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

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April 14, 1994

FIELD(1)

Re: Pre-Variety Germplasm Certification Standards

Dear **FIELD(2)**:

The Utah Coal Mining Rules require that reclaimed areas be vegetated with a vegetative cover that meets the general requirements in R645-301-353. Among these requirements are the criteria that the vegetation must have the same seasonal characteristics of growth as the original vegetation and be capable of self-regeneration and plant succession.

Many of the species that grow in Utah are genetically diverse and survive in a wide variety of conditions. Although a particular species may grow in a variety of situations, races or ecotypes of that species may be differentially adapted to certain conditions. There are numerous examples where seed from warm areas has been planted in cooler climates than those from which it originated. Plants of the species grow in both location. The seed from the warm area may germinate and plants may become established, but they may all die during a cold winter. Obviously, these plants would not meet the general requirements because they were not capable of self-regeneration and plant succession.

In the past, seed purchasers have had to rely on the good faith of seed dealers when asking for seed from adapted ecotypes. The Association of Official Seed Certifying Agencies has published "Pre-Variety Germplasm Certification Standards" for the certification of germplasms that have not reached varietal status. These standards include "Source Identified," "Selected," and "Tested" seed. By requesting seed from plants that either have known traits or that grow under known conditions, a purchaser can be assured the seeds used to revegetate a site will develop into plants as well-adapted to the environmental conditions as those already growing in the area.

Most seed dealers need some lead time to obtain seed from a specific area. Of course, there would be some additional cost to obtain the seed. However, seed costs are usually minimal compared to other reclamation costs and to the cost of reseeding.

To further explain the procedures with this certification program, a copy of two pages of the Utah Crop Improvement Association guidelines for certification of wildland-collected seed is enclosed. If you have questions about this program or how to obtain seed, please call our office or Dr. Stan Young with the Utah Crop Improvement Association at 797-2082.

Sincerely,

Lowell P. Braxton
Associate Director, Mining

pb/mbm
cc: S. Burningham (Utah Dept of Agriculture)
A. Foulger (Utah Seed Council)
S. Young (Utah Crop Improvement Association)
SEED.LET

II. CONTRACTS AND BIDS

A LMA may decide to offer for sale seed from a specific stand or geographic region. These areas must be listed as excluded prior to issuing general collection permits, thus granting exclusive collection rights to the individual(s) holding the contract. Exclusions and restrictions must be clearly stated on the invitation to bid.

LMA responsibilities

1. Estimate potential yield and value of the seed crop.

2. Complete appropriate Environmental Assessments.

3. Prepare invitations to bid, with all pertinent terms, restrictions, and exclusions defined.

4. As conditions permit, conduct on-site spot checks during collection to assure compliance with contract/bid specifications and exclusion of non-authorized collectors. By signing contract/bid sheets during these checks, LMA representatives could provide evidence for seed certification.

III. SEED CERTIFICATION

The Association of Official Seed Certifying Agencies (AOSCA) has published "Pre-Variety Germplasm Certification Standards" for the certification of germplasms which have not reached varietal status, and "Woody Plants and Forbs Certification Standards" and "Grass Certification Standards" for certification of seed of germplasms which have been released as a variety. These standards apply to either wildland collected or field produced seed, and offer a reliable way for the seed industry to offer seed of races or ecotypes to the buyer with genetic identity maintained along with accurate collection site information.

According to these certification standards, a race or ecotype of a native or naturalized species may be categorized into one of four classes:

(a) Source Identified (yellow tag) -- Comparisons with other germplasm collections, accessions, or ecotypes of the same species not known.

(b) Selected (green tag) -- Shows promise of superior and/or identifiable traits as contrasted with other germplasm accessions, ecotypes, or variety/cultivars of the species. Selection criteria and supporting comparative data is required.

(c) Tested (blue tag) -- Requires progeny testing to prove that traits of interest are heritable in succeeding generations. Testing procedures (number of sites, generations required, etc.) are outlined for each species by certification agencies.

(d) Variety (Foundation {white tag}, Registered {purple tag}, and Certified {blue tag} generations) -- Applicable to a Tested germplasm which, in the estimation of the developer, has sufficient marketplace potential to warrant release as a variety in compliance with Federal and State seed laws.

A. Seed Certification Agency responsibilities:

1. Develop and print a Certified Seed Site Identification Log sheet for use by seed collectors. These log sheets will be available from seed brokers (dealers and conditioners) and from the SCA and other agencies. This log will serve as a way to organize information such as:

   a. Collectors name, address, and telephone number
   b. Permit number, contract number, private land designation, etc.
   c. Species and common name.
   d. Location (State, County and elevation). It is strongly recommended additional information such as soil type, aspect, and associated species be given as this information would be extremely useful to the end user.
   e. Date(s) collected.
   f. Amount collected.
   g. Lot designation (must be indicated on bag or container also)
   h. Signature of collector that the information is correct.
   i. Signature of seed broker that to his knowledge information is correct.

2. Evaluate completed log sheets, seed broker's records, and related documents in determining certification eligibility of seed lot. Conduct thorough investigations on at least 5% of eligible seed lots, including verification of paperwork and prior and/or retroactive field inspection of collection sites to verify that stands are capable of producing the amount of seed indicated. Evidence of falsified logs or documents may result in loss of certification privileges.

3. Attach an official Source Identified, Selected, Tested, or variety tag with appropriate site and germplasm information to individual bags of eligible seed lots.

Mailing List:

Mr. Ben Grimes Environmental Coordinator Cyprus Plateau Mining Corporation P. O. Drawer PMC Price, Utah 84501	Star Point Mine
Mr. Lee Edmonson Hidden Valley Coal Company Properties Division 1801 East University Drive Phoenix, Arizona 85034	Hidden Valley Mine
Ms. Kathleen G. Welt Environmental Supervisor Mountain Coal Company P. O. Box 591 Somerset, Colorado 81434	Gordon Creek #2, #7 & #8 Mines Gordon Creek #3 & #6 Mines C.V. Spur Mine Huntington #4 Mine
Mr. E. M. Gerick Western States Minerals Suite 130 250 South Rock Blvd. Reno, Nevada 89502	J.B. King Mine
Mr. Val Payne Sr. Environmental Engineer PacifiCorp P. O. Box 1005 Huntington, Utah 84528	Trail Mountain Mine Des-Bee-Dove Mine Deer Creek Mine Cottonwood/Wilberg Mine
Mr. Mike Glasson Senior Geologist P. O. Box 902 Price, Utah 84501	Wildcat Loadout Centennial Project
Mr. Wendell Owen Co-Op Mining Company P. O. Box 1245 Huntington, Utah 84528	Trail Canyon Mine Bear Canyon Mine
Mr. David W. Anderson, P.E. Intermountain Power Agency Department of Water and Power City of Los Angeles, Room 1107 111 North Hope Street Los Angeles, California 90012	Horse Canyon Mine

Mr. Michael Baum, President U. S. Fuel Company P. O. Box 887 Price, Utah 84501	Hiawatha Complex
Mr. Ken Payne Utah Fuel Company P. O. Box 719 Helper, Utah 84526	Skyline Mine
Mr. Mike Gipson, Mine Manager White Oak Scofield Route Helper, Utah 84526	Belina Complex
Mr. David E. Lung, Secretary-Treasurer Valley Camp of Utah, Inc. P. O. Box 900 Oil City, Pennsylvania 16391	
Ms. Jean Semborski Environmental Coordinator Andalex Resources, Inc. P. O. Box 902 Price, Utah 84501	Smoky Hollow Mine

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