



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Thomas Munson, Senior Reclamation Hydrologist *TM*

RE: Variance to Ditch 51, 57, and 58, Cyprus Plateau Mining Corporation, Star Point Mine, ACT/007/006, Folder #2, Carbon County, Utah

Synopsis

The Division received on May 6, 1992 a request for a variance to meeting the design parameters for Ditches 51, 57, and 58. The rules do not allow for a variance to the requirements of R645-301-742.333. Therefore, the request is denied but the memo will outline the specific design which will be supplied to satisfy the requirements of the rules.

Analysis

- 742.300. Diversions.
- 742.310. General Requirements.
- 742.311. With the approval of the Division, any flow from mined areas abandoned before May 3, 1978, and any flow from undisturbed areas or reclaimed areas, after meeting the criteria of R645-301-356.300, R645-301-356.400, R645-301-513.200, R645-301-742.200 through R645-301-742.240, and R645-301-763 for siltation structure removal, may be diverted from disturbed areas by means of temporary or permanent diversions. All diversions will be designed to minimize adverse impacts to the hydrologic balance within the permit and adjacent areas, to prevent material damage outside the permit area and to assure the safety of the public. Diversions will not be used to divert

water into underground mines without approval of the Division in accordance with R645-301-731.510.

- 742.312. The diversion and its appurtenant structures will be designed, located, constructed, maintained and used to:
 - 742.312.1. Be stable;
 - 742.312.2. Provide protection against flooding and resultant damage to life and property;
 - 742.312.3. Prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area; and
 - 742.312.4. Comply with all applicable local, Utah, and federal laws and regulations.
- 742.313. Temporary diversions will be removed when no longer needed to achieve the purpose for which they were authorized. The land disturbed by the removal process will be restored in accordance with R645-301 and R645-302. Before diversions are removed, downstream water-treatment facilities previously protected by the diversion will be modified or removed, as necessary, to prevent overtopping or failure of the facilities. This requirement will not relieve the operator from maintaining water-treatment facilities as otherwise required. A permanent diversion or a stream channel reclaimed after the removal of a temporary diversion will be designed and constructed so as to restore or approximate the premining characteristics of the original stream channel including the natural riparian vegetation to promote the recovery and the enhancement of the aquatic habitat.
- 742.330. Diversion of Miscellaneous Flows.
- 742.331. Miscellaneous flows, which consist of all flows except for perennial and intermittent streams, may be diverted away

from disturbed areas if required or approved by the Division. Miscellaneous flows will include ground-water discharges and ephemeral streams.

- 742.332. The design, location, construction, maintenance, and removal of diversions of miscellaneous flows will meet all of the performance standards set forth in R645-301-742.310.
- 742.333. The requirements of R645-301-742.312.2 will be met when the temporary and permanent diversions for miscellaneous flows are designed so that the combination of channel, bank and floodplain configuration is adequate to pass safely the peak runoff of a 2-year, 6-hour precipitation event for a temporary diversion and a 10-year, 6-hour precipitation event for a permanent diversion.

When the operator has met the requirements of these rules, the Division will consider the permitting process complete. It will be noted that the operator has complained about the size of the Ditch 57 and 58, if constructed to specifications (i.e., "Preliminary riprap designs for these ditches indicates that a channel top width of approximately eight feet would be required to pass the design flow rate.", page 2). This is not correct according to the design specifications found in R645-301-742.333. These standards indicate that a 10-year/6-hour precipitation event can be used to size these diversions versus the original designs which used the 10-year/24-hour precipitation event significantly reducing the size of this ditch.

It is the operator's responsibility to check these designs and provide the necessary documentation to demonstrate compliance with the rules.

Recommendation

No variance can be granted and the operator must supply the necessary designs for all three ditches.