



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

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May 2, 1994

Mr. Mikel Johnson  
Weed and Mosquito Supervisor  
Carbon County  
Price, Utah 84501

RE: Species Classification for Reclaimed Areas, AMAX Coal Company, Castle Gate Mine, ~~ACT/007/004~~, Folder #2, Carbon County, Utah

Dear Mr. Johnson:

In 1993, AMAX Coal Company sampled the vegetation in a reclaimed portion of Hardscrabble Canyon. Analysis of the data requires a classification of the species into one of several categories. Among these categories are "Weedy Shrub Cover," "Non-weedy Shrub Cover," "Weedy Forbs and Grass Cover," and "Non-weedy Forb Cover." The mining and reclamation plan says, "Weeds are those species identified as weeds by the Carbon County Weed and Pest at the time the comparison between the reclaimed and reference areas is being made." For this reason, the Division of Oil Gas and Mining needs the Carbon County Weed Department to classify certain plants as weeds or as not being weeds.

The species encountered in vegetation sampling that might be considered weeds are:

Houndstongue	<i>Cynoglossum officinale</i>
Kochia	<i>Kochia scoparia</i>
Russian Thistle	<i>Salsola iberica</i>
Clasping Pepperweed	<i>Lepidium perfoliatum</i>
Western Salsify	<i>Tragopogon dubius</i>
Downy Brome	<i>Bromus tectorum</i>
Curlycup Gumweed	<i>Grindelia squarrosa</i>
Purple Aster	<i>Machaeranthera canescens</i>
Curly Dock	<i>Rumex crispus</i>
Field Bindweed	<i>Convolvulus arvensis</i>
Dandelion	<i>Taraxacum officinale</i>
Broom Snakeweed	<i>Gutierrezia sarothrae</i>

Some of these species, although commonly called weeds, are native to Utah and might not be called weeds in a reclamation situation. Examples are curlycup gumweed, curly dock, and



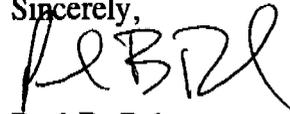
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purple aster.

The postmining land use for the area is grazing and wildlife. Please consider this land use when making your evaluation.

Please let us know how you would classify these species. Our analysis of AMAX's vegetation data cannot proceed until we have received your response. If you have any questions about what is required, please call me. I appreciate your assistance.

Sincerely,



Paul B. Baker  
Reclamation Biologist

cc: Mickey Steward