

### Document Information Form

Mine Number: C1041/002

File Name: Internal

To: DOGM

From:

Person N/A

Company N/A

Date Sent: MARCH 1, 1983

Explanation:

INSPECTION MEMO TO COAL FILE.

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cc:

File in:  
C/ 041 , 002 , Internal

- Refer to:
- Confidential
  - Shelf
  - Expandable

Date \_\_\_\_\_ For additional information

March 1, 1983

Inspection Memo to  
Coal File:

RE: Southern Utah Fuel Company  
Convulsion Canyon Mine  
ACT/041/002  
Folder No. 7  
Sevier County, Utah

On February 23 and 24, 1983 DOGM Field Specialist Ken Wyatt conducted a partial inspection at the Convulsion Canyon Mine facilities. Mike Davis of SUFCO accompanied this inspector.

At the time of this inspection the temperature was approximately 50° F. Snowmelt was creating runoff throughout the area. The sediment pond was discharging at about 40 - 60 gallons per minute. A water sample was collected of this discharge and is currently being analyzed by the Utah State Health Laboratories. Due to the appearance of the sample, it is probable that a violation of effluent limitations may be warranted. Results of these analyses should be forthcoming in the near future.

Due to the apparent poor water quality, the high discharge rate and concerns recently brought forth by DOGM hydrologists the design sizing of this pond is being scrutinized.

Since TDS problems have been reoccurring in the sediment pond discharge, a conductivity meter was brought on this inspection in order to measure the conductance of different runoff areas and try to isolate possible TDS sources. Since no thermometer was available to do temperature corrections it was assumed that runoff temperatures were constant. With this assumption in mind, the conductances obtained would be relative to one another. The results of this preliminary investigation are depicted on attachment #1. On this attachment, flow direction is indicated by arrows with numbers corresponding to conductance measuring points.

Upon closer examination of attachment #1, it appears that dissolved ion concentrations increase as water passes through the sediment pond. Possibly some TDS source lies in the sediment pond. Another increase, although minimal, was observed between the influent and effluent of the pond on January 11, 1983 (see memo to coal file dated January 21, 1983). A second increase in dissolved ions occurs between point 7 and point 6, this is the area of the truck loading and truck turnaround. The area adjacent to the salt stockpile shows significant increases from above the salt pile (point 11) to below the salt pile (point 9). A puddle directly adjacent to the salt pile had a conductance of 85,000 (point 12). This water tasted very salty. Finally an increase was observed along the road to the upper pad (from point 14 to point 13) this increase could possibly be attributed to salt applications on this road for snow removal purposes.

File in:

- Confidential
- Shelf
- Expandable

Refer to Record No. 0003 Date 3-1-83

In C/ 041, 002, Internal

For additional information

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Overall this inspection reveals areas where potential TDS sources lie. Further investigations need to be conducted using a thermometer for temperature correction at the various locations.

One problem was encountered along the sediment pond access road. Normally, disturbed area runoff from the non-coal waste area and the side slopes of the mine road adjacent to the guard shack drain onto the sediment pond access road. The drainage on the access road channels water to the sediment pond via a rip-rapped channel along the road's cut side.

Water was noticed flowing quite readily at the top of the access road but none was reaching the sediment pond. Closer observation revealed water piping down into the ground approximately 20 feet below the point where the non-coal waste area water is culverted down onto the sediment pond access road. Upon further investigation water was observed flowing out over the cliff face, therefore bypassing the sediment pond. The area of the violation is shown on attachment #1 marked by X. NOV N83-7-2-1 was issued as follows for this violation.

Notice of Violation N83-7-2-1, violation #1 of 1

Nature of the Violation

Failure to pass all surface drainage from the disturbed areas through a sediment control facility prior to leaving the permit area. Failure to prevent to the extent possible additional contributions of sediment to streamflow or runoff outside the permit area.

Provisions of the Regulations, Act or Permit Violated

UCA 40-10-18 (2)(i)(ii), UMC 817.42 (a)(1), UMC 817.45.

Portion of the Operation to Which Notice Applies

Access road to the sediment pond where disturbed area runoff was undercutting the access road therefore bypassing sediment control facilities.

Remedial Action Required

Channel all disturbed area runoff into the sediment pond. Prevent further undercutting of access road.

Time for Abatement

One week, no later than March 3, 1983.

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This inspector returned on February 24, 1983 at about 10:30 a.m. At that time a channel was constructed to bypass the disturbed area runoff around the point where piping was occurring. SUFCO plans to dig the piped out area up and compact it to prevent further piping action. This cannot be conducted properly until weather and ground conditions permit (late spring 1983). This proposal was discussed with the operator and it was agreed upon that the violation could be terminated as long as the bypass channel around the piped out section is maintained and further piping action is prevented until the problem can be corrected properly.

No other violations are warranted at this time.

KEN WYATT *KW*  
FIELD SPECIALIST .

KW/lm

cc: Tom Ehmett, OSM  
Kerry Frame, SUFCO  
Joe Helfrich, DOGM

Statistics:

See Emery Deep Mine memo, dated February 28, 1983.  
Grant: A & E

attachment

# Relative Conductances ( $\mu\text{mhos/cm}$ )

1. Sed Pond Discharge: 1900

2. Sed Pond Influent: 1300

3. Non Coal Waste Drainage: 650

4. Road Runoff 660:

5. Sed Trap Influent: 1290

6. Coal Loading Drainage: 2300

7. Scale House Drainage: 1550

8. Culvert Inlet: 1850

9. Below Salt Pile: 2500

10. At Salt Pile: 1380

11. Above Salt: 650

12. Puddle: 85,000

13. Drainage: 100

14. Pad Drainage: 500

