

FILE COPY

February 5, 1986

TO: Technical File

FROM: Rick P. Summers, Reclamation Hydrologist 

RE: Utah Fuel Co., Skyline Mine, Request to Increase Discharge of Mine Water, ACT 007/005, Carbon Co., Utah

Summary: In October, 1985 Utah Fuel requested and received approval to increase the height of the principle spillway at the sedimentation pond at the Skyline Minesite. At that time, the mine was operating with an approval to discharge 240,000 gpd of mine water into the sedimentation pond. The original submittal simply requested approval to increase the standpipe elevation 0.9 foot, and did not request an increase in the daily allowable mine water discharge. Approval was granted under the basis that an increase in standpipe elevation with no increase in pond inflow would result in a greater detention time and more effective treatment of the mine water and surface drainage.

On December 23, 1985, the Division recieved a letter from Utah Fuel requesting that the "...539,211 gallon average mine water discharge capacity figure be approved". Additionally, the letter read: " Upon the Division approval of the sediment pond capacity for mine water discharge, Utah Fuel will submit the appropriate request for a minor modification of our mine plan.". It is felt that the request for the minor modification should be formally made at this time so the submittal can be placed on our review schedule.

Recommendation: Respond to the operator with a letter requesting information outlined in the body of this memo. Basically, the Division needs a stage-volume curve and the method to be used to track the mine water discharged daily into the system to continue with the analysis. This information could be generated by the Division, but we currently do not have the computer capability available (i.e. digitizing).

Body: A technical analysis cannot be conducted without the following information:

- 1) A stage-volume curve of the current sedimentation pond must be submitted. Supporting calculations must be included. Elevations of decant devices, the principle spillway, and the required sediment storage volume must be clearly labeled on the curve.

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2) The means the company proposes to insure that the proposed daily mine water discharge volume is not exceeded. The Division feels that the current strip chart meter is the most efficient tracking method for all interested parties. Alternative methods will be acceptable, but they must account for the mine water discharge on a daily basis and include a method for recording the daily information.

cc: L. P. Braxton
Wayne Hedberg
Sue Linner
Dave Cline
Tom Wright

Glen A. Zumwalt
Vice President and
General Manager



**Utah Fuel
Company**

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13 December 1985

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DIVISION OF OIL
GAS & MINING

Mine file
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Subsidiary of
Coastal States
Energy Company

Mr. Lowell P. Braxton
Mined Land Reclamation Administration
Division of Oil Gas & Mining
355 West North Temple, Suite 350
Salt Lake City, Utah 84180-1203

Dear Mr. Braxton:

On Tuesday, December 3, 1985 Keith Zobell called your office and talked with Rick Summers concerning our need to increase the mine water discharge above 167 gallons/minute average. We anticipated starting the increased discharge flow rate at noon that day. In order to increase the discharge flow of our pump, it must be adjusted by a certified electrician. At the time of our request all of our electricians were attending a mandatory annual re-certification class and were expected to be done by noon of that day. However, as it turned out the re-certification class did not get over with until late in the afternoon, so we had to postpone increasing the discharge flow until beginning of day shift on Wednesday, December 4th.

The increased flow was started at 9:25 a.m. on December 4, 1985. The flow was increased to approximately 260 GPM average. Water samples for TSS, SS, and oil and grease were obtained at the beginning of the increased discharge. Water samples were taken again at 8:56 a.m. on December 6, 1985.

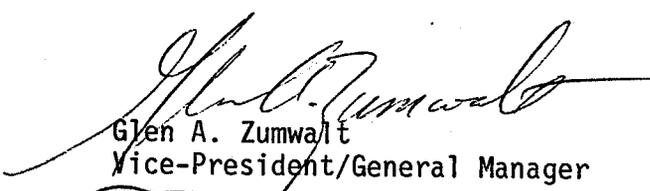
While the increased discharge was occurring, we started the project to increase the height of the decant structure in the sedimentation pond. This project was a result of our MRP amendment to increase the capacity of the sedimentation pond and was approved in your letter of October 3, 1985. The project to increase the capacity of the sedimentation pond was completed at 2:22 p.m. on December 5, 1985. Since the project increased the height of the decant structure, the mine water discharge overflow ceased, so a sample could not be taken. Keith Zobell called Rick Summers and discussed the ending sample with him. Rick Summers told him to take a sample when the overflow resumed. It was projected that this would occur some time on December 6, 1985. The final sample was taken at 10:50 a.m. on December 6, 1985. The total volume discharged from 9:25 a.m. on December 4, 1985 until 2:22 p.m. on December 5, 1985 was 448,600 gallons.

In our July 16, 1985 submittal for a minor modification to increase the capacity of the sedimentation pond, we used the basic figure of 32,588 cubic feet of storage available for mine water discharge. This figure came from the original design and survey data. The modification submitted was to increase the height of the decant structure 0.9 feet, which would increase the volume of the pond by 25,032 cubic feet. The total of the approved volume and this increased volume is 57,620 cubic feet. This volume converts to 430,998 gallons (57,630 x 7.48) of average mine water discharge capacity.

On November 7, 1985, Keith Zobell and Keith Welch met with you and Rick Summers and discussed the new map of the sedimentation pond that had been developed, using field measurements obtained this summer when the pond was cleaned. They also presented a certified sheet showing the calculations from this new survey which showed that there was in fact 47,055 cubic feet of capacity available for mine water discharge. Since the actual measured volume of the pond is larger than that previously certified, the available volume for mine water discharge is 72,087 cubic ft³ (47,055 + 25,032) or 539,211 gallons. As a result of our November 7, 1985 meeting we feel the calculations resulting from the pond survey reflect actual conditions and are requesting that the 539,211 gallon average mine water discharge capacity figure be approved.

Upon the Division approval of the sediment pond capacity for mine water discharge, Utah Fuel will submit the appropriate request for a minor modification of our Mine Plan.

Sincerely,


Glen A. Zumwalt
Vice-President/General Manager

GAZ:KZ:jm

check
w/
Tech
memo.

11/20/85

→ should be
submitted
now we
will coordinate
approval
for 7 copies
etc.