



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

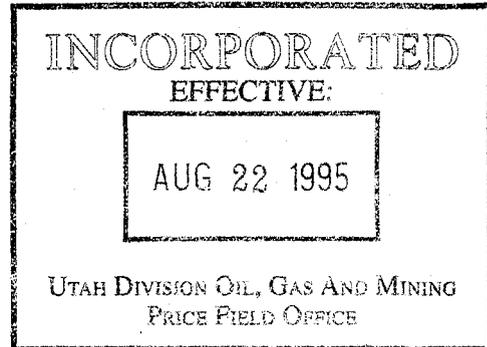
ACT/015/009

Michael O. Leavitt  
Governor  
Ted Stewart  
Executive Director  
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Division Director

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August 22, 1995

Val Payne  
Sr Environmental Engineer  
Energy West Mining  
PacifiCorp Electric Operations  
PO Box 310  
Huntington, Utah 84528



RE: Alternate Sediment Control Amendment, Trail Mountain Mine, PacifiCorp Electric Operations, (ACT/015/009-95G, Folder #3, Emery County, Utah)

Dear Mr. Payne:

The aforementioned amendment is approved effective August 22, 1995. The approval is based on the information you submitted together with the regulatory findings cited below.

Followup Action By Permittee

No followup action is required on this amendment. Documents approved herein must be incorporated in the MRP and are listed in Finding #8.

Project Description

The amendment updates the alternated sediment control designs (ASCD's), Plate 7-11 shows eight different typical designs. Such sediment control measures provide primary control in specific approved disturbed areas and redundant control in other areas.

Findings

- (1) The applicant submitted a complete and accurate amendment application.
- (2) DOGM PERMIT STATUS. The ASCD's are approved environmental control measures utilizing the best technology current available and lie within the permit area (R645-301-742.110).

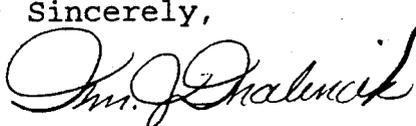
Page 2

V. Payne/Trail Mountain  
Alternate Sediment Control  
August 22, 1995

- (3) ACTIVE MINE. The ASCD's currently are in place within the disturbed area and are shown on map as required by DOGM Directive-Tech-003A dated June 7, 1995.
- (4) LAND STATUS. Not applicable.
- (5) OTHER APPROVAL. Not applicable.
- (6) IMPACTS. Not applicable.
- (7) RECLAMATION AND BONDING. Not applicable.
- (8) RECORD UPDATE. The MRP documents updated by this approval are as follows:

- Replace Table of Contents page, Volume 2, Chapter 7, MRP.
- Replace Table of Contents page, Volume 3, MRP.
- Replace page 7-38, Volume 2, MRP.
- Add plate 7-11, Volume 3, MRP.

Sincerely,

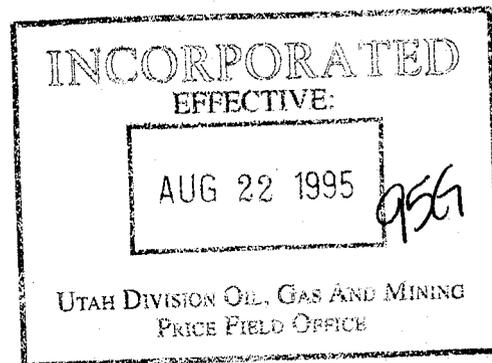


Wm. J. Malencik  
Reclamation Specialist

sd

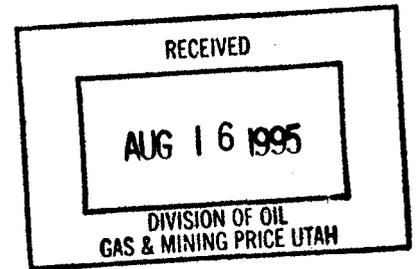
Enclosure

cc: James Fulton, OSM, Denver  
Mark Bailey, BLM, Price  
Janette Kaiser, USFS, Manti-LaSal  
Mark Page, DWR, Price  
Brent Bradford, DEQ, SLC  
Robert Valentine, DWR, SLC  
Scott Hirschi, Trust Lands, SLC, w/o enc  
Pam Grubaugh-Littig, DOGM, SLC  
Joe Helfrich, DOGM, SLC w/o enc  
Karl Houskeeper, Pacificorp, Huntington, w/o enc



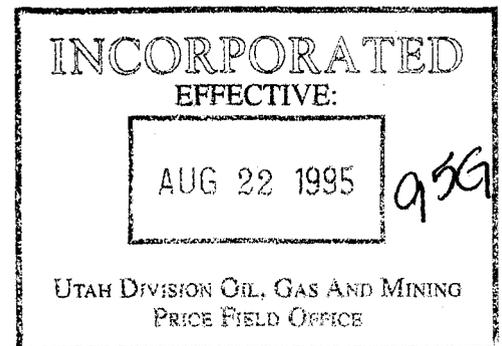
## LIST OF FIGURES

<u>FIGURE</u>	<u>DESCRIPTION</u>
7-1	Location of the Trail Mountain Plan Area
7-2	Hydrograph Terminology
7-3	24-Hour Rainfall Distribution (from Kent, 1973)
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7-5	Headwater Depth for Corrugated Metal Pipe Culverts with Inlet Control (US Soil Conservation Service, 1976)
7-6	San Rafael River Basin (Utah Division of Water Resources, 1976)
7-7	Monthly Distribution of Flows for Cottonwood Creek above Straight Canyon for the Water Year 1979 (Oct 1978 to Sept 1979)
7-8	Typical Sections of Curb/Gutter Diversion - Trail Mountain Mine
7-9	Stage-Capacity Curve for Sedimentation Pond
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<u>PLATES</u>	<u>DESCRIPTION</u>
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7-4	Surface Water Rights.
7-5	Drainage Controls.
7-6	Drainage Areas.
7-7	Sedimentation Pond Details.
7-8	Sediment Pond (as constructed).
7-9	Extent of Alluvium.
7-10	Cottonwood Creek Channel Change Cross Sections.
7-11	Typical Sediment Control Measures

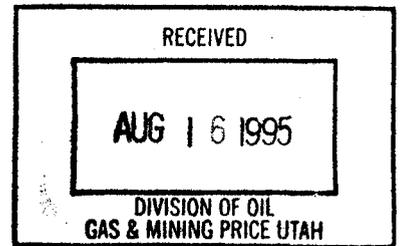


**LIST OF PLATES**

- 7-2                    **Water Monitoring Locations.**
- 7-3                    **Underground Water Monitoring Locations.**
- 7-4                    **Surface Water Rights.**
- 7-5                    **Drainage Controls.**
- 7-6                    **Drainage Areas.**
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- 7-9                    **Extent of Alluvium.**
- 7-10                  **Cottonwood Creek Channel Change cross sections.**
- 7-11                  **Typical Sediment Control Measures**

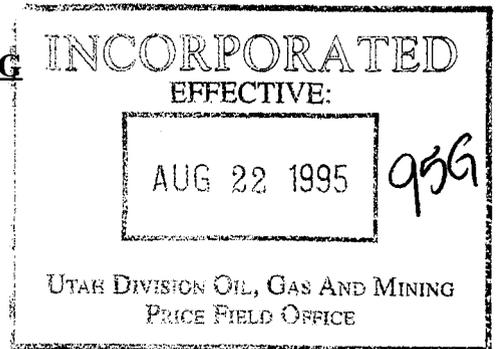
**CHAPTER 8                    SOIL RESOURCES**

<u>PLATE NO.</u>	<u>DESCRIPTION OF DRAWING</u>
8-1	Soil Map



**CHAPTER 9                    VEGETATION RESOURCES**

<u>PLATE NO.</u>	<u>DESCRIPTION OF DRAWING</u>
9-1	Vegetation Map



**CHAPTER 10                  FISH AND WILDLIFE RESOURCES**

<u>PLATE NO.</u>	<u>DESCRIPTION OF DRAWING</u>
NONE	

PacifiCorp  
Trail Mountain Mine

highway by the haul trucks. A third minor inlet is the mine water discharge line. This is a 4-inch aluminum pipe that is optionally used to channel mine water discharge through the sediment pond in lieu of discharging directly to Cottonwood Creek. The line is only used sporadically, and inflows vary according to routing as well as volume of water to be discharged. All inlets are shown on Plates 3-1 and 7-5. Design criteria and sizing are shown in Table 7-8.

"BTCA" Areas - It should be noted that two small areas of disturbance do not drain to the pond.

The first "BTCA" area consists of approximately 0.21 acres located just south of the sediment pond. The calculated runoff from this area is 0.013 acre feet, based on the 0.21 acres and a 10-year, 24-hour event. The area is vegetated, and all drainage from the site passes through straw bales, the approved sediment control measure. The realigned stream channel is entirely protected with large (approved size) riprap. Riprap will be maintained at this site until bond release or earlier release by the Division. The straw bales or other sediment control measures, approved by the Division, will be maintained at the site until vegetation is determined adequate by the Division. Adequacy will be based on comparison of the site with the riparian reference area.

The second "BTCA" area consists of approximately .028 acres located above the water treatment plant. The area, which drains to the creek, is an outslope of the pad area and cannot be drained to the sediment pond. The outslope BTCA area is vegetated, and all drainage from the site passes through a silt fence as a final treatment. Silt fences will be maintained at this site until vegetation is deemed adequate by the Division, by comparison with the riparian reference area, or until bond release. (see Plate 7-11 for Typical Sediment Control Measures)

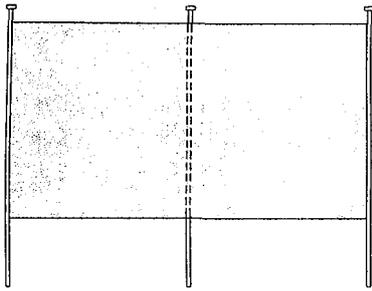
Runoff from the area for a 10-year, 24-hour event is calculated to be 0.002 acre feet above described "BTCA" areas are shown on Plates 3-1 and 7-5. It should be noted that these areas are included in the total disturbed area for the site (9.85 acres) but are not included in the runoff

Revised 8/11/95

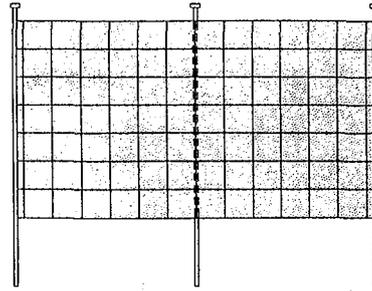
INCORPORATED  
EFFECTIVE  
AUG 22 1995  
956  
UTAH DIVISION OIL, GAS AND MINING  
PRICE FIELD OFFICE

RECEIVED  
AUG 16 1995  
DIVISION OF OIL  
GAS & MINING PRICE UTAH

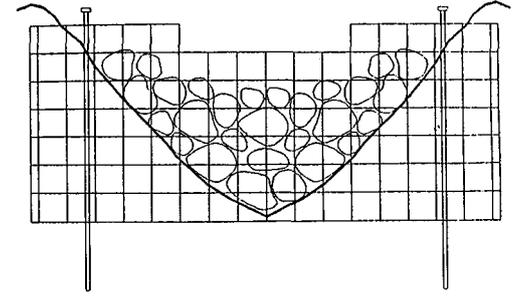
HYDROLOGY 7- 38



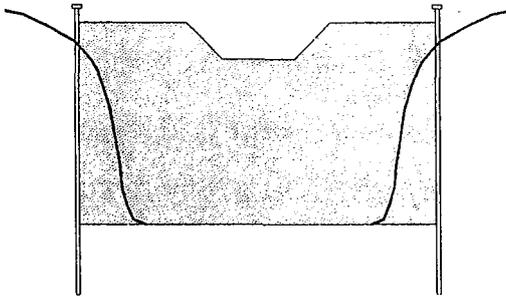
**SILT FENCE**  
 (SEDIMENT CONTROL/RUNOFF CONTROL  
 WIDTH AND HEIGHT VARIES)  
 BOTTOM KEYED IN TO PREVENT BYPASS  
 SIDES KEYED IN WHEN NECESSARY



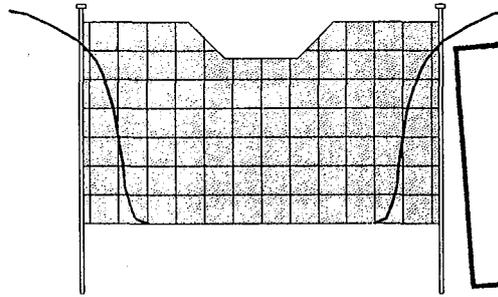
**SILT FENCE & MESH**  
 (SEDIMENT CONTROL/RUNOFF CONTROL  
 WIDTH AND HEIGHT VARIES)  
 BOTTOM KEYED IN TO PREVENT BYPASS  
 SIDES KEYED IN WHEN NECESSARY



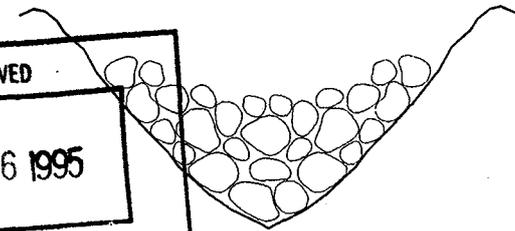
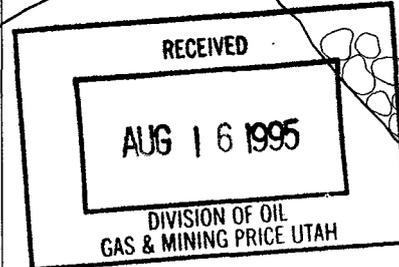
**ROCK GABION**  
 (SEDIMENT CONTROL/ENERGY DISSIPATER  
 WIDTH AND HEIGHT VARIES)



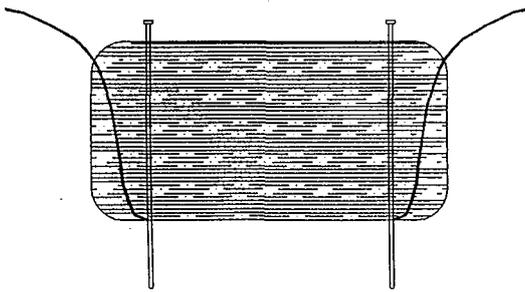
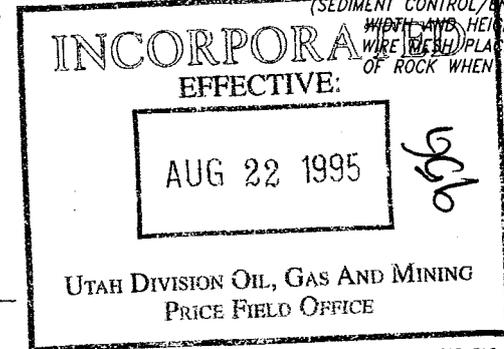
**SILT FENCE WITH NOTCH**  
 (SEDIMENT CONTROL/RUNOFF CONTROL  
 WIDTH AND HEIGHT VARIES)  
 SIDES AND BOTTOM KEYED IN  
 TO PREVENT BYPASS



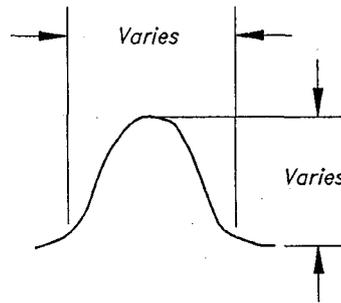
**SILT FENCE & MESH WITH NOTCH**  
 (SEDIMENT CONTROL/RUNOFF CONTROL  
 WIDTH AND HEIGHT VARIES)  
 SIDES AND BOTTOM KEYED IN  
 TO PREVENT BYPASS



**ROCK GABION**  
 (SEDIMENT CONTROL/ENERGY DISSIPATER  
 WIDTH AND HEIGHT VARIES)  
 WIRE MESH PLACED ON TOP  
 OF ROCK WHEN NECESSARY



**STRAW BALE INSTALLATION**  
 (SEDIMENT CONTROL/RUNOFF CONTROL  
 WIDTH AND HEIGHT VARIES)  
 SIDES AND BOTTOM KEYED IN  
 TO PREVENT BYPASS



**DIRT BERM**  
 (SEDIMENT CONTROL/RUNOFF CONTROL)

PLATE 7-11

CAD FILE NAME/DISK#: SILTFENC

ENERGY WEST MINING COMPANY HUNTINGTON, UTAH 84528	
<b>TYPICAL ALTERNATIVE SEDIMENT CONTROL MEASURES</b>	
DRAWN BY: <b>K. LARSEN</b>	<b>GENS1555A</b>
SCALE: <b>NONE</b>	DRAWING #:
DATE: <b>AUGUST 4, 1995</b>	SHEET <b>1</b> OF <b>1</b> REV. <b>---</b>