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

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September 14, 1995

TO: Daron Haddock, Permit Supervisor

FROM: Wayne H. Western, Reclamation Engineer *WHW*

RE: SUFCO Midterm Review, Southern Utah Fuel Company,
Convulsion Canyon Mine, ACT/041/002, Working File, *Folder #2*
Sevier County, Utah

I met Wes Sorensen on September 7, 1995 to discuss the backfilling and grading plan for the SUFCO mine. Currently the plan anticipates the retention of highwalls and a variance from AOC requirements.

SUFCO's current plan proposes the retention of highwalls due to lack of reasonably available fill material as stated in R645-553.520:

"The requirements of R645-301-553.110 and R645-301-553.120 requiring that elimination of highwalls will not apply to remaining operations where the volume of all reasonably available spoil is demonstrated in writing to the Division to be insufficient to completely backfill the reaffected or enlarged highwall. The highwall will be eliminated to the maximum extent technically practical in accordance with the following criteria."

Wes and I reviewed the aerial photographs of the site taken in 1958 and determined that no significant amount of materials had been taken off-site. Most of the cut material was used in the construction of the pad area and will be available for reclamation. Therefore, all highwalls could be eliminated during final reclamation. Wes will modify the MRP to show that and remove all mention of a request for a variance from AOC requirements.

Some cutslopes, however, will be left in place because it is impossible to restore the topography to the pre-mining condition. The regulations require that all regraded slope have a safety factor of at least 1.3, which usually requires a slope of no less than 2H to 1V. and preferably a 3H to 1V slope. The natural slopes have an angle of 1.5H to 1V. If the reclaimed slopes have

that angle they will be unstable and most likely fail. Slopes with angles of less than 2H to 1V usually cannot be successfully revegetated. The only way to grade the reclaimed slope to a 2H to 1V slope would be to import fill material. If fill material is imported, slopes would cover the stream channel.

The proposed cutslopes would be stable. The canyon walls consist of bedrock covered with a few feet of soil. The cutslope faces will consist mostly of bedrock. Since bedrock is much stronger than soil, there is little chance that the cutslopes would fail to meet the minimum static safety requirements.

We will submit an amendment to the MRP to propose to:

- 1) Remove the request for an AOC variance
- 2) Eliminate all highwalls
- 3) State by some cut slopes must be left

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highwall.whw