To Wayne
ACT/007/011

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

December 15, 1983

RECEIVED
DEC 20 1983
DIVISION OF
OIL, GAS & MINING

Mr. James W. Smith, Jr. Coordinator
of Mined Land Development
State of Utah, Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Request for approval on sediment pond inspection schedule.

JIM
DEC 20 1983

Dear Mr. Smith:

Pursuant to a quarterly complete inspection conducted by inspector Dave Lof on December 7 and 8, 1983, United States Fuel Company is seeking an approval for the modification of a sediment pond inspection schedule.

During his inspection, Dave reviewed reports on our slurry ponds. He requested that we begin inspection of impounding structures which do not meet the requirements of 30 CFR 77.216(a), as is the case of all of our sediment ponds based on 817.46(t).

The following is a list of our sediment ponds and their respective storage volumes. None of these ponds will impound water, sediment or slurry to an elevation of twenty feet or more above the upstream toe of the structure.

	Storage (acre-feet)
1. Sediment pond below slurry pond #1	1.02
2. Sediment pond below slurry pond #4	1.74
3. Sediment pond below slurry pond #5 - south	1.42
4. Sediment pond below slurry pond #5 - north	2.53
5. Sediment pond below upper coal storage yard	1.36
6. Sediment pond below Middle Fork mine yard	1.40
7. Sediment pond below South Fork loadout	.60
8. Sediment pond below South Fork mine yard	3.75

The sediment ponds below the slurry ponds are typically dry, with the exception of the period during spring runoff. Observations of these four ponds are made during inspections of the slurry ponds.

Sediment ponds below the two mine yards and the South Fork coal loadout are usually dry but are found to impound some water following precipitation events and spring runoff. These ponds are quite observable when driving to or from the mine portals.

Since these ponds are relatively small in size (do not meet the size criteria of 30 CFR 77.215(a)), impound water infrequently and are observable when conducting routine inspections or travelling to the mine pads, we request that the Division approval of a quarterly monitoring schedule for the sediment ponds. The ponds however may be inspected more frequently than this or will be inspected more frequently if problems requiring closer observation are noted.

During the quarterly monitoring inspections the ponds will be examined for signs of structural weakness, erosion and other hazardous conditions. Any observations will be recorded. Hazardous conditions will be reported.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

File ACT/007/011 Folder No. 3 Copy to Wayne and Sue

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

JIM

DEC 15 1983

December 13, 1983

James W. Smith, Jr., Coordinator of
Mined Land Development
State of Utah, Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Middle Fork Breakout

Dear Mr. Smith:

Earlier this fall United States Fuel Company submitted plans to the Division and to OSM describing a proposed modification to the Middle Fork mine yard. Essentially this preliminary plan described the breakout of the two portals, one for fresh air intake and one for a beltline to convey coal to the existing coal stockpile . The proposed portal breakouts are on the eastern margin of the present mine pad disturbed area and are within the permit boundaries. Measures have already been taken to convey runoff from this proposed disturbed area to the sediment pond. Additional material is being put together to satisfy the regulation requirements pertaining to this modification.

However, severe winter conditions incurred already in the upper mine canyons has promoted air restrictive icing in our air intake portals. The present conditions are not usually found until late January. The lack of a sufficient quantity of air into the mine is becoming a critical situation as MSHA is requiring a greater volume of air in the mine than is possible under the present conditions.

As a measure to attempt to maintain the air volumes required by law, United States Fuel Company must make at least one breakout now. All U.S. Fuel intends to do at this time is to mine underground to the outcrop in the beltline entry to allow air to pass into the mine.

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DIVISION OF
OIL, GAS & MINING

UTAH KING COAL

The section advancing toward the outcrop is now approximately two hundred feet from the outcrop. It is a dry section (i.e. no running or accumulating water) so no threat of water outflow from the breakout exists.

The approximate size of the breakout opening would be ten by twenty feet (ten feet high and up to twenty feet wide). All surficial debris covering the coal outcrop will be taken into the mine and not be cast down the slope. No face up or construction work will be done on the surface until the modification is approved.

Sincerely,

Jean Semborski

Engineer I

File ACT/007/011
Folder #3

Ford, Bacon & Davis
Incorporated
Engineers-Constructors

Done DWM

November 14, 1983 UC-528-301

Lynn Kunzler
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Lynn:

Enclosed please find six (6) copies of Page 67 from the U.S. Fuel DOA response. The tables were mis-titled. This has been corrected, so please replace old page 67 with the enclosed new page 67.

Sincerely,

FORD, BACON & DAVIS, INCORPORATED

Jack A. Elder, Ph.D.
Senior Environmental Scientist

/km

enclosures

375 Chipeta Way · P.O. Box 8009 · Salt Lake City, Utah 84108
(801) 583-3773 · Telex 38-8312

File ACT/007/011
Folder # 3, 15 w/maps

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

September 23, 1983

RECEIVED
SEP 26 1983
DIVISION OF
OIL, GAS & MINING

Mr. Wayne Hedberg
Reclamation Hydrologist
State of Utah Natural Resources
Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Wayne:

In response to your letter of September 16, 1983 relating to the North Fork vent portal discharge channel modification, the following comments are submitted:

1) You refer to the proposed modification as a diversion. Please note that this is not a proposed diversion but simply an attempt to upgrade an existing small drainage channel.

2) The purpose of our plan is simply to request permission to remove some straw bales from an existing small ditch and modify the ditch by installing riprap. This procedure was recommended by OSM and Division inspectors. The present ditch is not in violation of any regulations and complies with our original plan for North Fork submitted June 13, 1979 and approved by OSM on March 21, 1980. We really question the need to submit a plan at all since we are only proposing maintenance within an approved disturbed area in which we have the right to enter and carry out operations.

3) We have concerns about your statement that these plans must be certified by a professional engineer. There are portions of the regulations which specifically require certification but those are mostly in relation to major structures which could seriously endanger life or property or result in serious envionmental problems. We view the requirement to certify repairs and modification to minor structures as excessive overregulation. We do not want to start a precedent which is entirely beyond the intent of the regulations.

   You cited UMC 784.23 (c) as the basis of your request. Are you interpreting this to mean that every plan and drawing submitted to the Division must be certified? This regulation falls under Underground Coal Mining Permit Applications and refers to maps and drawings submitted in the permit application. Our

submittal on the North Fork ditch modification is not a permit application but a simple plan to riprap an existing small ditch. Plans such as this should fall under UMC 817 (Performance Standards). Areas where a professional engineer's certification is required, either under Performance Standards or Permit Applications, are specifically and clearly indicated in the regulations.

Again, we do not feel that it is the intent of the regulations to require a professional engineer's certification on plans for minor structures and do not intend to start such a precedent.

In view of the unnecessary burden of time and expense imposed by your request to certify minor plans, we request that you have your legal people review this issue and provide us with their interpretation of the intent of the regulations in this regard.

4) A more detailed map showing the portal yard area, drainage patterns, and ditches is enlcosed with this letter. The yard configuration has been changed to conform with recent mapping.

5) Runoff from the undisturbed area is diverted away from the yard by the ditch shown on the enclosed map. Drainage patterns within the yard are shown by arrows. Please note that the mine water discharge ditch need only handle the mine water (approximately 12 G.P.M.) plus precipitation that falls directly on the yard in front of the portal.

6) Monitoring of discharge from the vent portal has been done since September, 1981 but records were kept only during months when the portal is accessible. The data on file with the Division includes all the sampling results submitted to date.

Sincerely,

Robert Eccli

Robert Eccli
Senior Engineer

RE:lj

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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

September 16, 1983

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

RE: North Fork Vent Portal Discharge
Diversion Modification
Hiawatha Complex
ACT/007/011, Folder No. 3
Carbon County, Utah

Dear Jean:

The Division has reviewed U. S. Fuel Company's recent request to construct a small diversion across the North Fork Vent Portal Pad to handle discharge from the portal. The plans submitted are not acceptable at this time. The following is a list of the deficiencies to be addressed before the review can continue.

1. The hand sketch depicting the area of the proposed diversion is not adequate. Pursuant to UMC 784.23(c), maps, plans and cross-sections must be prepared and certified by a qualified professional engineer or professional geologist. The drawing does not meet this requirement.

   In addition, the clarity of this drawing is quite vague and does not present sufficient detail to interpret how the drainage patterns (arrows) were determined. There is no indication of ditches, berms, natural diversions, etc., to show how the surface runoff is routed around the pad area from the adjacent disturbed and undisturbed area watershed boundaries. How is the undisturbed watershed runoff separated from the disturbed area runoff?

2. Only portions of the hydrologic calculations can be checked at this time due to the poor reproduction of the topographic elevation contours from the drawing provided. A more detailed map with the disturbed area and legible elevation contours must be provided before the hydrologic review can be completed.

Also, was 0.3 feet of freeboard included in the design of the diversion ditch (UMC 817.43[f][2])? The present typical cross-section does not appear to depict any freeboard.

What size riprap will be used in the channel lining? How was an n-value of 0.1 determined? This value seems somewhat questionable. A value of n = 0.04 (see Table 3.1 enclosed) would probably be approaching an upper limit.

3. The operator states that the water discharging from the intake portal has been monitored over a 22-month period and that the quality and quantity have remained relatively constant. After reviewing the water quality files for the Hiawatha Complex, only five sampling occasions could be found for the King #4 vent tunnnel (July-October 1982 and June 1983). It is assumed that the North Fork intake tunnel referred to in the letter is the same as the King #4 vent tunnel.

Please provide copies of the discharge records for the remainder of this 22-month period.

Upon receipt of the requested information, the review process can continue for this proposal. Should you have any questions, please call.

Sincerely,

D. Wayne Hedberg

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/btb

Enclosure

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

Table 3.1. (continued)

Type of Channel and Description	Minimum	Normal	Maximum
i. Paved invert, sewer, smooth bottom	0.016	0.019	0.020
j. Rubble masonry, cemented	0.018	0.025	0.030
B. Lined or Built-Up Channels			
B-1. Metal			
a. Smooth steel surface			
1. Unpainted	0.011	0.012	0.014
2. Painted	0.012	0.013	0.017
b. Corrugated	0.021	0.025	0.030
B-2. Nonmetal			
a. Cement			
1. Neat, surface	0.010	0.011	0.013
2. Mortar	0.011	0.013	0.015
b. Wood			
1. Planed, untreated	0.010	0.012	0.014
2. Planed, creosoted	0.011	0.012	0.015
3. Unplaned	0.011	0.013	0.015
4. Plank with battens	0.012	0.015	0.018
5. Lined with roofing paper	0.010	0.014	0.017
c. Concrete			
1. Trowel finish	0.011	0.013	0.015
2. Float finish	0.013	0.015	0.016
3. Finished, with gravel on bottom	0.015	0.017	0.020
4. Unfinished	0.014	0.017	0.020
5. Gunite, good section	0.016	0.019	0.023
6. Gunite, wavy section	0.018	0.022	0.025
7. On good excavated rock	0.017	0.020	
8. On irregular excavated rock	0.022	0.027	
d. Concrete bottom float finished with sides of			
1. Dressed stone in mortar	0.015	0.017	0.020
2. Random stone in mortar	0.017	0.020	0.024
3. Cement rubble masonry, plastered	0.016	0.020	0.024
4. Cement rubble masonry	0.020	0.025	0.030
5. Dry rubble or riprap	0.020	0.030	0.035
e. Gravel bottom with sides of			
1. Formed concrete	0.017	0.020	0.025
2. Random stone in mortar	0.020	0.023	0.026
3. Dry rubble or riprap	0.023	0.033	0.036
f. Brick			
1. Glazed	0.011	0.013	0.015
2. In cement mortar	0.012	0.015	0.018
g. Masonry			
1. Cemented rubble	0.017	0.025	0.030
2. Dry rubble	0.023	0.032	0.035
h. Dressed ashlar	0.013	0.015	0.017

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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

September 20, 1983

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

RE: New Beltline Portal
Middlefork Mine Yard
Hiawatha Complex
ACT/007/011, Folder No. 3
Carbon County, Utah

Dear Jean:

The Division has received U. S. Fuel Company's recent submittal (August 30, 1983) proposing a new beltline and portal breakouts in the Middlefork Mine Yard area of the Hiawatha Complex.

On September 16, 1983, an additional twelve (12) copies of the proposal were received by this office. The Division requires thirteen (13) copies of all revisions to update copies of the Mining and Reclamation Plan (MRP) currently on file with all appropriate agencies (State and Federal).

Routinely, at least four (4) individuals from the Division technical staff will need to review a revision. Therefore, one or two copies of a submittal may take a substantial amount of time to be routed among the assigned review team depending on individual workloads. The Office of Surface Mining (OSM) may wish to comment on the proposal as well. Occasionally, other State agencies need to provide input on proposals. Consequently, the additional copies are necessary.

The Division has established a policy for reviewing revisions which requires that all necessary copies of the proposal be included at the time of initial submission before the proposal will be scheduled for review. Also, a minimum of 60-days for a Division response will be required.

The Division and the Office of Surface Mining (OSM) have elected to include this revision as part of the on-going permit review process. In order to stay on track with the established timeframe schedule for the MRP reviews, responses and approvals, it is necessary to curtail the amount of time spent reviewing new revisions to the MRP application until the permit approval(s) are complete.

Some preliminary comments have been developed, but are by no means all inclusive, as the review is not complete.

The preliminary comments must be addressed before the review can continue.

The comments developed thus far are as follows:

1. All maps and drawings submitted pursuant to UMC 784.23(c) must be prepared by, or under the direction of, and certified by a qualified professional engineer or professional geologist as appropriate.

2. The map does not clearly indicate the location of the proposed conveyor or coal stockpile. All proposed and existing structures must be clearly indicated on the plan overview. The old conveyor line is indicated on the map. Will the old line continue to be used? Will the old and new conveyor belts discharge at the same stockpiling location? How long will the new conveyor line be? Are design drawings finalized for the conveyor system available. What will the minimum height of the belt line be? Will the belt line be enclosed or covered to minimize coal spillage and/or coal fine dust problems?

3. Enclosed is a preliminary hydrologic computer printout which was based upon the input data provided in the operator's proposal. A peak flow of 5.1 cfs was calculated which is twice the value computed by the company (see enclosed computer printout). Use of a 12-inch culvert to pass this flow (5.1 cfs) could require a headwater depth of 2.6 for projecting pipe conditions depending on the critical slope of the invert. An expanded map of the disturbed area with better delineation of the surface drainage control structures and topographic elevation contours, must also be provided. The complete hydrologic review has not been finished for all the structures included in the proposal pending receipt of response to this letter.

4. The additional disturbance (0.34 acres) does not equal 200 X 120 feet as quoted in the proposal. Please clarify which is the correct figure, 0.34 or 0.55 acres of disturbance. A preliminary digitized value of 0.47 acres was determined from the drawing submitted to date.

Once the proper disturbance figure is determined, the company will need to address the additional bonding requirements for the sealing of portals, removal of any additional structures and reclamation of the new disturbed area(s) if not already included in the MRP bond calculations.

5. (a) The application lacks maps depicting the location(s) of soil sampling points as well as soil storage.

   (b) Further, no topsoil volume estimate has been provided. Use the correct acreage figure along with soils data to generate such an estimate.

6. A plan for revegetation that meets the requirements of UMC 784.13(b)(5) and UMC 817.111-.117 must be supplied. The vegetation type(s) to be disturbed needs to be disclosed and correlated with a vegetation reference area(s) that will be used for determining revegetation success.

These comments, though preliminary, should be accounted for in the resubmission. Should any questions arise, call me or D. Wayne Hedberg of the technical staff.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/DWH:btb

cc: Errol Gardiner, U.S. Fuel Co.
Sarah Bransom, OSM
Jodie Merriman, OSM
T. Portle, DOGM
L. Kunzler, DOGM
S. Storrud, DOGM
D. Lof, DOGM

9/12/83

U.S. FUEL CO.
KingII - Belt/Brkout. Mod.

SEDIMOT II

* *
JUNCTION 1, BRANCH 1, STRUCTURE 1
* *

*** HYDRAULIC INPUT VALUES FOR SUBWATERSHEDS ***

WATER SHED	AREA ACRES	CURVE NUMBER	TC HR	TT HR	ROUTING COEFFICIENTS K-HRS	X	UNIT HYDRO
1	12.80	80.00	.140	0.000	0.000	0.00	3.0 (Forest)

(8.63 min.) - average of 3 methods (Kirpitch (2.4) / Kent (5.13) / Hathaway (18.5))

* * * COMPUTED VALUES FOR INDIVIDUAL WATERSHEDS * * *

WATERSHED	PEAK FLOW (CFS)	RUNOFF (INCHES)
1	5.10	.72

***** SUMMARY TABLE FOR TOTAL WATERSHED *****

STORM DURATION	=	24.00	HOURS
PRECIPITATION DEPTH	=	2.25	INCHES
RUNOFF VOLUME	=	.7686	ACRE-FT
PEAK DISCHARGE	=	5.0998	CFS
AREA	=	12.8000	ACRES
TIME OF PEAK DISCHARGE	=	12.10	HRS

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

September 20, 1983

Mr. Allen D. Klein, Administrator
Western Technical Center
Office of Surface Mining
Brooks Towers
1020 Fifteenth Street
Denver, Colorado 80202

Attention: Ms. Sarah Bransom

RE: Permit Revision
New Beltline and Portal
Middlefork Mine Yard
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 3
Carbon County, Utah

Dear Mr. Klein:

Enclosed please find seven (7) copies of U. S. Fuel Company's proposal for a revision to the permit application. The revision proposes construction of two portals, one to handle coal, the other for ventilation. A new beltline, tower and truss support structure will also be constructed as part of the proposal.

As per a phone conversation with Mr. Steve Manger of your office on September 19, this revision will be reviewed as part of the current MRP permitting process.

Also enclosed are preliminary Division comments which have been directed to the company for response.

Should you have any questions or comments, please contact D. Wayne Hedberg of the technical staff.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/DWH:btb
cc: Jodie Merriman, OSM
D. Lof, DOGM
T. Portle, DOGM

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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

September 16, 1983

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

RE: North Fork Vent Portal Discharge
Diversion Modification
Hiawatha Complex
ACT/007/011, Folder No. 3
Carbon County, Utah

Dear Jean:

The Division has reviewed U. S. Fuel Company's recent request to construct a small diversion across the North Fork Vent Portal Pad to handle discharge from the portal. The plans submitted are not acceptable at this time. The following is a list of the deficiencies to be addressed before the review can continue.

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   In addition, the clarity of this drawing is quite vague and does not present sufficient detail to interpret how the drainage patterns (arrows) were determined. There is no indication of ditches, berms, natural diversions, etc., to show how the surface runoff is routed around the pad area from the adjacent disturbed and undisturbed area watershed boundaries. How is the undisturbed watershed runoff separated from the disturbed area runoff?

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Also, was 0.3 feet of freeboard included in the design of the diversion ditch (UMC 817.43[f][2])? The present typical cross-section does not appear to depict any freeboard.

What size riprap will be used in the channel lining? How was an n-value of 0.1 determined? This value seems somewhat questionable. A value of n = 0.04 (see Table 3.1 enclosed) would probably be approaching an upper limit.

3. The operator states that the water discharging from the intake portal has been monitored over a 22-month period and that the quality and quantity have remained relatively constant. After reviewing the water quality files for the Hiawatha Complex, only five sampling occasions could be found for the King #4 vent tunnnel (July-October 1982 and June 1983). It is assumed that the North Fork intake tunnel referred to in the letter is the same as the King #4 vent tunnel.

   Please provide copies of the discharge records for the remainder of this 22-month period.

Upon receipt of the requested information, the review process can continue for this proposal. Should you have any questions, please call.

Sincerely,

D. Wayne Hedberg

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/btb

Enclosure

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

Table 3.1. (continued)

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i. Paved invert, sewer, smooth bottom	0.016	0.019	0.020
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B-2. Nonmetal			
a. Cement			
1. Neat, surface	0.010	0.011	0.013
2. Mortar	0.011	0.013	0.015
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2. Planed, creosoted	0.011	0.012	0.015
3. Unplaned	0.011	0.013	0.015
4. Plank with battens	0.012	0.015	0.018
5. Lined with roofing paper	0.010	0.014	0.017
c. Concrete			
1. Trowel finish	0.011	0.013	0.015
2. Float finish	0.013	0.015	0.016
3. Finished, with gravel on bottom	0.015	0.017	0.020
4. Unfinished	0.014	0.017	0.020
5. Gunite, good section	0.016	0.019	0.023
6. Gunite, wavy section	0.018	0.022	0.025
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e. Gravel bottom with sides of			
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2. Random stone in mortar	0.020	0.023	0.026
3. Dry rubble or riprap	0.023	0.033	0.036
f. Brick			
1. Glazed	0.011	0.013	0.015
2. In cement mortar	0.012	0.015	0.018
g. Masonry			
1. Cemented rubble	0.017	0.025	0.030
2. Dry rubble	0.023	0.032	0.035
h. Dressed ashlar	0.013	0.015	0.017

To Wayne DWJ 9-19
File ACT/007/011 Folder 3
Final File Revision

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

Sept. 15, 1983

James W. Smith, Jr., Coordinator of Mined
Land Development
State of Utah, Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Mr. Smith:

Please find enclosed twelve extra copies of the Beltline Portal Breakout drawing which is proposed for the Middle Fork mine workings.

This drawing was initially sent under the cover of an August 30, 1983 letter which provides the narrative for the plan. Twelve copies of the narrative are also enclosed.

We hope this additional material sufficiently meets your needs.

Sincerely

Jean Semborski

Jean Semborski

Enclosure

File ACT/007/011
Folder No. 3
Copy to Wayne, Ron D., Dave L.

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

September 12, 1983

JIM

SEP 15 1983

James W. Smith, Jr., Coordinator of
Mined Land Development
State of Utah, Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Request of extension of time
on NOV 83-4-6-2, 2 of 2.

Dear Mr. Smith:

On July 1, 1983 Mr. Dave Lof inspected United States Fuel Company's property and noted areas that concerned him. U.S. Fuel Company, on July 7, 1983 received NOV 83-4-6-2. The interim step for abatement of the violation 2 of 2 in this group required us to submit plans to the Division detailing how we intended to abate this violation. The plan was due within 30 days of our reciept of the NOV.

Our plan containing the details for the abatement of this violation was sent to the Division on July 20, 1983, within the 30 day time limit. We received a response from the Division on August 17 which indicated that the plan was basically acceptable but a request for additional information was made.

We returned a response to their questions on August 22, 1983. It was at this time that Mr. Hedberg expressed his concern over our method of calculating hydrologic flows. He and Mr. Eccli debated over the appropriate method to be used for this situation. A period of perhaps a week elapsed after he received our response while the methods of calculation were being analyzed and compared.

RECEIVED
SEP 15 1983
DIVISION OF
OIL, GAS & MINING

UTAH KING COAL

We received approval to begin the construction on the diversion system on Sept. 7, 1983, 62 days after the violation was received. This was also two days past the allocated abatement period for completion of the work. Construction could not possibly have begun before approval was granted and still have been within the time constraint.

United States Fuel Company feels that we have been diligent and timely in responding to this violation. When we believed, from telephone conversations with Mr. Hedberg, that final approval was imminent, we went ahead and ordered and have received the materials necessary to construct the project. Also, we arranged with the contractor, on Sept. 8, to begin work on the project as soon as equipment became available. Work should begin the week of Sept. 12, 1983 as soon as the equipment can be moved to Hiawatha.

We had hoped, like the Division, for the project to be completed by the original deadline date. However, it is difficult to estimate how much time the technical review will take. In this case, the review period did not match the abatement date initially scheduled.

In view of the time remaining, we should be able to complete the project within the 90 day abatement period. United States Fuel Company requests that an extension of two weeks be added onto the past deadline date of 60 days so that we may have a chance to complete the work without being in a failure to abate situation. We feel that the work can be completed by Sept. 23, 1983 unless problems occur over which we have no control.

We hope you find our request to be reasonable. Construction of this diversion system will begin as soon as possible.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

pc: E. Gardiner

To John
File ACT/007/011
Folders 3 7 &
MRP
Copy to Dave L

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

September 12, 1983

SEP 1 0 1983

Mr. James W. Smith, Jr.
Corrd. of Mined Land Development
State of Utah, Div. of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Additional Information for Abatement Plans on NOV 83-4-9-2, 2 of 2.

Dear Mr. Smith:

This submittal is in reply to Mr. David Lof's letter of September 2, 1983 requesting additional information relating to abatement plans for NOV 83-4-9-2, 2 of 2. We received his letter on September 7, 1983.

In response to the five items requested in Mr. Lof's letter, please find the following information enclosed:

1) Calculations showing the velocity and discharge rates of outflow from the four inch water line. Assumptions and calculations are given in Figure 5. Figures 6, 7 and 8 give charts showing the relationships of velocity vs head, discharge rates vs head and head vs time. These charts are derived from equations given in Figure 5.

2) The drainage area and factors contributing to runoff entering the 36 inch culvert are given in Figure 1. Calculations relating to runoff from a 10-year, 24-hour storm are given in Table 1.

3) The use of railroad ties as energy dissipators was not derived from any literature or other documentation, but was proposed as a practical method utilizing readlily available material. Please note that the railroad ties are proposed only as a secondary means of energy dissipation. The two culvert elbows will be the primary energy dissipators. Also, the four inch gate valve can be regulated to limit outflow to any desired rate.

4. Utah Railway has indicated to us that they prefer to install the culvert and bill U.S. Fuel Co. for the work. They intend to backfill the project with material from their own property.

5. A copy of the letter sent to the EPA and the State Department of Health is enclosed. Please refer to the enclosure for details.

Sincerely,

Jean Semborski

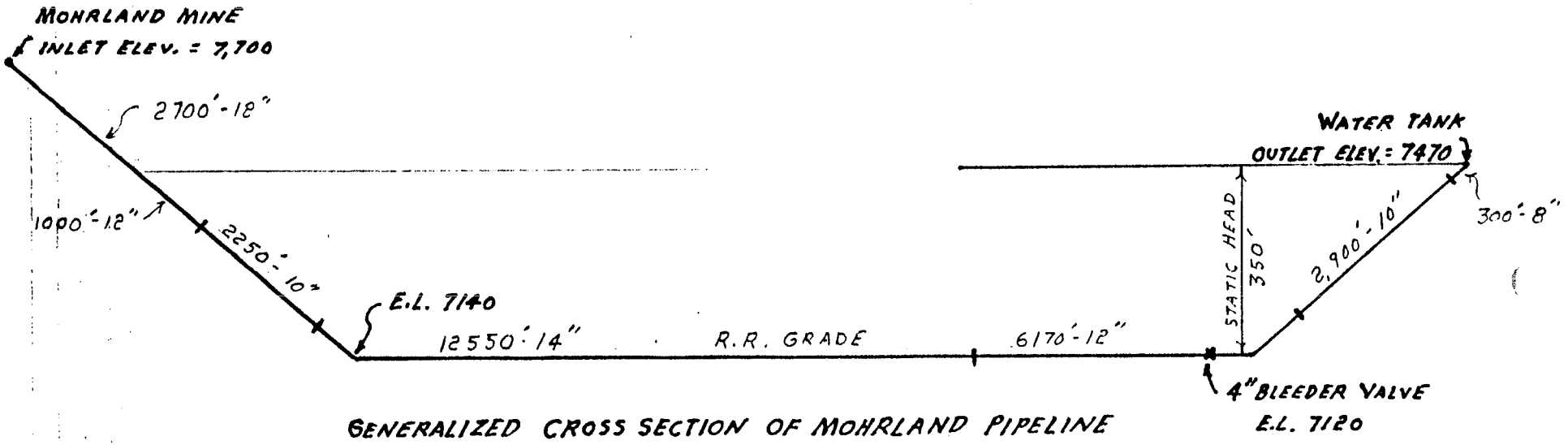
Jean Semborski
Engineer I

JS:lj

Enclosures

cc: Errol Gardiner
Dan Martin

FIGURE 5



GENERALIZED CROSS SECTION OF MOHRLAND PIPELINE

NOTES:

1/ WATER IS DIVERTED FROM PIPELINE INLET PRIOR TO OPENING BLEEDER VALVE.

2/ WATER REMAINING IN PIPELINE IS DRAINED OFF THROUGH 4" BLEEDER VALVE.

PIPE DIAMETER	LENGTH OF PIPE	VOLUME OF PIPE
8"	300'	105 FT^3
10"	5150'	2809
12"	7170'	5631
14"	12550'	13416 FT^3
	25170'	21961 FT^3

VELOCITY THROUGH BLEEDER VALVE = $V = c\sqrt{2gh}$

DISCHARGE THROUGH BLEEDER VALVE = $Q = ca\sqrt{2gh}$

TIME REQUIRED TO EMPTY VESSEL OF UNIFORM CROSS-SECTION = $t_{(sec)} = \dfrac{2A(\sqrt{H} - \sqrt{h})}{ca\sqrt{2g}}$

A = CROSS SECTIONAL AREA OF VESSEL (FT.^{2})
a = CROSS SECTIONAL AREA OF ORIFICE (FT^2)
H = INITIAL HEAD ON ORIFICE (FT.)
h = FINAL HEAD ON ORIFICE (FT.)
c = COEFF. OF DISCHARGE = 0.605
g = ACCELERATION DUE TO GRAVITY = 32.2 FT/SEC^2
t = TIME (sec.)

EQUIVALENT CROSS-SECTIONAL AREA OF PIPELINE (VESSEL) = $A = \dfrac{\text{VOLUME OF PIPELINE}}{\text{STATIC HEAD}} = \dfrac{21,961 \text{ FT}^3}{350 \text{ FT.}} = 62.75 \text{ FT}^2$

TABLE 1

STORM RUNOFF CALCULATIONS

DESIGN STORM 10-YR, 24-HR

LOCATION UTAH R.R. 36" CULVERT

	A	CN	ℓ	Y	S	L	Computed Tp	HYDRO. FAMILY NO.	P	Q	To	To / Tp Computed	To / Tp Used	REVISED Tp	484 AQ / REV. Tp	q	HD	CD
	.098	80	3,000	54	2.5	.104	.122	3	2.25	.721	13.4	110	75	.179	191	12.7	1.7	36"
					2.05		.213		1.4									

Method from National Engineering Handbook, Hydrology, Section 4, 1972

A = AREA (MI^2)

CN = RUNOFF CURVE NUMBER

ℓ = HYDROLOGIC LENGTH OF BASIN (FT.)

Y = AVERAGE SLOPE (%)

L = WATERSHED LAG (HRS.)

$$L = \frac{(\ell^{0.8})(S+1)^{0.7}}{1900\, Y^{0.5}}$$

$$S = \frac{1000}{CN} - 10$$

P = PRECIPITATION DEPTH (IN.)

Q = RUNOFF VOLUME (IN.)

$$Q = \frac{(P-0.2S)^2}{P+0.8S}$$

T_p = TIME TO PEAK = 1.17L

To = DURATION OF EXCESS RAINFALL (HRS.)

q = PEAK FLOW (CFS)

HD = HEADWATER DEPTH (FT.)

CD = CULVERT DIAMETER (FT)

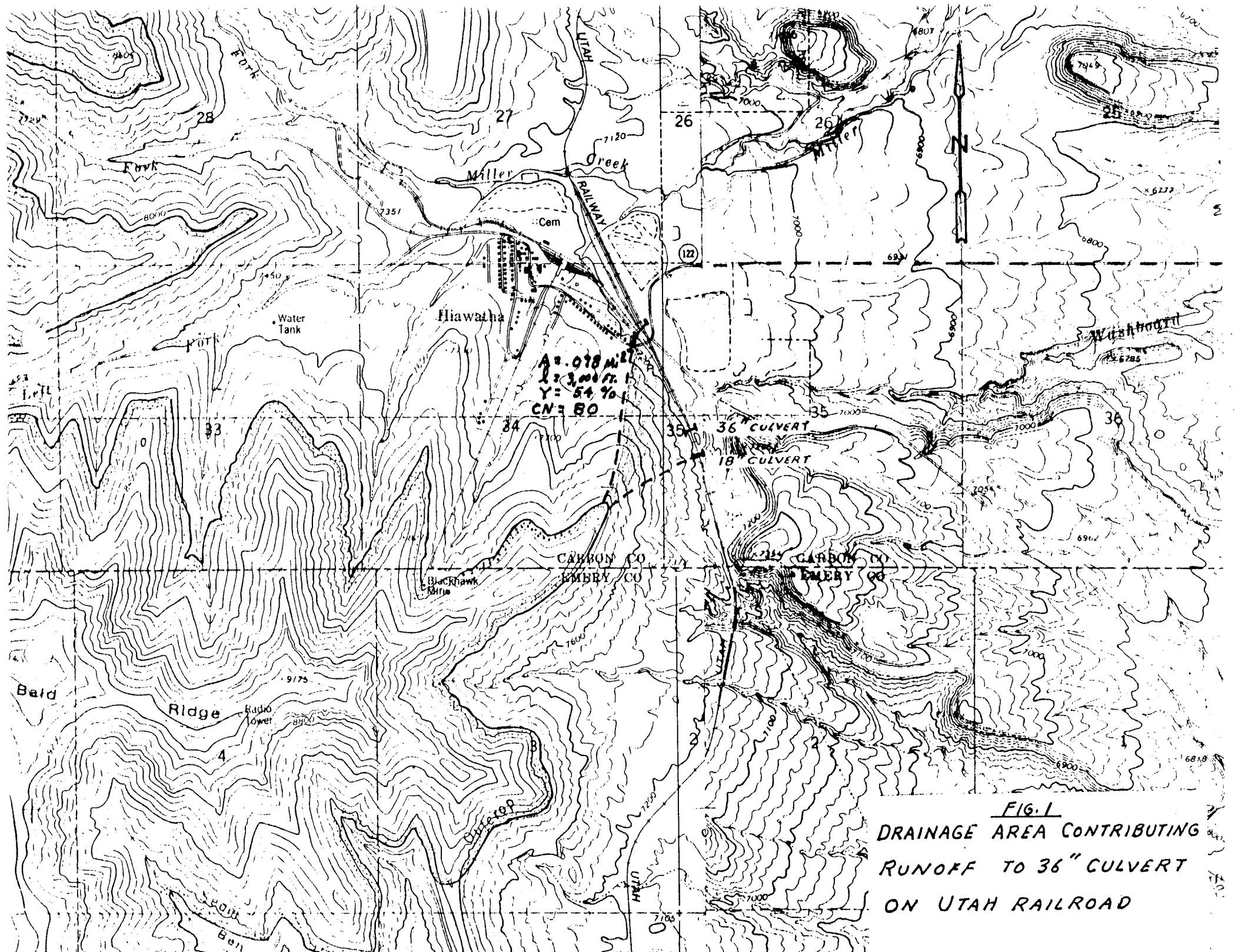


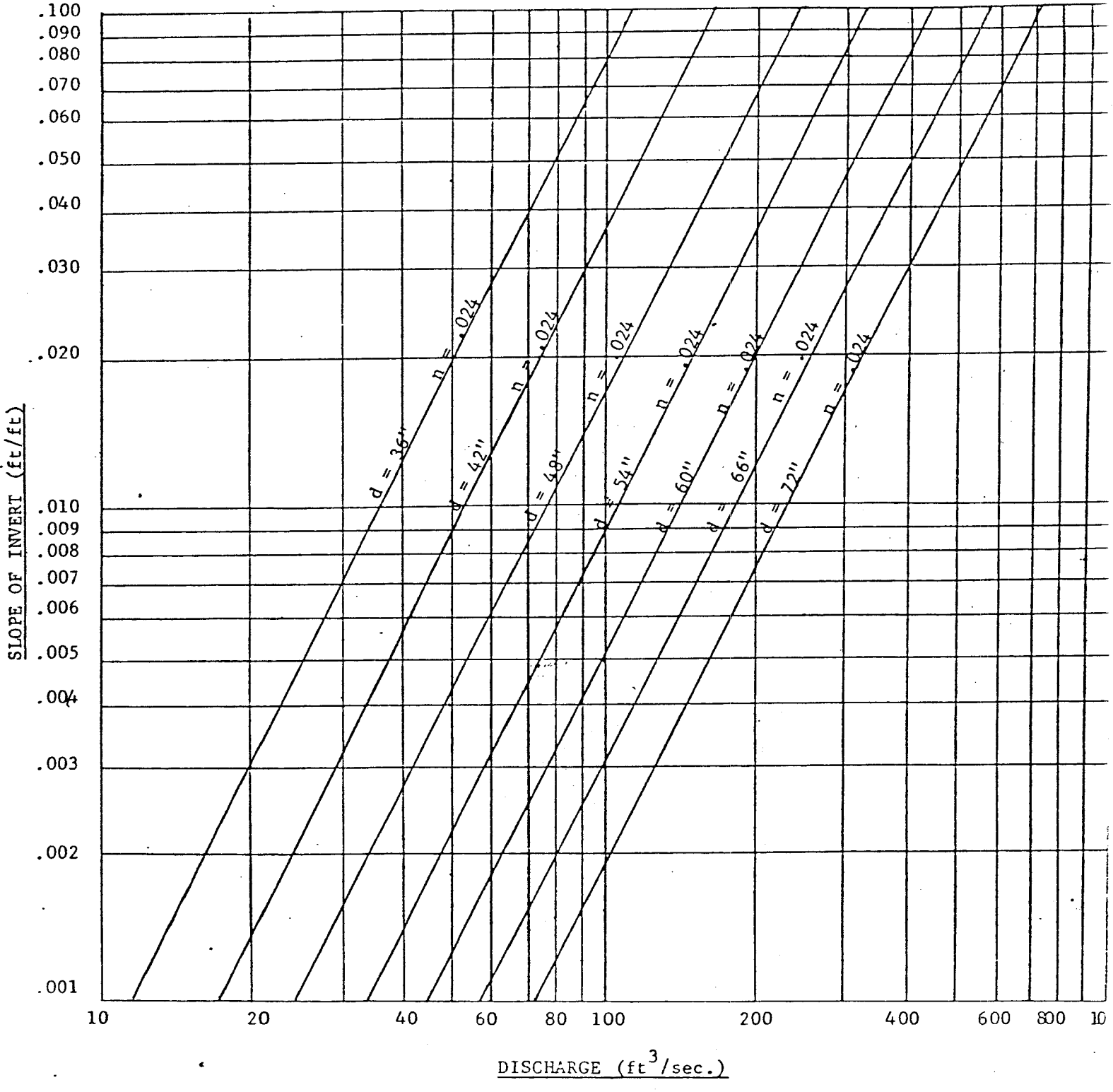
FIG. 1

DRAINAGE AREA CONTRIBUTING RUNOFF TO 36" CULVERT ON UTAH RAILROAD

(1/2 x 2-2/3 and 1 x 6 Cor ations)

FIGURE 2

Discharge based on "Manning's Equation" at full flow



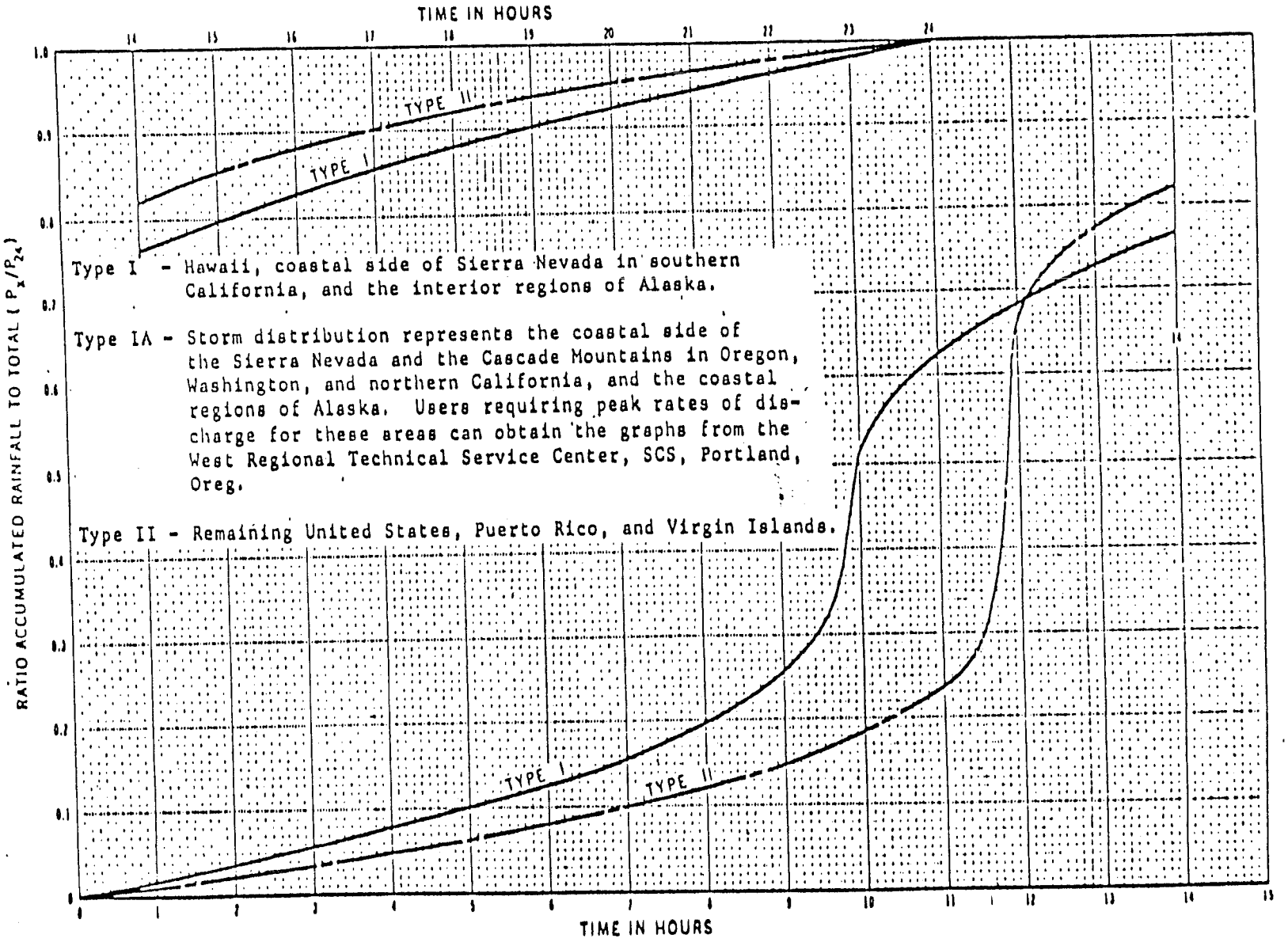


FIGURE 4

Figure 5.1-2. Twenty-four-hour rainfall distributions (from Kent, 1973).

FIGURE 3

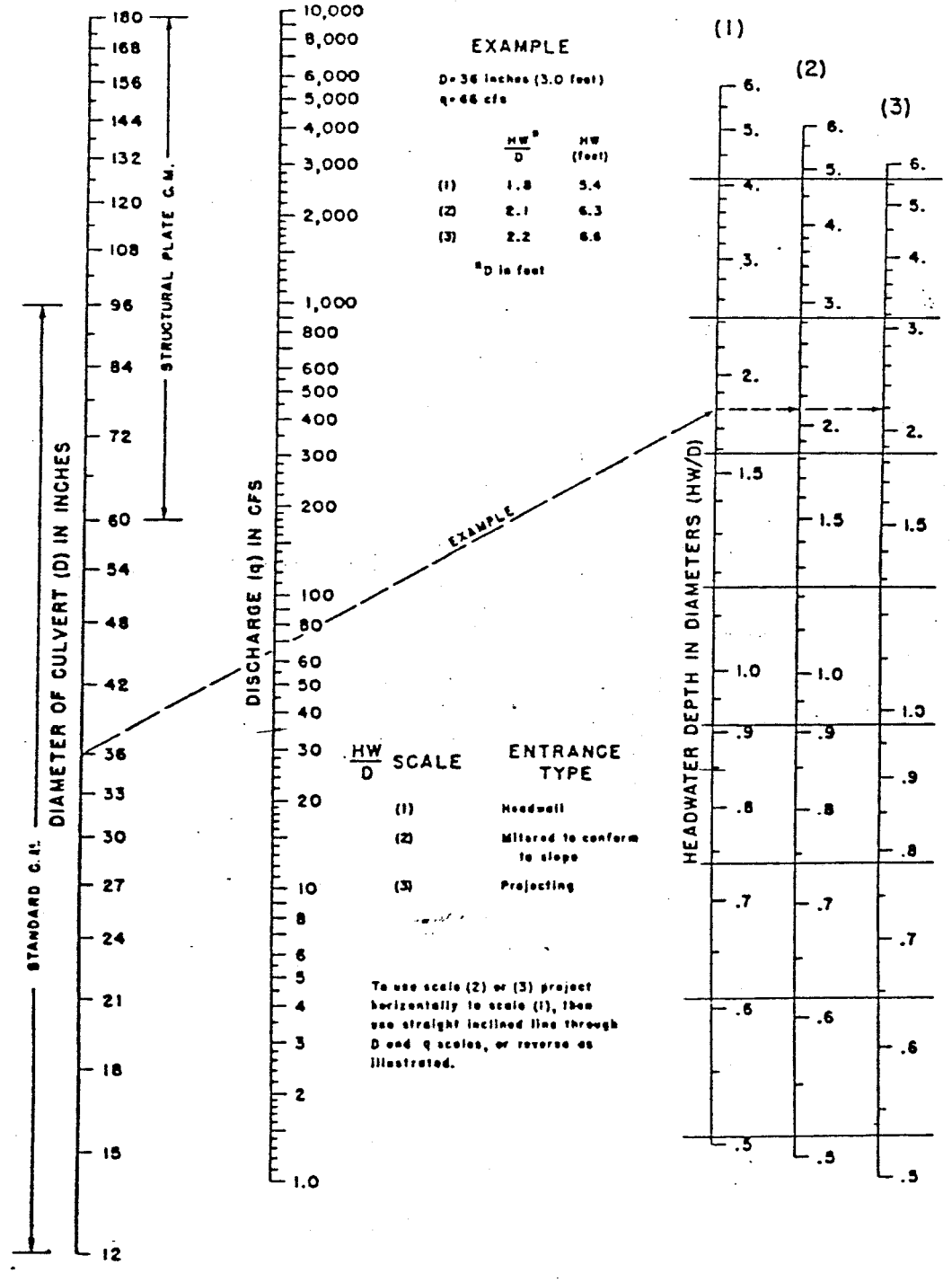


Exhibit 14-9. Headwater depth for C. M. pipe culverts with inlet control.

FORM CO. 689 1M 6-81

CALCULATION SHEET

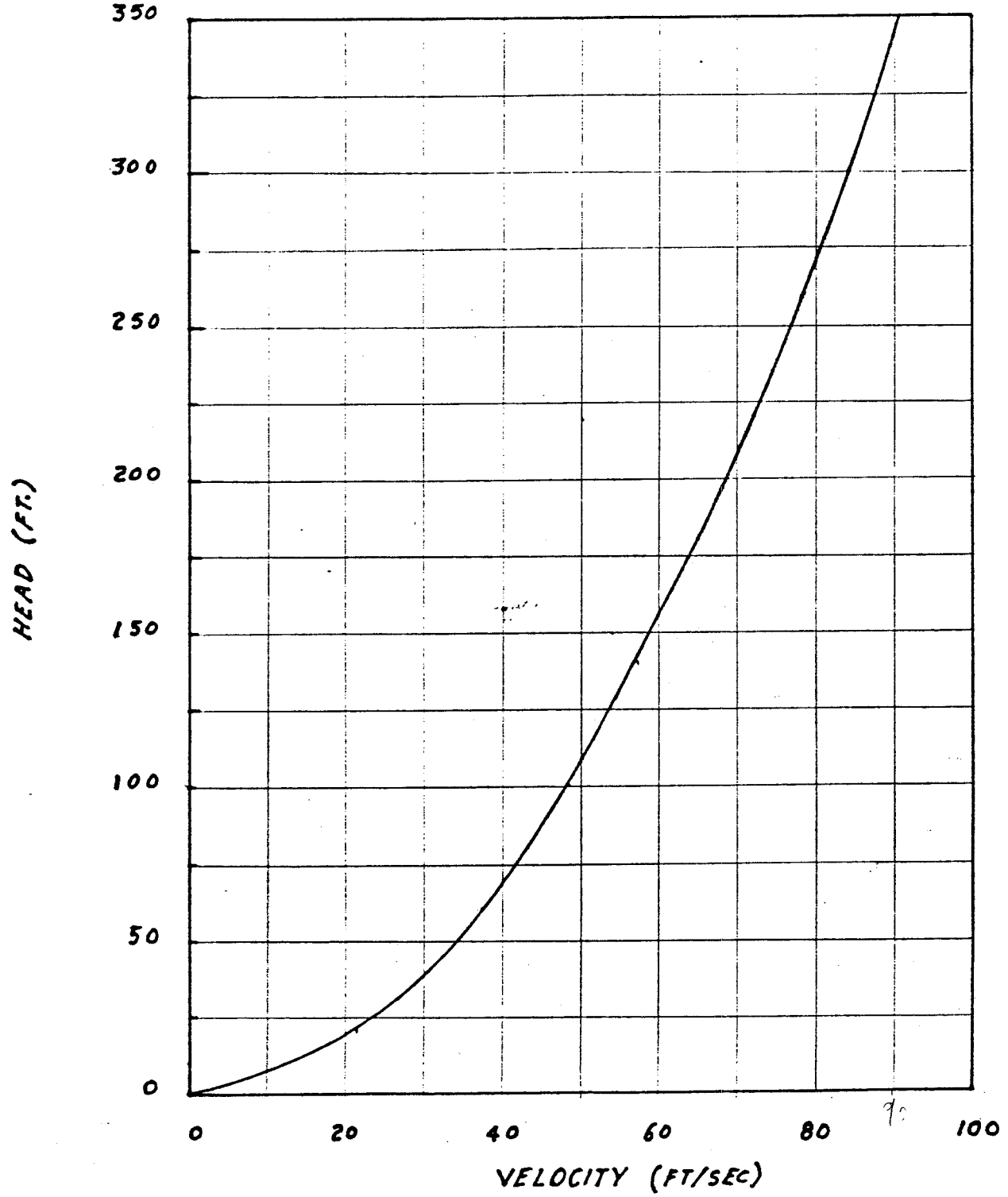
UNITED STATES FUEL COMPANY
ENGINEERING DEPT., HIAWATHA, UTAH

COMPUTATION FOR MOHRLAND PIPELINE
CHART SHOWING VELOCITY THROUGH 4" BLEEDER VALVE VS. HEAD PRESSURE (VALVE FULLY OPEN)

REF. DRAWING

INDEX _____ SHEET NO _____
PLACE _____
JOB _____
DATE 9-9-83
COMPUTED BY R.E.
CHECKED BY _____
REVISED _____

FIGURE 6



FORM CO. 689 IM 8-61

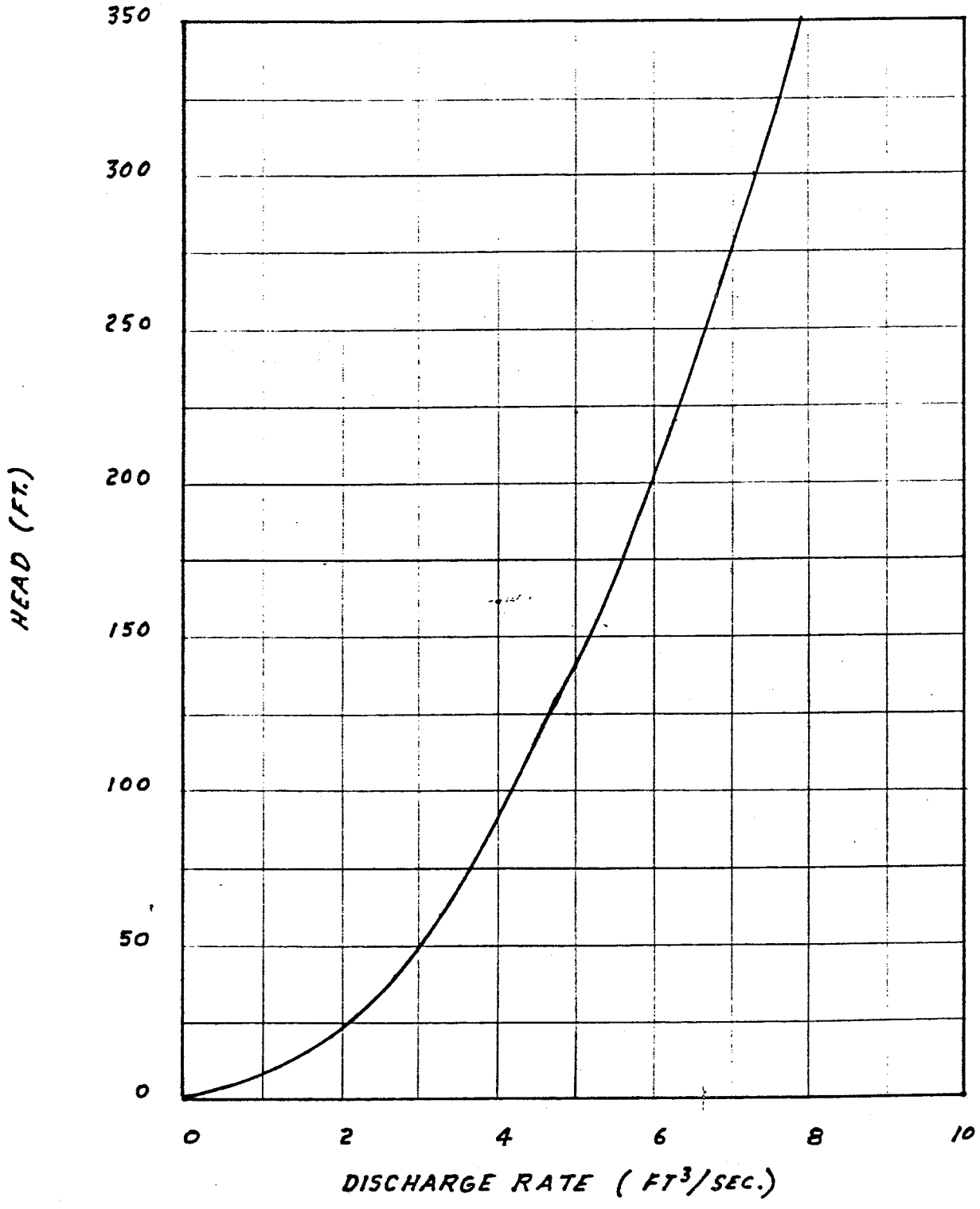
CALCULATION SHEET

UNITED STATES FUEL COMPANY
ENGINEERING DEPT., HIAWATHA, UTAH

COMPUTATION FOR MOHRLAND PIPELINE
CHART SHOWING DISCHARGE RATE THROUGH 4" BLEEDER VALVE VS. HEAD PRESSURE
REF. DRAWING (VALVE FULLY OPEN)

INDEX _____ SHEET NO _____
PLACE _____
JOB _____
DATE 9-9-83
COMPUTED BY R. E.
CHECKED BY _____
REVISED _____

FIGURE 7



FORM CO. 669 1M 8-81

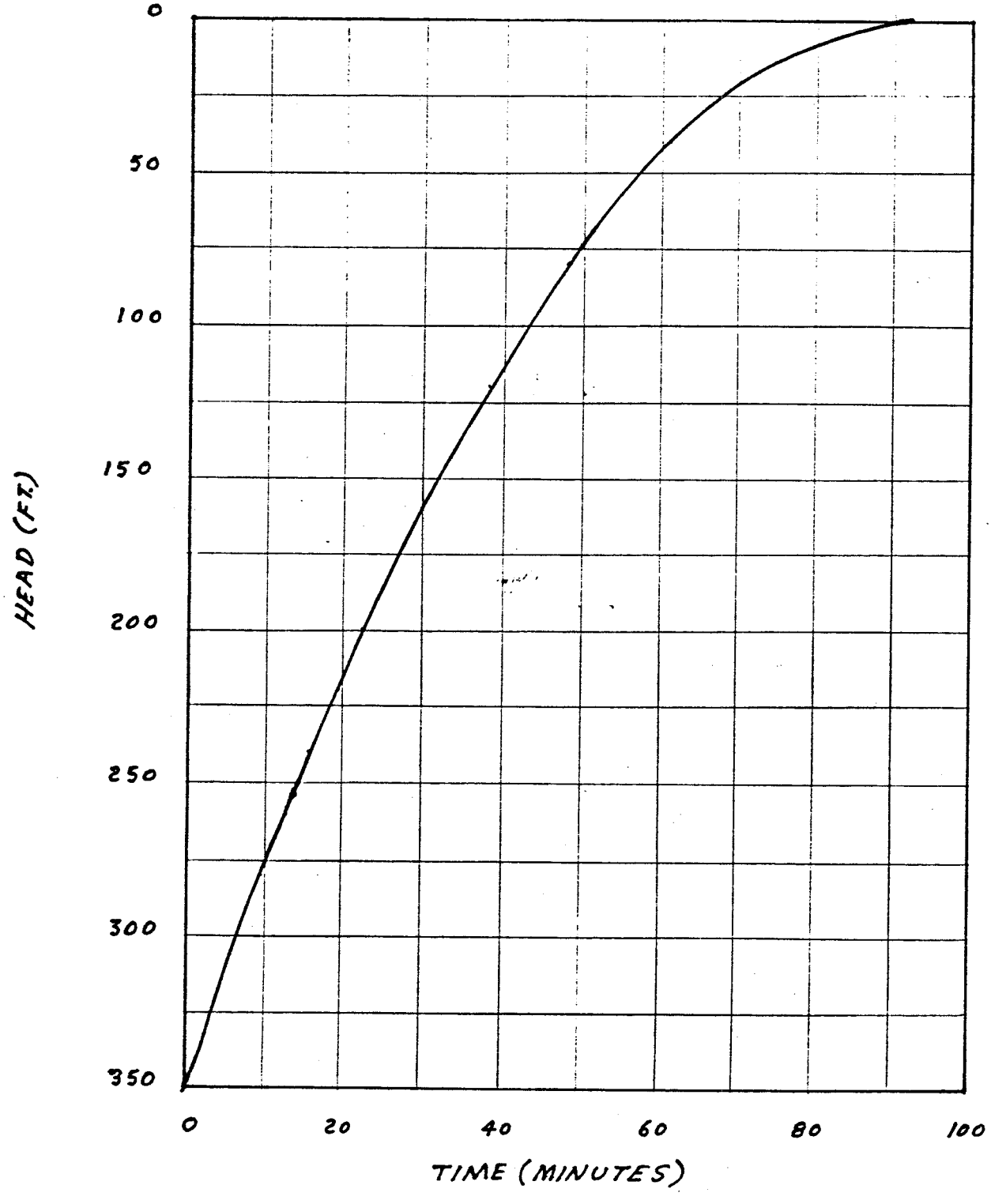
CALCULATION SHEET

UNITED STATES FUEL COMPANY
ENGINEERING DEPT., HIAWATHA, UTAH

COMPUTATION FOR MOHRLAND PIPELINE
CHART SHOWING HEAD VS. TIME FOR
DISCHARGE THROUGH 4" BLEEDER VALVE
REF. DRAWING (VALVE FULLY OPEN)

INDEX NO. _____ SHEET NO. _____
PLACE _____
JOB _____
DATE 9-12-83
COMPUTED BY R.E.
CHECKED BY _____
REVISED _____

FIGURE 8



UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

August 30, 1983

Max H. Dodson, Acting Director
United States Environment Protection Agency
Region VIII
1860 Lincoln Street
Denver, Colorado 80295

Re: NPDES PERMIT
No. UT-0023094

Dear Mr. Dodson;

Recently, United States Fuel Company was requested by the Utah Division of Oil, Gas and Mining to contact you concerning an emergency discharge we have.

The emergency discharge consists of a valve in the water pipeline from Mohrland to Hiawatha and is located along the railroad tracks 1700' south of the railroad crossing leading into the town of Hiawatha. On occasion, about 2 to 3 times per year, pipeline repairs require that the emergency discharge be used in order to repair a leak in the line.

Water in this pipeline is already being monitored at two locations on a monthly basis. Water is monitored at a mine discharge point near Mohrland (D001) where it enters the pipeline and at a water tank near Hiawatha (D002) where it leaves the pipeline.

Also, the discharge valve is used very infrequently and then only for a short duration, (less than 8 hours).

Since this same water is currently monitored at the inlet and outlet of the pipeline, United States Fuel Company would like to know if it is necessary that the emergency discharge be included in the mines discharge permit.

Sincerely,

Robert Eccli
Senior Mining Engineer

RE:lj
cc: Utah Dept. of Health

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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.

The T_o 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 signficantly.

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 ft^2 to 2.5 ft^2 (south) and 4.1 ft^2 (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

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

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

September 7, 1983

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

RE: Abatement Plan Adequacy
N83-4-6-2, No. 2 of 2
Middle Fork Mine Yard
Hiawatha Complex
ACT/007/011, Folder No. 3 & 7
Carbon County, Utah

Dear Jean:

The Division has completed the review of the additional information submitted by U. S. Fuel Company to abate NOV N83-4-6-2, 2 of 2. The plans have been determined adequate to abate the violation. The following concerns should be followed during implementation:

1. A trash rack should be provided at the inlet to the culvert to prevent the possibility of debris clogging the pipe internally.

2. The culvert should be securely anchored to prevent movement and possible separation at any joints. This could be accomplished by burial, securing with bolts to concrete footings or through other standard engineering practice. The elbow proposed for the discharge end should receive particular attention.

3. The outlet to the proposed culvert should not be placed to close to the by-pass culvert so as to restrict the normal flow of drainage originating from the adjacent area(s).

The Division appreciates the rapid responses and cooperation which U. S. Fuel Co. has provided regarding recent proposals and modifications. Please call should any questions arise concerning this review.

Sincerely,

D. Wayne Hedberg

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/jvb

cc: Jodie Merriman, OSM, Albuquerque
Sarah Bransom, OSM, Denver
Jim Smith, DOGM
Dave Lof, DOGM
John Whitehead, DOGM

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

September 2, 1983

P324-743-384
REGISTERED RETURN RECEIPT REQUESTED

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

RE: Abatement Plans NOV83-4-9-2,
2 of 2
Hiawatha Complex
ACT/007/011, Folder No. 3 & 7
Carbon County, Utah

Dear Ms. Semborski;

The abatement plans dated August 19, 1983 and submitted in response to NOV83-4-9-2, 2 of 2 have been reviewed by John Whitehead (Reclamation Hydrologist) and the following additional information is requested in order to fully analyze the plan.

1. Calculations showing the velocity and discharge rates of outflow from the 4 inch water line.

2. Ten year 24 hour discharge rate entering the 36 inch culvert from the contributing drainage area supported by calculations, drainage areas methodology and any assumptions used .

3. Literature citations and/or any other documentation supporting use of railroad ties as energy dissipators.

4. Clarification of where the proposed fill material will come from and an explanation of how this will not cause any additional disturbance.

5. A copy of a letter to EPA and State Health informing them of the emergency discharge point and requesting guidance from them in regards to any permitting of the discharge point which may be necessary (i.e. NPDES).

The additional information requested must be submitted to the Divison no later than one week from the date of receipt of this letter, in accordance with the enclosed modification.

As a reminder, the Notice of Violation requires that upon receipt of an approval letter for your proposed plan, the plan shall be implemented immediately. Failure to comply with the Notice of Violation within the time set for abatement will result in the issuance of a cessation order in accordance with UMC 843.11(b). As you and Mr. Jensen have been notified in previous correspondence, an extension of the time set for abatement will only be considered if, said extension is requested in writing prior to the abatement deadline and the request is substantiated.

Should you have any questions concerning this letter please do not hesitate to call us.

Sincerely,

DAVID LOF
FIELD SPECIALIST

JJW/jvb

Enclosure

cc: Tom Fonnett, OSM, Albuquerque
Allen Klein, OSM, Denver
John Whitehead, DOGM
Joe Helfrich, DOGM
Wayne Hedberg, DOGM

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

Modification of Notice or Order

To the Following Permitee or Operator:

Name _____

Mailing Address _____

State Permit No. _____

Utah Coal Mining and Reclamation Act, Section 40-10-1 et. seq., Utah Code Annotated (1953):

Notice of Violation No. N_____ ___ ___ dated_____, 19____.
Y TV

Cessation Order No. C _____ ___ ___ dated_____, 19____.
Y TV

Violation No. _____ is modified as follows:

The reason for this modification are as follows:

Violation No. _____ is modified as follows:

The reasons for this modification are as follows:

Violation No. _____ is modified as follows:

The reasons for this modification are as follows:

Date of Service_____ _____
Signature of Authorized Representative

Time of Service or Mailing_____ ____a.m. ____p.m. _____
Name and I.D. No.

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

August 30, 1983

James W. Smith, Jr., Coordinator of
Mined Land Development
State of Utah, Division of Oil, Gas
and Mining
4241 State Office Building
Salt Lake City, Utah 84114

JIM
SEP 02 1983

RE: New Beltline Portal
Middlefork Mine Yard

Dear Mr. Smith:

Over the years, there has been a growing need for a newer, more efficient beltline in United States Fuel Company's King 4 mine. When work resumed on July 11, 1983, actions to make the operating mine more efficient and less costly were mandated. For this reason work on the establishment of an alternate beltline through the mine has been highly emphasized since the return.

Surveying, designing and mining have brought us now within reach of the date when the breakout for the new portal will occur. There will be an additional breakout for air driven adjacent (east) of the beltline in order to comply with portions of federal law regarding air movement. We predict the initial breakout to occur on October 4, 1983.

Before this date however, preliminary contouring in the area of the breakout is required by MSHA to be completed for reasons of safety before a breakout by the mining crew can be made. MSHA is requiring that large boulders and trees above the area of the proposed breakout be removed and a more gradual slope be created. Because the coal seam is not exposed on this portion of the hillside, the mine would like to expose the seam to determine the amount of face up work that will be necessary.

The area of the new breakout lies adjacent to the present disturbed

area in the Middle Fork yard. (Refer to enclosed topographic map.) Acreage to be included in the new disturbed area totals .34 of an acre. It is 200 feet wide and 120 feet in depth. The perimeter of the new addition to the disturbed area is designated by the orange line on the topographic map. Only the portion that is on the same elevation as the portal break-outs and below will actually be impacted by mine activities. That above the portal will only be modified to achieve stability therefore, the soil growth medium from this area will only be stockpiled if and where it is dramatically affected by the modification to achieve stability.

On all proposed disturbed areas where material will be impacted, the surficial soil veneer will be removed and stockpiled. We propose to remove one and a half feet of the surface material and stockpile it. (See enclosed copy of soil sampling tests.) The depth of removal will fluctuate depending on the configuration of the underlying bedrock. (The K3 sample, corresponding to the third foot in depth in this area, may be somewhat biased because sampling was hindered by the rocky nature of the third foot. Only several samples were able to penetrate the entire third foot interval.) The underlying, rocky material will be used as fill for the yard pad.(See profiles on enclosed topographic map.)

The soil will be transported by truck to an existing soil storage pile located at the North Fork- Middle Fork roads split. The material collected at the Middle Fork yard will be placed adjacent to the existing pile. The soil will be seeded during the first normal seeding period. A ditch- berm structure will be established around the toe of the pile.

Labelled as to where it came from

Runoff figures for this new disturbance have been calculated and are presented on the enclosed sheets. They are done as before using calculations confirmed by Vaughn Hansen and Associates. The present sediment pond, below the Middle Fork yard, has adequate capacity to hold additional runoff form a ten year, twenty four hour storm occuring in this area. Water flowing from the area of new disturbance will be directed

into the old disturbed area and channeled down the ditch to where it will be picked up by the cross culvert. This culvert will cross the road and tie into the existing 12" drain system. The drain system continues furthur down along the road until it empties into a culvert that goes directly into the sediment pond.

The cross culvert inlet will take in all of the runoff coming down the ditch from the upper yard. The culvert will be 12" in diameter. It will cross the mine road at an angle of 30° then intercept the present 12" drainage system.

Runoff from the new disturbed area will flow toward the old disturbed area. This will be accomplished by grading the new pad so that it slopes 3° toward the old yard. A berm will be established at the top of the pad slope opposite the portal if necessary in order to convey water along the pad and into the road ditch.

Seeding will be done on the pad outslopes to enhance stability where surface conditions permit. No seeding will be done adjacent to or directly above the portals.

Final reclamation for this yard will occur contemporaneous with the rest of the Middle Fork mine yard and be conducted using similar techniques, i.e. backfilling portals, recontouring and revegetation.

From the breakout point to the coal pile, a truss and tower support structure will be constructed in order to carry the conveyor belt over the road. (Refer to structure design on enclosed topographic map.) The support system will be similar to that presently feeding the coal pile. All of the area below the truss and tower supports is already within the disturbed area. Runoff from this area is caught in the sediment pond below the truck loadout.

As this project is critical to the existence of the mine, we would like to begin the topsoil removal process very soon so that the necessary stability work can be done before the mining crew is at the breakout point.

Sincerely,

Jean Semborski

Jean Semborski
Engineer I

Enclosure

cc: E. Gardiner

UTAH STATE UNIVERSITY · LOGAN, UTAH 84322

SOIL, PLANT and WATER
ANALYSIS LABORATORY
UMC 48

United States Fuel Company
ATTN: Mr. Robert Eccli
P.O. Box A
Hiawatha, Utah 84527

August 25, 1983

(on - 2 mm fraction)

USU Log #	Ident.	ECe*	pH	% Organic Matter	SP*	% > 2mm	Hydrometer Sand	Silt	Clay	Texture	% Lime
83-1700	M. Fork 1' K1	0.2	8.5	2.64	35	35.3	69	19	12	Sandy Loam	7.8
83-1701	M. Fork 2' K2	0.1	8.3	1.91	30	34.1	70	18	12	Sandy Loam	9.8
83-1702	M. Fork 3' K3	0.3	8.4	1.50	33	15.4	63	21	16	Sandy Loam	14.6
83-1703	#5b Pond 1' J1	0.2	8.3	2.69	36	11.0	54	23	23	Sandy Clay Loam	2.9
83-1704	#5b Pond 2' J2	0.2	8.6	1.41	40	68.6	56	28	16	Sandy Loam	27.2
83-1705	#5b Pond 3' J3	0.3	8.5	1.53	38	41.5	61	26	13	Sandy Loam	30.1

Ident.	CEC*	SAR*	ppm P	ppm K	ppm NO_3-N	Water-Soluble (meq/100g.) Ca + Mg	Na	% N
K1	7.7	.3	5.2	66	4.9	3.0	.4	.12
K2	5.7	.4	4.5	53	2.6	2.2	.4	.09
K3	6.1	.4	12.0	42	2.1	3.7	.6	.07
J1	10.8	.4	3.9	69	1.9	2.4	.4	.11
J2	7.0	.4	2.0	24	1.1	2.4	.4	.07
J3	6.9	.3	2.5	24	1.1	3.4	.4	.07

*See 'Key to Abbreviations'

TABLE I.

MIDDLE FORK MINE YARD, KING 4 & 5 MINES
SEDIMENT POND STORAGE REQUIREMENTS

LOCATION	WATERSHED AREA ACRES	DISTURBED AREA ACRES	TOTAL RUNOFF AREA	RUNOFF VOLUME ACRE-FT.	SEDIMENT VOL. ACRE-FT.	TOTAL VOLUME REQUIRED ACRE-FT.	EXISTING POND VOLUME ACRE-FT.
EXISTING MINE YARD	18.2	4.8	23.0	0.92	0.48	1.40*	2.62
NEW DISTURBED AREA	9.6	0.31	9.91	0.60	.03	0.63	
						2.03	

*SEE ORIGINAL SEDIMENT POND DESIGN PLANS (APPROVED 8-22-79)

$$Q = \frac{(P - 0.2S)^2}{P + 0.8S}$$

$$S = \frac{1000}{CN} - 10$$

P = 2.25 in (10-yr 24-hr.)

CN = 80

SEDIMENT VOL = 0.1 ACRE-FT./ACRE

TABLE II

STORM RUNOFF CALCULATIONS

LOCATION

DESIGN STORM 10-YR., 24-HR.

A	CN	ℓ	Y	S	L	Computed Tp	HYDRO. FAMILY NO.	P	Q	To	To / Tp Computed	To / Tp Used	REVISE Tp
12.8 .02	80	1,400	64	2.5	.052	.061	3	2.25	.721	13.4	220	75	0.18

A = AREA (MI^2)

CN = RUNOFF CURVE NUMBER

ℓ = HYDROLOGIC LENGTH OF BASIN (FT.)

L = WATERSHED LAG (HRS.)

$$L = \frac{(\ell^{0.8})(S+1)^{0.7}}{1900\,Y^{0.5}}$$

$$S = \frac{1000}{CN} - 10$$

P = PRECIPITATION DEPTH (IN.)

Q = RUNOFF VOLUME (IN.)

$$Q = \frac{(P-0.2S)^2}{P+0.8S}$$

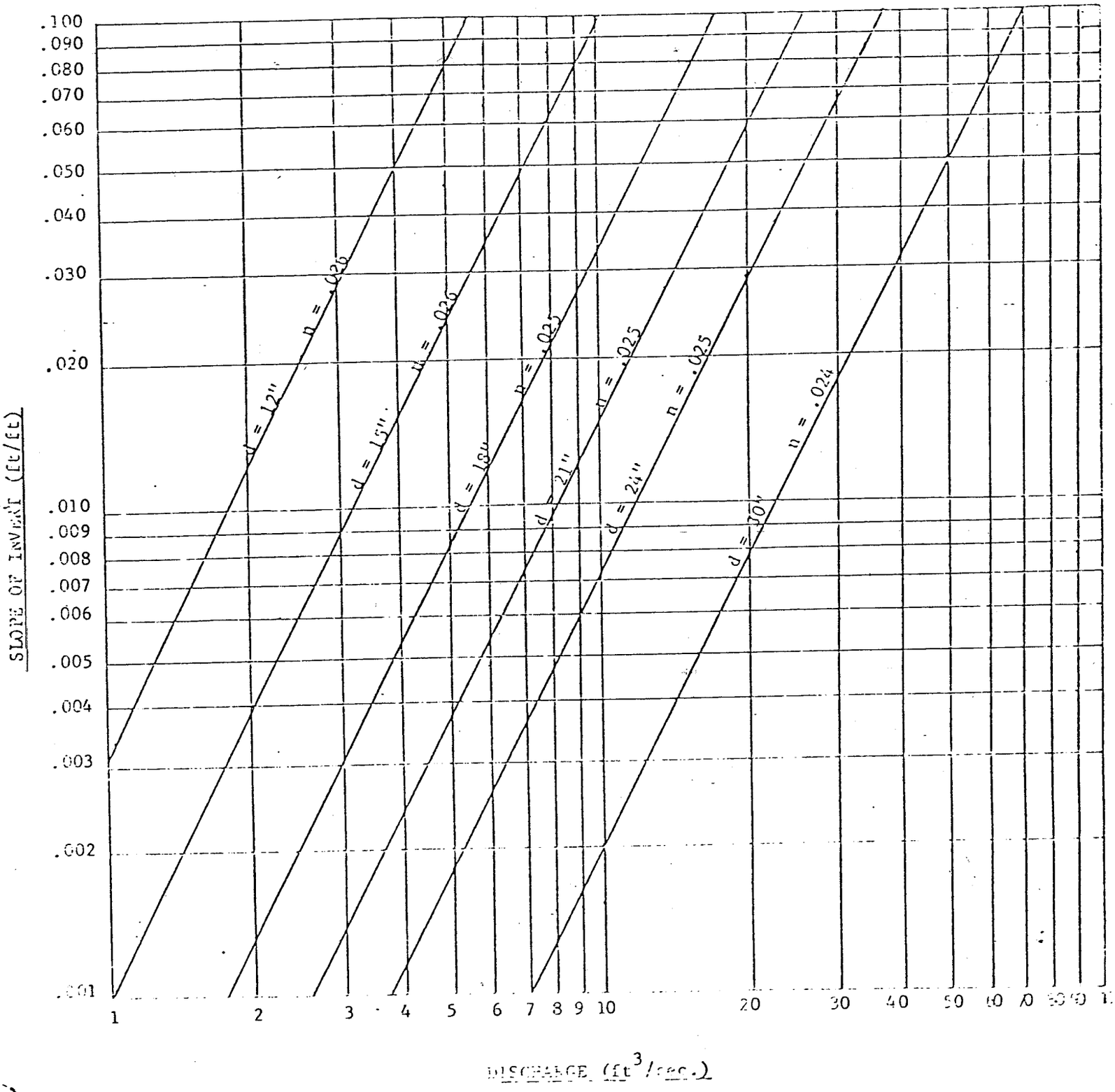
T_p = TIME TO PEAK = 1.17L

To = DURATION OF EXCESS RAINFALL (

ALUMINUM RIVETED PIPE

(1/2 x 2-2/3 Corrugations)

Discharge based on "Manning's Equation" at full flow



FROM KAISER ALUMINUM HIGHWAY PRODUCTS CATALOGUE

TABLE IV

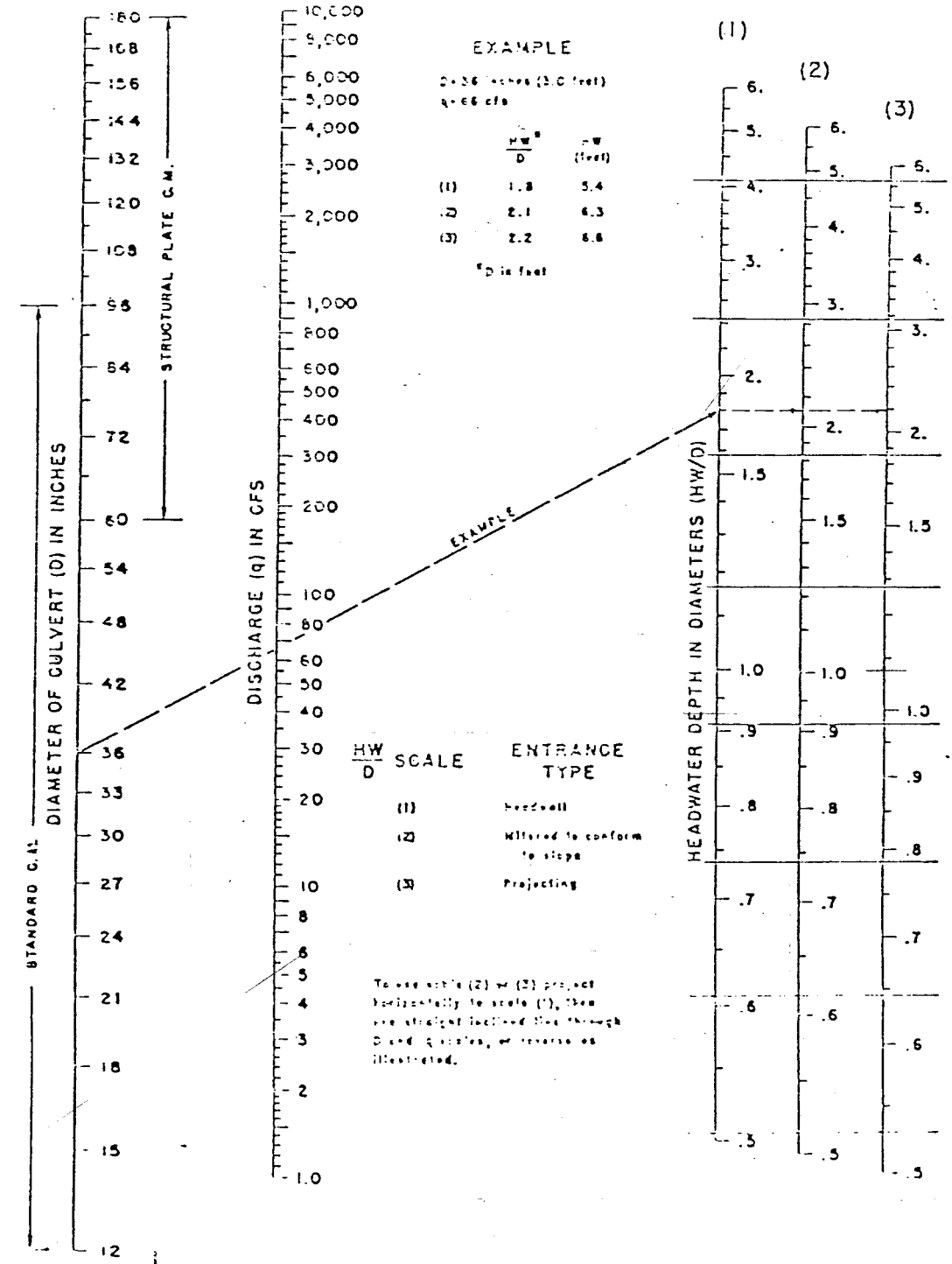
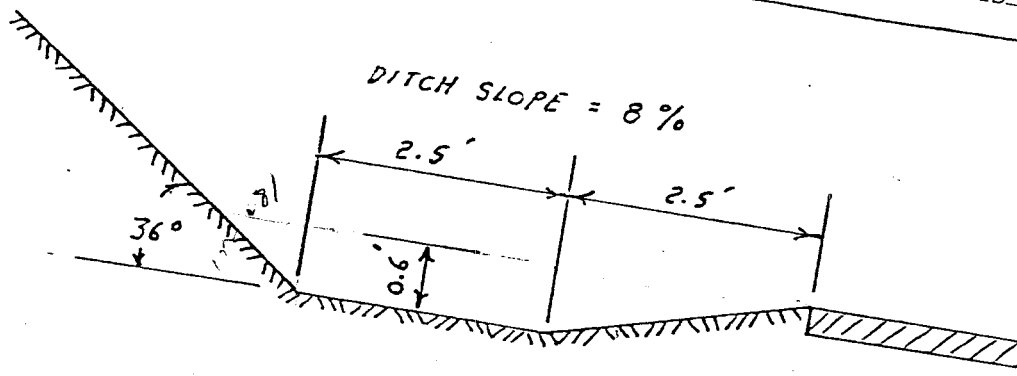


Exhibit 14-9. Headwater depth for C. M. pipe culverts with inlet control.

DRAWING ... SION DITCH CALCULATIONS ... 4 MINE

JOB
DATE
COMPUT
CHECKED
REVISED



TYPICAL CROSS SECTION
EXISTING ROADWAY DITCH
1" = 2'

$$V = \frac{1.486}{n} R^{0.67} S^{0.5}$$

$$R = \frac{A}{P} = \frac{2.49}{6.20} = 0.402$$

V = VELOCITY (FT/SEC)

n = ROUGHNESS COEFF. = 0.035

R = HYDRAULIC RADIUS = $\frac{A}{P}$

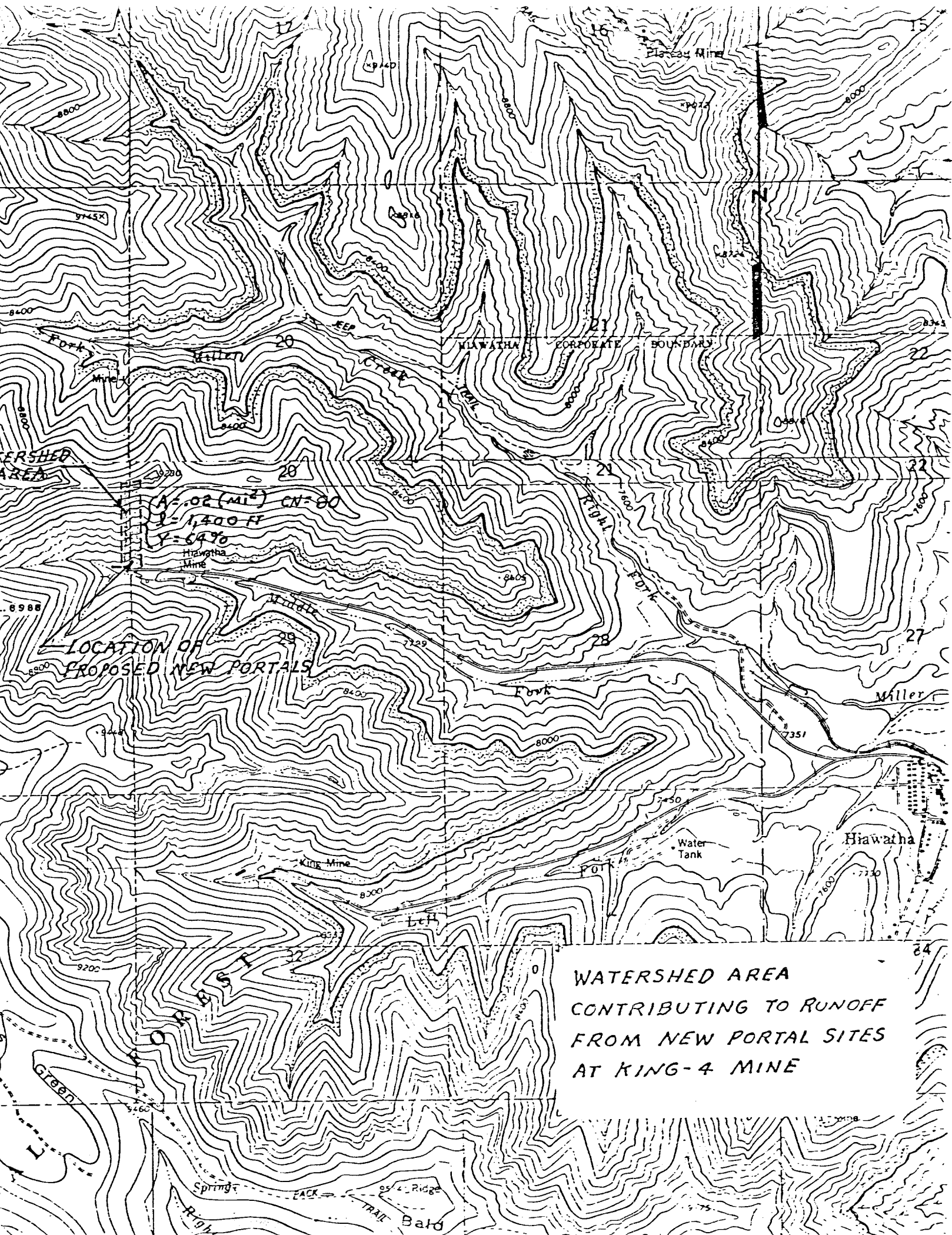
S = HYDRAULIC SLOPE (FT./FOOT) = .08

A = CROSS SECTIONAL AREA OF DITCH (FT^2) = 2.49

$$V = \frac{1.486}{.035} (0.402)^{0.67} (0.08)^{0.5}$$

V = 6.5 FT./SEC.
6.67

CAPACITY OF DITCH = VA = 6.50 x 2.49 = 16.2 CFS
16.63


WATERSHED AREA
A=.02 (mi²) CN=80
L=1,400 FT
Y=64%
LOCATION OF PROPOSED NEW PORTALS
HIAWATHA CORPORATE BOUNDARY
Hiawatha Mine
Miller Creek
Middle Fork
Right Fork
Fork
Miller
Hiawatha
Water Tank
King Mine
Placer Mine
Green
Spring
Ridge
TRAIL
Bald
WATERSHED AREA CONTRIBUTING TO RUNOFF FROM NEW PORTAL SITES AT KING-4 MINE

File ACT/007/011
Folder No. 3
Copy to Wayne, Tom P.

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

JIM
SEP 02 1983

August 29, 1983

Mr. James W. Smith, Jr., Coordinator of Mined Land Development
State of Utah, Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RECEIVED
AUG 31 1983
DIVISION OF
OIL, GAS & MINING

Dear Mr. Smith:

United States Fuel Company has received the August 19, 1983 letter regarding the Modification to Slurry Pond #5 - Additional Information Submittal. Several points appear to be yet unclear. The areas in question are addressed below as listed in the Aug. 19 letter.

1) As recommended by Tom Portle, the soil survey was conducted to search for chemically unsuitable characteristics of the various soil horizons which would inhibit their qualities as reclamation material. We have received the results of these tests. (See enclosed soil results). The J samples, 1,2 and 3, were taken from pits dug in the area of the proposed stability berm. From the test results, it appears that the first foot contains material much lower in rock and lime than the lower two to three feet. As the matural break appears to be at one foot, we intend to continue with our original plan to strip and store the upper one foot of this material. The volume calculation of 39,204 cubic feet (p.2, July 29, 1983 letter) based on one foot depth should be quite close. No change in volume, other than from removal of large rocks, is expected.

2) The salvage volume will decrease proportionally with the amount of large rock that is removed. This amount should be relatively insignificant (less than 5%) for the one foot removal depth based on a visual estimate of large bare rocks exposed.

3) In connection with the item No. 3 (peak flow calculations), we feel that our computations are correct. Our (T_c) values agree with yours (0.083 and 0.167 hours respectively). The disagreement appears to be in the (T_0) value. Our (T_0) values are from a 24 hour rainfall distribution chart (copy enclosed). This method had been recommended and used by Vaugh Hansen Associates and John T. Boyd Company in similar hydrologic computations for our company.

We hope this additional information will then finalize the review of this project. Our situation is becoming critical and work will begin as soon as the Division will grant approval.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

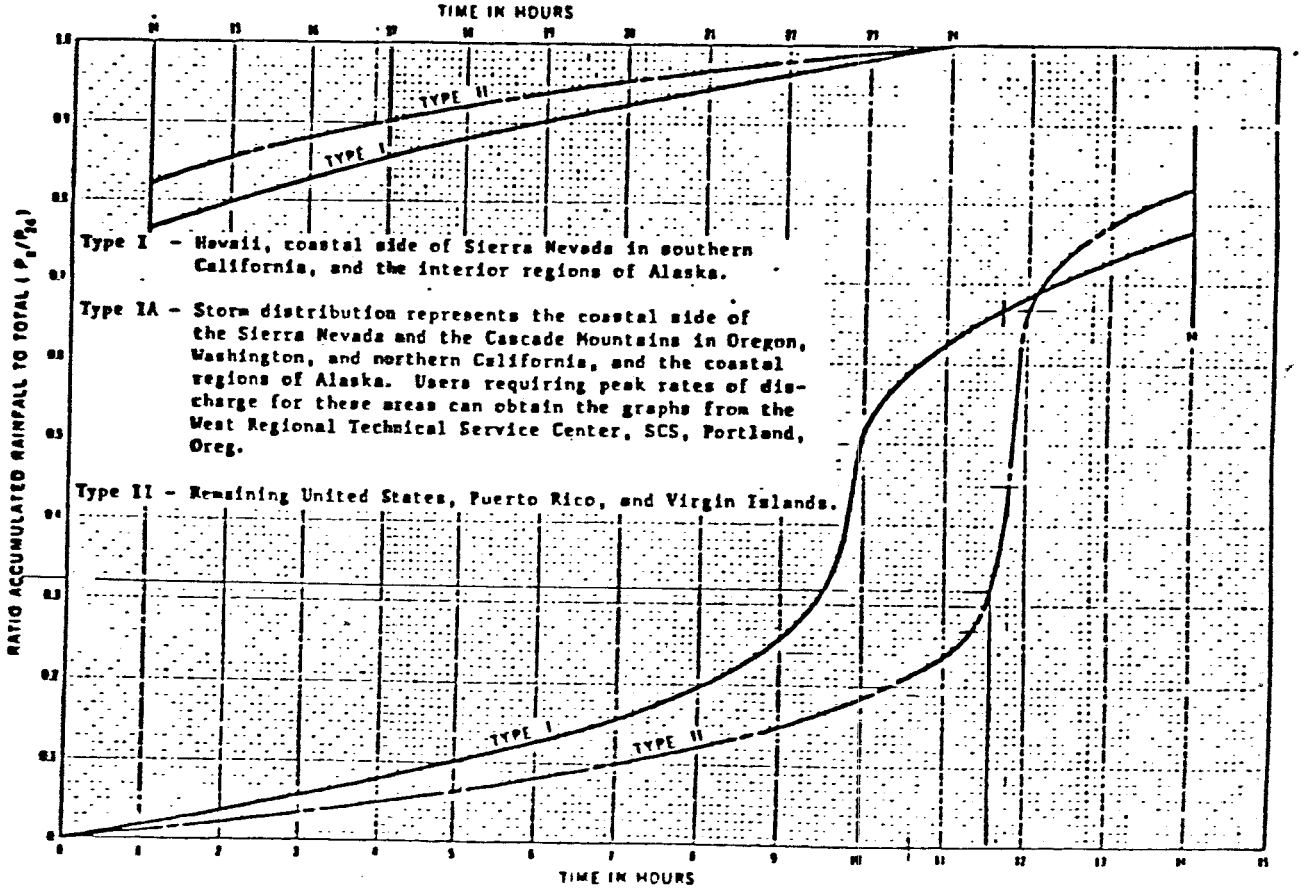
Enclosure

the design distribution shown in Figure VII-5 for 6-hour storms. According to the curve number method, sufficient precipitation must fall to satisfy initial watershed abstractions before runoff will begin. This depth of rainfall is taken as 0.2S (U.S Soil Conservation Service, 1972), where S is as previously defined. Dividing 0.2S by the total storm depth results in a ratio which can be found on the ordinate of either Figure VII-4 or 5, depending upon the storm duration. The corresponding time on the abscissa of the appropriate figure is the theoretical time from the beginning of rainfall to the beginning of runoff. Subtracting this value from the storm duration results in t_o.

Following the determination of a given peak discharge, design sizes for culverts used for ephemeral runoff diversions and conveyance were determined using methods derived by the U.S. Bureau of Public Roads as presented by the U.S. Soil Conservation Service (1972) and illustrated in Figure VII-6. Inlet control was assumed in all cases.

Figure VII-4

24-hour rainfall distributions (from Kent, 1973).



UTAH STATE UNIVERSITY · LOGAN, UTAH 84322

SOIL, PLANT and WATER
ANALYSIS LABORATORY
UMC 48

August 25, 1983

United States Fuel Company
ATTN: Mr. Robert Eccli
P.O. Box A
Hiawatha, Utah 84527

(on - 2 mm fraction)

USU Log #	Ident.	ECe*	pH	% Organic Matter	SP*	% > 2mm	Hydrometer Sand	Silt	Clay	Texture	% Lime
83-1700	M. Fork 1' K1	0.2	8.5	2.64	35	35.3	69	19	12	Sandy Loam	7.8
83-1701	M. Fork 2' K2	0.1	8.3	1.91	30	34.1	70	18	12	Sandy Loam	9.8
83-1702	M. Fork 3' K3	0.3	8.4	1.50	33	15.4	63	21	16	Sandy Loam	14.6
83-1703	#5b Pond 1' J1	0.2	8.3	2.69	36	11.0	54	23	23	Sandy Clay Loam	2.9
83-1704	#5b Pond 2' J2	0.2	8.6	1.41	40	68.6	56	28	16	Sandy Loam	27.2
83-1705	#5b Pond 3' J3	0.3	8.5	1.53	38	41.5	61	26	13	Sandy Loam	30.1

Ident.	CEC*	SAR*	ppm P	ppm K	ppm NO_3-N	Water-Soluble (meq/100g.) Ca + Mg	Na	% N
K1	7.7	.3	5.2	66	4.9	3.0	.4	.12
K2	5.7	.4	4.5	53	2.6	2.2	.4	.09
K3	6.1	.4	12.0	42	2.1	3.7	.6	.07
J1	10.8	.4	3.9	69	1.9	2.4	.4	.11
J2	7.0	.4	2.0	24	1.1	2.4	.4	.07
J3	6.9	.3	2.5	24	1.1	3.4	.4	.07

*See 'Key to Abbreviations'

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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

August 26, 1983

Mr. Allen D. Klein, Director
Western Technical Center
Office of Surface Mining
Brooks Towers
1020 Fifteenth Street
Denver, Colorado 80202

ATTENTION: Ms. Sarah Bransom

RE: Correspondence
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder #3
Carbon County, Utah

Dear Mr. Klein:

Enclosed, please find the requested copies of recent correspondence between this Division and U. S. Fuel Company which pertain to:

1. Company response to DOGM Administrative Completeness Review document (May 19, 1983).

2. Abatement plans for NOV N83-4-6-2, #2 of 2 (July 20, 1983).

3. Additional information pursuant to DOGM draft deficiency list and on-site field inspection for Slurry Pond #5 modification (July 29, 1983).

4. DOGM letter to Jean Semborksi outlining remaining deficiencies not addressed in July 29 submission (August 19, 1983).

5. Abatement plans for NOV N83-4-9-2, #2 of 2 (August 19, 1983).

6. Additional information pursuant to DOGM deficiency letter of August 16 with regard to abatement plans for NOV N83-4-6-2, #2 of 2 (August 22, 1983).

7. Eight (8) copies of a recent submittal from U. S. Fuel Company which address a minor modification for a stream channel diversion at the North Fork Pad (August 17, 1983).

I hope that all the requested information is enclosed. Please feel free to call me if anything has been deleted or if questions arise.

Sincerely,

D. Wayne Hedberg

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/btb

Enclosures

cc: Sarah Bransom, Community Planner, OSM
J. Smith, DOGM
D. Lof, DOGM
J. Whitehead, DOGM

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

August 22, 1983

Mr. James W. Smith Jr., Coordinator of
Mined Land Devel
State of Utah, Divi File: ACT/007/011 ing
4241 State Office B Folder #3
Salt Lake City, Uta

Dear Mr. Smith:

United States Fuel Company has received the Aug. 16, 1983 letter from Wayne Hedberg on our abatement plan for NOV #83-4-6-2, 2 of 2. The plan shall be supplemented with the following information:

Item 1:

The 24" diameter culvert will be emplaced directely in the stream channel in such a manner as to accept the entire stream flow. Any exposed fill adjacent to the culvert inlet will contain sufficient rip rap material to resist erosion by the stream flow, should it be that great in volume.

Item 2:

At the outlet of the culvert system coming down the hillside, an elbow will be installed. The elbow will serve two purposes:

1) to diminish the energy of the water flowing down the hillside pipe,

2) to direct the water flowing down the hillside culvert into the existing main bypass culvert.

The hillside culvert will angle toward the bypass culvert and reach the stream channel within one foot of the existing, main bypass culvert. Water exiting the elbow at any significant velocity will be directed

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

August 22, 1983

Mr. James W. Smith Jr., Coordinator of
Mined Land Development
State of Utah, Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Mr. Smith:

United States Fuel Company has received the Aug. 16, 1983 letter from Wayne Hedberg on our abatement plan for NOV #83-4-6-2, 2 of 2. The plan shall be supplemented with the following information:

Item 1:

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2) to direct the water flowing down the hillside culvert into the existing main bypass culvert.

The hillside culvert will angle toward the bypass culvert and reach the stream channel within one foot of the existing, main bypass culvert. Water exiting the elbow at any significant velocity will be directed

inside of the existing main culvert. Lesser flows will be turned by the elbow to flow into the main culvert.

We feel that the turned elbow will most effectively reduce velocities and direct flow while controlling erosion. Also, we do not wish to impede the other flow in the bypass ditch by installing structures prior to the existing bypass inlet.

Item 3:

In regard to this item, the Division states that the peak flow calculated by the Operator is questionable and that several assumptions and input values were omitted. Please re-examine the submitted data (storm runoff calculation table and watershed map). We feel that all the necessary data required to calculate the peak flow has been submitted. A telephone conversation between Wayne Hedberg and Bob Eccli on Aug. 17, 1983 indicated that possibly the Division is using a different (T_o) value than us in their calculations. Our (T_o) value was derived from the procedure outlined in Enclosure No. 1. This method has been used by Vaughn Hansen Associates and John T. Boyd Company in earlier hydrologic projects for our company.

An invert slope of at least .03 feet/foot will be provided for the culvert. Apparently the Division assumed we were planning to use a lesser slope because of the slope/discharge table included with the original submittal. This table was included only to show the minimum slope at which a 24" culvert could handle the calculated peak runoff.

We hope this letter adequately addresses your previous questions as we are anxious to abate this violation.

Sincerely

Jean Semborski

Jean Semborski
Engineer

Enclosure

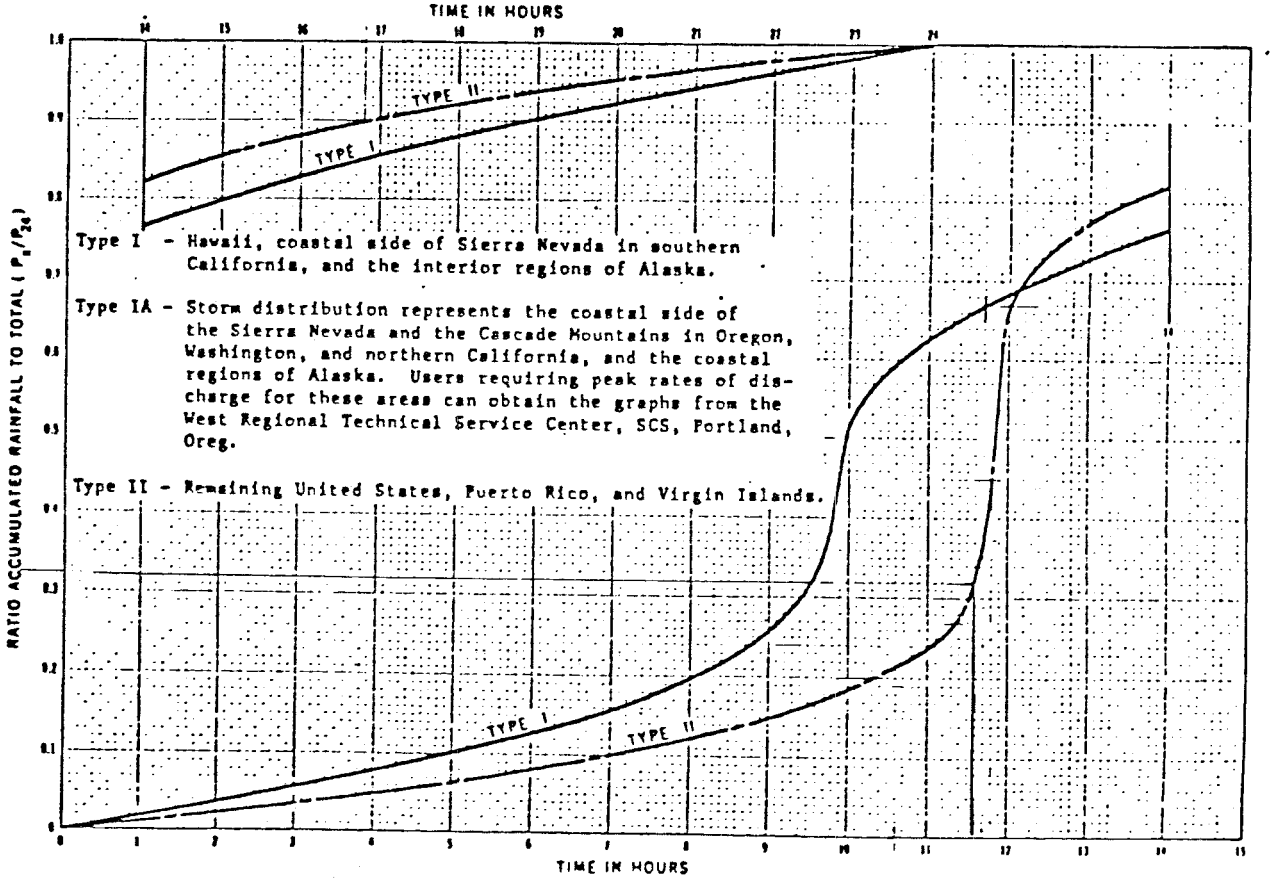
pc: E. Gardiner

the design distribution shown in Figure VII-5 for 6-hour storms. According to the curve number method, sufficient precipitation must fall to satisfy initial watershed abstractions before runoff will begin. This depth of rainfall is taken as 0.2S (U.S Soil Conservation Service, 1972), where S is as previously defined. Dividing 0.2S by the total storm depth results in a ratio which can be found on the ordinate of either Figure VII-4 or 5, depending upon the storm duration. The corresponding time on the abscissa of the appropriate figure is the theoretical time from the beginning of rainfall to the beginning of runoff. Subtracting this value from the storm duration results in t_o.

Following the determination of a given peak discharge, design sizes for culverts used for ephemeral runoff diversions and conveyance were determined using methods derived by the U.S. Bureau of Public Roads as presented by the U.S. Soil Conservation Service (1972) and illustrated in Figure VII-6. Inlet control was assumed in all cases.

Figure VII-4

24-hour rainfall distributions (from Kent, 1973).



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Joe, Ron
Wayne, John
Also, put in
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UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

August 19, 1983

RECEIVED
AUG 19 1983
DIVISION OF
OIL, GAS & MINING

JIM
AUG 22 1983

Mr. James W. Smith, Jr.
Coordinator of Mined Land Development
State of Utah, Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Plan to Abate
NOV 83-4-9-2, 2 of 2

Dear Mr. Smith;

The following letter responses to Mr. Lof's letter and modification notice dated August 17, 1983. Enclosed is a copy for your reference.

United States Fuel Co. has recieved the Modification of Notice for NOV 83-4-9-2, 2 of 2. We feel a two week interim abatement deadline is more reasonable in this situation. Again, we restate our objection to the policy of a one week abatement and request to know if this is a policy of the Division's entire inspection staff and if is enforced similarly on other operators. The regulations set no specific time limit (other than 90 days) but state, "A reasonable time for abatement, which may include time for acomplishment of interim steps". The lack of fixed abatement period seems to recognize the fact that all abatements can not be handled the same. It appears quite unreasonable to make the operator react within a week when it takes the Division several weeks or a month to review the submitted plan. If abatements have not been made efficiently in the past perhaps the time shortening needs to occur in the Division as well as the operators.

Perhaps it was not made clear that the members of our staff that handle compliance matters were both gone for portions or th entire week. Upon receiving the violation Tuesday moring, it was realized that there was insufficient time to appropriately address this issue. A letter for an extension was written that day and sent. Vacations had been scheduled prior to the receipt or knowledge of this violation. We had hoped this would be viewed as a reasonable request for an extension of time rather than a lack of diligence.

Also, we feel it should have been our responsibility to contact the other party and not Mr. Lof's. Our attorney was first consulted as to the Company's legal position and obligations.

Next, we felt it best to have developed some type of plan to present to Mr Martin. The one day, for the staff members return to work to when Mr. Martin was contacted, in reasonable terms, does not display a gross lack of diligence.

Contact was made by United States Fuel Co. with the Division on August 16 not for initial guidance but to reaffirm previous verbal guidance. Our experience has been that this is sometimes subject to change. The intent of the conversation was to make a comparison of our plan with any later suggestions Mr. Lof may have had.

Last of all, the legal issues involved are of prime concern. Both Mr. Lof, when he made his initial inspection and us, when we reviewed the situation in the field were trespassers and depending on the circumstances then or in the future, could be prosecuted.

The following portion of this letter relays our plan to abate this violation and will be implemented if and when the railroad permits us to do so.

Presently a 4" diameter waterline valve lies very close to the 36" railroad culvert inlet. In order to minimize erosion and sediment disturbance when this emergency release valve is activated United States Fuel Co. proposes to install a culvert turn down on the outlet of this 36"culvert. The turn down will be followed by a section of pipe approximately 15' long in order to convey the drainage to the bottom of the channel. Another elbow will be attached to this drop pipe along with a length of pipe sufficient in length to outlet the drainage in a location where an energy dissipator can be employed. Construction of the dissipator will utilize materials already present in the channel, i.e. railroad ties. The ties will be emplaced perpendicularly to the direction of water flow in the channel below the culvert outlet and will be lashed together. (See enclosed topographic map - schematic diagram for visual details of the project). Dirt from beside the channel will be used to cover and stabilize the culvert lengths and elbows.

We feel this follows Mr. Lof's initial guidance and should satisfactorially abate this violation.

Sincerely,

Jean Semborski

Jean Semborski
Engineer I

JS:lj

Enclosure
cc: Errol M. Gardiner

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

August 19, 1983

Ms. Jean Semborski, Engineer
United States Fuel Company
Hiawatha, Utah 84527

RE: Modification to Slurry Pond #5 (Resubmission)
Hiawatha Complex
ACT/007/011, Folder No. 3
Carbon County, Utah

Dear Jean:

The Division has completed the review of the latest information submitted by U. S. Fuel Company regarding the proposed modification to Slurry Pond #5.

The resubmission of materials was in response to questions raised at the technical staff's on-site visit July 20, 1983 and to the preliminary comments document delivered to the operator at that time.

Some confusion still remains with regard to this proposal. The areas in question are as follows:

1. Since the operator indicates that subsoil material below the one foot level is excessively rocky (70 percent), how will forthcoming soils data be interpreted? What would be the rationale for change in the expected volume of topsoil storage (page 4)?

2. On page 2 of the August 1, 1983 submission an estimate of 39,204 ft^3 is provided for the expected volume of salvagable topsoil. The text then refers to removing large boulders from the topsoil. How might the expected salvage volume be altered accounting for the boulders?

3. The peak flows calculated by the operator for the two diversion ditches to be constructed are questionable. Upon cross-checking the operator's method, the Division calculated peak flows (Qp) of 11.28 cfs and 18.63 cfs for the south and north ditches, respectively.

It appears that the operator may have incorrectly applied the method described in NEH-4, Chapter 2, by using a time of concentration value (tc) in excess of six hours. The tc values computed by the Division are less than one hour (0.083 and 0.167 hours, respectively).

Example No. 1 on page 21.51 of NEH-4 utilizes a six-hour duration storm for instances where the tc value is less than six hours. The operator apparently utilized a 24-hour storm and used example No. 2 on page 21.53 which is for cases where the tc is greater than six hours and watershed areas over 10 square miles. This does not apply to the site in question.

The calculations and designs for the diversion ditches should be re-evaluated and adjusted accordingly before this proposal can be approved.

Should you have any questions or comments, please contact the Division as your earliest convience.

Sincerely,

for JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/DWH:btb

cc: Walter Swain, OSM, Denver
Jodie Merriman, OSM, Albuquerque
T. Portle, DOGM
D. Wayne Hedberg, DOGM
D. Lof, DOGM

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Dave L.,

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UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

August 17, 1983

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GAS & MINING

JIM
AUG 22 1983

Mr. James W. Smith, Jr., Coordinator of Mined Land Development
State of Utah, Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Stream modification-
North Fork Pad

Dear Mr. Smith:

United States Fuel Company would like to obtain permission to modify a channelway present on the North Fork Intake Pad. This modification was recommended to United States Fuel Company by OSM during their annual inspection conducted this past July and also by members of the Division's inspection staff.

Presently a small stream of water flows from an air intake portal on this pad. The portal is used only as an airway. The areal extent of the intake pad is .2 acre. The small stream, averaging eight gallons per minute, runs directly through the yard, about fifty feet wide, and into a natural stream course to the left fork of the north fork of Miller Creek.

Over a 22 month period, the small stream has been monitored and sampled. Quality and quantity have remained relatively constant. The quality of the water issuing from the intake tunnel is quite good and has always met discharge effluent limitations.

The water is derived from a sandstone-colluvium interface located 145 feet in the tunnel. It is in this area that the tunnel connects with the coal seam. The tunnel supports a passageway through the side

slope colluvium to the coal seam.

Presently, water runs from the air intake tunnel to the surface pad. The water coming out of the tunnel does not come from the mine workings furthur in the mine. Progressing in the tunnel and past the tunnel-coal connection the floor level rises five feet in elevation before it starts sloping back into the main mine workings. The slope of 2° to the southwest would prevent any water in the mine sections from flowing out the air intake portal. Water flowing out the intake air tunnel is exclusively that from the coal-colluvium interface 145 feet within the tunnel.

The tunnel drainage is impounded on this pad by a straw bale filter system at the end of the yard. This bale filter system, we feel, is unnecessary, troublesome and counter-effective. We concur with outside opinions that this stream might best be served by an open, rip rapped channelway to convey the tunnel drainage to the natural stream course.

We have found several problems with the present drainage design. First, as the pad is very small, a vehicle usually needs to cross this small stream in order to turn around. In doing so, it churns up the soft bottom in the ponded water. Although very few vehicles have a reason to drive to this location, it is used on occasion by the mine, as an emergency escapeway and for inspections by DOGM and OSM. A properly sized, rip rapped channel, or stream ford, in this yard could eliminate the turbidity. Also, cows and wildlife walk through the ponded water, churning it and sometimes leaving excrement which causes the water to turn green, smell and deteriorate in quality.

Maintenance of the filtration berm is also a problem. Cows and wildlife destroy and displace the bales. Water seeps under and around the bales. Due to the remoteness of this location, trips are seldom made unless called for by a specific purpose.

The discharge from the portal is covered under our NPDES permit.

The quality of the discharge easily meets and has always met discharge effluent limitations even without the straw bale filter system.

The situation, as it presently exists and is interpreted by inspectors, is not much more than a set up for a surface, hydrologic violation when no violation is warranted. We feel discharge requirements can be met adequately using a rip rapped stream channel 50 feet long across the pad. We request that our plan be reviewed and a small area exemption be granted.

Our request is justifiable under UMC 817.50. As the coal seam is not acid or iron producing and the drainage satisfies effluent limitations and all applicable State and Federal quality standards, the gravity discharge from this intake air portal may be allowed.

An adequately sized channel has been designed for this drainage. It also takes into consideration the runoff in this area from a 10 yr., 24 hr. storm. Refer to the enclosed topographic map to determine drainage boundaries and also to the enclosed calculation sheet for ditch dimensions. The ditch will contain an adequate amount of rip rap to avoid erosion or disturbance.

As we intend to complete this work before the weather and roads become bad, we hope your response can be made quickly.

Sincerely,

Jean Semborski

Jean Semborski
Engineer I

JS

Enclosure

NORTH FORK VENT TUNNEL YARD

$S = \frac{1000}{CN} - 10 = 2.5''$

CN = 80

$Q = \frac{(P - 0.2S)^2}{P + 0.8S} = 0.959''$

P = 2.6"

25 year

$L = \frac{(L^{.8})(S+1)^{.7}}{1900\ Y^{.5}} = 0.018$ hr.

I = 85'

Y = 5.88 %

$T_p = 1.17\ L = 0.021$

$q = \frac{484\ AQ}{T_p} = 6.629$ cu ft/sec

A = 0.0003

sq. miles

mine discharge $\pm$ 0.027 cu ft/sec

Total 6.656 cu ft/sec

Ditch calculations

$V = \frac{1.486}{n} R^{.67} S^{.5}$

V = 3 ft/sec

n = 0.1

$\therefore R = 0.75'$

S = 0.059

feet/foot

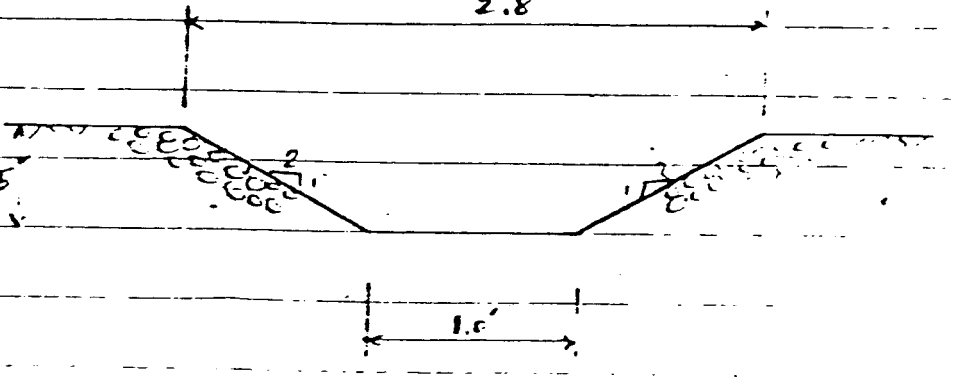
$q = V A$

$\therefore A = \frac{q}{V} = 2.219$ sq. ft.

4

$R = 0.5\ r$

$\therefore r = 1.5'$

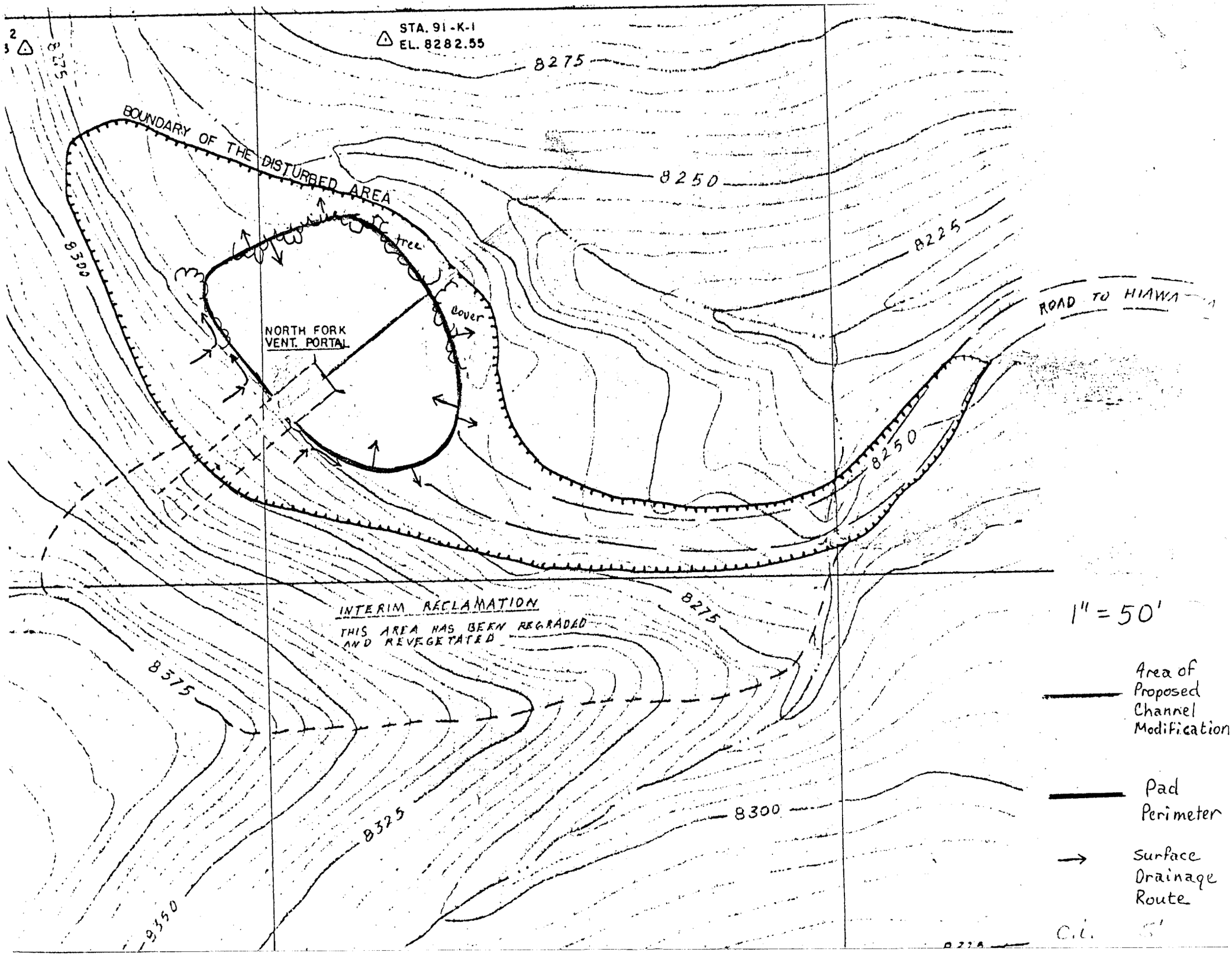


$A = 0.5\ p\ r$

p "wetted perimeter"

$= 2.959'$

$\doteq 3.0'$


STA. 91-K-1
EL. 8282.55
8275
8250
8225
8300
BOUNDARY OF THE DISTURBED AREA
tree
cover
NORTH FORK
VENT. PORTAL
ROAD TO HIAWA
8250
INTERIM RECLAMATION
THIS AREA HAS BEEN REGRADED
AND REVEGETATED
8275
8375
8325
8300
9350
1" = 50'
Area of
Proposed
Channel
Modification
Pad
Perimeter
Surface
Drainage
Route
C.I.

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

August 16, 1983

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

RE: Abatement Plans for NOV
N83-4-6-2, #2 of 2
Middle Fork Mine Yard
Hiawatha Complex
ACT/007/011, Folder Nos. 3 & 7
Carbon County, Utah

Dear Jean:

The Division has completed the review of the abatement plans submitted by U. S. Fuel Company in response to NOV N83-4-6-2, #2 of 2 issued by Inspector David Lof. The plans as provided are deficient in the following areas:

1. A narrative and/or design plan for controlling erosion at the inlet to the proposed culvert must be proposed.

2. Specific design plans for controlling erosion and dissipating exit velocities at the discharge end of the same culvert must be indicated.

3. The peak flow (qp) generated by the operator is questionable (13.9 cfs). It is assumed that the operator utilized the SCS - National Engineering Handbook, Section 4, Hydrology, Chapter 21 in sizing the culvert. The Division has cross-checked the operator's calculations utilizing this method and computed a peak discharge (qp) of 20 cfs for the 190+ acre watershed.

   Several of the assumptions and input values used by the operator were not included with the write-up and the Division was unable to verify the accuracy of those figures. Consequently, the values computed by the Division for To, To/Tp, the revised Tp and qp are different from those provided by the operator.

It is very important to provide all design calculations, methodologies and references when submitting a plan or modification to the Division for review and approval. This not only aids the Division in comprehending how a structure was designed, but also speeds up the review process significantly.

In order to maintain a manageable head water depth of 1, it is recommended that the operator provide an invert slope for the 24 inch culvert of at least .03 (ft/ft). The natural embankment slope should be more than adequate to provide this slope gradient.

Once these deficiencies have been addressed, the proposal should be approvable.

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

Sincerely,

D. Wayne Hedberg

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/btb

cc: Walter Swain, OSM, Denver
Jodie Merriman, OSM, Albuquerque
D. Lof, DOGM
J. Whitehead, DOGM

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

August 2, 1983

Mr. Allen D. Klein, Administrator
Western Technical Center
Office of Surface Mining
Brooks Towers
1020 15th Street
Denver, CO 80202

Attention: Walter Swain

RE: Slurry Pond #5 Modification
(additional requirements)
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder #3
Carbon County, Utah

Dear Mr. Klein:

Enclosed are seven (7) copies of U. S. Fuel Company's latest submission of additional information requested by the Division with regard to their earlier submission for a minor modification to slurry pond #5.

The Division will proceed with the completion of the review and forward a copy of the results to your office.

Should you have any questions, please call me.

Sincerely,

for

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH:gl

Enclosures

File
ACT/007/011
Folder No. 3
Copy to
Wayne, John
Dave L., Tom P.
Shannon

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

July 29, 1983

Mr. James W. Smith, Jr., Coordinator of Mined
Land Development
State of Utah, Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

JIM

AUG 01 1983

Dear Mr. Smith:

Tuesday, July 20, 1983, Tom Portle and Wayne Hedberg reviewed the area to be affected by construction of the stability berm at the base of the Slurry Pond #5b outslopes. Questions were brought up while in the field and others presented as written Preliminary Comments.

Total additional acreage that will be disturbed by construction of the stability berm will be .9 (nine tenths) of an acre. The ditches are designated on the enclosed map and will be located at the outside perimeter of the blue or black colored areas. The ditch will be at an incline directed toward the appropriate sediment pond.

The newly constructed ditches will be alike in design, function and respective placement to those which presently serve the ponds.

A visual examination of the soil in the area of proposed disturbance had been made. Three pits were dug with a backhoe to a depth greater than three feet deep. The top foot consists of a reddish-brown, silty clay. It is soft, fairly homogeneous with few rock fragments. Roots and trace organic material are present.

Right at the one foot depth an abrupt change occurs. The material one to two feet below the soil surface consists primarily (about 70%) of partially weathered sandstone fragments ¼ " to 3" in length.

The matrix is composed of silty sand. This zone is buff to white in color and has been infiltrated by calcareous solution to form a poorly cemented matrix and pods of caliche.

The bottom, or third foot, continues to some depth not determined in these exposures. This has a greater degree of calcareous cementing. It is mostly white in color, contains calcareous pods, large rocks greater than 12 inches in diameter and weathered sandstone fragments.

In all of the pits, the cut off between the topsoil materials and the weathered, poorly cemented parent rock below was one foot. United States Fuel Company will have chemical tests performed on the individual horizons.

We intend to strip the top foot of viable, growth supportive material, i.e. all of that between the grubbed surface and one foot in depth from the grubbed surface. This material will be stockpiled in the designated location and treated in the manner specified later in this plan.

Below are the preliminary volume calculations for the material to be removed. No allowance has been made for large rocks or loss during removal and handling:

.9 acres = 39,204 sq. ft. x 1 ft. vertical depth = 39,204 cu. ft.

39,204 cubic feet of material theoretically could be removed.

The soil material recovered will be stored on a vegetative, supportive material pile located as indicated on the map. It is a fairly level and relatively access restricted spot located within the disturbed area. Very large boulders encountered during the surface material removal process will be excluded from incorporation in the vegetative supportive material pile. This will help to minimize the areal extent of the soil storage pile and will expedite redistribution at some later date (probably final reclamation). The pile will be protected by a berm-

ditch system around it and "seeded during the first normal period after removal for favorable planting conditions" as required by the regulations.

The small strip of undisturbed vegetation 400 feet long and 25 feet wide on the eastern embankment is indicated in blue near the bottom of the map.

Basically, United States Fuel Company intends to expand their perimeter slightly (.9 acre) around the south and east sides of Slurry Pond #5b in order to accomodate a stability berm. The berm will skirt the lower portion of the existing south and east outside embankments of Slurry Pond #5b. Our present diversion ditches along these sides leading to the sediment ponds must then occupy a more remote position. That is, they will be located on the new perimeter which will be the embankment toe of the stability berm. Some of the area that will be overtaken by the stability berm and relocated diversion ditches is presently within the disturbed area. Other portions are not, as indicated by the blue on the map.

The existing access road to the outslope embankments of the #5b Slurry Pond is depicted on the map as a dashed line.

During the Division's field observation of the area, we had discussed the construction of a road at the new toe of the stability berm to serve as a diversion ditch. This will keep the required new disturbance to a minimum. Refer to the enclosed calculations which size the diversion ditch. This ditch will surround the entire new disturbance on the down slope side and will collect and convey runoff from the disturbed area into the sediment ponds. Volume calculations show the ponds to have sufficient capacity to handle the additional .9 of an acre disturbance. Refer to the enclosed calculation sheet. The location of the new diversion ditch is shown on the enclosed map.

The phreatic surface will be monitored by two pipes in the top of the #5b Slurry Pond embankment. They are shown as red circles on the enclosed map.

Soil samples have been collected and are being analyzed on the area of proposed disturbance. From the preliminary examination, it appears a depth of one foot contains the majority of the growth supportive material in this area. Removal volume calculations are based on this one foot depth.

A final estimate of the material to be removed will be made pending the results of the soil analyses. The volume will be recalculated upon determining the depth of removal if differnt from that projected.

The material will be removed with a cat and also a loader where possible. The loader will transfer dozed material to the soil stockpile.

We hope this will answer the difficult questions and clear the picture as to the intent of our actions.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

cc: E. Gardiner

POND NO.	RUNOFF AREA ACRES	RUNOFF VOLUME ACRE-FT.	SEDIMENT VOLUME ACRE-FT.	TOTAL VOL. REQUIRED ACRE-FT.	EXISTING VOLUME ACRE-FT.
5 SOUTH	6.8	0.74	0.68	1.42	
ADDITIONAL AREA	0.67	0.07	0.07	0.14	
				1.56	1.77
5 NORTH	12.1	1.32	1.21	2.53	
ADDITIONAL AREA	0.22	0.02	0.02	0.04	
				2.57	2.71

SEE ORIGINAL SEDIMENT POND DESIGN PLANS (APPROVED 8-22-79) FOR CALCULATION METHODS AND DETAILS.

STORM RUNOFF CALCULATIONS

DESIGN STORM 10-YEAR, 24-HOUR

LOCATION NO. 5 SLURRY POND

~~CULVERT~~ NO.	A	CN	ℓ	Y	Computed Tp	HYDRO. FAMILY NO.	P	Q	To	To/Tp		REVISED Tp	484AQ / REV. Tp	q
										Computed	Used			
POND 5 SOUTH	.011	90	1,210	27.51	.059	2	2.25	1.31	17.1	290	75	0.23	30.32	2.4
POND 5 NORTH	.019	90	1,910	13.85	.118	2	2.25	1.31	17.1	145	75	0.23	52.38	4.1

A = AREA ($MI.^2$)

CN = RUNOFF CURVE NUMBER

ℓ = HYDROLOGIC LENGTH OF BASIN (FT.)

Y = AVERAGE SLOPE (%)

L = WATERSHED LAG (HRS.)

$$= \frac{(\ell^{0.8})(S+1)^{0.7}}{1900\, Y^{0.5}}$$

$$S = \frac{1000}{CN} - 10$$

P = PRECIPITATION DEPTH (IN.)

Q = RUNOFF VOLUME (IN.)

To = DURATION OF EXCESS RAINFALL (HRS.)

q = PEAK FLOW (CFS)

FORM CO. 689 1M 8-61

CALCULATION SHEET

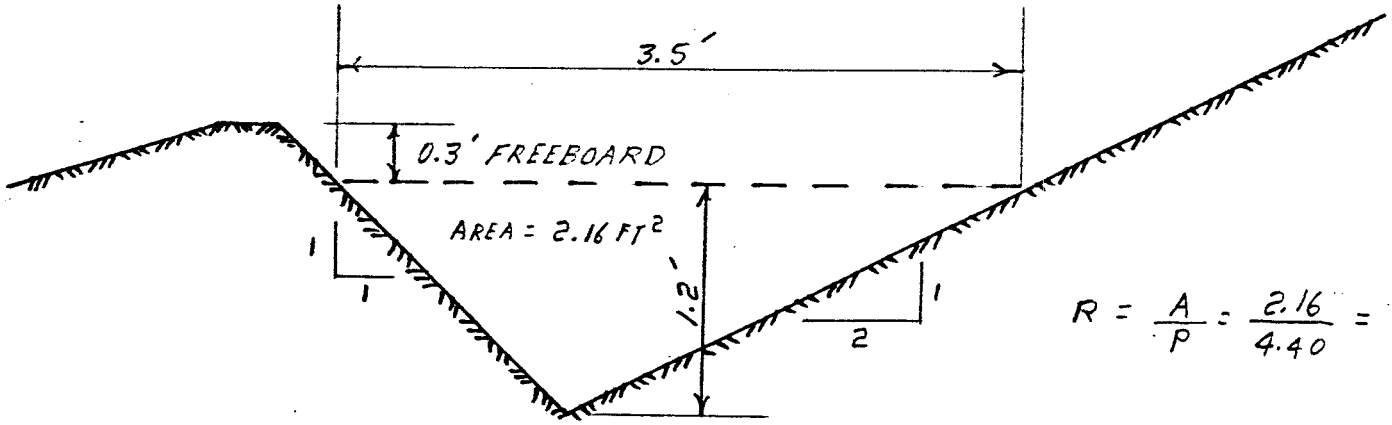
UNITED STATES FUEL COMPANY
ENGINEERING DEPT., HIAWATHA, UTAH

COMPUTATION FOR No. 5 SLURRY POND

RUNOFF DIVERSION DITCH CALCULATIONS

REF. DRAWING

INDEX: SHEET NO.
PLACE
JOB
DATE 7-22-83
COMPUTED BY R.E.
CHECKED BY
REVISED



$$R = \frac{A}{P} = \frac{2.16}{4.40} = 0.491$$

$$V = \frac{1.486}{n} R^{0.67} S^{0.5}$$

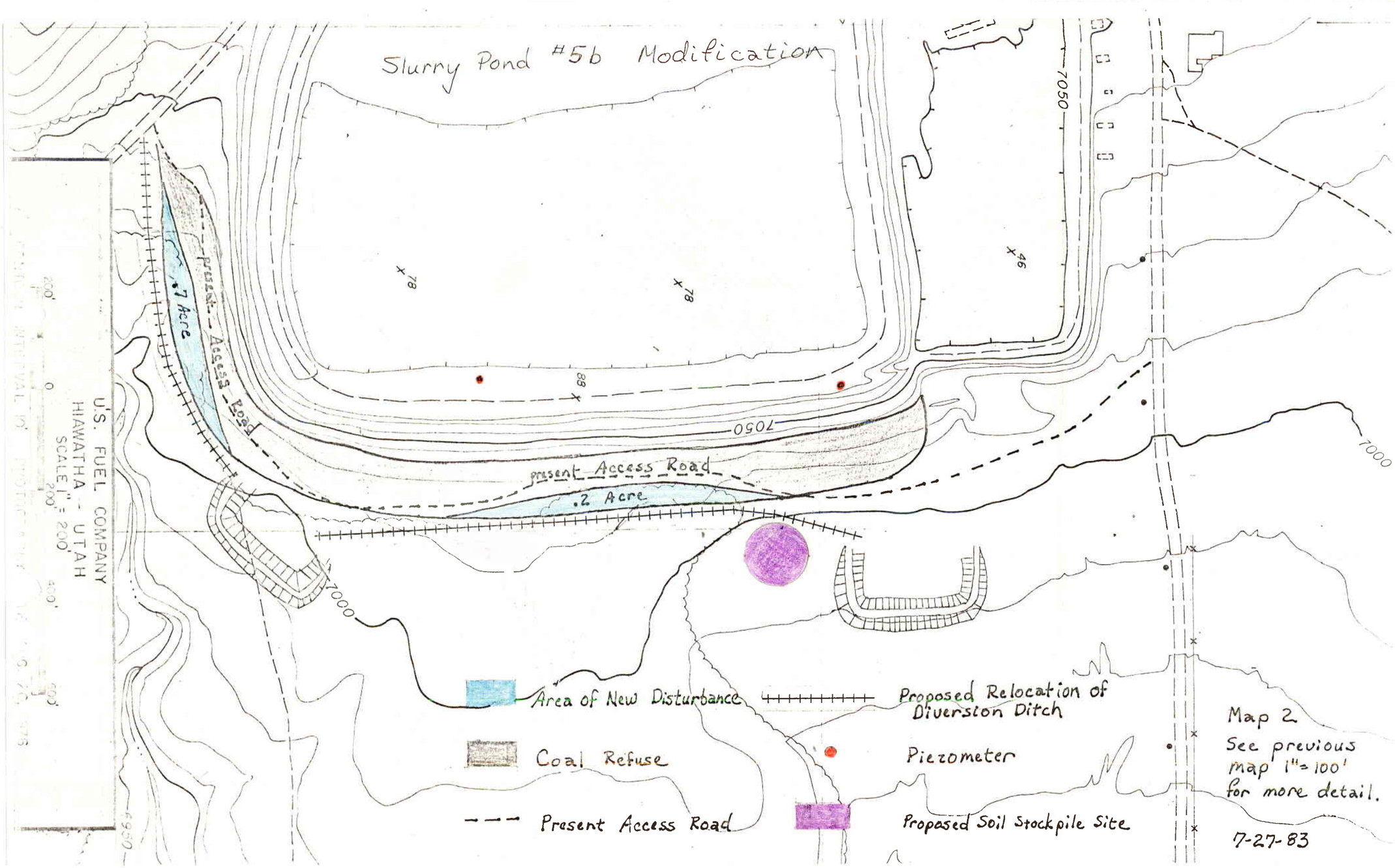
V = VELOCITY (FT./SEC.)
n = ROUGHNESS COEFF. = 0.035
R = HYDRAULIC RADIUS = $\frac{A}{P}$
S = HYDRAULIC SLOPE (FEET/FOOT)

$$V = \frac{1.486}{0.035} (0.491)^{0.67} (0.02)^{0.5}$$

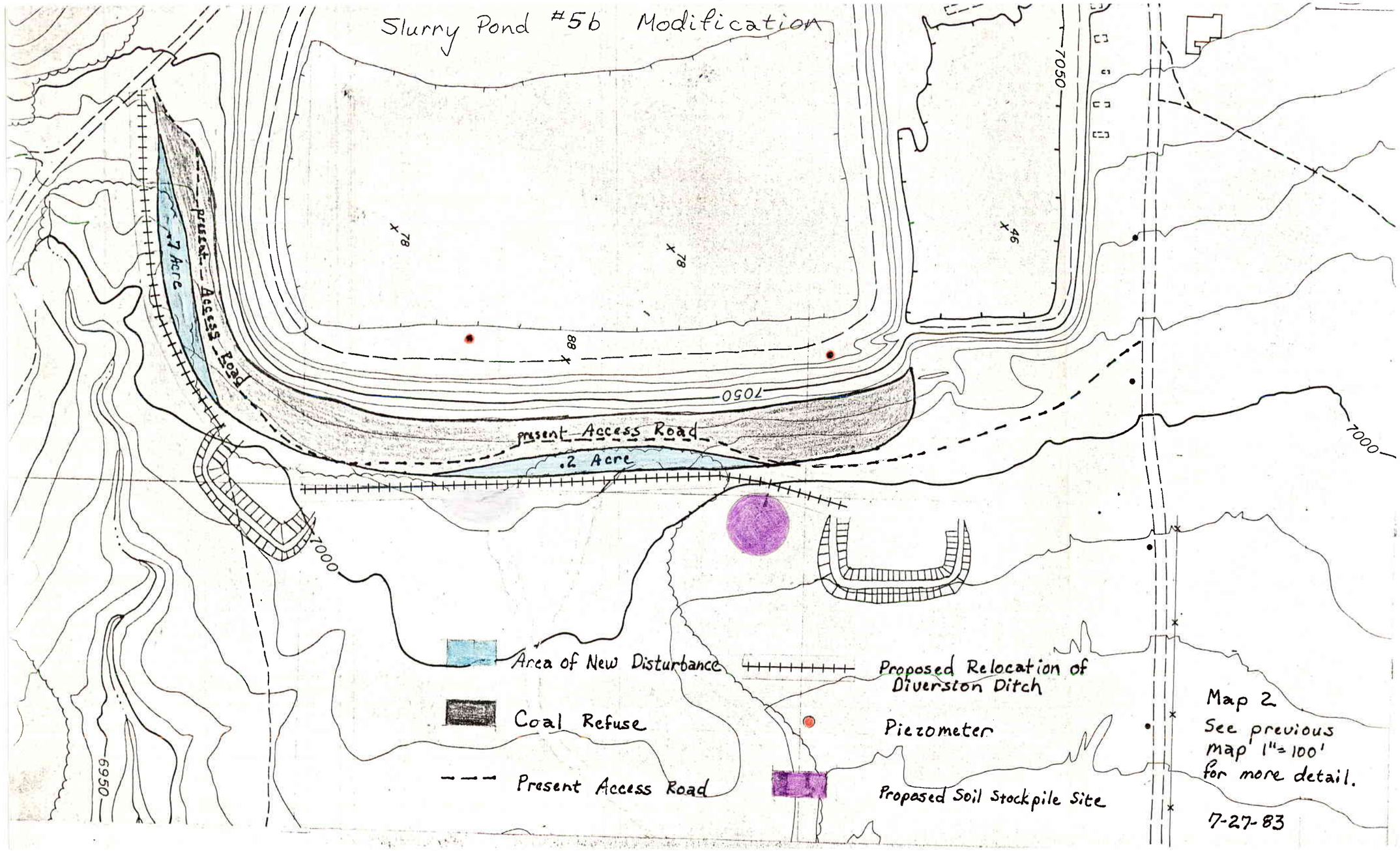
V = 3.7 FEET/SEC

CAPACITY OF DITCH = VA = 3.7 x 2.16 = 8.0 CFS.

CAPACITY REQUIRED = 4.1 CFS (SEE RUNOFF CALCULATIONS)


Slurry Pond #5b Modification
7050
7000
present Access Road
.7 Acre
.2 Acre
U.S. FUEL COMPANY
HIAWATHA - UTAH
SCALE 1" = 200'
Area of New Disturbance
Coal Refuse
Present Access Road
Proposed Relocation of Diversion Ditch
Piezometer
Proposed Soil Stockpile Site
Map 2
See previous map 1"=100' for more detail.
7-27-83

Slurry Pond #5b Modification



Map 2
See previous map 1"=100' for more detail.

7-27-83

July 28, 1983

Memo to Coal File

RE: U.S. Fuel Company
Hiawatha Complex
ACT/007/011, Folders #3 & #7
Carbon County, Utah

On July 19, 1983, Division technical staff, Tom Portle and D. Wayne Hedberg met with Ms. Jean Semborski of U.S. Fuel Company at the Hiawatha mine site.

The purpose of the trip was to look over an area to be impacted by a proposed modification to an existing coal slurry pond #5.

Plans had been submitted by the Company previously for the proposed modification which were found deficient by the Division. The preliminary review comments were delivered and discussed with Ms. Semborski on site.

It was the staff members' opinion, after site inspection, that some of the deficiencies initially identified in the proposal by the Division would not necessarily hinder the planned construction schedule, however, other items would require further detail prior to final approval for construction initiation.

Another area was observed while at the mine site via Ms. Semborski's request. The Middlefork Yard (King IV Mine) had an undisturbed area drainage problem which had resulted in the issuance of an NOV by David Lof. Ms. Semborski related the company's tentative plans for abatement of this violation and solicited the technical staff's opinion on the viability of the proposals.

U.S. Fuel Company will develop a response to the Division's comments promptly, in order that the pond modification may be approved in the very near future.

D. WAYNE HEDBERG DWH
RECLAMATION HYDROLOGIST

DWH:gl

cc: Jean Semborski, U.S. Fuel Company
Tom Portle, DOGM
Dave Lof, DOGM
Jodie Merriman, OSM

File ACT/007/011
Folder No (3)
Copy to Wayne
Dave L.,
John
JIM

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

July 20, 1983 JUL 27 1983

Mr. James W. Smith, Jr., Coordinator of Mined
Land Development
State of Utah, Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RECEIVED
JUL 30 1983
DIVISION OF
OIL GAS & MINING

Dear Mr. Smith:

ir ...roperty by
fc ...the left
ch ...l drainage
di ...h the un-
fr ...itely across

ir ...istifications

dc ...ly would flow
me ...ithwest peri-
We ...ing diagram).
dr ...a cross drain
dr ...l. The
dr ...the perimeter
of ...culvert as
ir

7-27
Wayne —
See that OSM (Walt Swain ~~B.J.~~ Sarah) gets a copy of this. Thx.
(F.T.I.
Jim

An alternate route discussed would require the channel to be breached at the tree line. Drainage would then flow down a longer path into the bypass. This route is less preferred for several reasons:

1) The greater length equals a greater cost in materials,
2) Culverting down the hillside would be impractical due to seeps which occur in this area,
3) To use rip rap for an open channel way would mean disturbance of established vegetation along this route.

During a recent inspection by an OSM officer, it was recommended to U.S. Fuel Co. by that officer that we use the route being proposed in this plan, i.e. to use the existing channel in conjunction with a culverted drain

File ACT/007/011
Folder No (3)
Copy to Wayne
Dave L.,
John
JIM

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

July 20, 1983 JUL 27 1983

Mr. James W. Smith, Jr., Coordinator of Mined
Land Development
State of Utah, Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RECEIVED
JUL 30 1983
DIVISION OF
OIL GAS & MINING

Dear Mr. Smith:

During a recent inspection of the United State Fuel Co. property by inspector Dave Lof, Violation #83-4-6-2, 2 of 2 was issued on the left fork drainage above the Middle Fork mine yard. The undisturbed drainage channel way from above the mine was not directly connected with the undisturbed drainage bypass culvert channel which lies approximately across from the King 4 fan at the elevation of the mine yard pad.

United States Fuel Co. presents the following plan and justifications in order to abate this violation.

The undisturbed drainage from above the mine yard presently would flow down a natural channel just inside the tree line along the southwest perimeter of the mineyard (as indicated in yellow on the accompanying diagram). We propose to continue to utilize this channel but to install a cross drain drop culvert to intercept the water before it exits the channel. The drainage would be picked up by a 24" corrugated metal pipe at the perimeter of the tree line and culverted across and down to the bypass culvert as indicated by the dashed blue line on the diagram.

An alternate route discussed would require the channel to be breached at the tree line. Drainage would then flow down a longer path into the bypass. This route is less preferred for several reasons:

1) The greater length equals a greater cost in materials,
2) Culverting down the hillside would be impractical due to seeps which occur in this area,
3) To use rip rap for an open channel way would mean disturbance of established vegetation along this route.

During a recent inspection by an OSM officer, it was recommended to U.S. Fuel Co. by that officer that we use the route being proposed in this plan, i.e. to use the existing channel in conjunction with a culverted drain

down to the existing bypass.

Work could be completed on this route the most expeditiously due to a lower labor factor. The cost of culvert in this area would be less than rip rap for the second consideration and also more substantial.

Wayne Hedberg visited this site on July 19, 1983. In his visual evaluation of the situation he expected this proposal to adequately address the situation. He also mentioned that erosion protection should be employed at the drop culvert outlet.

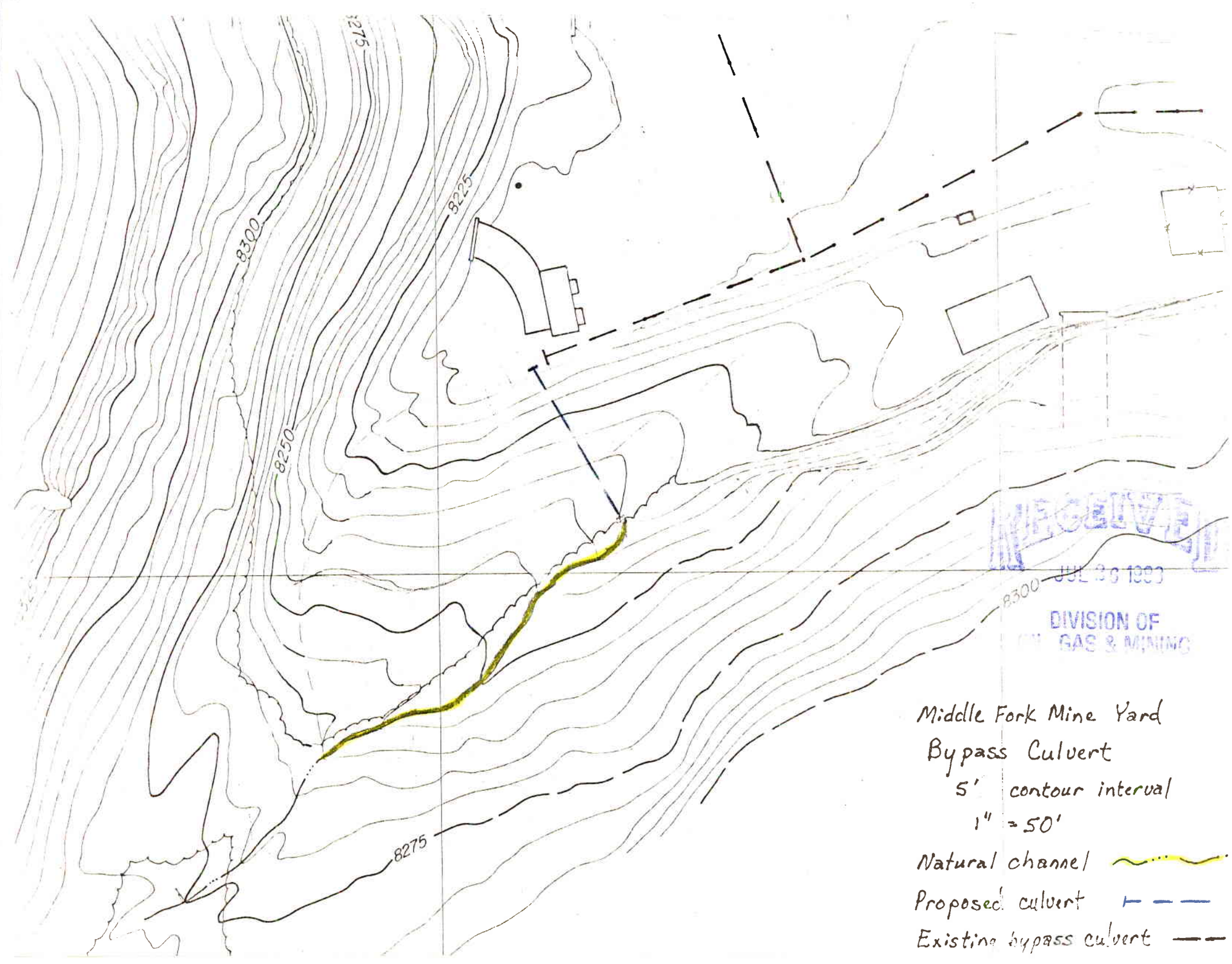
United States Fuel Company will begin construction of this drop drain bypass system upon approval by the Division.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

Enclosures



Middle Fork Mine Yard
Bypass Culvert
5' contour interval
1" = 50'

Natural channel

Proposed culvert

Existing bypass culvert

STORM RUNOFF CALCULATIONS

DESIGN STORM 10 YEAR, 24 HR. LOCATION LEFT FORK OF MIDDLE FORK

CULVERT NO.	A	CN	ℓ	Y	Computed Tp	HYDRO. FAMILY NO.	P	Q	To	To/Tp		REVISED Tp	484AQ / REV. Tp	q
										Computed	Used			
	0.303	75	4,500	70	0.172	4	2.25	0.511	12.5	72.7	50	0.250	299.8	13.9

A = AREA ($MI.^2$)

CN = RUNOFF CURVE NUMBER

ℓ = HYDROLOGIC LENGTH OF BASIN (FT.)

Y = AVERAGE SLOPE (%)

L = WATERSHED LAG (HRS.)

$$= \frac{(\ell^{0.8})(S+1)^{0.7}}{1900\ Y^{0.5}}$$

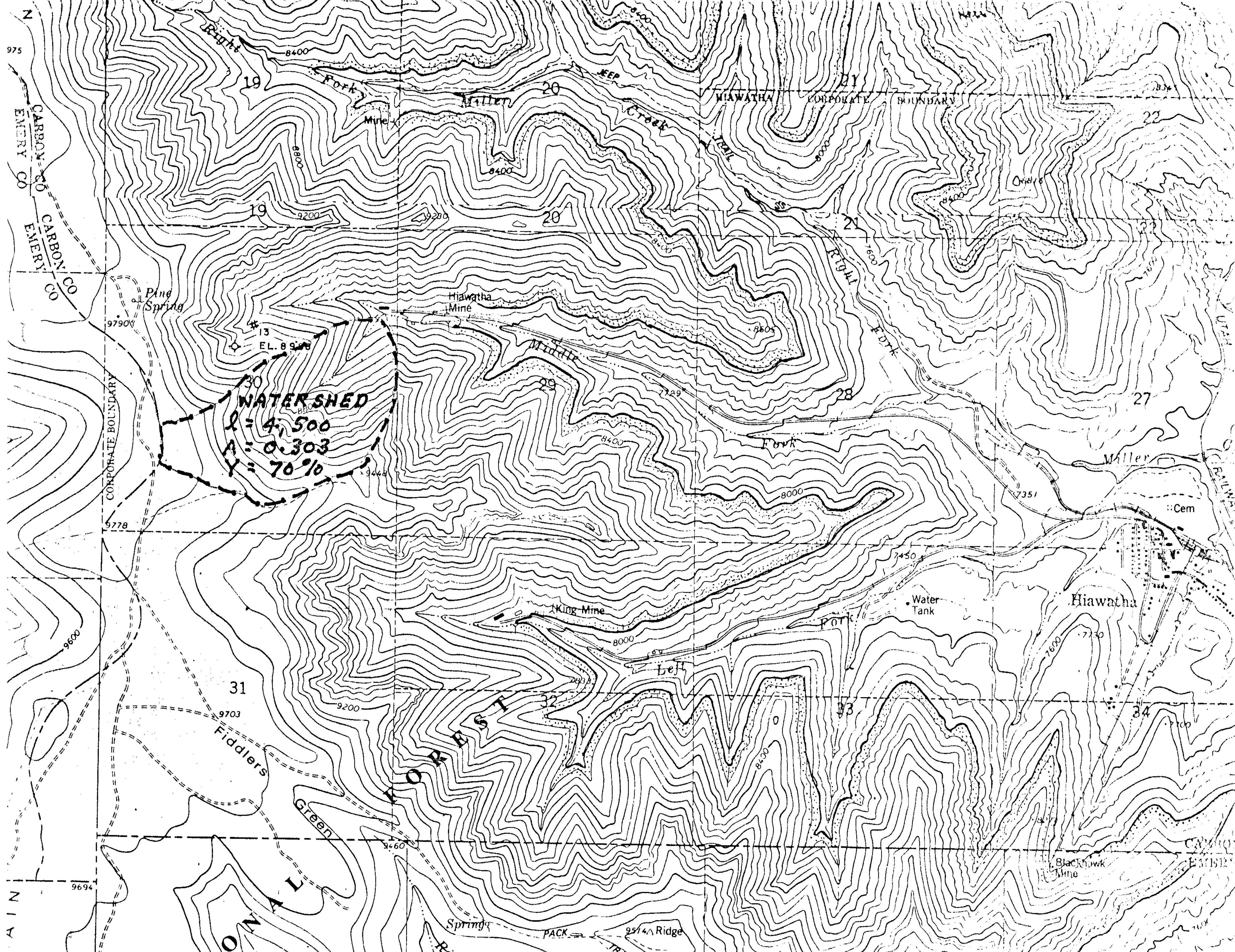
$$S = \frac{1000}{CN} - 10$$

P = PRECIPITATION DEPTH (IN.)

Q = RUNOFF VOLUME (IN.)

To = DURATION OF EXCESS RAINFALL (HRS.)

q = PEAK FLOW (CFS)


Right Fork Miller Creek
JEEP TRAIL
HIAWATHA CORPORATE BOUNDARY
Mine
CARBON CO
EMERY CO
Pine Spring
13
Hiawatha Mine
Middle Fork
WATERSHED
l = 4,500
A = 0.303
Y = 70%
CORPORATE BOUNDARY
Right Fork
Miller
Cem
King Mine
Water Tank
Hiawatha
Left Fork
Fiddlers Green
FOREST
Spring
PACK
Ridge
Blackhawk Mine
8400
8800
9200
8000
7600
9600
8605
7351
7450
9778
9703
9460
9694
19
20
21
22
27
28
29
30
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32
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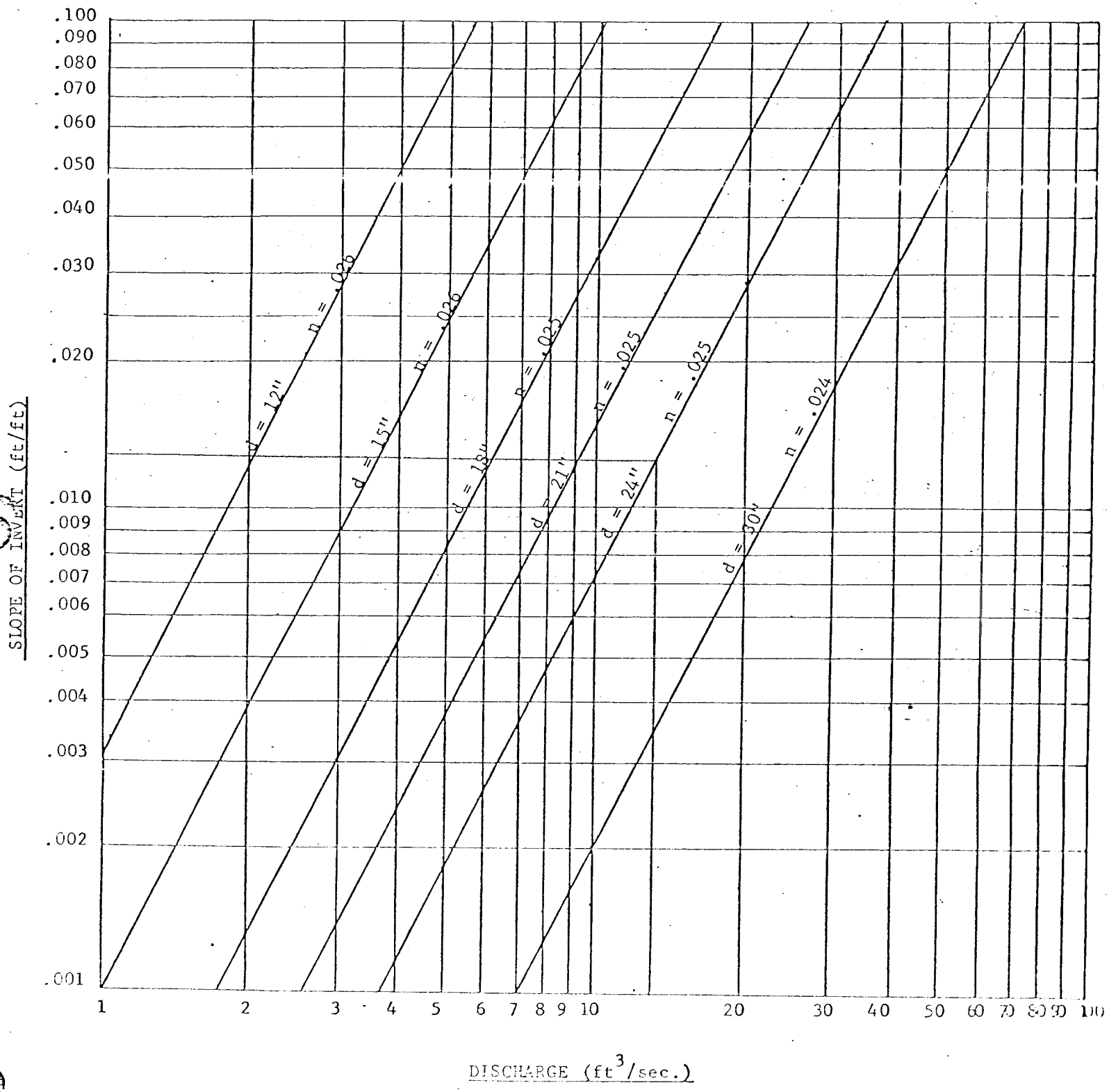
34

ALUMINUM RIVETED PIPE

(1/2 x 2-2/3 Corrugations)

Discharge based on "Manning's Equation" at full flow



FROM KAISER ALUMINUM HIGHWAY PRODUCTS CATALOGUE

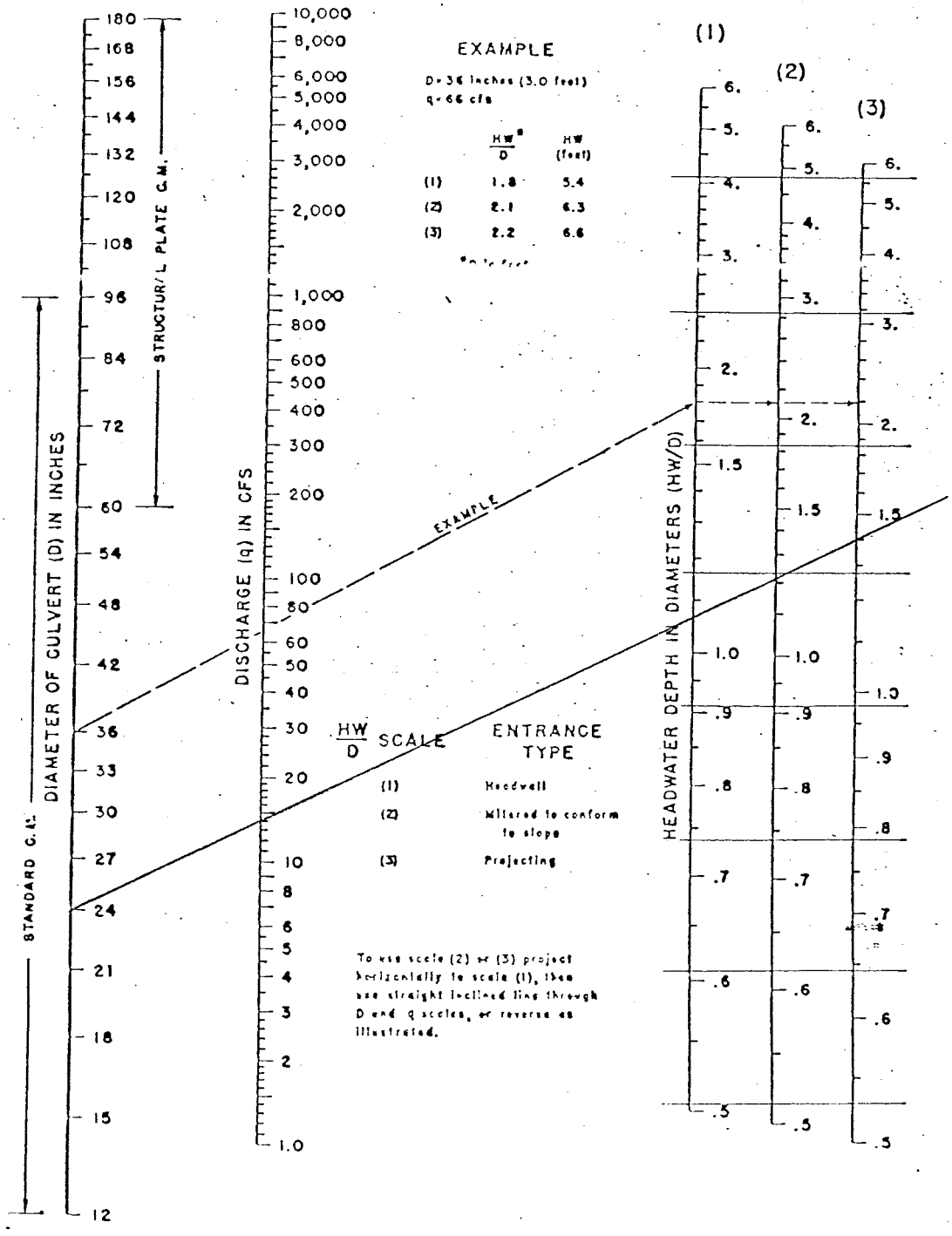


Exhibit 14-9. Headwater depth for C. M. pipe culverts with inlet control.

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

July 6, 1983

Mr. Walter Swain, Utah Coordinator
Western Technical Center
Office of Surface Mining
Brooks Towers
1020 Fifteenth Street
Denver, Colorado 80202

RE: MRP Modification Addendums
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 3
Carbon County, Utah

Dear Mr. Swain:

Enclosed are three (3) copies of United States Fuel Company's latest submission for a modification to Slurry Pond #5 at the Hiawatha coal processing complex. The company has temporarily closed down active operations at their mining complex due to the Thistle Mudslide and resultant closure of the railroad.

The new railway is nearing completion and the company, in anticipation, is proposing a much needed modification to an existing coal slurry pond in order to handle increased coal production and processing upon resumption of active operations.

These extra copies were requested from the company in order to allow you to update the current MRP copies on file with your office.

It is our understanding that the MSHA office has been sent a copy of this modification and is currently reviewing the proposal. The Division has forwarded a copy to the State Engineer's Office and is also processing this modification and will forward a copy of our final review and/or approval when it is complete.

If your office has any comment, please feel free to contact me at your earliest convenience.

Sincerely,

D. Wayne Hedberg

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/btb

cc: Jean Semborski, U. S. Fuel Company
Bob Morgan, Dam Safety

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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

July 6, 1983

Mr. Bob Morgan, Engineer
State Engineer's Office, Dam Safety
Division of Water Rights
1636 West North Temple, Room 220
Salt Lake City, Utah 84116

RE: MRP Modification Addendums
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 3
Carbon County, Utah

Dear Bob:

I wasn't sure if you need to have someone in your office review this modification or not.

Apparently, the MSHA office is reviewing the proposal also. If that is adequate, you can use this proposal to just update your files.

Call me if you have questions. Thanks.

Sincerely,

D. Wayne Hedberg

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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

June 27, 1983

Ms. Jean Semborski
Engineer
United States Fuel Company
Hiawatha, Utah 84527

RE: Request for Additional Copies
of Maps and Plans
Modification to
Slurry Pond #5b
Hiawatha Complex
ACT/007/011
Folder No. 3
Carbon County, Utah

Dear Ms. Semborski:

The Division is in receipt of your latest June 7th letter which discusses the need to upgrade and enlarge Slurry Pond #5b at the Hiawatha Complex. I apologize for the delay in not responding sooner to this request. It has just recently come to my attention that there was only one set of plans copied to this office and I'm assuming one to the MSHA office as well.

In a concerted effort to keep all the appropriate regulatory agencies MRP files up to date we must ask that at least five (5) additional copies of this modification be provided as soon as possible.

Again my apologies for the inconvenience, please be advised that we are proceeding as rapidly as possible with the processing of this modification.

Should you have any questions please feel free to call me.

Sincerely,

D. Wayne Hedberg

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/lm

cc: Dave Lof, DOGM
Walter Swain, 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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

June 10, 1983

Mr. Robert Eccli
Senior Mining Engineer
U. S. Fuel Company
P. O. Box A
Hiawatha, Utah 84527

RE: Administrative Completeness
Hiawatha Complex
ACT/007/011
Folder Nos. 2 and 3
Carbon County, Utah

Dear Mr. Eccli:

U. S. Fuel Company's May 19, 1983 response to the Division's Administrative Completeness Review letter of May 9, 1983 has satisfied our request for additional information not addressed in the original permanent program permit application. Therefore, the Division hereby finds the mine plan permit application to be administratively complete, in that all areas of concern appear to have been addressed.

This determination will allow U. S. Fuel Company to temporarily continue mining operations under the existing interim State permit according to provisions of Federal and State statutes and regulations until such time as the review of your company's permanent permit application is completed.

As you are aware, an in-depth Apparent Completeness Review (ACR) has been conducted in order to determine the sufficiency of the application and the Division is currently awaiting your response to the deficiencies noted in the ACR in order to proceed with the review process according to an established priority schedule.

Though no further response to the cursory administrative completeness review, nor a publication of completeness, is required at this time, the Division would appreciate being notified in writing of any significant circumstances that may exist or develop in the near future which could affect the Division's review priorities that have been established. Your continued cooperation is appreciated. If you have any questions, please don't hesitate to call.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/MMB:btb
cc: Allen Klein, OSM, Denver

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

June 14, 1983

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

RE: Soil Data from April 21, 1983
Tour of Slurry Pond #1 and
Attendant Disturbance
Hiawatha Complex
ACT/007/011
Folder No.'s 3 & 7
Carbon County, Utah

Dear Jean:

Pursuant to your May 17, 1983 request please find the soils data (item 3) which has recently been returned from the Utah State soils laboratory.

Judging from this data there appears to be no restrictive properties which might enter into decision making with regard to topsoil salvaging. Soil texture, organic matter and high CEC all affirm the viability of this material.

Please keep us posted with regard to your development plans for this area so we might coordinate with you in having a representative present during actual soil removal.

Sincerely,

THOMAS L. PORTLE
RECLAMATION SOILS SPECIALIST

TLP/lm

cc: Sandy Pruitt, DOGM
Dave Lof, DOGM

enclosure

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

May 17, 1983

Mr. Tom Portle, Reclamation Soils Specialist
State of Utah, Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Topsoil removal
Slurry pond #1

Dear Tom:

United States Fuel Company has received your May 10, 19 letter regarding a request for plans and a partial exemption topsoil removal on Slurry Pond #1.

Please call me
File ACT/007/011
File #3

We would like the Division to respond to several questi to aid our Plan for Topsoil Removal - Slurry Pond #1 and als provide the company with a more clear and complete understan of what is to be done.

1) Your letter refers to the topsoil located on the west slope of the point. From our map, the area which we discussed in the field appears to be on the eastern portion of this point. It seems the area to be stripped should be agreed upon in map form as well.

2) Item #4 in the May 10 letter states "All topsoil on the west slope must be removed". The company was under the impression from the April 28, 1983 memo that the lower 10 - 15 feet (that which could be affected by the ultimate slurry level) was to be removed and the above material and vegetation left to prevent severe erosion.

3) We would like to review the results of the two soil samples taken by you on April 21. Knowledge of the qualities of this soil will be important in future reclamation efforts. It will also be important in determining the depth of removal. Consideration of the rock content may be necessary.

4) As suggested in prior correspondence, we believe it would be useful for yourself or a member of the technical advisory staff to be present during removal operations thus we need to coordinate the timing of this effort.

RECEIVED
MAY 20 1983
DIVISION OF

UTAH KING COAL

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

May 17, 1983

Mr. Tom Portle, Reclamation Soils Specialist
State of Utah, Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: Topsoil removal
Slurry pond #1

Dear Tom:

United States Fuel Company has received your May 10, 1983 letter regarding a request for plans and a partial exemption for topsoil removal on Slurry Pond #1.

We would like the Division to respond to several questions to aid our Plan for Topsoil Removal - Slurry Pond #1 and also to provide the company with a more clear and complete understanding of what is to be done.

1) Your letter refers to the topsoil located on the west slope of the point. From our map, the area which we discussed in the field appears to be on the eastern portion of this point. It seems the area to be stripped should be agreed upon in map form as well.

2) Item #4 in the May 10 letter states "All topsoil on the west slope must be removed". The company was under the impression from the April 28, 1983 memo that the lower 10 - 15 feet (that which could be affected by the ultimate slurry level) was to be removed and the above material and vegetation left to prevent severe erosion.

3) We would like to review the results of the two soil samples taken by you on April 21. Knowledge of the qualities of this soil will be important in future reclamation efforts. It will also be important in determining the depth of removal. Consideration of the rock content may be necessary.

4) As suggested in prior correspondence, we believe it would be useful for yourself or a member of the technical advisory staff to be present during removal operations thus we need to coordinate the timing of this effort.

UTAH KING COAL

Thank you for sending us the guidelines on sampling. The sampling of our proposed borrow areas is being conducted in this manner. We feel that the sample results should then be sufficiently complete for inclusion in our mining and reclamation plan.

We appreciate your time and effort in assisting us with this problem.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

ACT/007/011
#3

UTAH STATE UNIVERSITY · LOGAN, UTAH 84322

SOIL, PLANT and WATER
ANALYSIS LABORATORY
UMC 48

Tom Portle
DOGM
4241 State Office Building
Salt Lake City, UT 84114

Samples received on May 16, 1983.

041/ #/012

USU Log #	Ident.	% > 2 mm	Lime	pH	EC_e	Texture	% O.C.*	CEC*	SAR*	% N	SP*	
83-986	W-1	10	++	8.6	13.2	Sandy Clay Loam	.35	17.2	72.3	.04	87	East Stockpile
987	W-2	12	++	8.3	19,0	Clay Loam	.32	23.9	55.1	.02	104	West stockpile
988	W-3	5	++	8.1	23.9	Clay Loam	.28	10.2	47.5	.01	68	Highwall soils
989	W-4	7	++	9.1	8.9	Clay	.15	45.7	87.5	.01	243	bentonite soils
990	H-1	65	++	7.8	.8	Silt Loam	2.64	13.2	1.4	.18	49	Topsoil Slurry pond 1
991	H-2	41	++	8.0	.6	Silt Loam	1.63	11.3	.9	.13	43	Topsoil Slurry pond 1

007/ 07/011

- Organic carbon

Ident.	ppm			Water-Soluble (me/l)	Amm. Acetate (me/100g.)			
	P	K	NO_3-N	Na	Na	K	Ca	Mg
W-1	4.2	156	4.0	125	26.1	.52	46.6	2.2
W-2	7.0	204	6.5	143	43.1	.70	43.1	1.0
W-3	3.4	83	8.1	190	21.7	.33	101.6	1.6
W-4	0.8	172	11.0	75.8	58.2	.54	20.3	1.0
H-1	3.4	43	9.6	2.5	.2	.13	50.2	1.3
H-2	2.8	39	7.2	1.4	.3	.12	49.7	2.0

* See enclosed key to abbreviations.

R. Lamborn

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

May 16, 1983

Ms. Jean Semborski, Engineer
United States Fuel Company
Hiawatha, Utah 84527

RE: Temporary Cessation of Operations
U. S. Fuel Company
King IV Mine
ACT/007/011
Folder Nos. 3 and 13
Carbon County, Utah

Dear Ms. Semborski:

The Division has received your letter dated May 6, 1983 which explains U. S. Fuel Company's temporary cessation of underground mine operations at the King IV Mine.

Pursuant to UMC 817.131, U. S. Fuel has provided a general description of the pertinent information required by this regulation.

Prior to reinitiation of mining operations at the King IV Mine, the Division requests notification of the same. Thank you for your cooperation.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/MMB:btb

cc: Raymond Blake, OSM, Denver
D. Wayne Hedberg, DOGM

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

May 10, 1983

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

RE: Request for Plans and Partial Exemption for Topsoil Removal Pursuant to Slurry Expansion
U. S. Fuel Company
Hiawatha Complex
ACT/007/011
Folder No.'s 3 & 7
Carbon County, Utah

Dear Jean:

Thank you for accompanying me on our April 21, 1983 tour of the areas to be inundated attendant to the rise of the slurry level in slurry pond #1. The tour was most helpful in meshing the details which appear in the correspondence relative to this matter with the field reality.

This letter conveys the Divisions conclusions as a result of the tour.

1. Since U. S. Fuel does not have an approved plan for the Miller Creek borrow area or any other borrow area thus the assertion that soil lost in this area can be covered by surplus from another will not be considered.

2. Even if an approved borrow area was in existence and surplus topsoil or substitute material were available we would not be able to approve the sacrifice of soil in this area as it is not within the context of UMC 817.22.

3. The Division does, however, agree that safety would be a major concern for equipment operators on the north slope and that the area would be left more stable due to good vegetative growth on this steep slope. Thus the Division grants an exemption to topsoil removal on this slope pursuant to UMC 817.22 (g)(1).

4. All topsoil on the west slope must be removed. Prior to removal, plans must be sumbitted to and approved by the Division. This should be done as soon as possible.

A memo dated April 28, 1983 (enclosed) addresses other items in your April 11, 1983 letter to Sandy Pruitt. Also, as you recall, we discussed sampling requirements for defining the potential for the use of the Miller Creek area for substitute materials. Please find the attached guide to sampling.

Sincerely,

THOMAS L. PORTLE
RECLAMATION SOILS SPECIALIST

TLP/lm

cc: Sandy Pruitt, DOGM
David Lof, DOGM

Enclosures

SAMPLING

The number of samples necessary to adequately delineate the quality and quantity of the soil substitute material in question depends largely on the probable variability of the material in question. The goal generally is to obtain samples that are representative of the area. Also, it is of interest to: (1) show that no physical or chemical charateristics exist which would adversely affect the capability of the substitute material to support vegetation; and, (2) determine the nutrient levels of the material to serve a baseline function.

In this case sampling must be done at depth intervals. All analysis should be done for each depth increment. It is recommended that sampling be done by soil horizon where possible and that at a minimum that every 12 inches should be sampled independently. Probably at least 15 - 20 samples should be taken. Compositing of these samples would be more economical and probably be more representative by obtaining a homogeneous mix of each soil depth interval from composited soil from all the sample points in adequate volume for the purpose of analysis. Send paired samples to the lab.

Test to be performed	Reported As	Suggested Methods*
Soil texture	% sand, silt, clay	Hydrometer method. Black et al. 1965. Methods of Soil analysis. ASA Mono No. 9, Part 1, method 43-45: 562-566.
pH	units	U.S.D.A. Handbook 60, method (2a) page 102.
Organic matter	%	Walkely-Black Method. Black et al. 1965. ASA Mono. No. 9, part 2, method 90 - 3.2, pp 1374 - 1376.
Saturation percentage	%	U.S.D.A. Handbook No. 60, Method (27a & b), p 107.
Carbonates	meq/100g	U.S.D.A. Handbook #60 Method (236), pp 105.
Cation Exchange Capacity	meq/100g	U.S.D.A. Handbook 525, No. 5B, p. 8 & 9.
Electrical Conductivity	mmhos/cm@ 25° C	U.S.D.A. Handbook 60 pp 84 - 90.

Sodium Absorbtion Ratio	SAR calculated from soluble Ca, Mg & Na	Jurinak, J.J. 1980. Salt affected soils. Utah State University, Logan, Utah: 40 - 41.
Total Nitrogen	ppm	Kjeldahl digestion ammonia distillation. USDA Handbook 525 No. 10, p 14 - 16.
Available Nitrogen	ppm	Extraction By A.S.A. Mono No. 9 Part 2, Method 84-85. 3.3, p 1216.
Available Phosphorus	ppm	Estimation of available phosphorus in soils by extraction with sodium bicarbonate. U.S.D.A. Handbook 525, No. 9, pp 13 - 14, Watanabe and Olsen (1965).
Potassium, calcium, magnesium and sodium	ppm and meq/100g	U.S.D.A. Handbook 60, Method 2 and 3a, p 84.

*These are suggested methods, other equivalent methods may be used if desired as long as they can be justified upon request.

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

May 10, 1983

Ms. Jean Semborski, Engineer
United States Fuel Company
Hiawatha, Utah 84527

RE: Temporary Cessation of
Operations
U. S. Fuel Company
King VI Mine
ACT/007/011
Folder Nos. 3 & 13
Carbon County, Utah

Dear Ms. Semborski:

The Division has received your letter dated May 4, 1983 which explains U. S. Fuel Company's intent to temporarily cease underground mining operations at the King V Mine.

Pursuant to UMC 817.131, U. S. Fuel has provided a general description of the pertinent information required by this regulation.

Prior to reinitiation of mining operations at the King V Mine, the Division requests written notification of the same. Thank you for your cooperation in these matters.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/btb

cc: Raymond Blake, OSM, Denver
D. Wayne Hedberg, DOGM
D. Lof, DOGM
M. Boucek, DOGM

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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

May 9, 1983

Mr. Charles J. Jahne
Sharon Steel Corporation
19 Floor, University Club Building
136 East South Temple
Salt Lake City, Utah 84111

RE: Administrative Completeness Review
of Permanent Program Permit
U. S. Fuel Company
Hiawatha Complex
ACT/007/011
Folder Nos. 2 and 3
Carbon County, Utah

Dear Mr. Jahne:

The Division of Oil, Gas and Mining technical staff has performed a cursory review to determine the administrative completeness of U. S. Fuel Company's Hiawatha Complex permament program permit application and mining and reclamation plan and has found it to be administratively incomplete, in that all areas of concern have not been addressed.

As you are aware, the Division has also performed an in-depth Apparent Completeness Review (ACR) in which numerous items were found to be deficient or lacking, thus prohibiting the Division from proceeding with a Technical Analysis review (TA). It should be clarified that the cursory administrative completeness review and the in-depth Apparent Completeness Review are not the same.

In order to continue operations under the interim permit, it is imperative that U. S. Fuel Company immediately address those items outlined below thus rendering the mining and reclamation plan administratively complete:

1. UMC 771.27 Verification of Application

2. UMC 783.17 Alternative Water Supply Information

3. UMC 783.27 Prime Farmland Investigation

4. UMC 785.17 Prime Farmlands (as related to UMC 783.27)

A written response to the above items, furnishing the required information, must be submitted to the Division within 30 days of receipt of this letter.

Concerning the in-depth Apparent Completeness Review, which was completed in November 1982, the Division is requesting that, for the sake of continuity, U. S. Fuel Company respond to the ACR in a consolidated manner, i.e., assemble all responses into one comprehensive submittal. This will eliminate the "piecemeal" approach and potential confusion on the parts of both the applicant and the Division and should facilitate the review process. The applicant's complete ACR response must be received by the Division no later than July 15, 1983 in order to continue the review process according to a strict review priority schedule.

Your continued cooperation in these matters is appreciated. If you have any questions, please contact the Division.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/btb

cc: Jean Semborski, U. S. Fuel Company
Allen Klein, OSM
D. Wayne Hedberg, DOGM

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

April 29, 1983

ACT/007/004
#3+4

Mr. Shannon Storrud
Reclamation Engineer
Utah Natural Resources and Energy
Oil Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Mr. Storrud:

This is in response to your approval letter for modification of Slurry Impoundment No. 1 at Hiawatha, Utah.

In stipulation No. 3, you noted that the May 1979 Rollins, Brown and Gunnell report recommended that a line of drainage wells be installed as outlined by recommendation No. 9 on page 7. You asked if this action had been undertaken.

These drainage wells have not been installed because conditions have not indicated a need. Please note that recommendation No. 8 would require this corrective action only if the phreatic surface in the downstream portion of the structure exceeds the position shown in Figure 20 of the May, 1979 report. Three piezometers located on or near the crest of the embankment have been monitored on a weekly basis since June of 1979 (See Table No. 1 of the June of 1979 modification report). These piezometer readings show that the phreatic surface has remained substantially below the position shown on Figure 20.

If you have any further questions please give me a call at 343-2471.

Sincerely,

Robert Eccli

Robert Eccli
Sr. Mine Engineer

RE/kc

UTAH KING COAL

April 28, 1983

Memo to Coal File:

RE: Soil Removal and Slurry Expansion
U. S. Fuel Company
Hiawatha Complex
ACT/007/011
Folder No.'s 3 & 7
Carbon County, Utah

On April 21, 1983 Thomas L. Portle, Reclamation Soils Specialist visited the above mentioned minesite. He was accompanied by Jean Semborski of U. S. Fuel. The objective was to view areas which will be inundated with the rise of the slurry level in Slurry Pond #1. (Refer to DOGM letter of March 30, 1983 and U. S. Fuel letter of April 11, 1983.)

The question as to the fate of topsoil in the aforementioned area resulted in a debate in which U. S. Fuels maintains that:

1. Access precludes topsoil stripping;

2. if topsoil were stripped instability to the area would result due to loss of vegetation with attendant erosion;

3. if access were attempted safety hazards would result;

4. excessive costs would be incurred considering relative area and amount of soil loss; and,

5. a Miller Creek borrow area would be used to make up lost materials.

The validity of each of these points was examined.

Although access was a noteworthy consideration it was mainly relevant to the north embankment. The Division would agree that due to the steepness of the north slope and good vegetative cover (which is sure to be adversely affected to attain access) it would be best to leave the soil on the north slope. However, access would not be as difficult on the less steep west slope. In fact, a road could be built using refuse in place immediately adjacent to the west slope. Use of a cat and/or backhoe in this area would

result in the salvaging of a worthwhile quantity of soil without any safety hazard. Vegetation above the lower 10 - 15 foot area to be stripped could be left in place to prevent erosion and retain stability. For these reasons every attempt should be made to retreive all soil in this area.

In response to the cost concern, the Division's primary goal is environmental protection. While we, of course, favor the most cost effective method of achieving this goal cost in and of itself is not an overriding consideration.

Soil samples were taken to assess the quality of the material. Judging from the growth it supported and on-site observation it appeared to be very good quality material.

With regard to the Miller Creek borrow area, it is still in the permitting process. DOGM has, in fact, been given indicatins that this area may not be used if sufficient excess material can be obtained from the Mohrland development.

The operator has been requested to submit plans for soil removal in this area.

THOMAS L. PORTLE TLP
RECLAMATION SOILS SPECIALIST

TLP/lm

cc: Sandy Pruitt, DOGM
David Lof, DOGM

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Wildlife Resources

1596 West North Temple • Salt Lake City, UT 84116 • 801-533-9333

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Douglas F. Day, Division Director

FILE ACT/007/011
Folders # 3 # 7

April 19, 1983

Mr. Jim Shirazi, Director
Utah Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, UT 84114

Attention: Mary Boucek and Sandy Pruitt

Dear Jim:

The Division on April 8, 1983, inspected the modification to the U.S. Fuel Company's King 6 conveyor. The modifications made by the company relative to passage of deer are appropriate and considered to be complete. The conveyor now does not represent a barrier to deer movement.

Thank you for the cooperation and assistance provided by your staff.

Sincerely,

Douglas F. Day
Director

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

April 18, 1983

Ms. Jean Semborski
U. S. Fuels Company
Hiawatha, Utah 84527

RE: Approval letter
Modification of Slurry
Impoundment No. 1
ACT/007/011
#(3) 4

Dear Ms. Semborski:

The modification plan of Slurry Impoundment No. 1 has been reviewed by the Division and is approved with the following stipulations:

1. The construction procedures itemized by Rollins, Brown and Gunnell, Inc. are strictly adhered to.

2. The observation wells are monitored and maintained on a monthly basis and records are kept.

3. According to an earlier Rollins, Brown and Gunnell report dated May 1979 Rollins recommended that a corrective step to lower the phreatic surface was to drill a line of drainage wells as outlined by #9 on page 7. Has this action been undertaken? If not please indicate why.

Thank you for your assistance in getting this matter taken care of. If I can be of any assistance please don't hesitate to call.

Sincerely,

Shannon Storrud

SHANNON STORRUD
RECLAMATION ENGINEER

SS/lm

cc: Sandy Pruitt, DOGM
Joe Lyons, DOGM
Dave Lof, DOGM

ACT/002/011
#3

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

April 11. 1983

Plan is in map folder

Ms. Sandy Pruitt
State of Utah, Natural Resources and Energy
Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Sandy:

Please find enclosed a copy of the Slurry Pond #1 Modification Plan as submitted and approved by MSHA in January 1983.

Submittal of this plan should then abate Violation #82-2-2-1.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

c.c.: E. Gardiner
J. Lind

Enclosure

RECEIVED
APR 13 1983
DIVISION OF
OIL, GAS & MINING

file
ACT/007/011

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

Copy to Wayne & Joe L.

April 11, 1983

JIM
APR 13 1983

Ms. Sandy Pruitt
State of Utah, Natural Resources and Energy
Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Sandy:

After reviewing your March 30, 1983 letter concerning the southwest embankment of slurry pond #1, United States Fuel Company feels the request set forth in that letter is excessive in view of the relative area ultimately affected. The required action, while achieving a point in principle, will promote effects contrary to the Division's goal i.e. minimizing disturbance to vegetation and wildlife, controlling erosion and promoting vegetative growth and cover.

Slurry pond #1 has existed since early in the 1940's. It was inactive from the early 1950's to when plans for reconstruction of the pond were approved by the Division in April of 1979. The pond embankment was at an elevation of 7165 until United States Fuel Company was granted permission by MSHA's technical staff in January of 1983 to raise the embankment to 7185 as the maximum elevation MSHA will ever approve. As of April 1983, the embankment elevation stood at 7175 and slurry level at 7164.5. The slurry level could potentially rise fifteen feet should the pond be built to the maximum elevation of 7185.

Access to this location will be difficult as the point is rocky and steep. Roadways would need to be built to recover any material from the slope. The operations will be hazardous due to the deep, soft slurry impounded below the slope. Loose material and even equipment could slide down into it.

Removal of any material from this slope will create unstability and erosion. If United States Fuel Company is forced into stripping all the vegetative material (trees, shrubs etc.) from this point won't they also be forced to control erosion on these slopes even though devegetation was against their wishes?

Cost estimates, based on one cat (for one day) one dragline and one truck (for two days) , run over $5000.00. In our opinion the costs, risks and quality of the material to be recovered make this an unreasonable request, at a time where we are laying off people and shutting down mines,

RECEIVED
APR 13 1983
DIVISION OF
OIL, GAS & MINING

all costs are carefully acrutinized before being approved and only the most essential are being allowed.

You stated that United States Fuel Company's proposal to provide suitable substitute topsoil is a fabrication. You also implied that DOGM has made fruitless efforts to have United States Fuel Company provide soil survey results from proposed borrow areas. We find both of these statements to be superfluous and offensive. To set the record straight, United States Fuel Company was given the impression by Tom Portle that the Division needed to determine if the area adjacent to Miller creek could even be considered by United States Fuel Company as a borrow area. The only written request we have received was in the Apparent Completeness Review. Also, our supportive evidence seems to be the same as yours, i.e. vegetation indicates a growth medium.

We still maintain that better material can be obtained from the proposed borrow area. In this way we can avoid destroying a whole acre of vegetation in order to obtain at a high cost and considerable difficulty a rather small strip of only fair quality topsoil. See the enclosed map for additional details and dimensions.

In new areas of disturbance we fully intend to remove and stockpile topsoil. This particular case however is complicated by the fact that disturbance prior to the Act has now made it difficult to access this remnant. The point though is far from the only item in this situation. We propose to just not disutrb more than we have to in order to minimize later reclamation efforts which will be large enough themselves.

United States Fuel Company requests that the material, both in the proposed borrow area and southwest bank of slurry pond #1 be viewed in the field by appropriate members of the technical staff before a decision is made concerning the removal of any material.

Thank you. We hope this matter can be worked out satisfactorily to both parties.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

c.c.: E. Gardiner
J. Lind
Jim Smith DOGM


SLURRY IMPOUNDMENT No. 1
STA. 66
EL. 7124.5
MILLER
Contour interval 10'
1" = 200'
Coal refuse
Maximum area to be affected
Coal slurry
RECEIVED
APR 1987
DIVISION OF
OIL, GAS & MINING

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

April 6, 1983

Ms. Jean Semborski, Engineer
United States Fuel Company
Hiawatha, Utah 84527

RE: Temporary Cessation of Operations
U. S. Fuel Company
King VI Mine
ACT/007/011
Folder Nos. 3 & 13
Carbon County, Utah

Dear Ms. Semborski:

The Division has received your letter dated March 22, 1983 which explains U. S. Fuel Company's intent to temporarily cease underground mining operations at the King VI Mine.

Pursuant to UMC 817.131, U. S. Fuel has provided a general description of the pertinent information required by this regulation.

Prior to reinitiation of mining operations at the King VI Mine, the Division requests written notification of the same. Thank you for your cooperation in these matters.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/btb

cc: Raymond Blake, OSM, Denver

File
ACT/007/011
Folder No. 13
Copy to
Ron D., Wayne,
Mary, Joe L.,
Shannon, Doug
M., Tam P.,
Sandy P.

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

March 22, 1983

Dr. Jim Shirazi, Division Director
State of Utah, Natural Resources and Energy
Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Dr. Shirazi:

As required by UMC 817.131, United States Fuel Company is giving written notice for temporary cessation of mining and reclamation operations at their King 6 mine yard and truck loadout facility located in South Fork canyon. The Mineral Management Service has received notice of the closure also.

Due to the poor outlook of the coal market, the duration of the temporary shutdown is relatively uncertain. At this time, most of the equipment has been pulled back from the face and mining operations are not expected to resume for a year.

The disturbed area of the upper and lower King 6 mine yard and sediment pond amounts to nine acres. A conveyorline follows the road a portion of the distance down to the coal stockpile and truck loadout. This lower facility plus it's sediment pond is approximately three acres.

Underground development had progressed 5000 feet west on a five and six entry system. The pillar size is 100 feet long and 100 feet wide. Mined coal height varys between six and eight feet.

Some reclamation work was accomplished last fall when Bio-West was contracted to revegetate areas of the King 6 loadout including slopes adjacent to the conveyorline, the coal pile, truck turn-around and sediment pond. Detailed plans of this operation were sent to your office by Mr. Chuck Jahne, Sharon Steel Environmental Engineer.

The mine is still being ventilated and maintained for future operations. Surface monitoring and maintanance will also be continued. No backfilling, regrading or closure of underground openings is planned as of this date.

Water monitoring which is done monthly will be carried out as in the past. Water treatment of the bathhouse water will continue in order to provide an adequate supply for maintanance people using the bathhouse facility.

As no coal is being produced from the mine, the conveyorline down to the coal stockpile will cease to operate. While it is idle, corrective measures are being made to adjust the clearance on the beltline as required by the Utah Division of Wildlife Resources. The lower conveyor belt has been raised to it's maximum height. The conduit along the base of the stands is in the process of being lifted to at least the bottom of the lower belt. Certain sections of the guardrail, as selected by Mr. Larry Dalton, Division of Wildlife Resources, from along the roadway portion of the conveyor have been removed. Both the belt and conduit have also been raised along these sections.

No other modifications to the South Fork canyon mine area are anticipated at this time.

Sincerely,

Jean Semborski

Jean Semborski
Engineer

cc: E. Gardiner
R. Graeme
G. Barker
J. Lind
R. Bury

FILE ACT/007/011 FOLDER #3

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

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 supplimental 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.

(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

D. WAYNE HEDBERG
RECLAMATION HYDROLOGIST

DWH/mn

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

SHARONSTEEL • Mining Division AN NVF COMPANY

SHARON STEEL CORPORATION

19th Floor, University Club Building
136 East South Temple
Salt Lake City, Utah 84111
Telephone (801) 355-5301

March 4, 1983

File ACT/007/041
folder #3
#3 for 9(3)

Mr. Wayne Hedberg
State of Utah Natural Resources
and Energy - Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Wayne:

I am enclosing a print each of a revised Property Map, and of the A & B Seams at Kings 4 & 5 revised to reflect the five year life of the Permit. I am also sending along a copy of some calculations relative to 25 year - 24 hour storm for spillway flows. I am doing this for two reasons: 1) to let you know (and OSM, if necessary) that work is being done to address the DOGM comments and 2) to ask you to pass these to the proper reviewers to see if the type of information and its presentation is what is wanted by your people.

I would appreciate your doing this for me "in your spare time" so that it won't become necessary for all of us to re-do things due to the fact that I did not provide information in the proper form.

Thank you.

Very truly yours,

Charles J. Jahne

Charles J. Jahne

CJJ/dc

Enclosures

...N STEEL CORPORATION
Mining Division

...NTH FLOOR UNIVERSITY CLUB BLDG
136 EAST SOUTH TEMPLE
...LT LAKE CITY, UTAH 84111

1 COPY
US Fuels "piecemeal" approach
to ACR review response
* not acceptable, requested
total submission from company
all at once via letter from
Jim Smith in May '83(?)

PRIORITY MAIL

Mr. Wayne Hedberg
State of Utah Natural Resources
and Energy - Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

FORM 689 REV. 2M 8-78

CALCULATION SHEET

U V Industries, Inc.

ENGINEERING DEPT., SALT LAKE CITY, UTAH

PROJECT HIAWATHA SHEET NO. 1 OF 4

JOB RESPOND TO DOGM COMMENTS - APR

COMPUTATION FOR EMERGENCY SPILLWAYS 25 YR. - 24 HR. STORM AS OPPOSED TO 25 YR. - 21 HR.

COMPUTED BY JANNE DATE FEB. 21, 198

REF. DWG.

RECEIVED MAR 07 1988

DIVISION OF OIL GAS & MINING

REGULATION: UMC 817.46 (i) OSM:

DESIGN CRITERIA:

WATER EVENT: SED. POND: 10 YR. 24 HOUR
EMER. SPILLWAY: 25 YR. 24 HR.
CURVE NUMBERS - CN - 70 UNDISTURBED, 90 DISTURBED
HYDROLOGIC CHARACTERISTICS - AMP CHAP. VII, TABLE 2

RAINFALL PRECIPITATION DEPTH:

10 YR. 24 HR. STORM: RAINFALL:

TIME	PRECIP. DEPTH
1 HR.	0.55"
2 HR.	0.75"
3 HR.	0.93"
6 HR.	1.40"
12 HR.	1.82"
24 HR.	2.25"

25 YR. 24 HR. STORM RAINFALL:

TIME	PRECIP. DEPTH
1 HR.	0.78"
2 HR.	0.99"
3 HR.	1.19"
6 HR.	1.69"
12 HR.	2.14"
24 HR.	2.60"

HIAWATHA MAIN YARD:

DISTURBED AREA: 30 UNDISTURBED AREA: 40 TOTAL: 70 ACRES

$CN = [30 \times 90 + 40 \times 70] \div 70 = 78.57 \approx 79$

$79 = 1000 \div (10 + S)$ $S = (1000 - 790) \div 79 = 2.66$ $0.25 = 0.53$ $0.85 = 2.13$

RUN-OFF VOLUME:

10 YR. 24 HR. EVENT:

$Q = (0.55 - 0.53)^2 \div (0.55 + 2.13) = 0.0001"$

$Q_2 = (0.75 - 0.53)^2 \div (0.75 + 2.13) = 0.017"$

$Q_3 = (0.93 - 0.53)^2 \div (0.93 + 2.13) = 0.052"$

$Q_6 = (1.4 - 0.53)^2 \div (1.4 + 2.13) = 0.214"$

$Q_{12} = (1.82 - 0.53)^2 \div (1.82 + 2.13) = 0.421"$

$Q_{24} = (2.25 - 0.53)^2 \div (2.25 + 2.13) = 0.675"$

25 YR. 24 HR. EVENT:

		DIFF
$Q_1 = (0.78 - 0.53)^2 \div (0.78 + 2.13)$	$= 0.02$	$0.0199"$
$Q_2 = (0.99 - 0.53)^2 \div (0.99 + 2.13)$	$= 0.067$	$0.05"$
$Q_3 = (1.19 - 0.53)^2 \div (1.19 + 2.13)$	$= 0.13$	$0.078"$
$Q_6 = (1.69 - 0.53)^2 \div (1.69 + 2.13)$	$= 0.352$	$0.138"$
$Q_{12} = (2.14 - 0.53)^2 \div (2.14 + 2.13)$	$= 0.607$	$0.186"$
$Q_{24} = (2.6 - 0.53)^2 \div (2.6 + 2.13)$	$= 0.906"$	$0.231"$

$L = [(4860^{0.8})(2.66 + 1)^{0.7}] \div 1900\sqrt{13.79} = 0.313 HR.$

$T_p = 1.17 \times 0.313 = 0.366 HR.$

$q_p = [484 \times (70 \div 640) \times 0.231] \div 0.366 = 33 CFS.$

FORM 689 REV. 2M 8-78

CALCULATION SHEET

U V Industries, Inc.

ENGINEERING DEPT., SALT LAKE CITY, UTAH

P. T. HINKAMTION SHEET NO. 2 OF 4

JOB RESPONSE TO DOGM COMMENTS - AMP

COMPUTATION FOR EMERGENCY SPILLWAY FLOW

COMPUTED BY JAMIE DATE FEB. 21, 1983

REF. DWG.

SLURRY POND 3 (A):

DISTURBED AREA = 8.3 ACRES UNDISTURBED AREA = 0 TOTAL = 8.3 ACRES

CN = 90

$Q_0 = 1000 \div (10+S)$ $S = (1000 - 90) \div 90 = 1.11$ 0.25×0.22 0.85×0.89

RUN-OFF DEPTH:

10 YR - 24 HR. STORM.	25 YR - 24 HR. STORM:	DIFF.
$Q_1 = (0.55 - 0.22)^2 \div (0.55 + 0.89) = 0.076"$	$Q_1 = (0.78 - 0.22)^2 \div (0.78 + 0.89) = 0.188"$	0.112"
$Q_2 = (0.75 - 0.22)^2 \div (0.75 + 0.89) = 0.171"$	$Q_2 = (0.99 - 0.22)^2 \div (0.99 + 0.89) = 0.315"$	0.144"
$Q_3 = (0.93 - 0.22)^2 \div (0.93 + 0.89) = 0.277"$	$Q_3 = (1.19 - 0.22)^2 \div (1.19 + 0.89) = 0.452"$	0.175"
$Q_6 = (1.4 - 0.22)^2 \div (1.4 + 0.89) = 0.608"$	$Q_6 = (1.69 - 0.22)^2 \div (1.69 + 0.89) = 0.837"$	0.229"
$Q_{12} = (1.82 - 0.22)^2 \div (1.82 + 0.89) = 0.921"$	$Q_{12} = (2.14 - 0.22)^2 \div (2.14 + 0.89) = 1.217"$	0.296"
$Q_{24} = (2.25 - 0.22)^2 \div (2.25 + 0.89) = 1.312"$	$Q_{24} = (2.6 - 0.22)^2 \div (2.6 + 0.89) = 1.623"$	0.311"

$L = [(1390)^{0.8}(1.11+1)^{0.7}] \div 1900\sqrt{20.01} = 0.065$ HR.

$T_p = 1.17 \times 0.065 = 0.076$ HR.

$q_p = 484 \times (8.3 \div 640) \times 0.311 \div 0.076 = 25.69$ CFS.

SLURRY POND 5-SOUTH:

DISTURBED AREA = 6.8 ACRES UNDISTURBED AREA = 0 TOTAL = 6.8 ACRES

CN = 90

$Q_0 = 1000 \div (10+S)$ $S = 1.11$ 0.25×0.22 0.85×0.89

RUN-OFF DEPTH: - SAME AS SLURRY POND 3 (A) = 0.311

$L = [(1210^{0.8})(1.11+1)^{0.7}] \div 1900\sqrt{27.52} = 0.0495$ HR.

$T_p = 1.17 \times 0.0495 = 0.058$ HR.

$q_p = 484 \times (6.8 \times 640) \times 0.311 \div 0.058 = 27.57$ CFS.

SLURRY POND 5-NORTH:

DISTURBED AREA = 12.1 ACRES UNDISTURBED AREA = 0 TOTAL = 12.1 ACRES

CN = 90 S = 1.11 0.25×0.22 0.85×0.89

RUN-OFF DEPTH = 0.311"

$L = (1910^{0.8})(2.11)^{0.7} \div 1900\sqrt{13.87} = 0.100$ HRS.

$T_p = 1.17 \times 0.100 = 0.117$ HRS.

$q_p = 484 \times (12.1 \div 640) \times 0.311 \div 0.117 = 24.32$ CFS.

FORM 689 REV. 2M 8-78

CALCULATION SHEET

U V Industries, Inc.

ENGINEERING DEPT., SALT LAKE CITY, UTAH

PLANT HIAWATHA SHEET NO. 3 OF 4

JOB RESPONSE TO DOGM COMMENTS - AI

COMPUTATION FOR EMERGENCY SPILLWAY FLOW

COMPUTED BY JANNE DATE FEB. 21, 198

REF. DWG.

HIAWATHA REFUSE PILE:

DISTURBED AREA = 4.4 UNDISTURBED AREA = 0 TOTAL = 4.4 ACRE

CN = 90 S = 1.11 0.25 = 0.22 0.85 = 0.89

RUN-OFF DEPTH = 0.311"

$L = (640^{0.8})(2.11)^{0.7} \div 1900\sqrt{10.16} = 0.049$ HRS.

$T_P = 1.17 \times 0.049 = 0.057$

$q_p = 484 \times (4.4 \div 640) \times 0.311 \div 0.057 = 18.07$ CFS.

UPPER COM STORAGE YARD:

DISTURBED AREA = 6.0 UNDISTURBED AREA = 8.0 TOTAL = 14.0 ACR

CN = 6.0 x 90 + 8.0 x 70 ÷ 14 = 78.6 = 79

$79 = 1000 \div (10 + S)$ $S = (1000 - 790) \div 79 = 2.66$ 0.25 = 0.53 0.85 = 2.13

RUN-OFF DEPTH:

		DIFF
$Q_1 = (0.55 - 0.53)^2 \div (0.55 + 2.13) = 0.0001"$	$Q_1 = (0.78 - 0.53)^2 \div (0.78 + 2.13) = 0.0215"$	0.0214"
$Q_2 = (0.75 - 0.53)^2 \div (0.75 + 2.13) = 0.017"$	$Q_2 = (0.99 - 0.53)^2 \div (0.99 + 2.13) = 0.068$	0.051
$Q_3 = (0.93 - 0.53)^2 \div (0.93 + 2.13) = 0.052"$	$Q_3 = (1.19 - 0.53)^2 \div (1.19 + 2.13) = 0.131$	0.079
$Q_6 = (1.4 - 0.53)^2 \div (1.4 + 2.13) = 0.214"$	$Q_6 = (1.69 - 0.53)^2 \div (1.69 + 2.13) = 0.352$	0.138
$Q_{12} = (1.82 - 0.53)^2 \div (1.82 + 2.13) = 0.421"$	$Q_{12} = (2.14 - 0.53)^2 \div (2.14 + 2.13) = 0.607"$	0.186"
$Q_{24} = (2.25 - 0.53)^2 \div (2.25 + 2.13) = 0.675"$	$Q_{24} = (2.6 - 0.53)^2 \div (2.6 + 2.13) = 0.906$	0.231"

$L = (1650^{0.8} \times 3.66^{0.7}) \div 1900\sqrt{19.515} = 0.11$ HRS.

$T_P = 1.17 \times 0.11 = 0.13$ HRS.

$q_p = 484 \times (14 \div 640) \times 0.231 \div 0.13 = 18.81$ CFS.

MIDDLEFORK YARD:

DISTURBED AREA = 4.8 ACRES UNDISTURBED AREA = 18.2 ACRES TOTAL = 23.0 AC

CN = (4.8 x 90 + 18.2 x 70) ÷ 23 = 74

$74 = 1000 \div (10 + S)$ $S = (1000 - 740) \div 74 = 3.51$ 0.25 = 0.70 0.85 = 2.81

RUN-OFF DEPTH:

		DIFF.
$Q_1 = (0.55 - 0.7)^2 \div (0.55 + 2.81) = 0.00"$	$Q_1 = (0.78 - 0.7)^2 \div (0.78 + 2.81) = 0.0018$	0.0018"
$Q_2 = (0.75 - 0.7)^2 \div (0.75 + 2.81) = 0.0007$	$Q_2 = (0.99 - 0.7)^2 \div (0.99 + 2.81) = 0.022$	0.0213"
$Q_3 = (0.93 - 0.7)^2 \div (0.93 + 2.81) = 0.014"$	$Q_3 = (1.19 - 0.7)^2 \div (1.19 + 2.81) = 0.06$	0.046"
$Q_6 = (1.4 - 0.7)^2 \div (1.4 + 2.81) = 0.116"$	$Q_6 = (1.69 - 0.7)^2 \div (1.69 + 2.81) = 0.218"$	0.102"
$Q_{12} = (1.82 - 0.7)^2 \div (1.82 + 2.81) = 0.271"$	$Q_{12} = (2.14 - 0.7)^2 \div (2.14 + 2.81) = 0.418"$	0.148"
$Q_{24} = (2.25 - 0.7)^2 \div (2.25 + 2.81) = 0.475"$	$Q_{24} = (2.6 - 0.7)^2 \div (2.6 + 2.81) = 0.667"$	0.192"

FORM 689 REV. 2M 8-78

CALCULATION SHEET

U V Industries, Inc.

ENGINEERING DEPT., SALT LAKE CITY, UTAH

PL HIAWATHA SHEET NO. 4 OF 4

JOB RESPONSE TO DOGM COMMENT - AMP

COMPUTATION FOR EMERGENCY SPILLWAY FLOW

COMPUTED BY JAIME DATE FEB. 22, 198

REF. DWG.

MIDDLE FORK YARD (CONT'D.):

$L = (1400^{0.8} \times 4.51^{0.7}) \div 1900\sqrt{44.71} = 0.074$ HR.

$T_P = 1.17 \times 0.074 = 0.088$

$q_p = 484 \times (23 \div 640) \times 0.192 \div 0.088 = 57.95$ CFS.

SOUTH FORK YARD:

DISTURBED AREA = 7.6 Ac UNDISTURBED AREA = 83.4 Ac TOTAL = 91 ACRES

$CN = (7.6 \times 90 + 83.4 \times 70) \div 91 = 71.67 \approx 72$

$72 = 1000 \div (10 + 5)$ $S = (1000 - 720) \div 72 = 3.89$ 0.23×0.78 0.85×3.11

RUN-OFF DEPTH:

		DIFF.
$Q_1 = (0.55 - 0.78)^2 \div (0.55 + 3.11) = 0$	$Q_1 = (0.78 - 0.78)^2 \div (0.78 + 3.11) = 0$	0.000"
$Q_2 = (0.75 - 0.78)^2 \div (0.75 + 3.11) = 0$	$Q_2 = (0.99 - 0.78)^2 \div (0.99 + 3.11) = 0.011"$	0.011"
$Q_3 = (0.93 - 0.78)^2 \div (0.93 + 3.11) = 0.0052"$	$Q_3 = (1.19 - 0.78)^2 \div (1.19 + 3.11) = 0.039"$	0.0334"
$Q_6 = (1.4 - 0.78)^2 \div (1.4 + 3.11) = 0.085"$	$Q_6 = (1.69 - 0.78)^2 \div (1.69 + 3.11) = 0.172"$	0.087"
$Q_{12} = (1.82 - 0.78)^2 \div (1.82 + 3.11) = 0.219"$	$Q_{12} = (2.14 - 0.78)^2 \div (2.14 + 3.11) = 0.352"$	0.133"
$Q_{24} = (2.25 - 0.78)^2 \div (2.25 + 3.11) = 0.403"$	$Q_{24} = (2.6 - 0.78)^2 \div (2.6 + 3.11) = 0.580"$	0.177"

$L = (3300^{0.8} \times 4.89^{0.7}) \div 1900\sqrt{60.545} = 0.134$ HR.

$T_P = 1.17 \times 0.134 = 0.157$ HR.

$q_p = 484 \times (91 \div 640) \times 0.177 \div 0.157 = 77.58$ CFS.

Regulation	
UMC	OSM
817.82	.

COAL PROCESSING WASTE BANKS: Site Inspection:

Site inspection of slurry ponds has been performed by MSHA - the Denver office - since 1976. Pond embankments are inspected for stability, seepage, construction methods and general overall condition. Coarse coal processing waste material is used to develop the pond embankments and fine coal processing waste is deposited in the ponds. This last material is sometimes reclaimed and sold as a product by United States Fuel Company. Inspection reports are usually not sent to United States Fuel Company by the inspecting government agency unless there is something that does not meet the requirements of the inspecting agency. Such "failures to comply" are corrected as soon as possible by United States Fuel Company. Copies of inspection reports are maintained - and will continue to be maintained - at the office of the Mining Engineer at the Hiawatha site. Should an inspection reveal a fault in one of these coal processing waste embankments, the State of Utah, Department of Oil, Gas and Mining (DOGM) will be notified promptly and United States Fuel Company will formulate a procedure for remedial action. If such action cannot be formulated, the DOGM will also be contacted.

Regulation
UMC OSM

817.100

CONTEMPORANEOUS RECLAMATION:

Presently, there are two areas which are being reclaimed on an interim basis. One is in the North Fork area where an intake ventilation shaft was constructed for the King 4 Mine which opens into Middle Fork Canyon. The disturbed area has been recovered with the topsoil which was removed and stored during construction and has been reseeded. Monitoring on revegetation success is underway.

The second area is in South Fork Canyon. There, an Interim Revegetation Plan was developed and approved by the Department of Oil, Gas and Mining (DOGM) prior to application of seeds, fertilizer, mulch, tackifier and overlaid with erosion control netting, where needed, in the area of the King VI Mine truck turn out, sedimentation pond and about one-half of the overland conveyor area.

United States Fuel Company will also reclaim, as completely as necessary, any area that is disturbed by surface operations as contemporaneously as practicable with mining operations.

FILE ACT/007/011
#3, #7

Response letter drafted 3-18-83

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

March 2, 1983

DWH
Copy letter + calcs. to file #3 + #7
attach map to original which goes to file #3.
TX. W.

Reclamation Hydrologist
Resources and Energy

14

RE: United States Fuel Co.
Catchment Basin, Abatement
for NOV #83-2-1-1.

Dear Mr. Hedberg:

On February 17, 1983 Division inspector Sandy Pruitt issued to United States Fuel Company NOV #83-2-1-1. This violation was issued after a monthly inspection. Runoff from a small disturbed area at the South Fork-Middle Fork road split was running into a road culvert that conveys drainage ultimately to Miller creek.

Remedial action requires that United States Fuel Company "design, construct and maintain adequate sediment control measures so that all disturbed area discharge complies with effluent limitations."

Being the area is rather small and it's use is not as rigorous as that of a mine yard for example, we propose to contain the runoff in a catchment basin. This proposal was recommended to us by the issuing officer, Sandy Pruitt.

As this area will be closely scrutinized in the future, United States Fuel Company wishes to implement a design that:

1) will effectively treat runoff from that area,
2) is adequate to contain the area's runoff,
3) meets with the Division's approval,
4) releases United States Fuel Company from being subject to future violations should discharge from the pond occur.

With these points in mind, perhaps you could review our design for runoff containment in this area. (See enclosed drawing #H-726). United States Fuel Company would like to receive a written approval on the design we are to implement for abatement of this violation

FILE ACT/007/011
#3, #7

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

March 2, 1983

Mr. D. Wayne Hedberg, Reclamation Hydrologist
State of Utah, Natural Resources and Energy
Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: United States Fuel Co.
Catchment Basin, Abatement
for NOV #83-2-1-1.

Dear Mr. Hedberg:

On February 17, 1983 Division inspector Sandy Pruitt issued to United States Fuel Company NOV #83-2-1-1. This violation was issued after a monthly inspection. Runoff from a small disturbed area at the South Fork-Middle Fork road split was running into a road culvert that conveys drainage ultimately to Miller creek.

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Being the area is rather small and it's use is not as rigorous as that of a mine yard for example, we propose to contain the runoff in a catchment basin. This proposal was recommended to us by the issuing officer, Sandy Pruitt.

As this area will be closely scrutinized in the future, United States Fuel Company wishes to implement a design that:

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3) meets with the Division's approval,
4) releases United States Fuel Company from being subject to future violations should discharge from the pond occur.

With these points in mind, perhaps you could review our design for runoff containment in this area. (See enclosed drawing #H-726). United States Fuel Company would like to receive a written approval on the design we are to implement for abatement of this violation

in order to avoid additional construction and more violations in the future. As we have about 60 days left to abate this violation and we wish not to begin construction until a satisfactory plan has been drawn up, time is quite critical.

Thank you very much for your assistance with this problem.

Sincerely,

Jean Semborski

Jean Semborski
Engineering Assistant

c.c E. Gardiner
R. Graeme
J. Lind

FORM CO. 689 1M 4-79

CALCULATION SHEET

UNITED STATES FUEL COMPANY
ENGINEERING DEPT., HIAWATHA, UTAH

COMPUTATION FOR PROPOSED CATCHMENT BASIN

REF. DRAWING H-726

INDEX NO. _____ SHEET NO. 1 of 2
PLACE _____
JOB _____
DATE 2-29-83
COMPUTED BY Abdalla M. Elias
CHECKED BY _____
REVISED _____

APPROXIMATE AREA OF THE DISTURBED LAND = 114,214 Sq. ft.
= 2.622 AC. ft.

ESTIMATED PRECIPITATION DEPTH AT HIAWATHA, UTAH
FOR 10-YEARS, 24-HOURS EVENT = 2.25 in.

ACTIVE STORAGE
FOR THE 10-YEARS, 24-HOURS EVENT
$= 114,214 \times \frac{2.25}{12}$ = 21,415 Cu. ft.
= 0.49 AC. ft.

SEDIMENT STORAGE
0.1 AC. FT. / AC. OF THE DISTURBED AREA
$= 0.1 \times 2.622$ = 0.26 AC. ft.

TOTAL STORAGE
$= 0.49 + 0.26$ = 0.75 AC. ft.

NOTE :
AREA OF THE DISTURBED LAND TAKEN OFF THE MAP WITH A PLANIMETER.

FORM CO. 689 1M 4-79

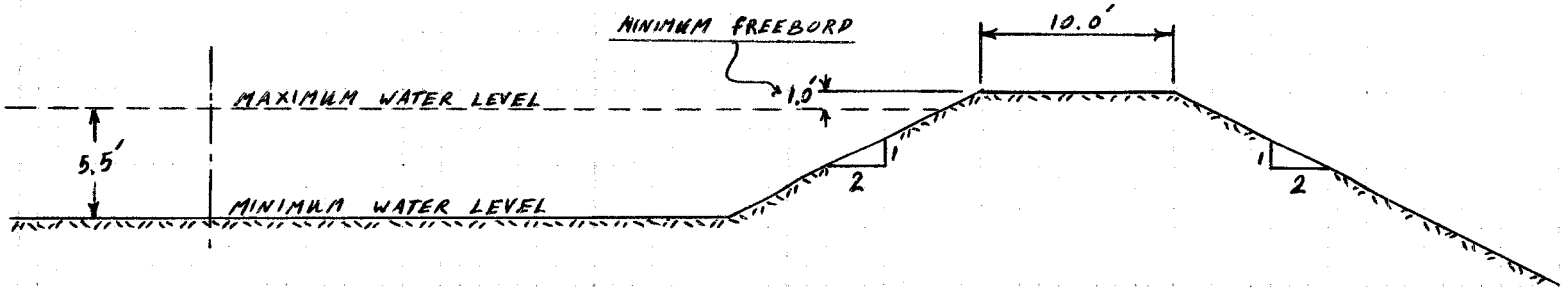
CALCULATION SHEET

UNITED STATES FUEL COMPANY
ENGINEERING DEPT., HIAWATHA, UTAH

COMPUTATION FOR PROPOSED CATCHMENT BASIN

REF. DRAWING H-726

INDEX NO. _____ SHEET NO. 2 of 2
PLACE _____
JOB _____
DATE 2-29-83
COMPUTED BY Abdalla M. Elias
CHECKED BY _____
REVISED _____



AREA OF THE MAXIMUM WATER LEVEL	= 7,750	Sq. ft.
AREA OF THE MINIMUM WATER LEVEL	= 4,253	Sq. ft.
DIPTH OF WATER	= 5.5	ft.
MINIMUM FREEBORD	= 1.0	ft.
MINIMUM TOP WIDTH OF THE EMBANKMENT $= \frac{5.5 + 35}{5} = 8.1$	= 10.0	ft.
SIDE SLOPES 1 V. : 2 H.		
ACTUAL CAPACITY OF THE BASIN $= \left(\frac{7,750 + 4,253}{2}\right) \times 5.5$	= 33,008	Sq. ft.
	= 0.76	AC. ft.

NOTE :

AREA OF THE MAXIMUM AND MINIMUM WATER LEVELS TAKEN OFF THE MAP WITH A PLANIMETER.

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

February 24, 1983

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

#3

RE: Division Policy for
Review of Modifications to
Permit Applications
ACT/007/011

Dear Ms. Semborski:

This letter is to advise you of the Division's policy regarding the review of modifications to mining and reclamation plans.

Section UMC 771.21 (b)(3) of the regulations states: "Any application for revision of a permit shall be filed with the Division 60 days before the date on which the permittee expects to revise underground coal mining activites (emphasis added)."

Also, Section UMC 788.12 (c) of the regulations states: "The Division shall approve or disapprove the complete application for revision, in accordance with the requirements of UMC 786, within 60 days of receipt by the Division of a complete application for revision (emphasis added). The Division Director may extend the 60 day time period if it is determined that due to weather conditions or other considerations it is physically impossible to perform the review of the complete application for a revision."

In order to allow the Division flexibility in scheduling and completely processing the backlog of existing permanent program permit applications, as well as a sizeable number of revisions to those mining and reclamation plans currently on file, it is necessary for the Division to adopt a policy of strict adherance to and utilization of the above regulations.

Upon receipt, permit modifications will be inserted into the monthly schedule for review to begin during the following month, or as soon as possible depending upon the time of submission, the current Division workload, and the nature and exigency of the revision.

All modifications and permit revisions must address the permanent program performance standards (section UMC 817) and become a part of the permanent program permit application. Approvals of modifications and revisions will reference previously approved permits.

I solicit your sincere cooperation in effectuation of this policy so that we both may succeed in accomplishing our overall objectives in a timely and orderly fashion. Thank you.

Should you have any questions relative to this correspondence, please don't hesitate to call me. Also, any suggestions you wish to offer are most welcome.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR
MINED LAND DEVELOPMENT

JWS/lm

cc: Allen Klein, OSM, Denver
Robert Hagen, OSM, Albuquerque
Ronald Daniels, DOGM
File No. 3 and 13

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

February 23, 1983

Mr. Charles Jahne
Sharon Steel Corporation
136 East South Temple
Salt Lake City, Utah 84111

#3

RE: Disvision Policy for
Review of Modifications
to Permit Applications
ACT/007/011

Dear Mr. Jahne:

This letter is to advise you of the Division's policy regarding the review of modifications to mining and reclamation plans.

Section UMC 771.21 (b)(3) of the regulations states: "Any application for revision of a permit shall be filed with the Division 60 days before the date on which the permittee expects to revise underground coal mining activites (emphasis added)."

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Sincerely,

JAMES W. SMITH, JR.
COORDINATOR
MINED LAND DEVELOPMENT

JWS/lm

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Ronald Daniels, DOGM