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

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December 19, 1997

TO: File

THRU: Joe Helfrich, Permit Supervisor *JH*

FROM: Sharon Falvey, Senior Reclamation Hydrologist *SKF*

RE: N97-46-5-1 Abatement, Cyprus Plateau Mining, Willow Creek Mine,
ACT/007/038-97F, Folder #2, Carbon County, Utah
5

SUMMARY:

This amendment is intended to meet the abatement requirements on violation N97-46-5-1 issued on July 4, 1997. This NOV was issued to update information related to the Probable Hydrologic Consequences for the water encountered during mining operations in July 1997. These activities were not approved operations and the groundwater occurrence was not identified in the earlier reconnaissance investigations used to develop the PHC.

Information was submitted to describe the chronology of events following the interception of water into the mine workings. The permittee presented this information as an addendum to the PHC and will have additional updates to appropriate sections of the PHC when the reconnaissance information is gathered for their plan to de-watering the "K" and "C" seams. This review includes information submitted on December 17th, November 17, and September 17, 1997.

ANALYSES:

TECHNICAL ANALYSIS:
ENVIRONMENTAL RESOURCE INFORMATION

HYDROLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

Probable Hydrologic Consequences Determination

Analysis:

The following paragraph summarizes the information submitted:

Flows encountered during the event were estimated to be approximately 1,200 gpm and the water was estimated to have a head of 200 ft. The source of the inflow was determined to originate from an abandoned surface well MC-090(found on the geology map), which allowed water to move from the lower seam into the mined area. The permittee drilled two injection wells into the "K" seam outside of the portals and plugged the abandoned hole. These wells will not be used further without prior notification and approval by the regulatory agency. (A request for further use was not presented in the amendment).

From the information presented, it appears that Willow Creek may be the primary source of water, which is recharging through the alluvium and substrata into previously mined underground workings that pass under the creek. Additional information has been gathered to investigate the gain/loss relationships of Willow Creek between Skinny Canyon and the Confluence with the Price River. The details of this proposed monitoring scheme were not presented but, are expected to be submitted in the PHC that will be updated with the proposed mine dewatering activities.

Findings:

The permittee provided information which describes the events leading to and following the issuance of Notice of Violation N97-46-5-1. From the information provided the Division determined that the responsible parties acted in a manner that minimized the potential for hydrologic impact outside the permit area.

RECOMMENDATION:

The submitted information related to the activities during the July 1997 encounter of ground water at the Willow Creek Mine should be approved and incorporated into the Willow Creek MRP. The December submittal provided only one copy of the revised text and figures.

Page 3
ACT/007/038-97F
December 19, 1997

An appropriate number of the complete submittal must be provided by the applicant with the appropriate C-1 and C-2 forms. It is recommended the original copies of data and event chronology be compiled and a copy presented to Nina for incorporation into the water quality data base and data filing system.

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cc: Price Field Office
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