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July 6, 1988

Mr. Robert A. Hagen, Director  
Albuquerque Field Office  
Office of Surface Mining  
Reclamation and Enforcement  
Suite 310,  
625 Silver Avenue S.W.  
Albuquerque, N.M. 87102

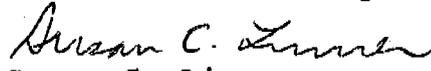
Dear Mr. Hagen:

RE: TDN No. 88-2-107-3, Violation Nos. 2 and 4, Wellington  
Preparation Plant, ACT/007/012, Folder #5, Carbon County, Utah

In response to your letter of June 29, 1988, enclosed are pages from the Division's Final Technical Analysis and Decision Document for the Wellington Preparation Plant, dated August 22, 1984. These document both the diversion and refuse pile as being existing structures which meet the performance standards of the Act and the State's regulations.

Feel free to contact me if I can provide further assistance.

Sincerely,

  
Susan C. Linner  
Reclamation Biologist/  
Permit Supervisor

SCL/as  
Enclosures  
cc: D. Nielson      K. May  
    L. P. Braxton    H. Sandbeck  
1356R/36

past three years has resulted in no observations of significant erosion problems and little to no evidence of historical erosion. No areas of channelized flow across the filter areas have been observed indicating the flow is indeed spreading and largely infiltrating in this area and the filter area is functioning as expected.

The operator indicates that sampling this area for verification of filter function is not feasible as sampling points where flow has collected in large enough volumes for sampling do not exist. Division observation on-site confirms this problem.

Silt fence treatments for two areas have been proposed for drainage treatment. The area surrounding the pumphouse on the east bank of the Price River is approximately one acre in size and has a predicted runoff volume of 0.063 acre-feet for the 10-year, 24-hour precipitation event.

An area of 31 acres near the coal refuse pile on the west side of the permit area will utilize a large ditch and silt fence for drainage treatment. This area has broad, flat topography (0-1/2 percent) and the low slope of the ditch essentially results in that structure functioning as a catchment area. The location of the silt fence is shown on Map F9-177, cross-section K-K'. The volume of the ditch has been calculated to be 1.03 acre-feet (AF) with runoff from the area estimated to be 1.17 AF.

#### Compliance

The applicant complies with this section.

#### Stipulations

None.

#### UMC 817.43 Hydrologic Balance: Diversions and Conveyance of Overland Flow, Shallow Groundwater Flow, and Ephemeral Streams

#### Existing Environment and Applicant's Proposal

The applicant has provided plans to control overland flow of runoff from disturbed and undisturbed areas within and adjacent to the permit area. A combination of diversions, channels, culverts and energy dissipators will be utilized to separate disturbed area runoff from undisturbed area runoff, control erosion and direct runoff away from coal processing activities. All designs and calculations are presented in Appendix B, ACR Response, July 7, 1983.

During operations three diversions (2 temporary and 1 permanent) are used. The southwest diversion ditch collects and routes approximately 281 acres of undisturbed runoff away from the facilities area to a natural low area where larger storm events cause a pond to form. Sizing calculations for the diversion ditch have been submitted and show that the ditch is sized to accommodate and transfer the 12.5 acre-feet volume of runoff expected during a 10-year, 24-hour precipitation event. The south drainage is not developed as a ditch but is established because the embankment of the railroad tracks diverts the runoff along the base of the embankment toward the Price River. Runoff from both disturbed and undisturbed areas is transported along this diversion. A silt fence is located in the ditch below the small disturbed area near the cleaning plant which filters out any sediments. As mentioned under TA Section UMC 817.42, the small disturbed area is approximately 13 acres and slopes zero to 1/2 degrees. The disturbed area that drains into the diversion consists of approximately 1 square mile, however, the configuration of the drainage is capable of handling the expected runoff from a 10-year, 24-hour precipitation event.

The drainage ditch is not subject to significant water velocities which would wash out the silt fence. Like the surrounding area, the ditch has only a slight grade which results in a maximum velocity of 2.8 feet per second (during the 10-year, 24-hour precipitation event). It should be noted that approximately one half of the total storm runoff (assuming all the runoff reached the drainage ditch) can be contained in the ditch from section K-K' upstream while maintaining 0.3 feet of freeboard. The Geofab silt fence has a capacity to pass some 470 gallons per square foot of fence. Specifications for this silt fence are included on page B-27 (Appendix B, ACR response).

These diversions will be reclaimed after operations cease at the plant site (page 784-14, ORP).

A permanent diversion presently exists in the northeast portion of the permit area which diverts water passing from fields (reaches 1 & 2 map A9-1429 Technical Revision No. 1) north of the refuse ponds into the Price River. The diversion is sized to pass the peak flow generated during a 100-year, 24-hour (53 cubic feet per second) precipitation event. Calculations and plans have been submitted by the applicant to illustrate the reliability of the diversion. This diversion will be left upon cessation of operations (page 784-41, ACR Response). The operator has placed rip rap along various lengths of the diversion and used grout to stabilize the finer sized rip rap material. As outlined in U. S. Steels response to NOV#84-2-12-1, the operator will leave the grouted rip rap intact during and after reclamation. The operator has shown that channel velocities generated during a 100-year, 24-hour precipitation event are below 5 feet per second and are essentially non erosive whether the channel is rip rapped or not.

Plans have been submitted for another permanent diversion along the east side of the refuse ponds. The diversion ditch will be constructed prior to reclamation of the ponds. This ditch will discharge into the Clear Water Ponds during reclamation. The impoundment will not have to be altered. When revegetation is successful the Clear Water Pond will be reclaimed and the diversion ditch extended to discharge into the Price River.

Calculations and plans have been submitted to ensure that the ditch will adequately contain and control the peak runoff of a 100-year, 24-hour precipitation event (Appendix B, ACR Response).

Undisturbed runoff drains from 310 acres in the northwest end of the permit area and passes through culverts which cross under the railroad tracks and then out onto a vegetated filter which is graded to preclude runoff. All culverts other than those crossing under Denver and Rio Grand Western tracks have sizing calculations provided by the applicant to show their carrying capacity and capabilities of providing transport for a 10-year, 24-hour precipitation event. All culverts underlying the Denver and Rio Grand Western tracks are under control of that company and cannot be controlled by the applicant. The culverts under D&RGW's track are of such size to pass the 10-year, 24-hour precipitation event. The applicant has stated that as of 1958 there has been no breaching of any culverts. All culverts except D&RGW's (Map E9-3342) will be reclaimed along with the railroad tracks. The long term plans for D&RGW's railroad tracks are unknown (page 784-14, ORP).

The applicant has provided a freeboard of at least 0.3 feet for all diversions. Velocities of overland flow and within channels are very low (2.6 fps) due to the almost flat topography of the area, hence there is almost no erosion.

### Compliance

The applicant has submitted appropriate plans to control overland flow, to protect facilities and property and prevent erosion. The submitted plans are accompanied by designs which fulfill the criteria established in the regulations.

In reviewing U. S. Steels proposal to leave the grouted rip rap intact in the permanent diversion on the north east side of the refuse ponds the Division finds that there should be no adverse impacts from these measures and approves these procedures in accordance with UMC 817.43(b). Emplacement of the grouted rip rap will undoubtedly provide stability and protection to the ditch banks. Deterioration of the grouted rip-rap will gradually occur, but this should not have adverse effects either to the diversion channel or waters down stream, since velocities are low and non-erosive.

UMC 817.61-.68 Use of Explosives

There is no use of explosives at a coal cleaning plant nor any anticipated use of any.

UMC 817.71-.74 Disposal of Underground Development Waste and Excess Spoil and Nonacid and Nontoxic-forming Coal Processing: General Requirements

Existing Environment and Applicant's Proposal

Analysis of the slurry pond coarse and fine refuse (page E-3, Refuse Sample Analysis) shows no presently existing toxic or potentially toxic conditions. All refuse ponds have been analyzed and certified by registered professional engineers (see Technical Revision #1) and also reviewed and approved by the State Engineer and MSHA (page 782-14, ACR Response). The slurry ponds will be covered with a nontoxic layer up to 12 inches deep to prevent upward migration of salts from the coal refuse and covered with six inches of topsoil and seeded upon reclamation (page 784-20, 21, 22, 23 of U. S. Steel's ACR Response).

Compliance

The applicant will be required to meet the stipulation under UMC 817.48 to provide future protection against acid and toxic material contamination. Any contamination will also be indicated in the surface and ground water monitoring program. Detection of contamination from any refuse sources will result in the operator drafting new design plans for conducting contamination control and reclamation procedures.

Stipulation 817.71-.74-(1)-DD

1. The applicant shall commit to submitting new designs for regulatory authority review and approval to satisfy regulations under UMC 817.71-.74 in the event toxic or acidic contamination occurs during future operations. These designs must be submitted within 90 days of discovery of contamination.

UMC 817.81 Coal Processing Waste Banks: General Requirements

Existing Environment and Applicant's Proposal

Coarse refuse has been placed in an area southwest of the plant (Map E9-3342) since the Wellington Plant went into production. The refuse pile has since been inspected by the State regulatory authority and has remained stable since its beginning in the late

1950's. The topography is flat with no water carrying structures underneath. The refuse pile has been analyzed (page E-3, DOC Response) and determined to be nontoxic. The refuse pile will be reclaimed and regraded to conform to State slope guidelines for stability and erosion control, covered with six inches of topsoil, reseeded and revegetated with an approved seed mix (reference pages 784.23, 24 of the DOC Response).

Compliance

Applicant is in compliance with the section.

Stipulations

None.

UMC 817.86-.88 Coal Processing Waste Banks

Not applicable.

UMC 817.89 Disposal of Noncoal Wastes

Existing Environment and Applicant's Proposal

Noncoal waste is accumulated in the designated area shown as EE on Map E9-3341 and disposed of in the Carbon County Landfill.

Used oil and oil drums are stored separately in area FF on Map E9-3341. Surface runoff from this site is minimal and an oil spill safety berm surrounds this storage facility. Empty drums are eventually shipped off-site for scrap metal or reused for operations.

Excess wood is stored in area DD (Map 3341). A permit to burn 3,000 cubic yards of this wood was received from the State Department of Health, Air Quality Bureau on March 19, 1984. In the future, accumulated wood will be taken to a landfill for disposal.

Compliance

The applicant is in compliance with this section.

Stipulation

None.