



FILE ACT/007/011
FOLDER #4

March 21, 1983

Ms. Jean Semborski
Engineering Assistant
U.S. Fuel Company
Hiawatha, Utah 84527

RE: Abatement to NOV #83-2-1-1
Catchment Basin Design
Hiawatha Complex
ACT/007/011
Carbon County, Utah

Dear Ms. Semborski:

The Division has received and reviewed your March 2, 1983 letter and the supplemental design calculations (received March 16, 1983) requesting approval of the proposed sediment control measures intended to abate NOV #83-2-1-1. This violation was issued by Sandy Pruitt on February 17, 1983 to U.S. Fuel Company for failure to control surface drainage and minimize sediment losses from a small disturbed area at the South Fork-Middle Fork road split.

The conceptual plans for the catchment basin should be sufficient to contain the disturbed area runoff for the 10 year-24 hour storm and an adequate amount of sediment storage.

The Division offers the following suggestions with regard to the design of the catchment basin:

- (A) Due to the fact that there is not a sedimentation pond down gradient from the proposed sediment basin and there is no means provided in the design drawing to manually dewater the basin, it is recommended that some type of overflow device be provided to bypass runoff volumes in excess of the 10 year-24 hour storm. An emergency dewatering device will protect the integrity of the structure and safely discharge excess storm runoff should the need arise. The outlet end of the discharge structure should have adequate erosion protection measures implemented as well.

Ms. Jean Semborski
March 21, 1983
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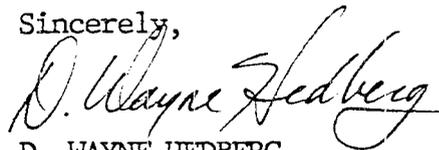
- (B) The basin should be provided with a means to assess when the maximum sediment storage level is reached. This will enable the operator to determine when the basin will require sediment removal and assure that the structure has ample runoff storage volume for the design storm at all times.

It should be understood that irregardless of the design approval for this structure it does not necessarily release U.S. Fuel Company from being subject to future violations should a discharge occur from the impoundment (refer to U.S. Fuel letter, item #4, March 2, 1983). If the sediment basin is not constructed or maintained properly, a future discharge could occur which may be just cause for subsequent violation(s).

Provided the above conditions do not become an issue, then there should be little likelihood of concern for non-compliance with the implementation of this sediment control proposal.

Should questions arise, please contact me or Sandy Pruitt of the inspection and enforcement staff.

Sincerely,



D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/mn

cc: Sandy Pruitt, OGM
Mary Boucek, OGM
Tom Emmett, OSM



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

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September 9, 1983

Ms. Jean Semborski, Engineer
U. S. Fuel Company
Hiawatha, Utah 84527

RE: Approval Slurry Pond #5
Expansion Project
Hiawatha Complex
ACT/007/011, Folder No. 3 & 4
Carbon County, Utah

Dear Jean:

The Division has reviewed U. S. Fuel Company's latest submittal (received September 2, 1983) regarding deficiencies pertinent to the proposed Slurry Pond #5 modification.

The information is sufficient to satisfy the Division's remaining questions; however, certain conditions are attached to the final approval for the project.

1. The soil analyses as provided do not appear to present significant chemical differences between the (3) three 1-foot intervals tested. It is the Division's opinion that the differences are minor and do not warrant the need to segregate the top one foot interval from the lower two and three foot intervals. Consequently, the Division directs U. S. Fuel Company to salvage as much of the upper (3) three feet of topsoil and subsoil medium as possible during the topsoil stripping activities, realizing that substantial rock material may prohibit the salvaging of the subsoil in certain locations. Excess rock material should be avoided if encountered and not incorporated into the topsoil stockpile.
2. The Division has re-evaluated the hydrologic design calculations submitted and has concluded that the application of the 10-year, 24-hour storm distribution from SCS-TP-149 is not directly applicable to the design method found in NEH-4, Chapter 21, Section 21.49, which is based on a six hour storm duration.

Ms. Jean Semborski, Engineer
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September 9, 1983
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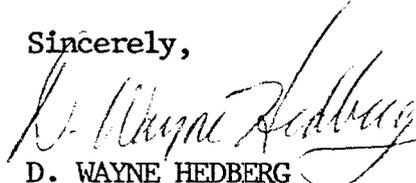
The T_0 values derived from the 10-year, 24-hour storm distribution chart are not applicable to the emergency spillway method and when applied tend to flatten the hydrograph peak thereby reducing the peak discharge significantly.

The Division has utilized a hydrologic computer program, SEDIMOT II, which was developed specifically to be applied to surface coal mining and reclamation hydrologic problems. The peak flows computed by this program for the disturbed areas draining to south pond 5 and north pond 5 are 9.3 and 15.3 cfs, respectively. This is based on a 10-year, 24-hour storm of 2.25 inches. As a further check, these computed discharge rates were compared with peak discharge nomographs prepared by the SCS for small watersheds (Standard Drawing #ES-1027, sheet 21 of 21, "Chapter 2, Engineering Field Manual for Conservation Practices," 1971) which depict peak discharge rates of 13 and 22 cfs for the respective south and north ponds.

Based upon the peak discharge estimates of 9.3 and 15.3 cfs, the cross-sectional area of the proposed diversion ditches must be increased from 2.15 ft² to 2.5 ft² (south) and 4.1 ft² (north) plus 0.3 ft of freeboard as required under UMC 817.43(f)(2).

Should any questions arise, please feel free to call me.

Sincerely,



D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/btb

cc: Jodie Merriman, OSM
Sarah Bransom, OSM
D. Lof, DOGM
J. Whitehead, DOGM
J. Smith, DOGM
T. Portle, DOGM