



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

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August 16, 1999

TO: File

THRU: Daron Haddock, Permit Supervisor *DH*

FROM: James D. Smith, Reclamation Specialist *JDS*

RE: Incidental Boundary Change - July 14 response to June TA, GENWAL Resources, Inc, Crandall Canyon Mine, ACT/015/032-99-1, File 2, Emery County, Utah

**SUMMARY**

The application for a fifty-acre IBC at GENWAL's Crandall Canyon Mine, including additional information submitted on July 14, is technically adequate in regards to hydrologic resources. Approval of the application is recommended. The IBC area is a narrow strip between the Joes Valley fault on the east and the existing mine permit area on the west. The IBC will allow GENWAL to mine coal reserves in the eastern edge of Sections 3 and 10 that would not be minable from the west because of the Joes Valley fault and not from the north or south because of limited access.

**TECHNICAL ANALYSIS**

**ENVIRONMENTAL RESOURCE INFORMATION**

**HYDROLOGIC RESOURCE INFORMATION**

**Analysis:**

**Baseline ground-water information.**

Seep and spring surveys were conducted in the area around the IBC in 1987, 1989, and 1990. Plate 7-12 in the current MRP shows locations. The area was resurveyed in 1997 by Gary Gray and Eric Peterson. No seeps or springs were identified in the IBC area (p. 7-3).

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**Findings:**

No other environmental hydrologic resource information has been submitted with the IBC application. Hydrologic resource information provided in the IBC application and the current MRP is considered adequate to meet the requirements of this section.

## **OPERATION PLAN**

### **HYDROLOGIC INFORMATION**

**Analysis:**

In order to keep at least 10 feet of coal between the mine workings and ground water associated with the Joes Valley fault system, GENWAL plans to locate faults and ground water by drilling up to 50 feet ahead of mining operations as the face is advanced. If, in spite of the efforts to avoid the fault, ground water begins to inundate the workings, the MRP includes a plan to pull back from the face and seal the section with stoppings and quick-drying cement. No longwall mining will be done within a 22 degree angle-of-draw projected from the surface trace of the Joes Valley fault, so no subsidence should intersect the fault zone.

**Findings:**

Operation hydrologic information provided in the IBC submittal is considered adequate to meet the requirements of this section.

### **CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA)**

UDOGM has previously provided an assessment of the probable cumulative hydrologic impacts of GENWAL's Crandall Canyon Mine operation and all anticipated mining upon surface- and ground-water systems in the cumulative impact area, and it was determined that the Crandall Canyon Mine operation has been designed to prevent material damage to the hydrologic balance outside the permit area. The proposed IBC contains information on how underground mining will be conducted so as to protect hydrologic systems possibly associated with the Joes Valley fault and to prevent material damage to the hydrologic balance in Joes Valley. The proposed IBC has been reviewed by the Division and it has been determined by the Division that a new or updated CHIA is not required. The permitted area will remain within the boundaries of the existing CIA, and there will be no mining operations in hydrologic basins other than those approved in the current permit. There is no need for additional cumulative impact area information.

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**RECOMMENDATION**

The application for a fifty-acre IBC at GENWAL's Crandall Canyon Mine, including additional information submitted on July 14, is technically adequate in regards to hydrologic resources. Approval of the application is recommended.

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