



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

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December 10, 1993

TO: Darron Haddock, Permit Supervisor

FROM: Henry Sauer, Senior Reclamation Soils Specialist *HS*

RE: Alternate Topsoil Borrow Areas E and F,  
Hiawatha Mine, U.S. Fuel Co., ACT/007/011-  
93B, Carbon County, Utah, Folder #2

SYNOPSIS

The permittee has submitted (received September 10, 1993) a proposal to the Division to replace borrow areas C and D (currently approved) with borrow areas E and F.

The forthcoming technical deficiencies must be adequately addressed prior to approval of Amendment ACT/007/011-93B.

ANALYSIS

R645-301-224. Substitute Topsoil.

According to the soil profile description representing Borrow Area F, the top 2.5 inches of the profile consists of coal fines. Coal mine waste (i.e coal fines) is not a desirable component of substitute topsoil nor is it an acceptable plant growth medium for final reclamation. Therefore, the permittee must commit to the removal and proper disposal of all coal mine waste material (i.e coal fines) in accordance with R645-301-536 et. seq.).

R645-301-243. Soil Nutrients and Amendments

On page 22 of the amendment proposal the permittee refers to "soil tests" prior to seeding operations. The permittee must describe the field and laboratory methods employed to ensure that the soil fertility status is adequate to meet the growth requirements of the seeded species. In addition, fertilizer application rates and types should be determined subsequent to the topsoil analyses conducted immediately prior to seeding. The rate of application must consider the effects of mulch



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incorporation upon the mineralization of plant available nitrogen.

RECOMMENDATION

The permittee must adequately address the issues enumerated above prior to approval of Amendment ACT/007/011-93B.

CC:Pamela Grubaugh-Littig