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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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March 14, 1985

TO: Susan C. Linner, Permit Supervisor

FROM: Thomas L. Portle, Soils Specialist TLP

RE: Adequacy of Approval Conditions, Valley Camp of Utah, Belina Complex, ACT/007/001, Folder No. 2 and 4, Carbon County, Utah

Condition #5

Summary:

Plan to redistribute soil to a uniform thickness.

Response

Substitute soil is in place but is covered with "coal contaminated surface soil".

Deficiency:

If such soil is already in place how will it be manipulated to allow for the required redistribution to a uniform thickness?

Summary:

Volumes available at each substitute material source are to be considered.

Response:

In many places the pricess of removing contaminated material will "expose" fill "which in all probability" will be acceptable as a topsoil substitute material.

In many areas the exposed material will actually be topsoil.

Proposes not to disturb areas which have already received topsoil.

Deficiency:

Suitability of the topsoil substitute materials has not been established.

The volume is never established as required.

What effect has covering alleged viable materials with contaminated material, time, and compaction had on the physical and chemical qualities of such material?

Nothing is found to indicate that the 14 acres currently covered with 6 inches of topsoil (allegedly reclaimed) is at the final approved contour.

The indication that a 3 inch topsoil cover will be implemented unless otherwise approved is ambigious.

Condition #6

Summary:

Test plots must include a test for optimum soil depth.

Response:

Proposal for 3 inch depth versus a 6 inch depth.

Deficiency:

Where would the topsoil to be used in the test plots come from?

Would it be representative of the substitute material available at reclamation?

What if optimum soil depth is in excess of 6 inches? If more is required the test plots as designed will have failed in their purpose.

Summary:

Establish a control condition.

Response:

The 6 inch soil condition is the control.

Deficiency:

What value is there in comparing an arbitary condition to another abritary condition? Either a no soil treatment or a reference area needs to be employed. Even a reference area would have problems since the comparison between established, mature plants and early stage plant growth would have to be made.

Summary:

Types and rates of required soil amendments to be provided.

Response:

Deferred proposed soil testing untill the time of test plot initation.

Deficiency:

Such testing should be promptly performed so as to allow the RA input into the recommendations.

Condition #9:

Detailed reclamation plan for haul road including topsoil handling.

Response:

A limited geotechnical evaluation on road outslopes was conducted.

Deficiency:

How was the relative stability of slopes determined? What criteria were employed to consider a slope stable? Unstable?

Response:

Emphasis was placed on not disturbing previously revegetated slopes.

Deficiency:

Nothing regarding the acceptability of such reclamation or its success is provided in the way of support for this approach.

Response:

The placement of all fill will be done in an engineered manner.

Deficiency:

Elaborate on what constitutes the placement of asphaltic concrete in an "engineered manner".

Response:

The area to receive the greatest volume of fill is located near the midpoint of the haul road.

Deficiency:

The largest fill will consist of blasted rock covered over with topsoil. What is the expected size of the blasted rock and how will soil loss into voids be prevented?

Response:

After backfilling and contouring the topsoil substitute material will oe used ot topsoil the area.

Deficiency:

The suitability of substitute materials have not been established. (see Condition #5 defeciency comment). Thus the satisfaction of condition #5 is a prerequisite to review of the response to condition #9.

Response:

Scarification to 1 foot will ensure that there are no slippage surfaces or excessive compaction.

Deficiency:

It is doubtfull that only 6 inches of topsoil will be adequate for reclamation of an area underlain by fill which has not been established as suitable and has an unknown capacity to support pant growth.

Response:

Fertilizer will be applied in the seed slurry at a rate dictated by the results of soil analysis.

Deficiency:

What criteria will be employed in making prescriptions for soil fertility amendments? If this is presented elsewhere it should be referenced here.

Response:

Figure 3 depicts a soil fill. Substitute soil will be used in these areas.

Deficiency:

The volume and suitability of the fill is not established.

cc: Lynn Kunzler
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