

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

October 8, 2003

TO: Internal File

FROM: Dana Dean, P.E., Senior Reclamation Hydrologist/Team Lead

RE: Industrial Post Mining Land Use Change, Plateau Mining Corporation, Willow Creek Mine, C/007/0038, Task ID #1691

SUMMARY:

Plateau Mining Corporation submitted an amendment on September 12, 2003 to change the post-mining land use at the Willow Creek Mine office site. The new use would be industrial.

Some support facilities would remain, in addition to the buildings, including some hydrologic structures. This memo addresses just the hydrologic aspects of the amendment.

TECHNICAL MEMO

TECHNICAL ANALYSIS:

RECLAMATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Analysis:

Hydrologic Reclamation Plan

The Permittee will only construct some of the previously designed new reclamation drainage channels as part of the industrial post-mining land use. They are WCRD-11 through WCRD-19. The Permittee has properly designed and sized each for a 10-year 6-hour storm event.

The Permittee will retain sedimentation pond 001 as part of the industrial post-mining land use. All precipitation that encounters the industrial area will report to it to remove excess sediments. Reclamation of the belt corridor will result in additional runoff reporting to the pond. The Permittee performed calculations to ensure that the pond will be able to contain the additional runoff from watersheds 9 and 10.

The Permittee will construct several diversion ditches to direct runoff around the industrial site. The Permittee provided calculations to show that the designs are adequate, and maps to illustrate where they will construct each ditch and which watersheds report to each.

The Permittee will place/leave several culverts to support the industrial use. They provided calculations to show that the designs are adequate, and maps to illustrate where they will place each culvert and what runoff will report to each.

Findings:

Information provided in the application is adequate to meet the minimum Hydrologic Reclamation requirements of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Reclamation Treatments Maps

Map 18-C shows all of the facilities to remain for the industrial land use. Maps 21A through 21D show the locations of post-mining drainage structures. Map 21G shows the watersheds and related reclamation ditches for the industrial use. Map 22D shows stream profiles for the pre-mining, operational, and post-mining industrial configurations.

Certification Requirements.

Layne D. Jensen, P.E. certified each of the hydrology maps according to the Rules.

Findings:

Information provided in the application is adequate to meet the minimum Maps, Plans, and Cross Sections of Reclamation Operations requirements of the regulations.