

January 15, 1988

TO: File

FROM: Lynn Kunzler, Reclamation Biologist 

RE: Revision of Refuse Pile Extension Modification, U.S. Fuel Company, Hiawatha Complex, ACT/007/011, Folder #2, Carbon County, Utah

The proposed revision of the above-referenced plan was reviewed and found inadequate for stabilizing (vegetating) the topsoil stock pile for the following reasons:

1. The proposed seed mix, while approved for final revegetation of the topsoil stockpile location, would not provide adequate protection for the stockpile, in that most species are slow in developing and generally are not adapted to a spring planting.
2. The proposed mix contains several woody species that over the life of the stockpile would produce extensive top growth and/or root systems that could interfere with normal topsoil replacement practices.

While spring planting is normally unacceptable due to a lack of adequate soil moisture for germination and establishment, the species on the attached recommended seed mix have been known to provide adequate establishment from spring plantings. However, planting still must be done as early as possible after snowmelt and the site must be mulched with a long-lasting mulch (such as straw) to reduce moisture loss and provide soil protection for the first growing season. If seeding cannot be done while there is still adequate moisture, then the topsoil pile should be protected with a straw mulch for the summer and be seeded in the fall (October). Any weeds (i.e. kochia) that germinate should be treated with a light application of herbicide such as 2,4-D to conserve as much moisture in the soil as possible.

With the incorporation of the above discussion into the plan, and acceptance of the recommended seed mix, the revision would be acceptable.

jr
Attachment
cc: S. Linner
1414/3

Recommended Seed Mix
for
Topsoil Stockpile Stabilization
(January 15, 1988)

U.S. Fuel Company
Hiawatha Complex
ACT/007/011

<u>SPECIES</u>	<u>RATE*</u>
<u>Agropyron dasystachyum</u> Thickspike wheatgrass	4.0
<u>Agropyron trachycaulum</u> Slender wheatgrass	4.0
<u>Elymus cinereus</u> Great Basin wildrye	5.0
<u>Oryzopsis hymenoides</u> Indian ricegrass	2.0
 <u>Forbs:</u>	
<u>Linum lewisii</u> Lewis flax	1.5
<u>Medicago sativa</u> Alfalfa	1.5
<u>Melilotus officinalis</u> Yellow sweetclover	1.5
<u>Penstemon palmeri</u> Palmer penstemon	0.5
 Total	 <u>20.0</u>

*Rate is pounds of pure live seed (PLS) per acre for broadcast seeding. After seeding, the area should be lightly raked to cover seed and mulched with 2,000 pounds of straw per acre. Mulch should be anchored by crimping or polypropylene netting stapled on 3 to 4-foot centers.