



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

Michael O. Leavitt
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January 4, 1994

Mr. Ken Payne, Manager
Utah Fuel Company
P. O. Box 719
Helper, Utah 84526

Re: Plans for Abatement of NOV #93-39-5-3 (part 1 of 3), Coastal States Energy Company, Skyline Mine, ACT/007/005-93M, Folder #3, Carbon County, Utah

Dear Mr. Payne:

As you are aware the abatement of NOV N93-39-5-3 (part 1 of 3) has proven to be a fairly complex issue (although one which we feel can be resolved). The abatement date for the submission of acceptable plans has been extended to March 31, 1994 and we are hoping to have the issues resolved by that date. At this point, the Division's technical staff has conducted a review of your initial submittal, received November 17, 1993, and has identified areas of deficiency with that submittal. A copy of the technical review is enclosed for your information and to provide you with some direction in responding to the deficiencies.

We realize there may be some difference of opinion on the best method of providing sediment control along the overland conveyor. We encourage you to work closely with the Division staff to arrive at a mutually acceptable solution to this issue, which fits within the constraints of the regulations. If we need to meet on this issue, don't hesitate to call and our staff will be made available.

Please call me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Daron R. Haddock".

Daron R. Haddock
Permit Supervisor

Enclosure

cc: S. Demczak, PFO
S. Falvey
J. Helfrich
CONVABAT.SKY





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December 28, 1993

TO: File

THRU: Daron Haddock, Permit Supervisor

FROM: Sharon Falvey, Senior Reclamation Hydrologist *SFF*

RE: N93-39-5-3#1 Abatement-Alternate Sediment Control Measures
Overland Conveyor, November 17, 1993, Utah Fuel Company, Skyline
Mine, ACT/007/005-93M, Folder #2, Carbon County, Utah

SUMMARY

An amendment addressing abatement for the sediment control/exempt area measures used for the overland conveyor was received on November 17, 1993. This amendment is the result of NOV 93-39-5-3#1 issued 9-16-93 for failure to have appropriate sediment control measures that are designed and constructed. A modification was granted by the Division extending the 90 day abatement date from Wednesday, the 15th of December, to March 31, 1994 for approval, and July 15, 1994 for implementation.

ANALYSIS

BTCA Designs

Proposal:

The operator refers to Areas 20, 21, 22, 26, 27, 28, 29, 30, 31, and 32 as exempt areas. The operator indicates all areas classified as alternate sediment control areas will be re-classified and referred to as exempt areas when demonstrated. The operator requests the topsoil pile be referred to as an exempt area.

The operator proposes some text changes to Areas 8, 9, 10, 10a, 23, 24 and 25. Area 10a includes a change in the size of area from 0.39 acres to 0.045 acres.



The operator has included a typical diagram for alternate sediment control measures as indicated on diagrams 1/3 through 2/3, Section 1, Volume 5. The silt fence diagram indicates metal or wooden stakes will be used as needed and that the bales will be placed on the surface without trenching if good contact is made.

Analysis:

It has been the Division's past practice and intent to incorporate some measure of alternate sediment control for each disturbed area not reporting to a sedimentation pond. It is recommended the operator delay the request for exempt areas until a directive is clarified by the Division. The operator is referred to R645-301-742.240 which indicates that exemptions may be granted. Additionally, the proposal per this plan could not be approved as Exempt because the operator has not provided a demonstration that effluent limitations will be met.

There is an advantage to the operator retaining these small disturbed areas as ASCA's. This advantage is based on whether the operator will always have the ability to maintain the conditions under which the demonstration was approved. For instance, the operator is known to have grazing near the topsoil piles which could result in a change in the conditions required in order to meet applicable effluent limitations. Should the conditions change at that site the operator will have failed to be in compliance with the permit and have to provide an amendment. Should the operator use a vegetative filter as the BTCA and, provide details for additional sediment control measures if the conditions change, the operator would be covered by the regulations and would not need to resubmit plans.

The operator has stated that some of the disturbed areas are covered by cement structures. These areas were constructed with the intent of minimizing the disturbed area (a few of these sites do show a small amount of disturbance around the base of the structure, as determined by a site visit on December 8, 1993). In the plan, the operator indicates that coal accumulations greater than 2 inches will be cleaned up on the permitted area along the conveyer (page 3-24 b). The accumulation of up to 2 inches of coal could cause a significant contribution of coal sediment off site. Therefore, a commitment and plan to provide alternate sediment control measures such as silt fences and straw bales, would provide protection when the site conditions are no longer adequate to prevent additional contributions of suspended solids outside the permit area.

The operator can show the design used as an Alternate Sediment Control Measure is adequate and meets the intent of the regulation for small disturbed areas

using vegetative filters through the following:

- a) Vegetation as ASC measures include mapping the area of vegetative filtration. Identifying the existing vegetation and a minimum cover requirement to determine ability of the vegetation to filter sediment.
- b) The operator may define the size of the small disturbance based on the runoff volume for the 10 year-24 hour event. The design, for a determined maximum size disturbance would include parameters representative of the site condition (discussion of and basis for CN such as % cover would have to be met or exceeded to continue to be in compliance with approved plan). The design should show that runoff for the sites of a specified size or smaller is insignificant (e.g. will not effect downstream area due to changes in runoff characteristics and flow velocity does not have erosive properties).
- c) Minimizing disturbed areas can be shown in discussing the extent of the permit area for the overland conveyance structure and summing the extent of the disturbance within the structure area. Previously disturbed and newly disturbed areas should be included for further clarification. Discussion of the conveyor as BTCA v.s. other conventional means would be considered a sediment control measure as well as minimizing erosion by using concrete in the disturbed areas and, retaining established vegetation around the disturbed area .
- d) The operator could commit to provide specific sediment control measures if the vegetative or design conditions change. This would ensure the site has adequate sediment control measures with out requiring an amendment.

The operator should clarify the treatment of drainage at the portal area. If this area is insloped the operator must obtain a approval to discharge to the mine in this area, if this has not already occurred. See Discharges R645-301-731.500.

The concept of placing the straw bales directly on the ground surface sounds good, but is shown to be less effective in practice. According to Hess and Fisher Engineers, INC. Handbook of Alternative Sediment Control Methodologies for Mined Lands, 1985, proper installation is critical to the performance of the straw bale filtering structure. The operator is required to use BTCA and therefore must provide trench excavation, staking, and backfill measures on straw bale installation. On a

case by case basis, the operator may show that trench excavation is not possible. In such cases the Division may approve alternate installation methods or approve an alternate method for BTCA.

Mapping

Map 3.23-3A although this map is amended to show Area 25 and Area 26 the photocopy lost the detail included on the previous submittal.

Area 30 is shown on maps 3.2.3-3D through 3.2.3-3F. The operators description indicates the area to be on map E through F.

Map 3.23-3F changes do not provide clear descriptions of the areas disturbed through conveyor construction and the changes occurring in the description of tower 10a. The area below G-B-2 is an area of concern due to the proximity of the operations to Eccles Creek silt fences and straw bales are considered necessary in this area beyond the normal vegetative filter because of the high level of coal operating activities, specifically the wash down bay and areas previously disturbed draining to the stream. Previous disturbances along conveyor BC-2 and adjacent to structure G8-2 are not described. Area 13 appears to be out of the permit boundary.

Deficiencies:

1. In order to justify that the proposed method is BTCA the operator should provide a discussion on why a sedimentation pond is impractical for treating the disturbed area.
2. Current guideline requirements for Alternate Sediment Control in areas not providing adequate vegetative filtering requires the following items:
 - a) Acreage of each area (presented) and the total Alternate Sediment Control Areas within the permit area.
 - b) Specific treatment structures or measures to be employed at each individual site.
 - c) Calculated runoff volume from a 10 year-24 hour precipitation event for each area.
 - d) A monitoring plan to sample collectable drainage from these areas when practical. The sample should analyze Total

Suspended Solids and Settable Solids.

3. The operator may show the designs used as Alternate Sediment Control Measures are adequate and, meet the intent of the regulation for small disturbed areas using vegetative filters and minimized disturbance would include the following:
 - a) Vegetation as ASC measures include mapping the area of vegetative filtration. Identifying the existing vegetation and a minimum cover requirement to determine ability of the vegetation to filter sediment.
 - b) The operator may define the size of the small disturbance based on the runoff volume for the 10 year-24 hour event. The design, for a determined maximum size disturbance would include parameters representative of the site condition (discussion of and basis for CN such as % cover would have to be met or exceeded to continue to be in compliance with approved plan). The design should show that runoff for the sites of a specified size or smaller is insignificant (e.g. will not effect downstream area due to changes in runoff characteristics and, flow velocity does not have erosive properties).
 - c) Minimizing disturbed areas can be shown in discussing the extent of the permit area for the overland conveyance structure and summing the extent of the disturbance within the structure area. Previously disturbed and newly disturbed areas should be included for further clarification. Discussion of the conveyor as BTCA v.s. other conventional means would be considered a sediment control measure as well as, minimizing erosion by using concrete in the disturbed areas, and retaining established vegetation around the disturbed area .
 - d) The operator could commit to provide specific sediment control measures if the vegetative or design conditions change. This would ensure the site has adequate sediment control measures with out requiring an amendment.

Note: The operator will be appraised as further clarification on this issue is received. Until that time this method would be acceptable if runoff is shown to

be small and of non erosive velocity and site conditions are reasonably specific.

4. The operator should clarify the treatment of drainage at the portal area. If this area is insloped the operator must obtain a approval to discharge to the mine in this area, if this has not already occurred. See Discharges R645-301-731.500.
5. Proper installation of sediment control measures is considered crucial to Alternate Sediment Control Measures, therefore the operator must provide trench excavation, staking, and backfill measures on straw bale installation unless site specific measures are approved.
6. The operators should provide clear detail of Map 3.23-3A as presented in the previously approved submittal.
7. Map 3.23-3F should clearly present the following:
 - a) Previously disturbed areas clearly defined for ASCA 10a.
 - b) Previous disturbances along conveyor BC-2 and adjacent to structure G8-2 must be defined.
 - c) Area 13 should appear within the permit area boundary.
8. The disturbed area text and the disturbed area shown on map 3.23-3 A do not match for ASCA 8.
9. Provide the correct map references for area 30.

RECOMMENDATION

The operators presented information requires additional information to provide a clear and accurate plan. Until policy is clarified on the term and uses of exempt areas it is recommended no exempt areas be approved. The operator is referred to R645-301-742.240 which indicates that exemptions may be granted (See analysis above). Additionally the operators use of exempt areas could not be approved until the operator provides the demonstration. On that basis this proposal must be denied. The operator has until Wednesday, the 15th of December to meet the 90 day period for NOV abatement.