No

Type: _____ Rate/Acre _____ lbs.

3. Revegetation Plan and Schedule -

Species	Rate/ Acre	Planting Location	Facing N-S-E-W	Season to be replanted
Crested Wheat Grass	4.8#	Disturbed Areas		Fall
Indian Rice Grass	.8#	Disturbed Areas		
4-Winged Salt Bush	.8#	Disturbed Areas		
Rabbit Brush	.8#	Disturbed Areas		
Ladak	.8#	Disturbed Areas		

4. Will affected area be subject to livestock or wildlife grazing?

( ) Yes (XX) No Will vegetation protection be needed? No

5. Will irrigation be used: ( ) Yes (XX) No Type _____

6. Describe maintenance procedures for revegetation if needed, until surety release is granted. Monitoring of revegetation shall be performed to evaluate the success.. Reseeding and drainage alterations or repairs will be made as needed to insure proper results.

STATE OF Utah

COUNTY OF Carbon

I, Dan W. Guy, having been duly sworn depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: Dan W. Guy

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 20th day of September, 19 79.

Notary Public: [illegible]

My Commission Expires: 6-12-82

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides as follows:

> "Information relating to the location, size, or nature of the deposit and marked confidential by the operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the operator, or until the mining operation has been terminated as provided in subsection (2) of section 40-8-21."

Is confidential information contained herein?

YES DGG (Initial)

NO _____ (Initial)

Sections desired to be maintained as confidential information -

All sections

RECEIVED
SEP 24 1979
STATE OF UTAH
Division of Oil, Gas
& Mining

G E N E R A L

The C.V. Spur Facility is a combination coal processing plant and unit-train loading facility. It is located in the Miller Creek area of Carbon County, Utah, some five (5) miles south of Price, Utah, in the SW¼ of Section 11, Township 15 South, Range 10 East, Salt Lake Base and Meridian.

The facility is owned by Swisher Coal Co. and has been constructed to process and load the coal from Swisher's various coal mines in Carbon and Emery Counties.

The general area is in the Price River drainage and is relatively flat, sloping to the northeast. While there are numerous farms located around the area, the particular site of C.V. Spur has never been developed due to the high alkalinity of the soil in the area.

The entire facility was designed and constructed by McNally Pittsburg Manufacturing Company. The coal processing plant is a closed-circuit type with no water discharge and is rated at 400 tons per hour of clean coal. Shipments from C.V. Spur will eventually reach 1,000,000 tons per year with 500,000 tons expected during 1979.

UNDERGROUND MINING PERFORMANCE STANDARDS

General Obligations

A. Compliance - C.V. Spur is considered a surface work area since it includes coal processing facilities, loading facilities, spoil disposal areas, and mine waste embankments.

Signs and Markers

A. Specifications - Signs required to be posted shall be of a standard design, shall be made of durable material and shall conform to local ordinances and codes. Signs shall be maintained throughout the life of the operation.

B. Mine and Permit Identification Signs - Required signs shall be posted at all points of access to the permit area from public highways. Signs will show the name, business address, telephone number of the permitee and identification numbers of current mining and reclamation permits or other authorizations to operate. Such signs shall not be removed until after release of all bonds.

Backfilling and Grading of Road Cuts and Other Surface Work Areas

A. Upon Completion of Underground Mining - In the case of C.V. Spur, upon completion of use of the facility the structures shall be dismantled and removed from the property. At that time, surface work areas shall be regraded to an approximate original contour.

1. All earth, rock or other non-waste material shall be retained and stockpiled on site whenever possible for future reclamation use.

2. Backfill and grading will be done to the most moderate slope reasonable.

B. Terraces are not presently planned on reclaimed lands.

C. There are no steep slopes in this area.

D. Rills or gullies deeper than nine (9) inches forming in regrading, but unplanted areas, shall be filled or graded to stablize the area.

E. Coal and other combustible waste materials produced by the plant shall be placed in designated surface disposal areas and, after placement, shall be covered with a minimum of

Are toxic forming or acid forming? four feet?

two (2) feet of non-combustible material. A map showing the proposed surface disposal sites is included. A detailed description of refuse placement, typical sections and support data are also included.

F. Final grading or placement of material shall be conducted in a manner which minimizes erosion and provides a surface compatible for replacement of topsoil (as applicable) or revegetation.

Disposal of Excess Rock and Earth Materials on Surface Areas

Excess rock and earth materials generated by underground mining shall be left underground or disposed of at the mine sites. Any excess material removed at C.V. Spur will be retained on site and stockpiled, if practical, for use in reclamation. This material shall be placed in the "topsoil" pile when practical or used in preliminary reclamation of disturbed areas.

Protection of the Hydrologic System

The construction of C.V. Spur will not alter the natural runoff pattern from the surrounding undisturbed area. An irrigation canal exists outisde the southern and western boundaries of the property, and as a result, some underground leakage has deposited ground water in the past. A "French Drain" consisting of a perforated pipe and/or drain rock has been installed around the west and north perimeter of the property and along a portion of the railroad in the southeast corner to intercept this water. The water is collected in a deep sump at the northeast corner of the property where it is used in the coal-washing system. Upon reclamation, the sump will be filled in and the ground water will be free to follow its normal course. It should be noted that this water is highly alkaline and is not suitable for stock or crop watering. In general, the hydrologic balance of the area will not be affected by our presence, and upon completion of final reclamation, grading will be such as to restore natural drainage patterns from the disturbed areas.

Hydrologic Impact of Road

A. General - All main access and haul roads at C.V. Spur have been constructed in such a manner to prevent additional contributions of suspended solids to streamflow and to prevent runoff outside the permit area to the extent possible.

B. Construction -

1. All roads are elevated slightly above natural ground providing for stability and drainage control. No roads cross any streams within the permit area. (Drainage from the roads is taken to the sedimentation structures with the exception of that drainage located on the undisturbed side of the incoming haul road.) This drainage is considered natural and is thus diverted.

topsoil & vegetation of slopes

How about drainage from surface of the road?

2. All roads are constructed at less than 10% grade.

3. Drainage along all roads is accomplished mainly by ditches of adequate size to handle the peak runoff of a ten-year, 24-hour precipitation event. Culverts are employed at various points, such as railroad crossings, and these too are sized to handle the above mentioned runoff.

4. All roads are presently surfaced with crushed or pit-run gravel. In the event hard surfacing is implemented, it shall be of a durable non-toxic type, such as asphalt. Vegetation is removed only for the essential width necessary to accommodate construction of roads, ditches, etc.

C. Maintenance -

1. Access and haul roads are routinely maintained by wetting and scraping.

2. All drainage structures along roads are maintained to prevent blockage or restriction.

All other access roads, constructed for and used only to provide infrequent service to surface facilities, shall be provided with adequate stablization to control erosion and these roads shall be exempt from the construction requirements in subparagraph "B".

D. Hydrologic Impacts of Other Transport Facilities - Railroad loops, spurs, conveyor and other transport facilities have been constructed, are maintained, and will be reclaimed to prevent additional contributions to streamflow or to runoff outside the permit area.

Dams Constructed of, or Impounding Waste Material

A. General - There are no plans to construct any dams of, or to impound any waste material at this facility.

Topsoil Handing and Revegetation

A. Topsoil is almost nonexistant at this site and surface material available is generally highly alkaline by nature. In all areas of proposed future disturbance the surface soil and vegetation shall be scraped off to a depth of about six inches and stockpiled as shown. This material shall be protected from wind and water erosion by planting if necessary. Once disturbed areas are no longer required for the conduct of the operation they shall be regraded and the topsoil will be disturbed and revegetated.

B. The soil in this area is quite saline in nature, and as a result, the vegetative cover is quite sparse. However, the following plant types have been identified on the undisturbed areas:

Russian Thistle
Halogedent
Kochia
Winter Fat
Rabbit Brush
Greasewood
Indian Rice Grass
Four-Winged Salt Bush
Clump Grass
Poverty Weed (Mouse Ear)
Tansy Mustard

In addition, there are minor occurrences of sagebrush, sunflower and tamarack.

Reclamation of disturbed areas shall be accomplished by grading, spreading of at least six inches of topsoil and re-seeding the area with a special seed mixture. Mulch will be used as needed and watering will probably not be required due to the compatibility of the seed mixture with the arid environment.

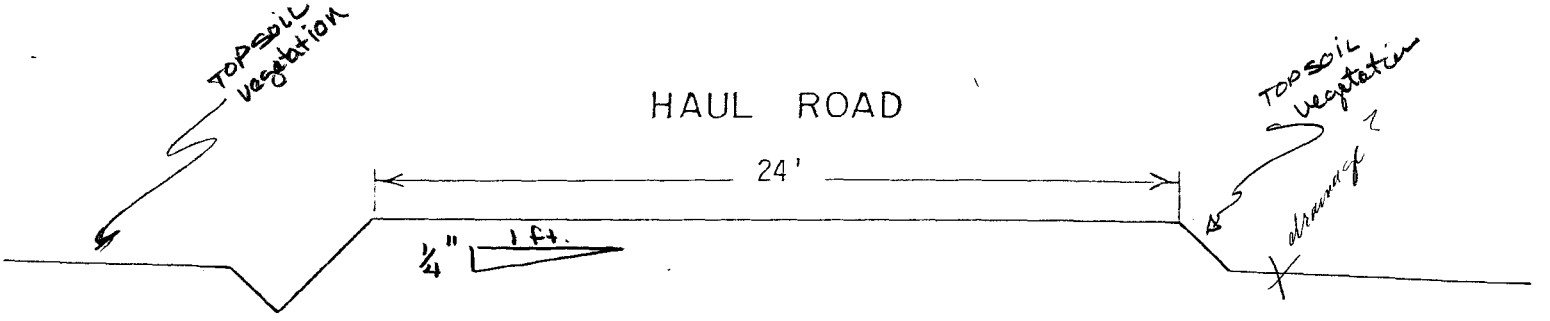
The following seed mixture is proposed to provide permanent vegetative cover capable of self-regeneration and succession and to prevent soil erosion:

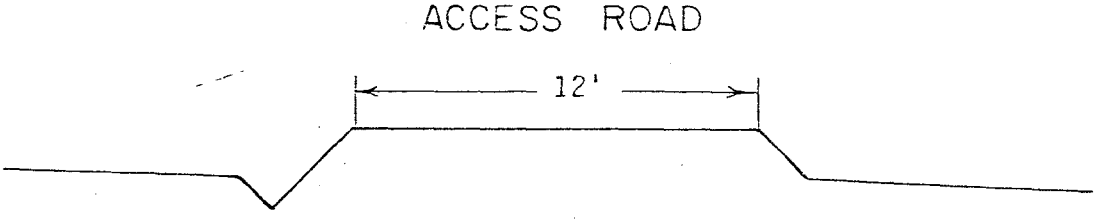
Creasted Wheat Grass	60%
Indian Rice Grass	10%
Four-Winged Salt Bush	10%
Rabbit Brush	10%
Ladak (Alfalfa)	10%

The proposed rate of application will be eight (8) pounds of seed per acre of disturbed land. The reclaimed areas will be monitored for growth and changes will be made as necessary to insure reasonable success of the vegetative effort.

Typical Cross-Section of Haul Road &
Access Road

TYPICAL CROSS-SECTION



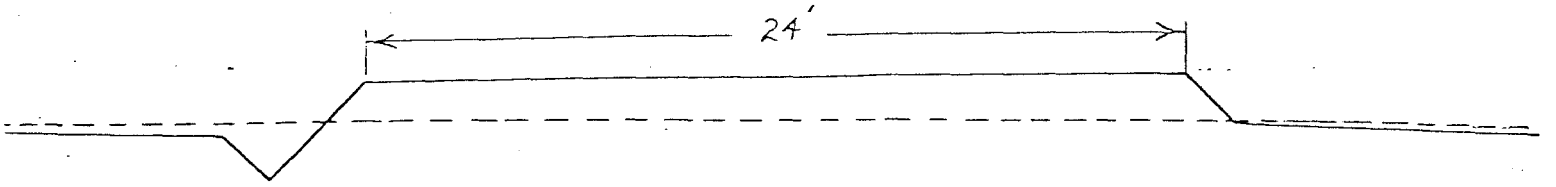


Profile ?

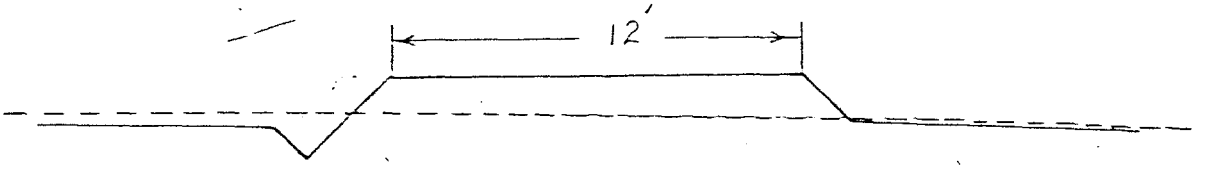
NOTE: Drainage ditches will be provided along roadways where needed. The size of these ditches will be adequate to handle the runoff for the area.

TYPICAL CROSS-SECTION
BEFORE & AFTER RECLAMATION

HAUL ROAD



ACCESS ROAD



REFUSE DISPOSAL PROCEDURE

Preparation:

1. Remove vegetation and topsoil and place in compacted lifts of one foot or less on designated storage area.

2. Remove lower soil to a depth of two to four feet as ground conditions allow. This material is also to be placed in compacted lifts of twelve inches or less in a designated storage area.

Dumping:

1. Refuse should be dumped on the extreme perimeter of the prepared area. Truckloads dumped should have three to five feet clearance from previous loads to allow spreading.

2. Continue dumping around perimeter until filled:

   (a) If using more than one area, proceed to next prepared area and repeat above dumping procedure.

   (b) If only using one large area, begin dumping back at original point or as near as possible to this point. (Access back to the perimeter may be limited by soft ground conditions.)

Spreading and Compaction:

1. Refuse piles should be knocked down and spread as soon as practical, preferably, at least every other day. Spread the refuse as thinly as possible to allow for more efficient drying.

2. Compaction should take place during spreading operation if possible. If refuse is too wet to compact, allow for air-drying and then proceed. Compact in layers not to exceed twelve inches, starting at the perimeter and working out. This will allow for the building of the height of the pile in a series of stable lifts.

3. It is imperative that the spreading and compacting operation keep up with the dumping to allow for maximum utilization of the refuse area.

Inspection

Reclamation

1. The first major pile will stop at the height of the railroad grade. Once the area is filled to this elevation, a second pile to be approximately ten feet thick will be started over the first. (See drawing.)

1st pile? or in 40 yards?

2. Once the pile is completed, reclamation will begin. This will consist of the following steps:

four feet UMC 817.85 (3-50) unless revegetation UMC 817.111-117 are met (may be ok)

(a) Rough grading and contouring to allow for drainage placement of soils.

(b) Cover area with at least eighteen inches of incombustible materials from storage area.

(c) Spread and compact at least six inches of topsoil from storage.

effect? on mining and farming

how.

(d) Eliminate rills and gullies and prepare for planting through final grading.

(e) Plant area with specified seed mixture at the recommended rate per acre.

standards for success.

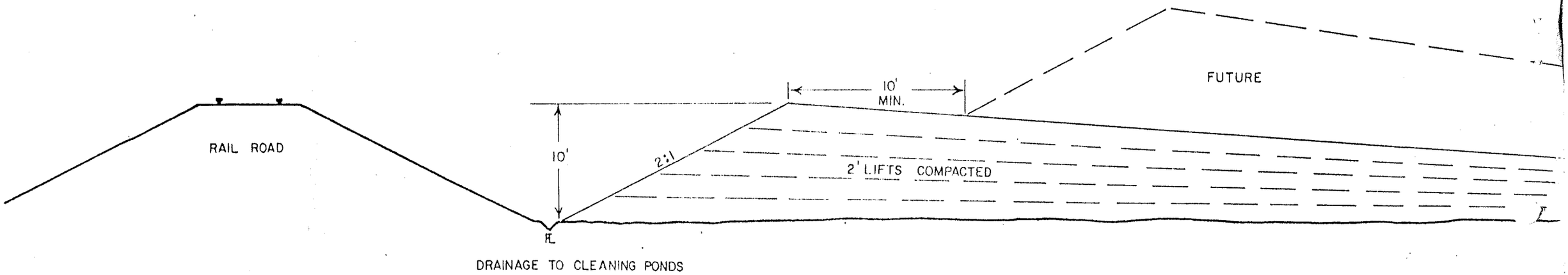
(f) Monitor progress of reclaimed areas. (The use of mulch and added water will be employed if demonstrated to be necessary through the monitoring.)

(a) a properly designed subdrain system installed unless operator demonstrates that his construction method ensures structural integrety (will not impound water) and ground water quality is protected
(b) slope protection from erosion.
(c) Compact to 90% of maximum dry density.
(d) static safety factor of 2:1 slope of 1.5. "Floors ok but not stated"

PROPOSED REFUSE PILE

SECTION VIEW

RECEIVED
SEP 24 1979
STATE OF UTAH
Division of Oil, Gas
& Mining



NO WATER IMPOUNDMENT