



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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TO: File

FROM: Paul Baker, Reclamation Biologist 

DATE: August 17, 1992

RE: Skyline's Response to Technical Deficiency Review, Utah Fuel Company, Skyline Mine, Folder #2, ACT/007/005, Carbon County, Utah

SUMMARY

Skyline responded to the Division's technical deficiency review, and an administrative overview of the responses was conducted. The purpose of this memo is to further discuss the deficiencies and Skyline's responses.

ANALYSIS

R645-301-321

Vegetation Information

Deficiency:

1. The plan must contain either a summary of vegetative cover, woody species density, productivity, and similarity comparison information for the reference areas and disturbed and proposed disturbed areas or a table to show precisely where this information is located in Appendix A-2.

Response:

This type of summary would be nice, however, it would be very time consuming and is not required in the regulations.

Discussion:

The summary and/or table are not required by the regulations, but the regulations do require that the plan be "clear and concise". This requirement is vague, but the deficiency was an attempt to consolidate the most important vegetation information. As currently written, most of the required information was found in

several reports containing conflicting terminology which were written over about a five-year period. Some of the required information, as detailed in the analysis section of the technical deficiency review, was not located.

The plan contains productivity information for the disturbed areas and for the reference areas, but all of the information needed for setting standards for success and for attempts to determine if reclamation is feasible at the site could not be found. R645-301-321.100 says that the plan needs to contain adequate information to predict the potential for revegetation including, if required by the Division, a description of plant communities within the area disturbed by surface operations for underground mines. The "Vegetation Information Guidelines" contain the standard Division requirements for vegetation information for the areas that were to be disturbed. It is recognized that if this information is not already gathered it cannot be obtained now. The plan may contain this information, though, and it could not be found. That is one of the reasons for requesting the table.

The reason for requesting reference area information or for asking for a summary so that it can be found is so that the Division has data on which to base standards for success (the woody species density standard which must be obtained in consultation with DWR) and so that information to compare with areas that Skyline is attempting to reclaim either for the interim or permanently is available. This would help to prove reclaimability.

R645-301-322

Wildlife Information

Deficiency:

1. The application must include raptor nesting information for the entire permit area.

Response:

The recent identification of the Northern Goshawk as a candidate for T & E status certainly suggests that this raptor receive special attention. However, as required by R645-301-322.100 the scope and level of the required information should be determined by the Division in consultation with DWR. There is no indication that this has been done. It is suggested that such an all encompassing survey requirement should be evaluated using the potential for damage from subsidence. The applicant would be willing to participate in such an evaluation.

Discussion:

This requirement was made after consultation with Bill Bates, a non-game biologist with DWR. This fact was not indicated in the deficiency review.

A survey of the entire permit area may not be necessary, but a survey of all areas with potential raptor nesting habitat where there is the potential for subsidence-caused loss of a nest needs to be performed.

Deficiency:

5. References to data from Seton (1927) must be deleted from the plan.

Response:

A difference of opinion by an employee of DWR with the work done by Seton is not sufficient reason to delete references to Seton's data. The statement by Seton on the elk's need for space does not appear to be the issue. To delete these references would require an inappropriate editing of a consultant's report.

Discussion:

I cannot comment on the validity of Seton's work. DWR, however, is considered to have biological and management expertise on such subjects in Utah.

The deficiency does not require that the references to Seton's data be eliminated from the consultant's report. The report is quoted in the plan, and this reference can be eliminated.

Deficiency:

6. The plan must include data from recent Wildlife Resources fisheries surveys.

Response:

It is suggested that the surveys by DWR be referenced and, where appropriate, the data be summarized. Including the reports, where applicability varies greatly from survey to survey, seems to be a waste of binder space.

Discussion:

Appropriate summaries of the data included in the MRP would be adequate.

R645-301-330

Operational Plan

Deficiency:

1. As it is developed, the plan for mitigation of loss of wildlife values due to subsidence in the Burnout Creek area must be incorporated into the plan.

Response:

The referenced mitigation plan is a part of a subsidence issue being pursued by the Forest Service. While the applicant has no problem with keeping the Division informed on the progress of this developing activity, inserting the mitigation plan in the M&RP essentially gives the Division modification and approval rights for the plan and potentially places the applicant in a difficult position between agencies. Since the scope of this effort appears to be beyond the requirements of 301-330, it is suggested that the Division pursue requirements related to this issue directly with the Forest Service.

Discussion:

R645-301-332 states: "For the purposes of UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES a description of the anticipated impacts of subsidence on renewable resource lands identified in R645-301-320, and how such impact will be mitigated;". Further, R645-301-333 requires that the plan describe "...how, to the extent possible using the best technology currently available, the operator will minimize disturbances and adverse impacts to fish and wildlife and related environmental values during coal mining and reclamation activities...". The mitigation plan anticipated for the Burnout Creek area clearly fits within the criteria of these regulations.

R645-301-341.226 Species and Quantities of Seeds and Seedlings

Deficiency:

1. The plan must contain methods to obtain seed and nursery materials of adapted ecotypes or varieties. If the Applicant is to gather seed from near the mine site, provisions for testing must be included so planting rates can be adhered to.

Response:

Regulations do not require "methods" to obtain seed and nursery materials.

Discussion:

The response is correct. The objective of the deficiency was to obtain a commitment that adapted ecotypes and varieties would be used for reclamation. The regulations require that the vegetative cover be diverse, effective, permanent, and the species must be capable of plant succession. It is the experience of several agencies and researchers, including the Soil Conservation Service, the Bureau of Land Management, and the Forest Service, that adapted ecotypes and varieties must be used to obtain a vegetative cover that meets these requirements. It is recognized that this type of seed may not always be available when it is needed, but it should be used whenever possible.

R645-301-341.220.

Planting and Seeding Methods.

Deficiency:

2. The revegetation or soil redistribution section of the application must show methods to be used to roughen the surfaces of slopes in preparation for seeding, particularly those greater than 3h:1v.

Response:

Regulations require "method" use in planting and seeding not for site preparation.

Discussion:

R645-301-355 requires that suitable mulch and other soil stabilizing practices will be used on all areas that have been regraded and covered by topsoil or topsoil substitutes. It is the Division's experience and the experience of several coal and other mine operators in Utah and elsewhere that leaving a roughened seeding surface is essential for seeding and soil stabilization success, especially on steeper slopes. As an alternative to this requirement, Skyline could include information in the plan to show that revegetation on steep slopes was feasible without using surface roughening techniques.

R645-301-341.300

Revegetation Feasibility Demonstration

Deficiency:

1. The plan must demonstrate revegetation feasibility in those areas where a variance from approximate original contour is proposed.

Response:

Where is this required in the regulations?

Discussion:

The regulations do not specifically require revegetation feasibility demonstration for areas with a variance from approximate original contour, and in this respect the deficiency was not properly written. The concern is that there are some areas where the plan appears to demonstrate that revegetation is not feasible, such as on slopes that are above the angle of repose or that are too steep to hold topsoil, and in areas consisting primarily of rock outcrops. Despite this, slopes may be greater than 1h:2v in some areas, and areas steeper than 1.5h:1v will not receive topsoil. These are the types of areas where revegetation feasibility must be demonstrated.

Deficiency:

2. The plan must be revised to show that quantitative data, including percent cover by life form, woody species density, and shrub survival rates, will be gathered for the conveyor bench in 1992 and annually thereafter for at least the next two years (1993-1994) if the reference area standards are not being approached this year. Further data may be needed after that period, and the reference area may also need to be evaluated for some of these parameters for comparison.

Response:

Why is this being requested many (15+) years before actual reclamation starts plus another 5 - 10 years before bond release will be sought?

Discussion:

As discussed in the deficiency review, the descriptions contained in the plan of the conveyor bench are of a site that is very steep and unstable and where revegetation has been very difficult. Even after 4 years of working on the Soil

Conservation Service plan and about 8 years of trying to establish vegetation before that, the site does not appear to be approaching the reference area standard. It is very unlikely that the *approved* success standard will ever be achieved using the current plan. Keith Zobell has acknowledged this in conversations that I have had with him. The requirement made in this deficiency is based on what is currently contained in the plan, and the plan must demonstrate that revegetation is feasible according to the State Program and the plan. This has not been done for the conveyor bench. However, this does not mean that using the approved success standard is the most desirable option for this area.

I believe that Keith Zobell and I are in agreement that another option to the approved plan needs to be developed. We are not certain what this option may be, but, for the present, Utah Fuel does not need to respond to this deficiency.

Deficiency:

3. As part of the discussion on reclaimability, the plan must include information on the source of the shrubs that have been used in reclamation of the conveyor bench.

Response:

Where is this required in the regulations?

Discussion:

This deficiency was not included in the final version of the technical deficiency review, and I am not sure how it was included in the Division Order. The justification for it was that Keith Zobell and I both felt that the source of the shrubs may have been one of the reasons for the shrubs not growing well on the conveyor bench. This information would probably be very difficult or impossible to obtain, however, so it was deleted in the final draft.

R645-301-342.

Fish and Wildlife.

Deficiency:

1. The Application must include a fish and wildlife habitat enhancement plan for the reclamation and postmining phase of operation or must include a statement explaining why enhancement is not practicable. Consultation with

R645-301-413. Reclamation Plan.

Deficiency:

4. The plan must adequately address the requirements for an alternative postmining land use in R645-301-413.300.

Response:

Only if an alternative postmining land use is proposed. We don't propose any.

Discussion:

R645-302-271.100 requires that the requirements of R645-301-413.300 be met for areas where a variance from approximate original contour is proposed.

Deficiency:

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.

Response:

It has never been proposed from the beginning to restore everything to approximate original contour. The USFS is the only land agency involved. These proposals have gone through the NEPA process plus original permit application review and one five year renewal review. It seems if they have concerns they would have said so.

Discussion:

Although the Forest Service has had opportunity to review the plan, there is no indication that, as required by R645-302-271.300, the potential use has been shown to constitute an equal or better economic or public use.

Deficiency:

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.

Response:

Same as No. 5.

Discussion:

R645-302-271.600 requires that the surface owner of the lands within the permit area must knowingly request, in writing, *as part of the permit application* (emphasis added), 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). No such written request was found within the MRP.

Deficiency:

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.

Response:

This is in conflict with R645-413.110-413.120.

Discussion:

I assume that the regulations meant to be cited are R645-301-413.110 and R645-301-413.120.

A variance from approximate original contour is a deviation from the premining land use; therefore, the requirements of R645-301-413.300 apply. This regulation states that the Division may approve higher or better uses as alternative postmining land uses. Improving the condition of the watershed is part of a higher or better use required by R645-302-271.700, R645-301-413.300, and R645-301-413.120. These regulations do not conflict.