

001



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

TO: Daron Haddock, Permit Supervisor

FROM: Paul Baker, Reclamation Biologist *PBB*

DATE: February 19, 1993

RE: Deficiencies in Mining and Reclamation Plan which were Deleted in the Administrative Review, Coastal States Energy and Skyline Coal Companies, Skyline Mines, Folder #2, ACT/007/005, Carbon County, Utah

SUMMARY

In the administrative review of the aforementioned mining and reclamation plan, some of the deficiencies were dropped. The purpose of this memorandum is to discuss some of these deficiencies further and to address the requirement of R645-301-356.231 that minimum tree and shrub stocking rates be established after consultation with State forestry and wildlife management agencies.

ANALYSIS

R645-301-341.250 Standards for Success

Analysis:

R645-301-356.231 requires that the Division consult with State forestry and wildlife management agencies concerning tree and shrub stocking rates and standards for success for areas that are to be returned to a wildlife postmining land use. The consultation has been performed and standards established based on the information available in the plan, the reclamation plans, and the experience of a Division of Wildlife Resources (DWR) habitat development specialist, the Operator, and the Division.

The following standards were established and need to be incorporated into the plan:

Reference area used for comparison	Standard (number per acre)
Riparian	2800 trees and shrubs
Sagebrush in Eccles Canyon	3000 shrubs

Aspen	421 trees and 1000 shrubs
Spruce-Fir	480 trees and 500 shrubs
Waste Rock	4000 shrubs

Some changes should be made to the seed and planting mixes to make it more likely to achieve these standards. These suggested changes have been discussed with a representative of the Operator, and he is in basic agreement.

1. The seed and planting mixture for north to east-facing slopes should probably be changed. The option that was discussed with Skyline and which would be approvable is to plant about 700 shrub transplants per acre using a mixture of approximately equal proportions of at least three species. Depending on availability, the species would be chosen from a list of about six. Recommended species are woody cinquefoil, Wood's rose, raspberry, red elderberry, snowberry, golden or gooseberry (*R. montigenum*) currant, mallow-leaved ninebark, and black twinberry.
2. The standard for trees on south-facing slopes (aspen reference area) is based on the baseline information in the plan. The plan should be changed so that at least 500 aspen trees will be planted per acre on south-facing slopes. Also, the Operator should consider planting Wood's rose and possibly some of the other shrub species from transplants rather than from seed.
3. At the waste rock disposal area, only three species of shrubs are to be planted. The list of species growing in the waste rock reference area includes six species. Some that might be added to the seed or planting list are bitterbrush, snowberry, Utah serviceberry, and wax currant. Also, it is suggested that Wood's rose be planted from transplants rather than from seed.

Deficiencies:

1. The plan must include the tree and shrub standards for success which have been obtained in consultation with the Division of Wildlife Resources as detailed above.

R645-301-342

Fish and Wildlife Plan

Analysis:

This regulation and R645-301-358 require that the best technology currently available, which can be determined by the Division within the scope of the State Program and after weighing economic considerations, be used to enhance wildlife habitat. The plan includes some enhancement measures, but they are not identified as such. Minimally, the plan should identify these enhancement measures:

1. Previously disturbed riparian vegetation at the mine site in Eccles Canyon will be reestablished. (See Forest Service Environmental Assessment, p. 6)
2. The area that was previously disturbed by mining will be cleaned up and restored to a productive site suitable for wildlife habitat and grazing. (Ibid.)
3. Changing the land use of the loadout area from a livestock corral to wildlife and grazing will be an enhancement.
4. Wildlife habitat will be enhanced at the waste rock site by extinguishing the fire and restoring plants which are useful for wildlife habitat.

Other habitat enhancement measures may be needed in the area. The Fish and Wildlife Service suggested that artificial habitat structures for pileated and Lewis woodpeckers, Williamson's sapsuckers, owls, and other migratory birds might be needed to enhance the habitat for these birds. DWR has been asked to determine what habitat enhancement measures would be practical for the area, but they have not yet responded. Until DWR does respond, the plan should be changed to indicate the enhancement measures listed above and any others that are already proposed in the plan but were not found.

Deficiencies:

1. Skyline's plan needs to show measures that will be used in the postmining phase of operations to enhance wildlife habitat. These measures need to incorporate the best technology currently available and should, at a minimum, identify the measures shown in this analysis. Other enhancement measures may be identified in the future and would also need to be included in the plan.

R645-301-413.

Land Use Reclamation Plan.

Analysis:

Deficiencies five through seven included in the permit renewal technical deficiency

review were:

5. *Skyline must show evidence of consultation with appropriate land use agencies to determine that the potential uses of areas not to be restored to approximate original contour will constitute equal or better economic or public uses.*
6. *The application must include written requests from surface landowners for a variance from approximate original contour so as to render the land, after reclamation, suitable for the postmining land use.*
7. *The application must show that the watershed of lands within the proposed permit and adjacent areas will be improved by the coal mining and reclamation operations when compared with its condition either before mining or if approximate original contour was restored.*

Skyline's initial response to these deficiencies was that they did not propose an alternative postmining land use, that the Forest Service had had a chance to comment on the mining and reclamation plan so that comments from them on the postmining land use and variance from approximate original contour were not needed, and that improving the watersheds through a variance from approximate original contour requirements was in conflict with other regulations.

The Division's response in the administrative review was that these deficiencies were not renewal issues, and the deficiencies were dropped.

Whether or not the deficiencies have a bearing on the decision to issue or not issue a permit, they are requirements of the regulations that need to be addressed in the plan. Of particular concern is the variance from approximate original contour on private lands.

R645-302-270 requires that the surface landowner of the lands within the permit area knowingly request, in writing, as part of the permit application, that a variance be granted so as to render the land, after reclamation, suitable for an industrial, commercial, residential or public use (including recreational facilities). The request will be made separately from any surface owner consent given for the operations under R645-301-114 and will show an understanding that the variance could not be granted without the owner's request. These requests have not been included in the permit. Skyline stated in one of the responses to the permit renewal technical deficiency review that they were attempting to renegotiate or change part of the lease for the private land on the conveyor route. They have proposed to submit information on May 3, 1993, to satisfy postmining land use and reclamation feasibility concerns. Included with this information, Skyline

needs to supply a request from the owner of the land in the conveyor area that the land not be returned to approximate original contour.

As Skyline stated in the preliminary response to the technical deficiency review, the Forest Service has had an opportunity to review the plan several times and should be aware of the postmining configuration plans. The Environmental Assessment performed in 1980 does not appear to contain specific reference to a variance from approximate original contour, but the Technical Analysis performed by OSM does. Even if the EA contained the needed request, it was still not included in the permit application as required.

For any area not to be returned to approximate original contour, the other requirements of R645-302-270, such as those included in the deficiencies listed above, also need to be addressed.

The Division needs to consult with appropriate land use agencies to determine if the potential use constitutes an equal or better economic or public use. In accordance with R645-302-271, most Federal and Utah government agencies with an interest in the proposed land use have had an adequate period of time in which to review and comment on the proposed use. Agencies which could potentially have an interest in the variance which have not received copies of the plan and had a chance to comment include the Utah Department of Transportation and Carbon County.

The Division needs to find that the plan demonstrates that after reclamation, the lands to be affected by the variance within the permit area will be suitable for an industrial, commercial, residential or public postmining land use (including recreational facilities). The Division also needs to find that the watershed of lands within the proposed permit and adjacent areas will be improved by the coal mining and reclamation operations when compared with the condition of the watershed before mining or with its condition if the approximate original contour were to be restored. The TA gives some indication that some areas of the watershed in the portal area would be improved compared to returning the land to approximate original contour, but since the conveyor bench was originally proposed to be returned to approximate original contour, the TA did not address the issue for this area.

The proposed design for the variance from approximate original contour needs to be prepared and certified by a Certified Professional Engineer. Unless the highwall is determined to be retained under R645-301-553.650, the highwall needs to be completely backfilled with spoil material, in a manner which results in a static factor of safety at least 1.3, using standard geotechnical analysis. The proposal discussed on page 4-28 of the plan is to leave cut slopes near the Nos. 1 and 3 portals with slopes of 1h:1v to 1h:2v. Eight-foot wide benches would be provided at 30-foot height intervals in these areas. The

4. The Division needs to find that the lands to be affected by the variance will be suitable for an industrial, commercial, residential or public postmining land use (including recreational facilities).
5. The Division needs to find that the watersheds will be improved compared to not being restored to approximate original contour.
6. The plan for a variance from approximate original contour needs to be certified by a Professional Engineer, and the reclaimed slopes need to be shown to have a minimum safety factor of 1.3.
7. The requirements of R645-302-270 need to be included as a condition of the permit, and the permit needs to be marked as containing a variance from approximate original contour.

Until these requirements are met, the variance from approximate original contour contained in Skyline's plan cannot be considered to be approved.

Deficiencies:

1. The plan must address the requirements of R645-302-270 for those areas that are not proposed to be returned to approximate original contour at the time of final reclamation.

RECOMMENDATIONS

Skyline's mining and reclamation plan needs to contain the woody species density standards for success that were established in consultation with the Division of Wildlife Resources. In conjunction with this, some changes to the seed and planting mixes need to be made. Skyline's plan does not discuss fish and wildlife habitat enhancement, but some habitat enhancement would be achieved through the current plan. These need to be identified in the plan, and additional measures that incorporate the best technology currently available according to the definition in the rules may need to be added in the future. The variance from approximate original contour contained in Skyline's plan cannot be considered to be approved until the requirements of R645-302-270 have been met.