



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

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June 5, 2000

TO: Internal File

FROM: Michael Suflita, Reclamation Hydrologist 

RE: Office Pad Drainage - ASCA Z, West Ridge Resources, Inc., West Ridge Mine, ACT/007/041- AM00E-1, Outgoing File

**SUMMARY:**

On April 3, 2000 the Division received a request to modify treatment of the drainage of Alternate Sediment Control Area (ASCA) - Z in order to use more of the area for parking. On April 21, 2000 the Division responded to the request pointing out some deficiencies. On May 12, 2000 a revised submittal was received by the Division. This Technical Memo is a response to that last submittal. No deficiencies were found.

**TECHNICAL ANALYSIS:**

**OPERATION PLAN**

**HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

**Analysis:**

**Sediment Control Measures**

The original design called for a detention basin to completely contain the anticipated runoff from the office and parking pad and an adjacent undisturbed drainage.

TECHNICAL MEMO

Reference the Mining and Reclamation Plan (MRP), Appendix 7-4, page 11. The original design event was a 10-year, 24-hour event and that was used for the proposed revisions as well. The runoff volumes did not change. The new proposal is to reverse the slope of the pad and to channel the runoff into 12-inch culvert, designated DC-16. At the inlet to the culvert would be a combination oil and grease separator and sediment trap. The culvert would carry water into the main stream channel at the energy dissipater riprap apron for the main culvert UC-00. This outfall is the very lowest end of the disturbed area.

Runoff from the undisturbed drainage area UA-PP flows to the east side of ASCA-Z and flows into a ditch, UD-Z. From there it flows into culvert UC-PP which carries the water into the main stream at the outfall of the main minesite culvert. Overland flows from the parking and office area, ASCA-Z, will be directed into a combination oil and grease separator and sediment trap. The flows will be directed to the trap by two berms, one on the southeast side and one on the southwest side of the pad. The one on the southeast side also separates the ASCA-Z flows from the flows in ditch UD-Z. Water from the trap is directed into DC-16, a 12-inch culvert, which leads to the main channel. The design of the separator appears adequate with a 90-degree elbow down keeping the oils from entering the culvert. The 18-inch berms appear adequate.

The flow capacity of the new culvert, DC-16 was checked and appears adequate. It appears the design will work and should allow increased usable area in the parking and office pad. There is, however, one condition in approving this design. The pad is designated as a snow storage area. See Map 7-2. This amendment design is based on the snow stored on the pad being ONLY the snow that falls on the pad. That is, no snow is imported onto the pad for storage purposes. To import snow would invalidate the designs upon which the amendment is based. Therefore, a condition to approval of this amendment is that no snow be imported to ASCA-Z area during the operation of the mine. Several tables were modified to accommodate this amendment and they appear correct.

**Findings:**

The submittal meets minimum regulatory requirements.

**RECOMMENDATION:**

The proposed amendment can be approved.