



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

June 8, 1994

Mr. Robert M. Burnham, President
Sunnyside Coal Company
1113 Spruce Street
Boulder, CO 80302

Re: Conditional Approval of Removal of Water Canyon Refuse Pile from the Disturbed Area in the Sunnyside Mine Permit Area, Sunnyside Mine, Sunnyside Coal Company, ACT/007/007-92D, Folder #3, Carbon County, Utah

Dear Mr. Burnham:

Sunnyside Coal Company resubmitted a permit change to remove the Water Canyon Refuse Pile from the disturbed area of the permit area on January 25, 1993, ACT/007/007-92D. This permit change to remove the Water Canyon refuse pile from the Mining and Reclamation Plan is characterized as a permit amendment. Evidence has been submitted by Sunnyside Coal Company supporting the fact that **no activities** defined under the Utah Coal Regulatory Program as "coal mining and reclamation operations" have occurred on the Water Canyon refuse pile subsequent to SMCRA, i.e. August 3, 1977.

Therefore, the Division approves the deletion of the Water Canyon Refuse Pile from the disturbed area of the Sunnyside Mine permit area in concept, with the condition that Plate 5-20 be resubmitted with two-foot contours of the Water Canyon area and the disturbed area boundary be delineated exactly. Please submit three copies of the revised Plate 5-20 by July 5, 1994.

Sincerely,


Lowell P. Braxton
Associate Director, Mining

cc: Pamela Grubaugh-Littig
Mary Ann Wright





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March 22, 1994

Robert H. Hagen, Director
Albuquerque Field Office
Office of Surface Mining
Reclamation and Enforcement
505 Marquette N.W., Suite 1200
Albuquerque, New Mexico 87102

Re: Water Canyon Refuse Pile, Sunnyside Mine, ACT/007/007, Folder #2, Carbon County, Utah

Dear Mr. Hagen:

Per our conversation in January of this year, we decided that the Division would review the status of the Water Canyon permit revision request and the acceptance of the site onto the AMLIS. To that end, I am enclosing a Division finding regarding this site which provides the rationale and chronology for omitting this area from the Sunnyside permit area.

Also, as we discussed, we would be happy to tour the site with a representative from your staff. While on site, we could also review some of the evidence that has been used to conclude that this site has not been disturbed since well before the passage of SMCRA.

In the interest of program management, we would like to suggest that the opportune timing for a site visit would be in late April/early May. Please let me know what date would be convenient.

Sincerely,

Lowell P. Braxton
Associate Director, Mining

vb

Enclosure

cc: P. Grubaugh-Littig
M. Wright

Bcc PFO



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March 22, 1994

TO: Mine File and Abandoned Mine Reclamation File

FROM: Lowell P. Braxton, Associate Director, Mining *LB*

RE: Finding of Regulatory Discretion, Water Canyon Refuse Pile, Sunnyside Mine, ACT/007/007, Folder #2, Carbon County, Utah

Background

The coal refuse pile located in Water Canyon was included in the Sunnyside Mine permit area when the original application for a mining and reclamation plan (MRP) was submitted to the Division of Oil, Gas and Mining. The Division's Coal Regulatory Program and Abandoned Mine Reclamation Program (AMR) discussed the necessity of keeping this site under the regulatory program in 1989, and concluded that the refuse pile should be kept under the domain of the regulatory program, although the basis for this conclusion did not include a review of historic mine activity at the Water Canyon refuse pile.

In 1992, the Division issued Notice of Violation (NOV) N92-32-4-1 to Sunnyside Coal Company, the operator of the Sunnyside Mine, for failure to extinguish waste fires in accordance with the plan approved by the Division and MSHA. At the same time, the Division issued NOV N92-32-5-1 for "failure to pass disturbed area drainage through a siltation control treatment structure(s)" on the Water Canyon refuse pile. Both violations were terminated.

In January of 1993, Sunnyside Coal submitted an amendment to its mining and reclamation plan to remove the coal refuse pile from the permit area. Members of the Division's AMR and Coal Regulatory staffs visited the Water Canyon site to determine viability of excluding the refuse pile from the mining and reclamation plan.

In October 1993, Henry Sauer, Jess Kelley, Lowell Braxton, Mary Ann Wright, and Luci Malin evaluated historic mining records presented by Peter Hess and Gary Gray that substantiated that no refuse had been placed upon the Water Canyon refuse pile subsequent to approximately 1953. This group concurred with excising the refuse pile from the Sunnyside MRP, and proposed a field criteria for determining the boundary between pre-SMCRA and permitted disturbances.



Division records substantiate that there has been no post-SMCRA mining activity beneath the refuse pile that could result in future subsidence resulting from regulated mining activities.

On October 27, 1993, the Division's (AMR) Program submitted data to the Office of Surface Mining (OSM) to include the refuse pile in the AMR Program. This data indicated the refuse pile was thought to have been part of a post-law permit until the October 1993 site visit documented 1953 as the most recent placement of refuse. The materials submitted to OSM substantiated the location in Water Canyon, a side drainage of Fan Canyon. The pile has surface hot spots, with smoking and venting gases. Charred, barren areas on the surface indicate constant and recent surface burning. The refuse pile is accessible via the East Carbon City Dump, and through the Sunnyside Mine access system. The area near the refuse pile is used by hunters, off-road vehicle enthusiasts, and other recreationists. The evidence of burning supports the contention that the refuse pile is a public safety hazard. Similar situations in Utah have resulted in personal injury when the surface crust above a burn has collapsed after being walked over.

On November 5, 1993, the OSM rejected the AMR proposal, citing that it was inappropriate to include lands that had been subject to notice of violation under Title V in a Title IV reclamation proposal.

In January 1994, the oversight meeting between the Division and OSM's Albuquerque Field Office (AFO) agreed to visit the basis for OSM's denial of Title IV reclamation funding based upon presentation of information by the Division to the AFO.

A chronology and supporting information are attached to support this background and the following findings and conclusions.

Finding

Evidence submitted by Sunnyside Coal in support of amending the MRP to remove the Water Canyon refuse pile supports a contention that no activities defined under the Utah Coal Regulatory Program as "coal mining and reclamation operations" have occurred on the Water Canyon refuse pile subsequent to SMCRA. This history is summarized in the Division's PAD, dated October 25, 1993, and is supported by observations of Lowell Braxton, Jesse Kelley, Henry Sauer, Mary Ann Wright and Lucia Malin's September 22, 1993, field inspection.

Page 3
Water Canyon Refuse Pile
ACT/007/007
March 22, 1994

The Division acted prudently in citing violations of the Utah Coal Regulatory Program within the boundary of the Sunnyside Mine permit area.

Sunnyside Coal's failure to contest the fact of violations N92-32-4-1 and N92-32-5-1 is not itself evidence that post-SMCRA activity occurred on the Water Canyon refuse pile. Suppression of coal refuse fires is not an activity falling within the definition of coal mining and reclamation operations under the Utah Coal Regulatory Program.

Conclusions

For reasons not fully documented in the MRP, Sunnyside Coal Company included the Water Canyon refuse pile in its permit application package. Under Utah Admin. R. 645-303-220 an operator may apply for a permit change. Permit changes not characterized as "significant permit revisions" shall be characterized and processed as permit amendments.

The Water Canyon refuse pile was not disturbed by post-SMCRA activity. Should Sunnyside Coal opt not to utilize the Water Canyon refuse pile for post-SMCRA coal mining and reclamation operations, there is no programmatic requirement for Sunnyside to permit the refuse pile.

Given an appropriately submitted application for permit change, the Division may approve a change to the Sunnyside Mine MRP to exclude the Water Canyon refuse pile. Unless specific data direct otherwise, a permit change to remove the Water Canyon refuse pile from the MRP would be characterized as a permit amendment.

vb
Attachments
cc: P. Grubaugh-Littig
M. Wright
Price Field Office
WATERCYN



State of Utah
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February 11, 1994

TO: Lowell P. Braxton, Associate Director, Mining
FROM: Pamela Grubaugh-Littig, Permit Supervisor *pgl*
Re: Chronology of Water Canyon, Sunnyside Coal Company,
Sunnyside Mine, ACT/007/007, Folder #2, Carbon County,
Utah

Pursuant to your request, I have compiled the chronology associated with the deletion of Water Canyon from Title V jurisdiction and transferred to Title IV. I have attached the appropriate documents related to the permitting actions.

February 13, 1989

Memo to Water Canyon Site File From Chris Rohrer.

Jim Fricke notified AML of a pre-Act coal refuse pile in Water Canyon located inside the Sunnyside Mine permit area. Plate III-23 in Sunnyside Mine plan shows all disturbance in both forks of Water Canyon as being post-law disturbance. Declared ineligible for AMR Funding because it is active and there is a "continuing reclamation responsibility". It is concluded that the Water Canyon site will no longer be considered for reclamation as part of the Book Cliffs Project.

March 13, 1992

OSM Oversight inspection.

As a result of this inspection, violation #N92-32-4-1 was issued on March 16, 1992 for "failure to extinguish coal mine waste fires in accordance with the plan approved by the Division and MSHA" on the Coarse Refuse Pile and Water Canyon Refuse Pile. This violation was terminated on September 21, 1992.

Violation #N92-32-5-1 was also issued on March 16, 1992 for "failure to pass disturbed area drainage through a siltation control treatment structure(s)" on the Water Canyon Refuse Pile. This violation was terminated on May 12, 1992 because "the



Chronology of Water Canyon
Sunnyside Coal Company
ACT/007/007
Page 2

operator has submitted plans and designs for sediment control around the Water Canyon Refuse Pile. The operator must implement the approved abatement measures no later than 15 days after Division approval of amendment ACT/007/007-92D". (NOTE: This amendment was denied August 7, 1992.)

April 28, 1992

Sunnyside Coal Company submits an amendment (ACT/007/007-92D) for sediment control on the Water Canyon Refuse Pile.

August 7, 1992

Amendment ACT/007/007-92D is denied.

January 25, 1993

Amendment ACT/007/007-92D, is resubmitted for the disturbed area in Water Canyon. The permittee proposes to redefine the disturbed area to delete the refuse pile due to its pre-law nature. The proposal includes the history of the Water Canyon Refuse and divides the activity into four periods:

- 1) Early 1920's through 1952, refuse pile was actually created,
- 2) 1952 through August 1973, all material from the No.2 Mine was transported by belt to cars which were hoisted from the mine by the Fan Canyon hoist--cars were transported underground to the preparation plant, emerging from one portal and entering the opposite portal, crossing the trestle across Water Canyon,
- 3) September 1973 to 1989, no refuse was removed through the Water Canyon portals, and
- 4) June to October 1985, two small areas of the No. 2 Mine were being worked, but no refuse material was removed through the Water Canyon portals.

Permittee maintains that the disturbed area markers have been erroneously placed to include the refuse pile.

April 29, 1993

Memo to Pamela Grubaugh-Littig from Jesse Kelley.

This memo recommends that the permittee be allowed to redefine the disturbed area boundary in Water Canyon.

Chronology of Water Canyon
Sunnyside Coal Company
ACT/007/007
Page 3

May 17, 1993

Memo to Lowell Braxton from Pamela Grubaugh-Littig.

This memo requests a signoff from AML to take responsibility for the pre-law pile before Title V releases the liability.

May 25, 1993

Luci Malin and Henry Sauer toured the Water Canyon Area.

July 28, 1993

Priscilla Burton and Luci Malin toured the Water Canyon Area.

September 22, 1993

Henry Sauer, Jess Kelley, Lowell Braxton, Mary Ann Wright, Luci Malin, Gary Gray and Peter Hess discussed the eligibility of the refuse pile for AML consideration on site. It was decided that the road alignment, if the road continued in a straight line until the cliff face was intercepted, would be the line between Title IV and Title V. The area to the south of that line had not been used for coal mining activities since approximately 1953, except for the placement of soil material over burning coal spoil to control the fire. The area north of the road is Title V.

cc: Mary Ann Wright



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cc: Mary Ann Wright

AMRP

ε : Site Water Canyon Site File

Carbon County

AMR/007/031

February 13, 1989

TO: Water Canyon Site File
AMR/007/031

Book Cliffs Project Legal File
AMR/007/913/L

FROM: Chris Rohrer *CR*
Reclamation Specialist

RE: Active Status of Site

Jim Fricke told me last October 28 of a pre-Act coal refuse pile in Water Canyon (T15S, R14E, Sec 5 SE¼ or Sec 8 NW¼) inside the Kaiser Sunnyside permit area. On January 31 I telephoned Jim, who described the pile as partially revegetated, eroding, and "pretty good sized." He had made Kaiser do some drainage control work to prevent erosion. On February 6, still unclear on the status of the pile after looking through the Kaiser MRP, I asked John Whitehead what he knew. John said he would assign someone to investigate pile.

Pam Grubaugh-Littig today showed me what she found out about the status of the Water Canyon pile. The pile is inside the Kaiser Mine permit area. Although the pile is not specifically identified on the map, Plate III-23 of the Kaiser MRP (Current vegetation and pre-law disturbed areas) shows all disturbance in both forks of Water Canyon as being post-law disturbance. Reclamation of the refuse pile (burial with imported soil) is included in Kaiser's bond estimate for the Water Canyon area, along with portal closures. From this it appears that the area is ineligible for Abandoned Mine Reclamation Funds as it is active and there is a "continuing reclamation responsibility," namely the Kaiser Mine under SMCRA. The Water Canyon site will no longer be considered for reclamation as part of the Book Cliffs Project.

jcr
AM68/5

United States Department of the Interior
Office of Surface Mining
Mine Site Evaluation Inspection Report

For Office Use Only

1a	1b	1c
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Y	Batch	Report

2. Name of Permittee

SUNNYSIDE COAL CO

3. Street Address

PO BOX 99

4. City

SUNNYSIDE

5. State

UT

6. Zip Code

84539

7. Area Code

801

8. Telephone Number

800-4421

9. MSHA Number

42-00094-

10. Date of Inspection (Y M D D)

9 20 3 13

11. State Permit Number

ACT/007/007

12. Name of Mine

SUNNYSIDE

13. County Code

007

14. State Code

UT

15. Strata

16. State Area Office

17. OSM Field Office No.

02

18. OSM Area Office No.

19. OSM Sample No.

20. Type of Inspection (Code)

P

21. Joint Inspection Yes No

X

22. Inspector's ID No.

370

23. Status

A 01

Type of Permit

B A

Mine Status (Code)

C 20

Type of Facility (Code)

D 14475.0

Number of Permitted Acres

E 00310.0

Number of Disturbed Acres

24. Type of Activity (check applicable boxes).

A Steep Slope

E Anthracite

B Mountain Top Removal

F Federal Lands

C Prime Farmlands

G Indian Lands

D Alluvial Valley Floors

H Other

25. Performance Standards (Codes)

Instructions: Indicate compliance code. For any standard marked 2 or 3, provide narrative to support this determination.
Standards That Limit the Effects to the Permit Area. Standards That Assure Reclamation Quality and Timeliness

- A Distance Prohibitions
- B Mining Within Permit Boundaries
- C 1 Signs and Markers
- D 1 Sediment Control Measures
- E Design and Certification Requirements—Sediment Control
- F 1 Effluent Limits
- G 1 Surface Water Monitoring
- H 1 Ground Water Monitoring
- I Blasting Procedures
- J Haul/Access Road Design and Maintenance
- K 2 Refuse Impoundments
- L Other: Specify _____

- M Topsoil Handling
- N Backfilling and Grading
- O Following Reclamation Schedule
- P Revegetation Requirements
- Q Disposal of Excess Spoil
- R Handling of Acid or Toxic Materials
- S Highwall Elimination
- T Downslope Spoil Disposal
- U Post Mining Land Use
- V Cessation of Operations: Temporary
- W 2 Other Concurrentaneous Recl.

United States Department of the Interior Office of Surface Mining Mine Site Evaluation Inspection Report

26. State Permit Number

27. Date of Inspection
(Y Y M M D D)

ACT/007/007

920313

28. Yes No Do mining and reclamation activities on the site comply with the plans in the permit?
If no, provide narrative to support this determination.

29. Indicate number of complete and partial inspections conducted by the State to date for this annual review period:

29a. Number of Completes

29b. Number of Partials

30. Indicate number of complete and partial inspections required by the State during this annual review period:

30a. Number of Completes

30b. Number of Partials

31. Has inspection frequency been met?

31a. Yes No Completes

31b. Yes No Partials

32. FEDERAL ENFORCEMENT INFORMATION. [Enter violation number. Check appropriate box(es)]

Ten-Day Notice No.	Notice of Violation No.	Cessation Order No.	Violation Codes
92-02-370-001			
A <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Authorizations to Operate
B <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Signs and Markers
C <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Backfilling and Grading
D <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highwall Elimination
E <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rills and Gullies
F <input checked="" type="checkbox"/> 1 of 2	<input type="checkbox"/>	<input type="checkbox"/>	Improper Fills
G <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Topsoil Handling
H <input checked="" type="checkbox"/> 2 of 2	<input type="checkbox"/>	<input type="checkbox"/>	Sediment Ponds
I <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Effluent Limits
J <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water Monitoring
K <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Buffer Zones
L <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roads
M <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dams
N <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Blasting
O <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Revegetation
P <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Spoil on the Downslope
Q <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mining Without Permit
R <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Exceeding Permit Limits
S <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Distance Prohibitions
T <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Toxic Materials
U <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other Violations

33. Name of Authorized Representative (print or type)

MITCHELL S. ROLLINGS

Signature of Authorized Representative

Signature of Reviewing Official

Date

3/17/92

Date

3/20/92

34. Administrative Information

- a 08.00 Permit Review (Hours)
- b 00.00 Travel Time (Hours)
- c 22.00 Inspection Time (Hours)
- d 08.00 Report Writing Time (Hours)

Sunnyside Coal Co. (SCC)
P.O. Box 99
Sunnyside, UT 84539
801-888-4421

Sunnyside Mine
ACT/007/007

Partial inspection
3/13/92

Mitchell S. Rollings, 370, OSM
Henry Sauer, DOGM
Karl Houskeeper, SCC
Gary Gray, SCC

This was a partial oversight inspection. The number and nature of the violations observed limited the time available for an inspection and as a result SCC and DOGM estimated that we only saw about ten percent of the mine. The areas that we inspected or partially inspected were the Coarse Refuse Pile (CRP), the slurry impoundments, Water Canyon portal area (reclaimed), and the Fan Canyon portal area.

ENFORCEMENT ACTIONS

DOGM issued four Notice of Violations (NOV). NOV 92-32-2-1 cites R645-301-553.100 and 553.130. This NOV was issued to address a sinkhole that had formed in Water Canyon. The portals on the SE side of the disturbed area in this canyon ran parallel to the canyon bottom and were only slightly offset to the S from the intermittent channel. N and E of the portals were stockpiles of soil and equipment from development work. The portals have been sealed, backfilled, and reclaimed. A sinkhole has formed in the bottom of the canyon in the intermittent channel. We could see down about ten feet and could see a roof bolt and a piece of twisted track. Our initial impressions were that the entry had subsided inby the portal seal. The next day, one of the SCC personnel climbed down into the hole. He said that he could not see the coal seam and it appeared that the water coming into the hole was running to the W under the stream channel. Because of this, we were unsure whether or not the water was actually entering the mine. SCC believes that there was a void in the material stockpiled adjacent to the portals and this is what has subsided. In any event, SCC will excavate to the extent of the void to see exactly what is happening. Depending on what is encountered, SCC will backfill the void area if it was just in the stockpiled material or will reseal the entry inby the void and then backfill. If the entry has subsided and the water is entering the mine, SCC will notify MSHA.

NOV 92-32-3-1 cites R645-301-742.113 for erosion on the CRP, Fan Canyon and the access road, and the face of the East Slurry Cell. The CRP had two deep gullies that were in violation. One was from the lowest terrace elevation to the road at the toe of the CRP and the other was on the S side of the third terrace from the bottom. SCC will regrade and control the runoff. The S face of the East Slurry Cell had a number of rills that were in violation and had not been revegetated. SCC will probably regrade, cover the refuse material that the embankment is made from with borrow area material, and revegetate the area. Fan Canyon and the access road had three gullies that were in violation. Two extended down from the substation pad to the access road. These had resulted from a breeched berm. The third was from the access road to the canyon bottom, slightly down the access road from the two mentioned above. We felt the best way to eliminate the problems in this canyon was to reclaim the disturbed area. The portals are sealed and the useable equipment taken off.

NOV 92-32-4-1 cites R645-301-528.323 for coal mine waste fires in both the CRP and the Water Canyon refuse pile. We did not walk around the fires very much or too closely because of the dangers these can create. There is documentation that the CRP has had fire problems as far back as 1976, and OSM issued a TDN for fire in the CRP in February 1991. The fire stretched across the face of the CRP at about the third terrace elevation with smoke also evident above and below this terrace. A plan generated to address MSHA concerns about the fires in 1976, calls for the pile to be covered with two feet of non-combustible material. The Water Canyon refuse pile was on fire in a couple of locations from about the middle of the pile to the east end. This was the first time that the DOGM inspector saw smoke. He had previously only smelled the fire. This fire could be troublesome since refuse material may have been stacked against the mineable coal seam. The abatement measures are to extinguish the fires and eliminate the conditions that create a fire hazard.

NOV 92-32-5-1 cites R645-301-742 and 752. This violation addresses the lack of siltation controls for the Water Canyon refuse piles. The portal area disturbance in this canyon drains to an approved ASCA (a silt fence) but the refuse pile does not have any drainage controls.

I originally wrote a three part TDN to deliver to DOGM-SLC, but Mr. Lowell Braxton requested that I not deliver it to him because he would like DOGM to address the coal waste fires that were included in the TDN. DOGM faxed copies of the last two NOV's referenced above that addressed two parts of the original TDN. When I met Mr. Braxton I indicated that another TDN for slurry impoundment designs may also be issued pending discussions with AFO. As such, a two part TDN is now being issued. The contemporaneous reclamation of the CRP is the outstanding issue from the initial TDN that was not delivered, and the slurry impoundment designs is being issued after my discussions with AFO.

TDN 92-02-370-001 TV2 is issued with this report for; 1 of 2 - Failure to contemporaneously reclaim the coarse refuse pile. This applies from the level of the second terrace (counted from the bottom of the pile up) to the level of the fifth terrace. The NOV cites R645-300-143, R645-301-352, and R645-301-553.252. The CRP has five completed lifts. The sixth is the uppermost and still considered active. For purposes of this report, a lift is the area between terraces, approximately fifty vertical feet. Lift is not used to indicate the two foot compacted fill. The two lower lifts were reclaimed during the pre-law period; though some erosion problems and potential vegetation problems exist. The other three completed lifts are post-law and have not had four feet of non-toxic and non-combustible material put over them. The material to do this will come from borrow pits approved by DOGM. There are both environmental and safety concerns that have arisen largely because the pile has not been covered. Fires have been a problem in the CRP at least since 1976. There is potential for burned-out voids to exist after a sixteen year history of fire, that we know of, in the face of the CRP. A seep below the toe of the CRP has a record of some Fe exceedances and there is a typical orange stain from Fe precipitate. A spring close to this seep but on the other side of the canyon does not have the Fe stain. In-mine analyses show strata with a potential for acid-forming materials and for selenium toxicity. The CRP itself has not been analyzed for acid or toxic-forming materials.

Environmental Power Corporation (EPC) plans to re-mine the refuse pile for their cogeneration plant that is under construction nearby. However, SCC is still using the CRP, it's own permit does not address the cogeneration plant and the effects of the plant on the SCC permitted area, and EPC has not even submitted an application to re-mine the refuse pile yet. Given these circumstances, I told DOGM and SCC that I could not even consider what may or may not occur with EPC.

2 of 2 - Failure to properly design and construct impounding structures constructed of coal mine waste. The TDN cites R645-301-743.100, 746.311, 746.312, and 746.340. The only approved designs that SCC could provide were a geotechnical investigation and compaction studies. There are not any approved designs with regard to containment, spillways, dewatering methods, etc. SCC and DOGM indicated that some of this information, but not all, has been submitted for a permit review that is in progress. This TDN is a combination of a permit defect and performance standards violations.

GENERAL OBSERVATIONS

The operator fixed two problems during the inspection. The first was a silt fence at the old CRT pond location and the other was a silt fence at the Fan Canyon portal area. Both were reestablished.

Water Canyon has been partially reclaimed. The portals and the majority of the highwalls have all been backfilled. SCC is scheduled to go back in there this summer and finish. The remaining walls will be reclaimed and a stream channel reestablished. A tributary drainage to Water Canyon had started eroding through some reclamation and SCC will establish a protected channel through there this summer.

All ponds are inspected and certified quarterly. The CRP is also certified quarterly. The roads are certified.

There were a couple of other conditions that show a potential for being in violation. DOGM should investigate these to determine if they are in compliance or not.

The old road to the CRP was constructed during the pre-law period and is made out of refuse material. The embankments of this road are black and essentially the only vegetation are scarce annuals. I suspect that this material may be acid- or toxic-forming since the only volunteer vegetation after all these years are annuals. Some of this material has washed down onto the undisturbed area.

The approved bond calculations reflect 287 disturbed acres. There are about 310 acres currently disturbed. SCC believed the difference is because the permanent roads are not counted in the bond calculations since they will not have to be reclaimed.

A bond calculation approved by DOGM in 11/89, requires \$2,708,024 in bond. The permit issued on 1/20/91, states that SCC has posted a bond for \$2,639,088. This indicates a shortfall of \$68,936. The permit states that the bond is in the form of a First Deed of Trust for Undisturbed Lands and Water Rights. However, SCC showed me a CD for about \$78,000 that DOGM is listed on. SCC also showed me an assessment for the water rights that showed their value at around \$6,000,000. From the information provided, I could not tell if there was adequate bond posted since the permit states \$2,639,088 is posted, but there are documents that indicate more assets have been devoted to DOGM.

The categories marked as in compliance on the MSEIR are only for those areas observed, not for the entire mine.

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT
RANDOM SAMPLE MEIR SUPPLEMENT

1. Permittee Sunnyside Coal Co. 5. Days since Last State Complete Inspection (LSCI) 49 2/27/92
 2. Permit Number ACT/007/007 6. Block 25 Categories in NON-COMPLIANCE this RSI 7
 3. Joint Inspection | Y | Y/N 4. Date 5 13 92 4-16-92 7. Total Violations this RSI 10

 8. List (only once) all violations:
 1) where State enforcement was required and taken during the LSCI;
 2) recorded in the LSCI report but the State failed to take enforcement;
 3) observed during this RSI which clearly existed during the LSCI but the State failed to take enforcement; and
 4) existing during this RSI which are not already listed under one of the categories above.

	A SPECIFIC STATE LAW/REGULATION VIOLATED	B BLOCK 25 CATEGORY	C ABATED (Y/N)	D STATE ACTION	E REASON IF UNCITED	F CAUSE	G SERIOUSNESS PEO	H IMPACT	I OSMRE ACTION	J OPTIONAL	K
Dr N&N's 92-32-2-1	1. R645-301-553.100+130	N	N	4		4	1	1	1		
	Description: <u>Sinkhole in Water Canyon</u>										
92-32-3-1	2. R645-301-742.113	N	N	4		4	1	1	1		
	Description: <u>poison</u>										
92-32-4-1	3. R645-301-528.323	L	N	2		4	2	2	1		
	Description: <u>Coal mine waste fire</u>										
92-32-5-1	4. R645-301-742+752	D	N	2		4	2	1	1		
	Description: <u>failure to pass</u>										
92-32-7-1	5. R645-301-742.113	N	N	4		4	1	1	1		
	Description: <u>poison</u>										
92-32-8-1	6. R645-301-742.211	D	N	4		4	2	4	1		
	Description: <u>additional contr.</u>										
14329-1	7. R645-301-542.741	W	N	4		4	1	1	1		
	Description: <u>mineral waste</u>										
OSM TDN's 92-2-370-1	8. R645-301-352+553.252	O	N	2	1	4	1	1	2		
	Description: <u>Contemporaneous rec.</u>										
242	9. R645-301-746.311, 743.100, 746.312, 746.343	K	N	2	9	4	1	1	2		
	Description: <u>Coal mine waste impoundments</u>										
92-2-370-2 TVI	10. R645-301-742.223, 742.130	E	N	2	9	4	1	1	2		
	Description: <u>road spillway</u>										

- | | | | | | |
|---|--|--|--|--|--|
| <p>STATE ACTION</p> <ol style="list-style-type: none"> 1) Existed on LSCI, cited 2) Existed on LSCI, not cited 3) Cited Prior to LSCI, Abatement Pending 4) Occurred since LSCI 5) Permit defect | <p>STATE'S REASON FOR NOT CITING VIOLATION (AFTER DISCUSSION WITH THE STATE)</p> <ol style="list-style-type: none"> 1) Not a Violation 2) Precluded by State Policy 3) Not Included under State Program 4) Warning given in lieu of a Citation 5) Violation not recognized (missed) 6) Practice allowed under approved Permit 7) Too minor to cite 8) Working with Operator to Correct 9) Other: <u>Discrim. Order issued</u> | <p>CAUSES</p> <ol style="list-style-type: none"> 1) Permit Defect 2) Unusual Weather Conditions 3) Unofficial Waiver 4) Operator Negligence 5) Other: _____ | <p>PROBABILITY OF EVENT OCCURRENCE</p> <ol style="list-style-type: none"> 1) None or Unlikely 2) Likely 3) Occurred | <p>IMPACT</p> <p>Damage Remains Within the Permit Area</p> <ol style="list-style-type: none"> 1) None or Minor 2) Moderate 3) Considerable <p>Damage Extends Beyond the Permit Area</p> <ol style="list-style-type: none"> 4) None or Minor 5) Moderate 6) Considerable <p>Obstruction to Enforcement</p> <ol style="list-style-type: none"> 7) None or Minor 8) Moderate 9) Considerable | <p>OSMRE ACTION</p> <ol style="list-style-type: none"> 1) Deferred to State Action 2) TDN issued 3) IH-CO issued 4) Previously Cited, Abatement Pending 5) Abated during or before OSMRE Inspection 6) TDN issued 7) TDN Issued for Permit Defect |
|---|--|--|--|--|--|



psf/gm

VACATION/TERMINATION OF NOTICE OF VIOLATION/CESSATION ORDER

To the following Permittee or Operator:

Name SUNNYSIDE COAL COMPANY

Mailing Address P.O. Box 99, SUNNYSIDE, UT. 84539

State Permit No. ACT/007/007

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

Notice of Violation No. N 92-32-5-1 dated 3/16, 19 92.

Cessation Order No. C _____ dated _____, 19 _____.

Part 1 of 1 is vacated terminated because the operator has submitted plans and designs for sediment control around the Water Canyon Refuse Pile. The operator must implement the approved statements no later

Part _____ of _____ is vacated terminated because then 15 days after Division approval of Amendment # C/007/007-92D.

Part _____ of _____ is vacated terminated because _____

Date of service (mailing) 5/12/92

Time of service (mailing) 3:00 a.m. p.m.

Joe Fielder
Permittee/Operator representative

Title

Signature

HENRY SAUER
Division of Oil, Gas & Mining

SENIOR RECLAMATION SOILS SPECIALIST
Title

Henry Sauer
Signature

pgl

notice of violation

NO. N 92-32-5-1

To the following Permittee or Operator:

Name SUNNYSIDE COAL COMPANY

Mine SUNNYSIDE MINES Surface Underground Other

County CARBON State UT. Telephone 888-4421

Mailing Address P.O. Box 99, SUNNYSIDE 84539

State Permit No. ACT/007/007

Ownership Category State Federal Fee Mixed

Date of inspection 3/10-12/92, 1992

Time of inspection 3/10: 10:00 A.M. a.m. p.m. to 3/11: 8:00 A.M. a.m. p.m.
3/12: 2:00

Operator Name (other than Permittee) _____

Mailing Address _____

Under authority of the Utah Coal Mining and Reclamation Act, Section 40-10-1 et seq., *Utah Code Annotated*, 1953, the undersigned authorized representative of the Division of Oil, Gas & Mining has conducted an inspection of above mine on above date and has found violation(s) of the act, regulations or required permit condition(s) listed in attachment(s). This notice constitutes a separate Notice of Violation for each violation listed.

You must abate each of these violations within the designated abatement time. You are responsible for doing all work in a safe and workmanlike manner.

The undersigned representative finds that cessation of mining is is not expressly or in practical effect required by this notice. For this purpose, "mining" means extracting coal from the earth or a waste pile, and transporting it within or from the mine site.

This notice shall remain in effect until it expires as provided on reverse side of this form, or is modified, terminated or vacated by written notice of an authorized representative of the director of the Division of Oil, Gas & Mining. Time for abatement may be extended by authorized representative for good cause, if a request is made within a reasonable time before the end of abatement period.

Date of service (mailing) 3/10/92 Time of service (mailing) _____ a.m. p.m.

KARL HOUSEKEEPER Environmental Coordinator
Permittee/Operator representative Title

Signature _____ Title _____

HENRY SAUER Senior Reclamation Soils Specialist
Division of Oil, Gas & Mining representative Title

Signature Henry Sauer Identification Number #32

SEE REVERSE SIDE **CERTIFIED RECEIPT** P 074 979 200

WHITE-DOG M YELLOW-OSM PINK-PERMITTEE/OPERATOR GOLDENROD-NOV FILE



NOTICE OF VIOLATION NO. N 92-32-5-1

Violation No. 1 of 1

Nature of violation

Failure to pass disturbed area drainage through
a ~~sediment~~ control treatment structure(s).
siltation

Provisions of act, regulations or permit violated

R645-301-742
R645-301-752

Portion of operation to which notice applies

WATER CANYON REFUSE PILE

Remedial action required (including any interim steps)

sign + Construct appropriate sediment control measures.

Abatement time (including interim steps)

No LATER THAN 5:00 P.M. APRIL 17, 1992



pgl

notice of violation

NO. N 92-32-4-1

To the following Permittee or Operator:

Name SUNNYSIDE COAL COMPANY

Mine SUNNYSIDE MINES Surface Underground Other

County CARBON State UT. Telephone 888-4421

Mailing Address P.O. BOX 99, SUNNYSIDE 84539

State Permit No. ACT/007/007

Ownership Category State Federal Fee Mixed

Date of inspection 3/10-12/92, 1992

Time of inspection 3/10 : 10:00 A.M. a.m. p.m. to 3/10 3:00 a.m. p.m.
3/11 : 8:00 A.M. a.m. p.m. to 3/11 5:00 a.m. p.m.

Operator Name (other than Permittee) 3/12 : 8:00 A.M. 3/12 2:00

Mailing Address _____

Under authority of the Utah Coal Mining and Reclamation Act, Section 40-10-1 et seq., *Utah Code Annotated*, 1953, the undersigned authorized representative of the Division of Oil, Gas & Mining has conducted an inspection of above mine on above date and has found violation(s) of the act, regulations or required permit condition(s) listed in attachment(s). This notice constitutes a separate Notice of Violation for each violation listed.

You must abate each of these violations within the designated abatement time. You are responsible for doing all work in a safe and workmanlike manner.

The undersigned representative finds that cessation of mining is is not expressly or in practical effect required by this notice. For this purpose, "mining" means extracting coal from the earth or a waste pile, and transporting it within or from the mine site.

This notice shall remain in effect until it expires as provided on reverse side of this form, or is modified, terminated or vacated by written notice of an authorized representative of the director of the Division of Oil, Gas & Mining. Time for abatement may be extended by authorized representative for good cause, if a request is made within a reasonable time before the end of abatement period.

Date of ~~service~~ (mailing) 3/16/92

Time of service (mailing) _____ a.m. p.m.

KARL HOUSEKEEPER
Permittee/Operator representative

Environmental Coordinator
Title

Signature

HENRY SAUER
Division of Oil, Gas & Mining representative

Senior Reclamation File Specialist
Title

Henry Sauer
Signature

32
Identification Number

SEE REVERSE SIDE **CERTIFIED RECEIPT P 074 979 200**

WHITE-DOGM YELLOW-OSM PINK-PERMITTEE/OPERATOR GOLDENROD-NOV FILE



NOTICE OF VIOLATION NO. N 92-32-4-1

Violation No. 1 of 1

Nature of violation
Failure to extinguish coal mine waste fires in accordance with the plan approved by the Division and MSHA.

Provisions of act, regulations or permit violated
RC45-301-528.323
UCA 40-10-18 (2)(h)

Portion of operation to which notice applies
COARSE REFUSE PILE
WATER CANYON REFUSE PILE

Remedial action required (including any interim steps)
EXTINGUISH COAL MINE WASTE FIRES and ELIMINATE CONDITIONS WHICH CONSTITUTE A FIRE HAZARD

Abatement time (including interim steps)
NO LATER THAN 5:00 P.M. APRIL 17, 1992



VACATION/TERMINATION OF NOTICE OF VIOLATION/CESSATION ORDER

To the following Permittee or Operator:

Name SUNNYSIDE COAL COMPANY
 Mailing Address P.O. BOX 99, HIGHWAY 123, SUNNYSIDE, UT. 84539
 State Permit No. ACT/007/007

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

Notice of Violation No. N 92-32-4-1 dated 3/12, 19 92.

Cessation Order No. C _____ dated _____, 19 _____.

Part 1 of 1 is vacated terminated because abatement requirements
(covering the entire surface of the lower lift of the Coalse Pit as defined
noncombustible material) had been fulfilled

Part _____ of _____ is vacated terminated because _____

Part _____ of _____ is vacated terminated because _____

Date of service (mailing) 9/21/92 Time of service (mailing) 3:00 a.m. p.m.

PETER HESS
 Permittee/Operator representative

Environmental Coordinator
 Title

Signature _____

HEORY SAUER
 Division of Oil, Gas & Mining

Environmental Specialist
 Title

Henry Sauer
 Signature

ACT/007/007 92D
2.5#5

Sunnyside Coal Company

Operations • Highway 123 • P.O. Box 99 • Sunnyside, Utah 84539

April 28, 1992

Mr. Henry Sauer
Senior Reclamation Soils Specialist
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

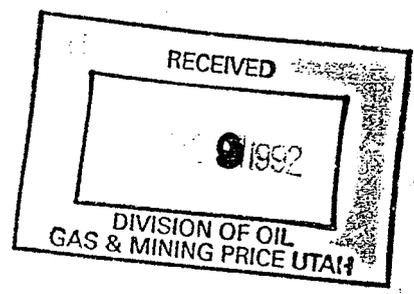
Dear Henry,

Re: Design Information - Water Canyon Refuse Pile
Sediment Control

Sunnyside Mine is providing additional information supporting the design and installation of the silt fence for the Water Canyon Refuse Pile. The silt fence installation abates NOV 92-32-5-1.

The silt fence is located in the drainage channel for the runoff from the refuse pile and is V-shaped for a total length of 11 feet. The 5-foot leg spans the bottom of the downstream channel to the canyon wall and the 6-foot leg spans to the road on the other side of the drainage channel. The silt fence, as-built, passes both the 25-year, 6-hour and the 10-year, 24-hour precipitation events.

The silt fence will be inspected and maintained as described in the approved permit.



Sincerely,
[Handwritten Signature]
Gary Gray
Chief Mine Engineer

cc: J. Fielder - SCC
M. Elder - JMeco
File

Corporate Offices
The Registry
1113 Spruce Street
Boulder, CO 80302
303-938-1506
FAX: 303-938-5050

Sales Office
1350 17th Street
Suite 350
Denver, CO 80202
303-534-3348
FAX: 303-825-8626

West Coast Division
1345 Astoria Drive
Fairfield, CA 94533
707-425-4506

Operations
Highway 123
P.O. Box 99
Sunnyside, UT 84539
801-888-4421
FAX: 801-888-2581



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

August 7, 1992

Mr. Joe Fielder, General Manager
Sunnyside Coal Company
P.O. Box 99
Sunnyside, Utah 84539

Dear Mr. Fielder:

Re: Water Canyon Refuse Pile Sediment Control, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007-92D, Folder #2, Carbon County, Utah

The submittal, dated April 28, 1992, regarding this proposal is denied. Please resubmit this proposal with the necessary information for runoff from a refuse pile by September 15, 1992. If you have any questions, please call me or Hugh Klein.

Sincerely,

A large, stylized handwritten signature in black ink, reading "Pamela Grubaugh-Littig".

Pamela Grubaugh-Littig
Permit Supervisor

pg1

92D

Sunnyside Coal Company

Operations • Highway 123 • P.O. Box 99 • Sunnyside, Utah 84539

RECEIVED

JAN 25 1993

DIVISION OF
GAS & MINING

January 21, 1993

Ms. Pamela Grubaugh-Littig
Division of Gas, Oil & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

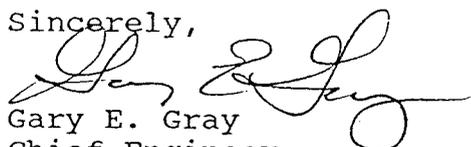
Dear Pam:

Re: Permit Amendment for Water Canyon Refuse Area Disturbed Area
Boundary and Sediment Control

Attached is an application to amend the permit, removing a part of
the Water Canyon Refuse Area as Pre-Law and revising the sediment
controls for the area.

We appreciate your review of this amendment. Please call if you
have any questions.

Sincerely,


Gary E. Gray
Chief Engineer

Corporate Offices
The Registry
1113 Spruce Street
Boulder, CO 80302
303-938-1506
FAX: 303-938-5050

Sales Office
1350 17th Street
Suite 350
Denver, CO 80202
303-534-3348
FAX: 303-825-8626

West Coast Division
1345 Astoria Drive
Fairfield, CA 94533
707-425-4506

Operations
Highway 123
P.O. Box 99
Sunnyside, UT 84539
801-888-4421
FAX: 801-888-2581



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

April 29, 1993

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Jess Kelley, Reclamation Engineer *JK*

RE: Amendment for Removal of Water Canyon Refuse Pile from Disturbed Area, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007-92D, Folder #2, Carbon County, Utah

SYNOPSIS

It is the permittee's intention to remove the Water Canyon refuse pile from the disturbed area as a prelaw structure. To this end, on January 25, 1993, the permittee submitted Amendment 92D for Division approval. Exhibit B, "Water Canyon Disturbed Area Boundary Map," shows the disturbed area in Water Canyon as the permittee intends to redefine it.

ANALYSIS

The permittee has divided the history of the Water Canyon refuse pile into four periods. Mining activities which took place during these periods are shown on Exhibit A, "No. 2 Mine Material Extraction History," which the permittee has included as part of the submittal.

The first period was from the early 1920s through 1952. It was during this period that the refuse pile was actually created. Refuse material was removed from the mine by hoist through the Water Canyon portal and placed in the refuse pile. Placement of material in the refuse pile ceased in 1952 when the preparation plant was built.

The second period was from 1952 through August of 1973. During this period, all material from the No. 2 Mine was transported by belt to cars which were hoisted from the mine by the Fan Canyon hoist. The cars were transported underground to the preparation plant, emerging from one portal and entering the

opposite portal, crossing the trestle across Water Canyon. Refuse material went to the rotary dump at the preparation plant.

The third period was from September of 1973 to 1989. During this period, all material was removed from the mine by belt up the No. 3 slope and went directly to the preparation plant. No refuse was removed through the Water Canyon portals. Management and fire bosses with motors, on their way to inspect the No. 2 Mine, were the only traffic to cross the Water Canyon trestle from portal to portal.

The fourth period was from June to October of 1985, when two small areas of the No. 2 Mine were being worked. Material removed from these areas went by belt down dip to 19th left and up the No. 3 slope to the preparation plant. As in the two previous periods, no refuse material was removed through the Water Canyon portals.

According to the permittee, Water Canyon has seen, since 1973, only occasional surface inspections, occasional cleanout of sediment accumulated beneath the trestle, the capping of fires outside the designated refuse pile area, and occasional use of the trestle and track for transportation of workers and material. The permittee further maintains that the disturbed area markers have been erroneously placed to include the refuse pile. From the material in the submittal, from my conversations with other Division staff members, and from my familiarity with the Water Canyon area, the permittee's chronology appears to be correct. There appears to be no reason why the Water Canyon refuse pile should not be removed from the disturbed area and, thus, from the permittee's reclamation responsibility.

RECOMMENDATIONS

It is recommended that Amendment 92D be approved and that the permittee be allowed to redefine the disturbed area boundary in Water Canyon as shown in Exhibit B of the submittal.



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

May 17, 1993

To: Lowell P. Braxton, Associate Director, Mining

From: Pamela Grubaugh-Littig, Permit Supervisor. *pal*

Re: Signoff from AML for Removal of Water Canyon Refuse Pile from the Disturbed Area, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007-92D, Folder #2, Carbon County, Utah

Sunnyside Coal Company (SCC) has proposed to remove the Water Canyon refuse pile from the disturbed area as a prelaw structure. The initial proposal was denied on August 7, 1992 and the permittee resubmitted information on January 25, 1993 that has been reviewed by Jesse Kelley, see attached memo.

Before this amendment can be approved, a letter from AML taking responsibility for the pre-law pile is probably in order, i.e. before the liability is released from Title V the liability should be shifted to Title IV. This pile was included in the disturbed area in the original permit, but has not been reaffected by post law mining, which is the argument of the permittee for releasing the pile from the disturbed area. ✓

I have attached information relative to the amendment for your review. Please let me know how I should proceed with this issue. Thank you.





State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

July 8, 1994

Thomas E. Ehmett, Acting Director
Office of Surface Mining
Reclamation and Enforcement
505 Marquette N.W., Ste. 1200
Albuquerque, NM 87102

Re: Plate 5-20, Removal of Water Canyon Refuse Pile from the Disturbed Area in the Sunnyside Mine Permit Area, Sunnyside Mine, Sunnyside Coal Company, ACT/007/007-92D, Folder #2, Carbon County, Utah

Dear Mr. Ehmett:

Enclosed please find Plate 5-20 that delineates the area that will be removed from the disturbed area in the Sunnyside Mine permit area. This amendment was approved July 7, 1994.

Sincerely,


Pamela Grubaugh-Littig
Permit Supervisor

Enclosure

cc: Bill Malencik, PFO





State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

July 7, 1994

Mr. Robert M. Burnham, President
Sunnyside Coal Company
1113 Spruce Street
Boulder, CO 80302

Re: Approval of Removal of Water Canyon Refuse Pile from the Disturbed Area in the Sunnyside Mine Permit Area, Sunnyside Mine, Sunnyside Coal Company, ACT/007/007-92D, Folder #3, Carbon County, Utah

Bob
Dear Mr. Burnham:

The Division received three copies of the revised Plate 5-20 on July 5, 1994 that delineates the disturbed area boundary with ten-foot contours, not two-foot contours as requested in the letter of June 8, 1994. However, the Division finds that the reclamation contours for the area can be identified and this letter is the final approval for the removal of Water Canyon Refuse Pile from the disturbed area in the Sunnyside Mine permit area.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Lowell P. Braxton'.

Lowell P. Braxton
Associate Director, Mining

cc: Pamela Grubaugh-Littig
Mary Ann Wright





State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

July 8, 1994

Thomas E. Ehmett, Acting Director
Office of Surface Mining
Reclamation and Enforcement
505 Marquette N.W., Ste. 1200
Albuquerque, NM 87102

Re: Plate 5-20, Removal of Water Canyon Refuse Pile from the Disturbed Area in the Sunnyside Mine Permit Area, Sunnyside Mine, Sunnyside Coal Company, ACT/007/007-92D, Folder #2, Carbon County, Utah

Dear Mr. Ehmett:

Enclosed please find Plate 5-20 that delineates the area that will be removed from the disturbed area in the Sunnyside Mine permit area. This amendment was approved July 7, 1994.

Sincerely,


Pamela Grubaugh-Littig
Permit Supervisor

Enclosure

cc: Bill Malencik, PFO





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Pamela Grubaugh-Littig
Permit Supervisor

Enclosure

cc: Bill Malencik, PFO



August 17, 1993

To: James W. Carter, Director
Through: Lowell P. Braxton, Associate Director
From: Daron R. Haddock, Permit Supervisor
Re: Title IV vs. Title V jurisdiction at Trash Canyon, Amax Coal Company, Castle Gate Mine

INTRODUCTION:

A recent investigation of the Trash Canyon area by the AML staff has raised some questions with regard to how a site gets designated as Title IV or Title V and the dates associated with that designation. This memo is being written to provide a clearer picture for making that determination, although there are still some grey areas associated with the transition period. The code of Federal Regulations was reviewed and numerous people were consulted including Richard Holbrook (OSM-WFO) in order to arrive at the conclusions herein.

ANALYSIS:

SMCRA was enacted on August 3, 1977. Any coal mine that operated and was abandoned prior to that date is clearly considered pre-law and is designated Title IV or an AML site. Mines that were in operation prior to August 3, 1977 and continued to operate after that date were allowed a certain time to get in compliance with the requirements of the initial regulatory program and apply for a permit to conduct coal mining operations. There was a six month window and a nine month window. Permits issued after February 3, 1978 (6 month window) and before May 3, 1978 (nine month window) were required to meet only a certain set of relevant performance standards. After May 3, 1978 all of the initial program performance standards kicked in and any mine issued a permit after that date would be responsible for meeting all the requirements of the initial regulatory program.

This brings us to the sites that were not operating prior to August 3, 1977, but obtained a permit and started mining after that date. These mines are clearly considered post-law and are designated Title V subject to the relevant performance standards based on the date of permit issuance. If the permit was issued after May 3, 1978 all of the initial program performance standards apply.

The final category and perhaps most confusing, is those mines that were operating prior to August 3, 1977 and were then abandoned before May 3, 1978. These sites are not subject to the performance standards of the initial program because they were

abandoned prior to the performance standards kicking in. These sites are considered pre-law and are subject to Title IV.

(Note: There are also a few special situations dealing with exemptions for small operators that may differ from the above scenarios. They are not considered relevant and will not be discussed in this memo.)

CONCLUSION:

Trash canyon near Castle Gate Mine appears to fit in the last category. There is some evidence that coal mining operations were occurring in Trash Canyon through December of 1977, but nothing that indicates that mining activities were occurring after that date. This being the case, the site would be considered abandoned prior to May 3, 1978 and is therefore considered pre-law and subject to Title IV.



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801-538-5319 (TDD)

May 17, 1993

To: Lowell P. Braxton, Associate Director, Mining

From: Pamela Grubaugh-Littig, Permit Supervisor *pgl*

Re: Signoff from AML for Removal of Water Canyon Refuse Pile from the Disturbed Area, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007-92D, Folder #2, Carbon County, Utah

Sunnyside Coal Company (SCC) has proposed to remove the Water Canyon refuse pile from the disturbed area as a prelaw structure. The initial proposal was denied on August 7, 1992 and the permittee resubmitted information on January 25, 1993 that has been reviewed by Jesse Kelley, see attached memo.

Before this amendment can be approved, a letter from AML taking responsibility for the pre-law pile is probably in order, i.e. before the liability is released from Title V the liability should be shifted to Title IV. This pile was included in the disturbed area in the original permit, but has not been reaffected by post law mining, which is the argument of the permittee for releasing the pile from the disturbed area. ✓

I have attached information relative to the amendment for your review. Please let me know how I should proceed with this issue. Thank you.





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April 29, 1993

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Jess Kelley, Reclamation Engineer *JK*

RE: Amendment for Removal of Water Canyon Refuse Pile from Disturbed Area, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007-92D, Folder #2, Carbon County, Utah

SYNOPSIS

It is the permittee's intention to remove the Water Canyon refuse pile from the disturbed area as a prelaw structure. To this end, on January 25, 1993, the permittee submitted Amendment 92D for Division approval. Exhibit B, "Water Canyon Disturbed Area Boundary Map," shows the disturbed area in Water Canyon as the permittee intends to redefine it.

ANALYSIS

The permittee has divided the history of the Water Canyon refuse pile into four periods. Mining activities which took place during these periods are shown on Exhibit A, "No. 2 Mine Material Extraction History," which the permittee has included as part of the submittal.

The first period was from the early 1920s through 1952. It was during this period that the refuse pile was actually created. Refuse material was removed from the mine by hoist through the Water Canyon portal and placed in the refuse pile. Placement of material in the refuse pile ceased in 1952 when the preparation plant was built.

The second period was from 1952 through August of 1973. During this period, all material from the No. 2 Mine was transported by belt to cars which were hoisted from the mine by the Fan Canyon hoist. The cars were transported underground to the preparation plant, emerging from one portal and entering the



opposite portal, crossing the trestle across Water Canyon. Refuse material went to the rotary dump at the preparation plant.

The third period was from September of 1973 to 1989. During this period, all material was removed from the mine by belt up the No. 3 slope and went directly to the preparation plant. No refuse was removed through the Water Canyon portals. Management and fire bosses with motors, on their way to inspect the No. 2 Mine, were the only traffic to cross the Water Canyon trestle from portal to portal.

The fourth period was from June to October of 1985, when two small areas of the No. 2 Mine were being worked. Material removed from these areas went by belt down dip to 19th left and up the No. 3 slope to the preparation plant. As in the two previous periods, no refuse material was removed through the Water Canyon portals.

According to the permittee, Water Canyon has seen, since 1973, only occasional surface inspections, occasional cleanout of sediment accumulated beneath the trestle, the capping of fires outside the designated refuse pile area, and occasional use of the trestle and track for transportation of workers and material. The permittee further maintains that the disturbed area markers have been erroneously placed to include the refuse pile. From the material in the submittal, from my conversations with other Division staff members, and from my familiarity with the Water Canyon area, the permittee's chronology appears to be correct. There appears to be no reason why the Water Canyon refuse pile should not be removed from the disturbed area and, thus, from the permittee's reclamation responsibility.

RECOMMENDATIONS

It is recommended that Amendment 92D be approved and that the permittee be allowed to redefine the disturbed area boundary in Water Canyon as shown in Exhibit B of the submittal.

Application for Permit Amendment

Water Canyon Refuse Area

Sunnyside Coal Company

Permit Act/007/007

Sunnyside Coal Company needs to amend its permit to relocate the boundary of the existing disturbed area of the Water Canyon Refuse Area in the approved PAP. The amendment would correct the boundary of the disturbed area to include only that area which Sunnyside Coal Company has affected and will reclaim. The amendment also addresses the sediment controls for the area.

This permit change should be considered as an amendment since:

1. R614-303-224,100 - There is no increase in surface or sub-surface area. The amendment corrects the disturbed area depicted on the approved plans.
2. R614-303-224,200 - Operations remain within the existing cumulative impact area.
3. R614-303-224,300 - Operations are engaged only in the hydrologic basin authorized in the approved permit.
4. R614-303-224,400 - No division order has been issued for this change.
5. R614-303-224,500 - There has been no cancellation or material reductions of any guarantees of the original permit.
6. R614-303-224,600 - And, no other law or regulation applies to this change application.

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I. General

The Water Canyon Refuse Area requires a permit amendment to address:

- A. Relocation of the erroneously placed field markers to reflect the Disturbed Area Boundary as described in the current existing PAP.
- B. Changing the Disturbed Area Boundary as described in the existing PAP to include only the post-law area disturbed by SCC.
- C. Revising the Sediment Controls for the disturbed area.

Maps and overlays are provided to show the existing disturbed area boundary as described in the approved PAP, versus the field location of the boundary markers. The maps and overlays also show the extent of SCC's actual disturbance of this area compared to the approved PAP disturbance boundary. A mining map showing the last date of mining and extraction of the coal seam materials is also provided, and the history of mining in No. 2 Mine is documented.

The use and justification of alternate sediment control for the area is detailed, and maps showing the location and construction of sediment control structures are included, as is an analysis of the Water Canyon Refuse Pile watershed.

2. Environmental Impacts

This amendment will have the following environmental impacts:

a. Soil Resources

No additional impacts to the soil resources are anticipated.

b. Biological Resources

No additional impacts to the vegetation and wildlife of the permit area are expected.

c. Land Use and Air Quality

The pre-mining and post-mining land use remains the same. The boundary of the land to be reclaimed is the change requested in this application.

No additional impact to cultural or historical resources will be made as there is no anticipated additional disturbance.

No significant change to the air quality within the permit area is anticipated.

d. Geology

The plan for casing and sealing exploration holes and bore holes will remain the same.

Subsidence will not effect the area as no coal seams are below the surface.

e. Hydrology

There will be no additional impacts to the existing hydrological resources. The existing hydrological information and plans in the approved permit will not substantially change.

3. History of No. 2 Mine Refuse Disposal

Coal mining done in the Fan Canyon and Water Canyon Portal areas can be divided into four geographic/time periods. The first period covers the first mining efforts in the early 1920's through 1952, until the preparation plant was completed. During this period, material was removed through the Water Canyon portal by hoist, and refuse material was stored in the Water Canyon refuse pile.

Storage of refuse material from the Water Canyon Portal ceased with the completion of the preparation plant in 1952.

The track from the Water Canyon Portal to the Water Canyon Refuse Pile was removed during a period from 1952 to 1955, disallowing any further use of the Water Canyon Refuse Pile.

The second time period encompasses the time from 1952 through August of 1973, when all material removed from No. 2 Mine was transported by belt to cars which were hoisted from the mine with the Fan Canyon Hoist. The cars were then transported underground to the preparation plant, emerging from one portal and entering the opposite portal, crossing the trestle across Water Canyon. Refuse from this period went to the rotary dump at the prep plant.

After 1973, only management and fire bosses took motors across the Water Canyon Trestle from portal to portal for routine inspections of No. 2 Mine.

The third time period was between September of 1973 and 1989, when all material was removed by belt via the #3 Slope to the preparation plant. No refuse from this period went outside to the Water Canyon Portals, being sent instead to the rotary dump.

The fourth time period occurs between the months of June and October of 1985, when two areas of No. 2 Mine were being mined. These areas are noted on Exhibit A. Material removed from this area went via belt down dip to 19th left and up #3 slope to the prep plant, and no refuse material was removed through the Water Canyon Portals.

The significant time periods are shown on Exhibit A, No. 2 Mine Material Extraction History

4. Operation Plans and Engineering

A. Relocation of Erroneously Placed Field Markers.

The Water Canyon Disturbed Area boundary markers have been erroneously placed in the field to include the pre-law area designated on Exhibit B.

Sunnyside Coal Company needs to relocate the disturbed area boundary markers to reflect the disturbed area boundary as described in the current existing PAP.

B. Change of Disturbed Area Boundary to Include Only Post-Law Disturbance by Sunnyside Coal Company.

As shown in Exhibit B, some of the designated disturbed area within SCC's existing approved permit is pre-law disturbance, and has not been used by SCC.

The refuse site has not been exposed to the opportunity of use for refuse disposal since 1973. No refuse material has been added to the Water Canyon Disturbed Area since 1952.

Aside from the refuse area disturbed by the addition of noncombustible cap material to put out visible fires, the use of other surface area of Water Canyon since 1973 has consisted of minimal periodic surface inspection, occasional clean-out of sediment accumulated beneath the trestle, and the occasional use of the two portals, connecting track, and trestle supporting the track to allow rail runner transportation of people for underground inspections. The removed sediment material has been used for capping the fires.

Sunnyside Coal Company is requesting in this amendment to remove the pre-law disturbed area, which has not been used since the early 1950's, from its permit. The amended permit will include only the area designated as "Proposed Permit Area Boundary" in Exhibit B, which is the area where the fires have been capped. This area is included in the recently submitted reclamation plan for Water Canyon.

C. Sediment Controls for the Disturbed Area

The plan for sediment controls for the Water Canyon disturbed area is revised.

Due to the constricted area within Water Canyon, sediment ponds were never designed as sediment control for the entire Water Canyon Disturbed Area.

The total Water Canyon Disturbed Area is 8.3 acres. The total disturbed area of the refuse disposal area amounts to 4.6 acres. This small area is insignificant when compared to a major disturbance for the construction of a sediment pond.

Best Technology Currently Available has been used in the construction of the Water Canyon Silt Fence (Exhibits D and E) in order to prevent additional contributions of suspended solids and sediment from the disturbed areas comprising Water Canyon Watersheds #1, #2, #3, and #4 (Exhibit C) to stream flow or runoff outside the permit area. The details of silt fence construction are shown in Exhibits D and E, while the placement of the silt fence is shown in Exhibit C. An analysis of the Water Canyon Refuse Pile watershed is provided in Appendix A.

The silt fence is located in the drainage channel for the runoff from the coarse refuse pile and is V-shaped for a total length of 11 feet. The 5-foot leg spans the bottom of the downstream channel to the canyon wall, and the 6-foot leg spans to the road on the other side of the drainage channel. The silt fence, as built, passes both the 25-year, 6-hour and the 10 year, 24 hour precipitation events. (Appendix A).

Sediment control for the remaining disturbed area has been accomplished by the installation of a second silt fence, located in the drainage channel just above the refuse pile. This silt fence is constructed of a wire mesh covered with silt fence material, and is approximately 6' wide and 2' high, spanning the width of the drainage channel.

Runoff from the watersheds, as well as drainage over the road surface above the silt fences, will flow into the diversion ditch and through the silt fences, which will reduce overland flow velocities, reduce runoff volumes, and trap sediment.

4. Reclamation Plans

The reclamation plan has been submitted to the Division for review and approval.

Structure removal and rough grade for reclamation have been accomplished.

As authorized by the Division, removal of the silt fence will be done after the disturbed area has been stabilized and revegetated, in not less than two years after the last augmented seeding.

After removal of the silt fence, the land on which the structure was located will be regraded and revegetated in accordance with the reclamation plan.

4. Bonding

No additional or incremental bonding is required for the amendment. All surface disturbance associated with surface reclamation activities are covered in the existing PAP.



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April 29, 1993

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Jess Kelley, Reclamation Engineer *JK*

RE: Amendment for Removal of Water Canyon Refuse Pile from Disturbed Area, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007-92D, Folder #2, Carbon County, Utah

SYNOPSIS

It is the permittee's intention to remove the Water Canyon refuse pile from the disturbed area as a prelaw structure. To this end, on January 25, 1993, the permittee submitted Amendment 92D for Division approval. Exhibit B, "Water Canyon Disturbed Area Boundary Map," shows the disturbed area in Water Canyon as the permittee intends to redefine it.

ANALYSIS

The permittee has divided the history of the Water Canyon refuse pile into four periods. Mining activities which took place during these periods are shown on Exhibit A, "No. 2 Mine Material Extraction History," which the permittee has included as part of the submittal.

The first period was from the early 1920s through 1952. It was during this period that the refuse pile was actually created. Refuse material was removed from the mine by hoist through the Water Canyon portal and placed in the refuse pile. Placement of material in the refuse pile ceased in 1952 when the preparation plant was built.

The second period was from 1952 through August of 1973. During this period, all material from the No. 2 Mine was transported by belt to cars which were hoisted from the mine by the Fan Canyon hoist. The cars were transported underground to the preparation plant, emerging from one portal and entering the



Page 2
Amendment Memo
ACT/007/007-92D
April 29, 1993

opposite portal, crossing the trestle across Water Canyon. Refuse material went to the rotary dump at the preparation plant.

The third period was from September of 1973 to 1989. During this period, all material was removed from the mine by belt up the No. 3 slope and went directly to the preparation plant. No refuse was removed through the Water Canyon portals. Management and fire bosses with motors, on their way to inspect the No. 2 Mine, were the only traffic to cross the Water Canyon trestle from portal to portal.

The fourth period was from June to October of 1985, when two small areas of the No. 2 Mine were being worked. Material removed from these areas went by belt down dip to 19th left and up the No. 3 slope to the preparation plant. As in the two previous periods, no refuse material was removed through the Water Canyon portals.

According to the permittee, Water Canyon has seen, since 1973, only occasional surface inspections, occasional cleanout of sediment accumulated beneath the trestle, the capping of fires outside the designated refuse pile area, and occasional use of the trestle and track for transportation of workers and material. The permittee further maintains that the disturbed area markers have been erroneously placed to include the refuse pile. From the material in the submittal, from my conversations with other Division staff members, and from my familiarity with the Water Canyon area, the permittee's chronology appears to be correct. There appears to be no reason why the Water Canyon refuse pile should not be removed from the disturbed area and, thus, from the permittee's reclamation responsibility.

RECOMMENDATIONS

It is recommended that Amendment 92D be approved and that the permittee be allowed to redefine the disturbed area boundary in Water Canyon as shown in Exhibit B of the submittal.

SSWRF.MEM



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

April 29, 1993

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Jess Kelley, Reclamation Engineer *JK*

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STATE OF UTAH
NATURAL RESOURCE
Division of Oil, Gas &

Reclamation of
Water Canyon
Fan Canyon
#2 Canyon For

To:

Jesse

From: **Pam Grubaugh-Littig**

Date:

3/10

- For your information and file.
- For necessary action.
- Other _____

Please write
a memo - need to
explain & including
refuse to move
disturbed area.

Do by 3/30.

PAK.



STATE OF UTAH
NATURAL RESOURCES
Division of Oil, Gas & Mining

To:

Jesse

From:

Pam Grubaugh-Littig

Date:

3/10

For your information and file.

For necessary action.

Other _____

*Please write
a memo - need to
explain & including
refuse from
disturbed area.*

Do by 3/30.

AX



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

26 January 1993

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Hugh Klein, Geologist/Hydrologist *hjk*

RE: Water Canyon Permit Amendment 92-D, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007, Folder 3, Carbon County, Utah

SUMMARY

Sediment controls for this area are of concern because of exposed refuse in the canyon. In addition, Sunnyside coal has numerous areas not being treated by sediment ponds. Additional areas have also been proposed. Given the nature of this area, it is this author's belief that the presently proposed sediment controls should only be approved if reclamation takes place this year in this canyon. While this is a serious concern, the whole issue of the disturbed area boundary is of greater concern and needs review prior to any other approval.

2/26

Pam:

I've reviewed this. There are no engineering concerns. Assuming that Sunnyside's chronology is correct, I have no problem with excluding the refuse pile from the disturbed area.

Jim

PERMIT TRACKING FORM

Type of Proposal:

MRP AMENDMENT _____
 MRP REVISION _____
 EXPLORATION _____
 I.B.C. _____
 PERMIT RENEWAL _____
 NEW PAP _____

Enforcement Action Involved:

NOV #N 92.3251, # _____ of _____
 CO #C _____, # _____ of _____
 TDN #X _____, # _____ of _____
 TDL #X _____, # _____ of _____
 DIVISION ORDER: date _____

Title of Proposal:

Design - State Canyon Refuse File

Company/Mine Name:

Shanopide Mine, Shanopide Coal Co. Sediment Control

File # (INA / PRO / ACT / CEP)

007-1007 - X D
92

PROJECT LEADER: _____

	<u>Reviewers</u>	<u>Tech Memo Drafted</u>		<u>Date Completed</u>
		Yes	No	
HYDROLOGY	<u>[Signature]</u>	()	()	_____
BIOLOGY	_____	()	()	_____
ENGINEER	<u>[Signature]</u>	()	(X)	<u>2/26</u>
SOILS	_____	()	()	_____
GEOLOGY	_____	()	()	_____
LEGAL/FIN	_____	()	()	_____

Dates:

- | | |
|--|-----------------------------------|
| (1) Initial Plan Received <u>4/29/92</u> | (3) Publication Approval _____ |
| Tech Review Due <u>5/20/92</u> | (4) Conditional Approval _____ |
| Tech Review Complete _____ | Stipulations Due _____ |
| Deficiencies Sent _____ | Stipulations Recieved _____ |
| <u>Resubmit</u> Operator Response Due <u>9/15/92</u> | (5) Final Approval _____ |
| (2) Operator Response Rc'd _____ | Filed in MRP _____ |
| Tech Review Due _____ | Author _____ |
| Tech Review Complete _____ | (6) Proposal Denied <u>8/7/92</u> |

OTHER AGENCY INVOLVEMENT:

<u>Agency</u>	<u>Transmittal Date</u>	<u>Sign-off</u>	<u>COMMENTS:</u>
() OSMRE	_____	_____	_____
() USFS	_____	_____	_____
() BLM	_____	_____	_____
() USFWS	_____	_____	_____
() NPS	_____	_____	_____
() HEALTH	_____	_____	_____
() UDWR	_____	_____	_____
() H2O RTS.	_____	_____	_____
() HISTORY	_____	_____	_____

Silt Fence Properties

Property	Unit	Test Method	Typical Values ¹
Grab Strength	lbs	ASTM D-4632-88	100
Grab Elongation	%	ASTM D-4632-88	30 (Max.)
Trapezoid Tear Strength	lbs	ASTM D-4533-85	65
Mullen Burst Strength	psi	ASTM D-3786-80a ²	280
Coeff. of Permeability, k	cm/sec	ASTM D-4491-85 ³	0.01
Water Flow Rate	gal/min/ft ²	ASTM D-4491-85 ³	35
Ultraviolet Stability	%	ASTM D-4355-84	90

¹The values listed are average values. Contact the Mirafi Technical Department for minimum certifiable values.
²Diaphragm Bursting Tester.
³20-100m Falling Head Test Method.

To the best of our knowledge, the information contained herein is accurate. However, Mirafi Inc cannot assume any liability whatsoever for the accuracy or completeness thereof. Final determination of the suitability of any infor-

mation or material for the use contemplated, or its manner of use, and whether the suggested use infringes any patents is the sole responsibility of the user.

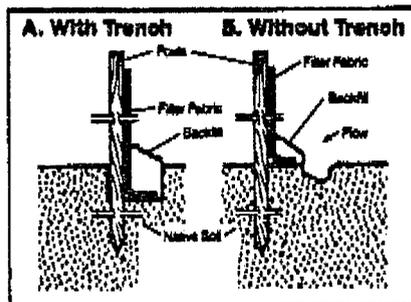
Standard Silt Fence Packaging

Silt Fence Type	Overall Length	Fabric Widths	Post Lengths	Post or Pocket Spacing
PreFab With Posts	100'	2', 3'	36", 48"	8.3'
With Pockets	102'	3'	—	6'
With Belt	330'/900'	3'	—	—

The following numbers are offered as a guide to shipping weights of standard combinations of silt fence options Mirafi provides you for specific applications:

- 100' roll with posts; 2' Fabric width, 36" post: 30 lbs
- 100' roll with posts; 3' Fabric width, 48" post: 35 lbs
- 102' roll; 3' Fabric width with pocket: 15 lbs
- 330' roll; 3' Fabric width with belt: 24 lbs
- 900' roll; 3' Fabric width with belt: 65 lbs

Toe-In Methods



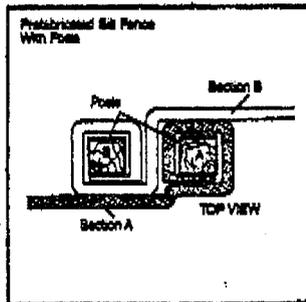
A. With Trench

- Excavate a 6" x 6" trench along lower perimeter of site
- Unroll silt fence one section at a time. Posts should be positioned on downstream side of fence.
- Drive post into ground, and lay the toe-in fabric flap in bottom of trench. Backfill trench, and tamp ground as shown in diagram above

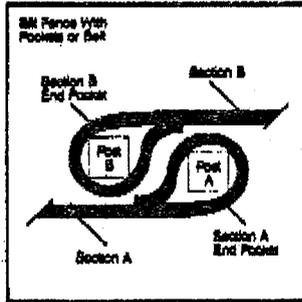
B. Without Trench

- Toe-in can also be accomplished by laying the fabric flap on untrrenched ground and piling and tamping soil over the flap at the base of the structure

Joining Sections of Silt Fences

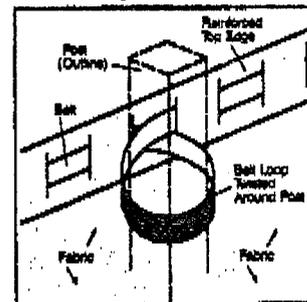


- Position posts to overlap as shown above, making certain that fabric folds around each post one full turn
- Drive posts tightly together and secure tops of posts by tying off with cord or wire to prevent flow-through of built-up sediment at joint



- Overlap posts as shown in previous section to prevent flow-through
- Drive posts firmly together and tie off tops of posts to prevent separation

Belt Loop at Post



- Ends of sections of belted silt fence are equipped with pockets for posts
- Joining of sections should be accomplished in basically the same manner as the fence with pockets. Do not use belt to secure adjoining tops of posts. Use rope or wire as in previous type fences
- To simply secure post to belted fabric at a given point along length of fabric, pull belt out from reinforced top, twist to form a loop, and slip post up through loop before driving post into place

Mirafi Inc is the largest geotextile marketing company in North America whose business focuses totally on a complete line of geotechnical products for the construction industry. As "The company that started an industry" Mirafi devotes its research, development and manufacturing expertise to designing products that provide sedimentation control, soil reinforcement, subsurface drainage, and erosion control. Mirafi is a recognized leader in developing innovative applications for its products through close consultation with architects, engineers, and contractors.

Mirafi Inc The company that started an industry.

The Mirafi Warranty. Mirafi Inc warrants its products to be free from defects in material and workmanship when delivered to Mirafi's customers. Mirafi further warrants that its products conform to the specifications published in Mirafi's current sales literature. If a Mirafi product is defective or does not meet our published specifications and our customer gives notice to Mirafi before installing the product, Mirafi will replace the product without charge to our customer or refund the purchase price at Mirafi's election. Replacing the product or obtaining a refund are the buyer's sole remedy for a breach, and Mirafi will not be liable for any consequential damage attributed to a defective product. This warranty is exclusive and in place of all other warranties expressed or implied and Mirafi makes no other warranty as to its products.

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 MIRAFI INC P.O. BOX 240987 • CHARLOTTE NC 28224
 (704) 523-7477 or (800) 234-0484/TELEX 216903 MRFI

SC-3
 6/91

Sunnyside Coal Company

Operations • Highway 123 • P.O. Box 99 • Sunnyside, Utah 84539

April 28, 1992

Mr. Henry Sauer
Senior Reclamation Soils Specialist
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

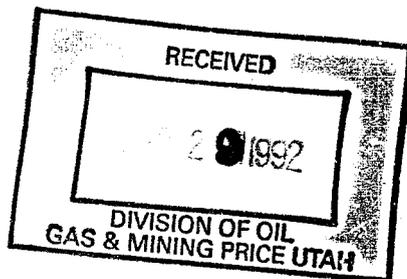
Dear Henry,

Re: Design Information - Water Canyon Refuse Pile
Sediment Control

Sunnyside Mine is providing additional information supporting the design and installation of the silt fence for the Water Canyon Refuse Pile. The silt fence installation abates NOV 92-32-5-1.

The silt fence is located in the drainage channel for the runoff from the refuse pile and is V-shaped for a total length of 11 feet. The 5-foot leg spans the bottom of the downstream channel to the canyon wall and the 6-foot leg spans to the road on the other side of the drainage channel. The silt fence, as-built, passes both the 25-year, 6-hour and the 10-year, 24-hour precipitation events.

The silt fence will be inspected and maintained as described in the approved permit.



Sincerely,

Gary Gray
Chief Mine Engineer

cc: J. Fielder - SCC
M. Elder - JMECO
File

Corporate Offices
The Registry
1113 Spruce Street
Boulder, CO 80302
303-938-1506
FAX: 303-938-5050

Sales Office
1350 17th Street
Suite 350
Denver, CO 80202
303-534-3348
FAX: 303-825-8626

West Coast Division
1345 Astoria Drive
Fairfield, CA 94533
707-425-4506

Operations
Highway 123
P.O. Box 99
Sunnyside, UT 84539
801-888-4421
FAX: 801-888-2581

AVAILABLE SURFACE AREA OF FABRIC
BELOW MAXIMUM WATER LEVEL

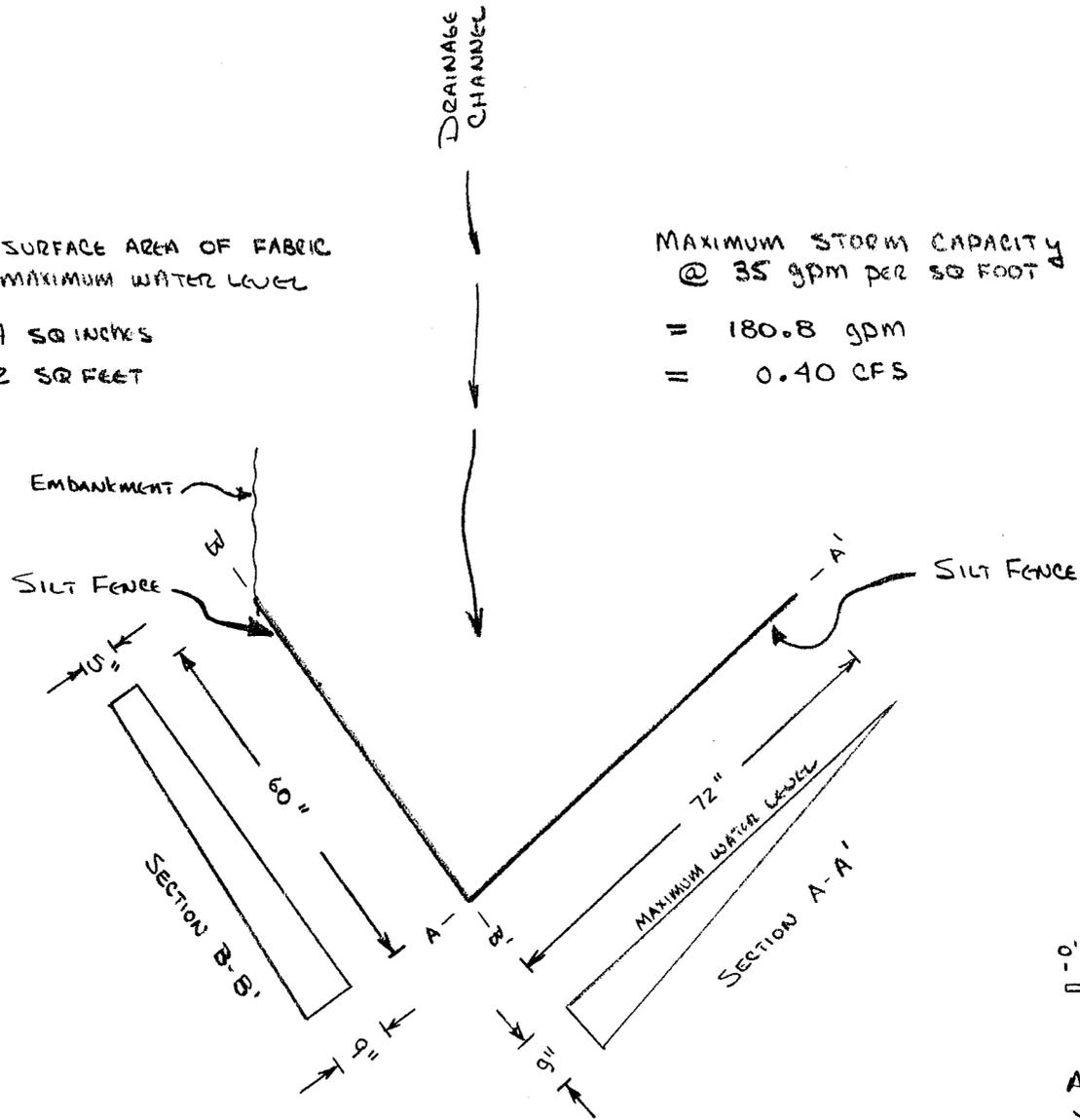
= 744 SQ INCHES

= 5.2 SQ FEET

MAXIMUM STORM CAPACITY
@ 35 gpm per SQ FOOT

= 180.8 gpm

= 0.40 CFS



0' 1' 2'
APPROX. SCALE

April 27, 1992

J. MICHAEL ELDER

WATER CANYON REFUSE PILE
SILT FENCE
(AS-BUILT)

Project Title = WC REFUSE PILE

WATERSHED HYDROGRAPH

Inflow into structure # 1
Structure type: Null

-- Routed Watershed # 1 to structure # 1
Muskingum routing parameters: X= 0.38 K= 0.07
Hydraulic length = 1400.00 feet
Elevation change = 125.0 feet.
Travel time = 0.07 hours
Travel time type = SCS Upland Curves

-- Watershed data for watershed # 1
Curve number = 61.0
Area = 4.0 acres
Hydraulic length = 710.00 Feet
Elevation change = 525.0 feet.
Concentration time = 0.03 hours
Concentration time type = SCS Upland Curves
Unit hydrograph type = Forested

-- Routed Watershed # 2 to structure # 1
Muskingum routing parameters: X= 0.36 K= 0.09
Hydraulic length = 1550.00 feet
Elevation change = 105.0 feet.
Travel time = 0.09 hours
Travel time type = SCS Upland Curves

-- Watershed data for watershed # 2
Curve number = 70.0
Area = 1.0 acres
Hydraulic length = 50.00 Feet
Elevation change = 20.0 feet.
Concentration time = 0.00 hours
Concentration time type = SCS Upland Curves
Unit hydrograph type = Disturbed

-- Routed Watershed # 3 to structure # 1
Muskingum routing parameters: X= 0.36 K= 0.09
Hydraulic length = 1300.00 feet
Elevation change = 75.0 feet.
Travel time = 0.09 hours
Travel time type = SCS Upland Curves

-- Watershed data for watershed # 3
Curve number = 70.0
Area = 1.0 acres
Hydraulic length = 60.00 Feet
Elevation change = 20.0 feet.
Concentration time = 0.00 hours
Concentration time type = SCS Upland Curves
Unit hydrograph type = Disturbed

-- Watershed data for watershed # 4
Curve number = 70.0
Area = 2.4 acres
Hydraulic length = 100.00 Feet
Elevation change = 75.0 feet.

Concentration time = 0.00 hours
 Concentration time type = SCS Upland Curves
 Unit hydrograph type = Disturbed

-- Total Area = 8.4 acres

-- Storm data

Total precipitation = 1.6 inches
 Storm type = SCS 6 hour design storm
 Peak Discharge = 0.11 cfs
 Discharge volume = 0.05 acre ft

time (hr.)	rainfall (in.)	hydrograph (cfs)	*	time (hr.)	rainfall (in.)	hydrograph (cfs)
0.00	0.000	0.000	*	0.10	0.010	0.000
0.20	0.010	0.000	*	0.30	0.010	0.000
0.40	0.010	0.000	*	0.50	0.010	0.000
0.60	0.016	0.000	*	0.70	0.015	0.000
0.80	0.016	0.000	*	0.90	0.016	0.000
1.00	0.016	0.000	*	1.10	0.017	0.000
1.20	0.017	0.000	*	1.30	0.017	0.000
1.40	0.017	0.000	*	1.50	0.017	0.000
1.60	0.031	0.000	*	1.70	0.031	0.000
1.80	0.031	0.000	*	1.90	0.031	0.000
2.00	0.031	0.000	*	2.10	0.120	0.000
2.20	0.120	0.000	*	2.30	0.120	0.000
2.40	0.121	0.000	*	2.50	0.120	0.035
2.60	0.032	0.043	*	2.70	0.032	0.045
2.80	0.032	0.052	*	2.90	0.032	0.060
3.00	0.032	0.069	*	3.10	0.026	0.067
3.20	0.026	0.068	*	3.30	0.026	0.072
3.40	0.026	0.077	*	3.50	0.026	0.082
3.60	0.018	0.071	*	3.70	0.018	0.065
3.80	0.018	0.066	*	3.90	0.018	0.070
4.00	0.018	0.075	*	4.10	0.016	0.075
4.20	0.016	0.076	*	4.30	0.016	0.079
4.40	0.016	0.084	*	4.50	0.016	0.088
4.60	0.013	0.084	*	4.70	0.013	0.082
4.80	0.013	0.084	*	4.90	0.013	0.086
5.00	0.013	0.089	*	5.10	0.012	0.087
5.20	0.012	0.087	*	5.30	0.012	0.088
5.40	0.012	0.090	*	5.50	0.012	0.092
5.60	0.013	0.099	*	5.70	0.013	0.105
5.80	0.013	0.108	*	5.90	0.013	0.111
6.00	0.013	0.114	*	6.10	0.000	0.069
6.20	0.000	0.032	*	6.30	0.000	0.017
6.40	0.000	0.014	*	6.50	0.000	0.011
6.60	0.000	0.009	*	6.70	0.000	0.006
6.80	0.000	0.005	*	6.90	0.000	0.003
7.00	0.000	0.002	*	7.10	0.000	0.001
7.20	0.000	0.000	*			

Project Title = WC REFUSE PILE
WATERSHED HYDROGRAPH
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Structure type: Null

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Elevation change = 525.0 feet.
Concentration time = 0.03 hours
Concentration time type = SCS Upland Curves
Unit hydrograph type = Forested

-- Routed Watershed # 2 to structure # 1
Muskingum routing parameters: X= 0.36 K= 0.09
Hydraulic length = 1550.00 feet
Elevation change = 105.0 feet.
Travel time = 0.09 hours
Travel time type = SCS Upland Curves

-- Watershed data for watershed # 2
Curve number = 70.0
Area = 1.0 acres
Hydraulic length = 50.00 Feet
Elevation change = 20.0 feet.
Concentration time = 0.00 hours
Concentration time type = SCS Upland Curves
Unit hydrograph type = Disturbed

-- Routed Watershed # 3 to structure # 1
Muskingum routing parameters: X= 0.36 K= 0.09
Hydraulic length = 1300.00 feet
Elevation change = 75.0 feet.
Travel time = 0.09 hours
Travel time type = SCS Upland Curves

-- Watershed data for watershed # 3
Curve number = 70.0
Area = 1.0 acres
Hydraulic length = 60.00 Feet
Elevation change = 20.0 feet.
Concentration time = 0.00 hours
Concentration time type = SCS Upland Curves
Unit hydrograph type = Disturbed

-- Watershed data for watershed # 4
Curve number = 70.0
Area = 2.4 acres
Hydraulic length = 100.00 Feet

Elevation change = 75.0 feet.
 Concentration time = 0.00 hours
 Concentration time type = SCS Upland Curves
 Unit hydrograph type = Disturbed

-- Total Area = 8.4 acres

-- Storm data

Total precipitation = 1.8 inches
 Storm type = SCS Type 2 storm, 24 hour storm
 Peak Discharge = 0.27 cfs
 Discharge volume = 0.08 acre ft

time (hr.)	rainfall (in.)	hydrograph (cfs)	*	time (hr.)	rainfall (in.)	hydrograph (cfs)
0.00	0.000	0.000	*	0.10	0.002	0.000
0.20	0.002	0.000	*	0.30	0.002	0.000
0.40	0.002	0.000	*	0.50	0.002	0.000
0.60	0.002	0.000	*	0.70	0.002	0.000
0.80	0.002	0.000	*	0.90	0.002	0.000
1.00	0.002	0.000	*	1.10	0.002	0.000
1.20	0.002	0.000	*	1.30	0.002	0.000
1.40	0.002	0.000	*	1.50	0.002	0.000
1.60	0.002	0.000	*	1.70	0.002	0.000
1.80	0.002	0.000	*	1.90	0.002	0.000
2.00	0.002	0.000	*	2.10	0.002	0.000
2.20	0.002	0.000	*	2.30	0.002	0.000
2.40	0.002	0.000	*	2.50	0.002	0.000
2.60	0.002	0.000	*	2.70	0.002	0.000
2.80	0.002	0.000	*	2.90	0.002	0.000
3.00	0.002	0.000	*	3.10	0.003	0.000
3.20	0.003	0.000	*	3.30	0.003	0.000
3.40	0.003	0.000	*	3.50	0.003	0.000
3.60	0.003	0.000	*	3.70	0.003	0.000
3.80	0.003	0.000	*	3.90	0.003	0.000
4.00	0.003	0.000	*	4.10	0.003	0.000
4.20	0.003	0.000	*	4.30	0.003	0.000
4.40	0.003	0.000	*	4.50	0.003	0.000
4.60	0.003	0.000	*	4.70	0.003	0.000
4.80	0.003	0.000	*	4.90	0.003	0.000
5.00	0.003	0.000	*	5.10	0.003	0.000
5.20	0.003	0.000	*	5.30	0.003	0.000
5.40	0.003	0.000	*	5.50	0.003	0.000
5.60	0.003	0.000	*	5.70	0.003	0.000
5.80	0.003	0.000	*	5.90	0.003	0.000
6.00	0.003	0.000	*	6.10	0.004	0.000
6.20	0.004	0.000	*	6.30	0.004	0.000
6.40	0.004	0.000	*	6.50	0.004	0.000
6.60	0.004	0.000	*	6.70	0.004	0.000
6.80	0.004	0.000	*	6.90	0.004	0.000
7.00	0.004	0.000	*	7.10	0.004	0.000
7.20	0.004	0.000	*	7.30	0.004	0.000
7.40	0.004	0.000	*	7.50	0.004	0.000
7.60	0.004	0.000	*	7.70	0.004	0.000
7.80	0.004	0.000	*	7.90	0.004	0.000
8.00	0.004	0.000	*	8.10	0.005	0.000
8.20	0.005	0.000	*	8.30	0.005	0.000
8.40	0.005	0.000	*	8.50	0.005	0.000
8.60	0.005	0.000	*	8.70	0.005	0.000
8.80	0.005	0.000	*	8.90	0.005	0.000
9.00	0.005	0.000	*	9.10	0.006	0.000
9.20	0.006	0.000	*	9.30	0.006	0.000

time (hr.)	rainfall (in.)	hydrograph (cfs)		time (hr.)	rainfall (in.)	hydrograph (cfs)
9.30	0.006	0.000				
9.40	0.006	0.000	*	9.50	0.006	0.000
9.60	0.007	0.000	*	9.70	0.007	0.000
9.80	0.007	0.000	*	9.90	0.007	0.000
10.00	0.007	0.000	*	10.10	0.008	0.000
10.20	0.008	0.000	*	10.30	0.008	0.000
10.40	0.008	0.000	*	10.50	0.008	0.000
10.60	0.011	0.000	*	10.70	0.011	0.000
10.80	0.011	0.000	*	10.90	0.011	0.000
11.00	0.011	0.000	*	11.10	0.018	0.000
11.20	0.018	0.000	*	11.30	0.018	0.000
11.40	0.018	0.000	*	11.50	0.018	0.000
11.60	0.140	0.000	*	11.70	0.140	0.000
11.80	0.140	0.019	*	11.90	0.140	0.120
12.00	0.140	0.268	*	12.10	0.026	0.181
12.20	0.026	0.108	*	12.30	0.026	0.095
12.40	0.026	0.098	*	12.50	0.026	0.107
12.60	0.014	0.084	*	12.70	0.014	0.070
12.80	0.014	0.069	*	12.90	0.014	0.071
13.00	0.014	0.074	*	13.10	0.010	0.067
13.20	0.010	0.063	*	13.30	0.010	0.063
13.40	0.010	0.064	*	13.50	0.010	0.065
13.60	0.008	0.060	*	13.70	0.008	0.057
13.80	0.008	0.056	*	13.90	0.008	0.056
14.00	0.008	0.057	*	14.10	0.006	0.051
14.20	0.006	0.046	*	14.30	0.006	0.045
14.40	0.006	0.044	*	14.50	0.006	0.045
14.60	0.006	0.045	*	14.70	0.006	0.045
14.80	0.006	0.045	*	14.90	0.006	0.045
15.00	0.006	0.046	*	15.10	0.006	0.046
15.20	0.006	0.047	*	15.30	0.006	0.047
15.40	0.006	0.048	*	15.50	0.006	0.048
15.60	0.006	0.049	*	15.70	0.006	0.049
15.80	0.006	0.050	*	15.90	0.006	0.050
16.00	0.006	0.051	*	16.10	0.003	0.043
16.20	0.003	0.037	*	16.30	0.003	0.034
16.40	0.003	0.034	*	16.50	0.003	0.034
16.60	0.003	0.033	*	16.70	0.003	0.033
16.80	0.003	0.033	*	16.90	0.003	0.033
17.00	0.003	0.033	*	17.10	0.003	0.033
17.20	0.003	0.033	*	17.30	0.003	0.033
17.40	0.003	0.033	*	17.50	0.003	0.033
17.60	0.003	0.033	*	17.70	0.003	0.034
17.80	0.003	0.034	*	17.90	0.003	0.034
18.00	0.003	0.034	*	18.10	0.003	0.034
18.20	0.003	0.034	*	18.30	0.003	0.035
18.40	0.003	0.035	*	18.50	0.003	0.035
18.60	0.003	0.035	*	18.70	0.003	0.035
18.80	0.003	0.035	*	18.90	0.003	0.036
19.00	0.003	0.036	*	19.10	0.003	0.036
19.20	0.003	0.036	*	19.30	0.003	0.036
19.40	0.003	0.036	*	19.50	0.003	0.037
19.60	0.003	0.037	*	19.70	0.003	0.037
19.80	0.003	0.037	*	19.90	0.003	0.037
20.00	0.003	0.037	*	20.10	0.002	0.033
20.20	0.002	0.029	*	20.30	0.002	0.028
20.40	0.002	0.027	*			
				20.50	0.002	0.027

time (hr.)	rainfall (in.)	hydrograph (cfs)		time (hr.)	rainfall (in.)	hydrograph (cfs)
20.50	0.002	0.027				
20.60	0.002	0.027	*	20.70	0.002	0.026
20.80	0.002	0.026	*	20.90	0.002	0.026
21.00	0.002	0.026	*	21.10	0.002	0.026
21.20	0.002	0.026	*	21.30	0.002	0.026
21.40	0.002	0.026	*	21.50	0.002	0.026
21.60	0.002	0.026	*	21.70	0.002	0.026
21.80	0.002	0.026	*	21.90	0.002	0.026
22.00	0.002	0.026	*	22.10	0.002	0.027
22.20	0.002	0.027	*	22.30	0.002	0.027
22.40	0.002	0.027	*	22.50	0.002	0.027
22.60	0.002	0.027	*	22.70	0.002	0.027
22.80	0.002	0.027	*	22.90	0.002	0.027
23.00	0.002	0.027	*	23.10	0.002	0.027
23.20	0.002	0.027	*	23.30	0.002	0.027
23.40	0.002	0.027	*	23.50	0.002	0.028
23.60	0.002	0.028	*	23.70	0.002	0.028
23.80	0.002	0.028	*	23.90	0.002	0.028
24.00	0.002	0.028	*	24.10	0.000	0.018
24.20	0.000	0.009	*	24.30	0.000	0.005
24.40	0.000	0.004	*	24.50	0.000	0.003
24.60	0.000	0.003	*	24.70	0.000	0.002
24.80	0.000	0.001	*	24.90	0.000	0.001
25.00	0.000	0.000	*	25.10	0.000	0.000
25.20	0.000	0.000	*			

*

6/14

Yes -

Which permitting
action are these
sunside traps
associated with?
Please let me
know.

MAF.

RAM

Pam: I'm pretty sure these were submitted to
abate Violation N93-32-2-5, Part 2 of 5, but I have no
record of the amendment number.