



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

IN REPLY REFER TO:
3400
UTU-76195
(UT-923)

Mr. Derris Jones
Regional Supervisor
Utah Division of Wildlife Resources
475 West Price River Drive, Suite C
Price, Utah 84501-2860

AUG 07 2003

Jacovig
c/o 4/1/002
Copy Jerriann

Dear Mr. Jones:

Thank you for your letter dated July 29, 2003 expressing your concerns that undermining Box Canyon could cause a loss of surface and subsurface flows in the area. An ephemeral portion of Box Canyon was undermined in May and June of 1999. Post-mining inspections of this area indicate that the small cracks that formed in the stream channel have closed and water flow in the drainage has not been impacted. Cracks along the unconfined canyon rim are wider, as expected, and they will continue to remain open for a longer period along with the natural fractures. Field observations indicate that these cracks are shallow and end above the canyon bottom, so any water intercepted by these cracks should discharge in the canyon. No further mining is projected for Box Canyon.

The mine has received approval from BLM to undermine a portion of the East Fork of Box Canyon, part of which contains a perennial stream. We have granted this approval based in part on hydrologic assessments that indicate the effects on the surface and subsurface water flows will not cause the dessication of the area as you expressed in your letter. The effects on the hydric soils in the East Fork of Box Canyon were characterized as follows in the Final Environmental Impact Statement (FEIS) prepared before the lands were leased:

The loss of hydrologic function of hydric soils (18.6 acres) due to alteration of the surface and shallow groundwater flows by subsidence-induced fractures would be short termed. Most of the fractures would be filled by natural sedimentation and/or swelling for the clays in the rock stratas, thus restoring the natural hydrologic function. The short-term loss would be quickly restored naturally and should not irreversibly affect riparian or wetland vegetation communities (FEIS page 3-89).

Based on monitoring of several miles of stream reaches that have been subsided in the Wasatch Plateau, we have concluded that there is a low likelihood that the impacts you envision will occur. If any impacts occur, the FEIS indicates that they can be mitigated.

The surface effects of the proposal to undermine the East Fork of Box Canyon are presently being assessed by the Utah Division of Oil, Gas, and Mining as part of their responsibilities under the Surface Mining Control and Reclamation Act (SMCRA). I am forwarding your concerns to them for their consideration in their approval of the revision to the SMCRA permit.

Sincerely,

James F. Kohler

James F. Kohler
Chief, Branch of Solid Minerals

RECEIVED

AUG 12 2003

cc: Mary Ann Wright, DOGM

DIV. OF OIL, GAS & MIN.



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE RESOURCES

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29 July 2003

Jim Kohler
BLM – Utah State Office
PO Box 45155
324 S. State St.
Salt Lake City, UT 84145-0155

RE: UDWR concerns with undermining of Box Canyon

Dear Jim,

On July 17th, 2003 we toured Box Canyon to look at the potential impacts to wildlife and habitat from the undermining of this reach. UDWR has the following concerns with the undermining of Box Canyon:

We are concerned that subsidence may fracture subsurface bed materials and cause the loss of surface and subsurface flows, causing a desiccation of the area. This drying of the area will alter the community structure by decreasing or eliminating ephemeral pools (impacting amphibian habitat and free drinking water for terrestrial vertebrates), and lower the total biomass of invertebrates (reducing forage for many species of passerine birds and bats).

We suggest that a survey of avian, amphibian, and mammalian species abundance and density be conducted pre and post mining to determine the extent of the impacts to the ecological community in Box Canyon. Thank you for considering our comments. If you would like to discuss this issue, please call Craig Walker (Aquatic Biologist) or Leroy Mead (Habitat Biologist) at 435-636-0260.

Sincerely,

A handwritten signature in cursive script that reads "Derris Jones".

Derris Jones
Regional Supervisor

CJC/cw