PERMIT CHANGE TRACKING FORM

- ☐ Significant Permit Revision
- ☒ Permit Amendment
- ☐ Incidental Boundary Change

DATE RECEIVED July 5, 1995	By: SW (Initial)	PERMIT NUMBER	ACT/015/004
Title of Proposal: Sediment Pond Removal		PERMIT CHANGE #	95 B
Description: Sediment Pond Removal		PERMITTEE	MOUNTAIN COAL COMPANY
		MINE NAME	HUNTINGTON CANYON #4 MINE

	DATE DUE	DATE DONE	RESULT	
☐ 15 DAY INITIAL RESPONSE TO PERMIT CHANGE APPLICATION			☐ ACCEPTED	☐ REJECTED
☐ Notice of Review Status of proposed permit change sent to the Permittee.			COMMENTS	
☐ Responses Received.				
☐ Notice of Affidavit of Publication. (If change is a Significant Revision.)				

REVIEW TRACKING	INITIAL REVIEW		MODIFIED REVIEW		FINAL REVIEW AND FINDINGS	
DOGM REVIEWER	DUE	DONE	Received DUE	DONE	DUE	DONE
☐ Lead NA		N/A	8/2			
☑ TA (See Attached) ___						
☐ Reviewers ___						
☐ Administrative (AVS) NA						
☐ Biology NA						
☐ Engineering NA						
☐ Geology NA						
☐ Soils NA						
☑ Hydrology Sharon ✓	7/20	7/20		8/7		

COORDINATED REVIEWS	SENT	DUE	RECEIVED	SENT	DUE	DONE
☑ OSMRE	✓	7/20				
☑ US Forest Service	✓					
☐ Bureau of Land Management						
☐ US Fish and Wildlife Service						
☐ US National Parks Service						
☐ UT Environmental Quality						
☑ UT Water Resources	✓					
☑ UT Water Rights	✓					
☑ UT Wildlife Resources	✓					
☐ UT State History (SHPO)						
☐ State Trust Lands						

☐ Public Notice / Comment / Hearing Complete. (If the permit change is a Significant Revision)		☐ Permit Change Approval Form signed and approved effective as of this date. ☐ Permit Change Denied.	
☐ Copies of permit change marked and ready for MRP.		☐ Notice of ☐ Approval ☐ Denial to Permittee.	
☐ Special Conditions/Stipulations written for approval.		☐ Copy of Approved Permit Change to File.	
☐ TA and CHIA modified as required.		☐ Copy of Approved Permit Change to Permittee.	
☐ Permit Change Approval Form ready for approval.		☐ Copies to Other Agencies and Price Field Office.	

Form DOGM - C1 (Last Revised 6/93) File Folder # 3

APPLICATION FOR PERMIT CHANGE

Title of Change: PROPOSED SEDIMENT POND REMOVAL

Permit Number: INA/005/014

Mine: Huntington Cyn. No. 4

Permittee: Mountain Coal Co.

Description, include reason for change and timing required to implement:
Required for Phase II Bond Release.

☐ Yes	☒ No	1. Change in the size of the Permit Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	☒ No	2. Change in the size of the Disturbed Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	☒ No	3. Will permit change include operations outside the Cumulative Hydrologic Impact Area?
☐ Yes	☒ No	4. Will permit change include operations in hydrologic basins other than currently approved?
☒ Yes	☐ No	5. Does permit change result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes	☒ No	6. Does permit change require or include public notice publication?
☐ Yes	☒ No	7. Permit change as a result of a Violation? Violation #
☐ Yes	☒ No	8. Permit change as a result of a Division Order? D.O.#
☐ Yes	☒ No	9. Permit change as a result of other laws or regulations? Explain:
☐ Yes	☒ No	10. Does permit change require or include ownership, control, right-of-entry, or compliance information?
☒ Yes	☐ No	11. Does the permit change affect the surface landowner or change the post mining land use?
☐ Yes	☒ No	12. Does permit change require or include collection and reporting of any baseline information?
☐ Yes	☒ No	13. Could the permit change have any effect on wildlife or vegetation outside the current disturbed area?
☒ Yes	☐ No	14. Does permit change require or include soil removal, storage or placement?
☒ Yes	☐ No	15. Does permit change require or include vegetation monitoring, removal or revegetation activities?
☒ Yes	☐ No	16. Does permit change require or include construction, modification, or removal of surface facilities?
☒ Yes	☐ No	17. Does permit change require or include water monitoring, sediment or drainage control measures?
☒ Yes	☐ No	18. Does permit change require or include certified designs, maps, or calculations?
☐ Yes	☒ No	19. Does permit change require or include underground design or mine sequence and timing?
☐ Yes	☒ No	20. Does permit change require or include subsidence control or monitoring?
☒ Yes	☐ No	21. Have reclamation costs for bonding been provided or revised for any change in the reclamation plan?
☒ Yes	☐ No	22. Is permit change within 100 feet of a public road or perennial stream or 500 feet of an occupied dwelling?
☐ Yes	☒ No	23. Is this permit change coal exploration activity ☐ inside ☐ outside of the permit area?

☒ Attach 3 complete copies of proposed permit change as it would be incorporated into the Mining and Reclamation Plan.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Signed - Name - Position - Date

Subscribed and sworn to before me this 20 day of JUNE, 19 95.

Notary Public

My Commission Expires: 9-27, 19 97

Attest: STATE OF UTAH
COUNTY OF CARBON

DANA BALLARD
NOTARY PUBLIC · STATE of UTAH
865 EAST 2800 SOUTH
PRICE, UTAH 84501
COMM. EXP. 9-27-97

RECEIVED
Received by Oil, Gas & Mining
JUL 05 1995
DIV. OF OIL, GAS & MINING

ASSIGNED PERMIT CHANGE NUMBER

Application for Permit Change
Detailed Schedule of Changes to the Permit

Title of Change: PROPOSED SEDIMENT POND REMOVAL	Permit Number: INA1 005 014
	Mine: Huntington Cyn. No. 4
	Permittee: Mountain Coal Co.

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit change. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the exiting mining and reclamation plan. Include page, section and drawing numbers as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
☒ ADD	☐ REPLACE	☐ REMOVE	APPENDIX 10
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
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Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

PERMIT CHANGE CHRONOLOGY

Title of Proposal: PROPOSED SEDIMENT POND REMOVAL	PERMIT NUMBER: INA/015/004
Description:	PERMIT CHANGE #:
	PERMITTEE: Mountain Coal Co.
	MINE NAME: Huntington Cyn. No. 4

DATE		DOCUMENT ALL ACTIVITIES ASSOCIATED WITH THIS PERMIT CHANGE
	☐Sent ☒Recv'd.	Initial Application for Permit Change Received from Permittee
	☐Sent ☐Recv'd.	
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	☐Sent ☐Recv'd.	
	☐Sent ☐Recv'd.	

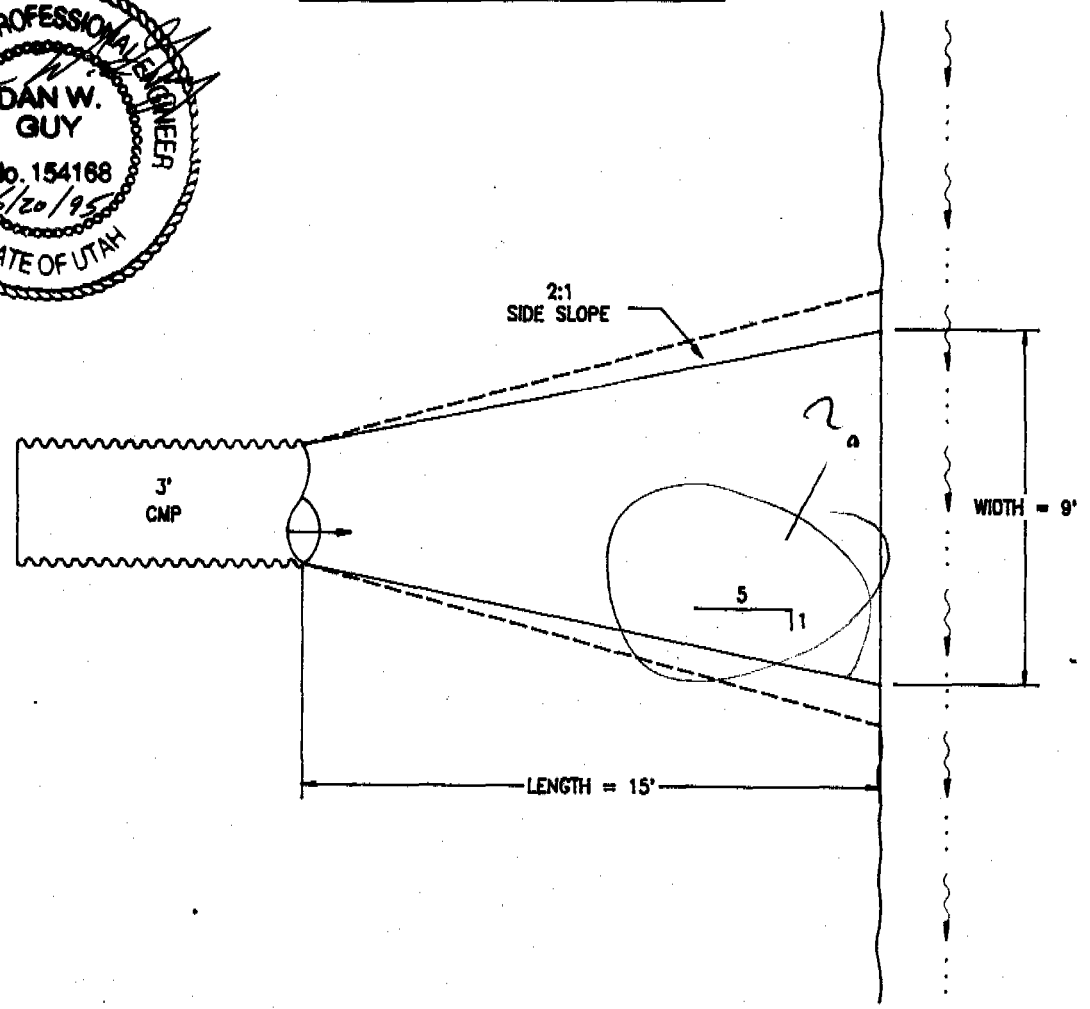
☐ ADDITIONAL SHEETS

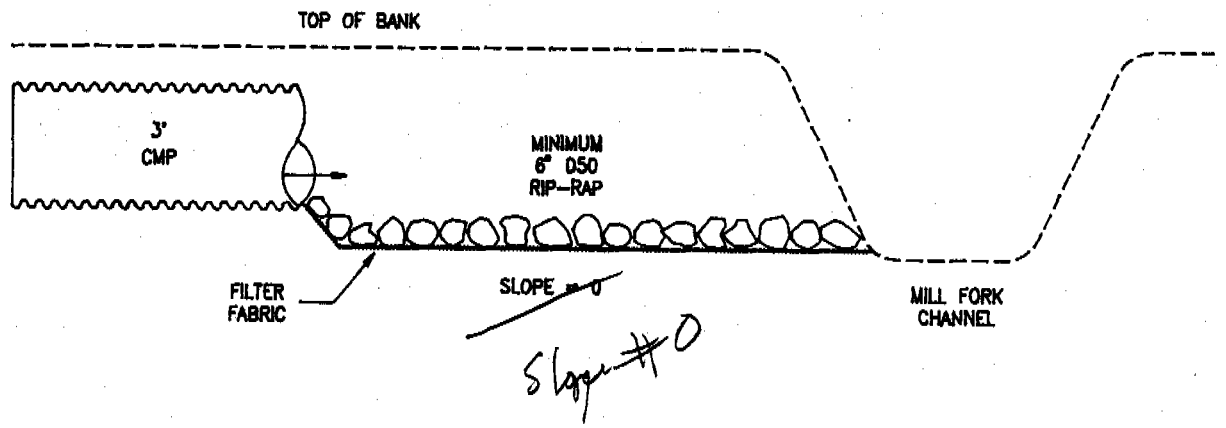
Appendix 10

ATTACHMENT A

PROPOSED RIP-RAP APRON

REGISTERED PROFESSIONAL ENGINEER
DAN W. GUY
No. 154168
6/20/95
STATE OF UTAH





Slope #0

* DESIGN BASED ON FIGURE 7-26, DESIGN OF OUTLET PROTECTION - MAXIMUM TAILWATER CONDITION, "APPLIED HYDROLOGY AND SEDIMENTOLOGY FOR DISTURBED AREAS", BARFIELD, WARNER & HAAN, 1983.

Project Title = Huntington pond removal

7/95 SF

WATERSHED HYDROGRAPH
Inflow into structure # 1
Structure type: Null

-- Routed Watershed # 1 to sturcture # 1
Muskingum routing parameters: X= 0.45 K= 0.07
Hydraulic length = 2500.00 feet
Elevation change = 1495.0 feet.
Travel time = 0.07 hours
Travel time type = Kirpich

uses map Plate 1 from Pase II Bond Release Dated 12-7-93

-- Watershed data for watershed # 1
Curve number = 73.0
Area = 78.2 acres
Hydraulic length = 2500.00 Feet
Elevation change = 1495.0 feet.
Concentration time = 0.07 hours
Concentration time type = Kirpich
Unit hydrograph type = Agriculture

-- Routed Watershed # 2 to sturcture # 1
Muskingum routing parameters: X= 0.45 K= 0.01
Hydraulic length = 150.00 feet
Elevation change = 80.0 feet.
Travel time = 0.01 hours
Travel time type = Kirpich

-- Watershed data for watershed # 2
Curve number = 78.0
Area = 4.1 acres
Hydraulic length = 150.00 Feet
Elevation change = 80.0 feet.
Concentration time = 0.01 hours
Concentration time type = Kirpich
Unit hydrograph type = Disturbed

-- Routed Watershed # 3 to sturcture # 1
Muskingum routing parameters: X= 0.44 K= 0.04
Hydraulic length = 1000.00 feet
Elevation change = 460.0 feet.
Travel time = 0.04 hours
Travel time type = Kirpich

-- Watershed data for watershed # 3
Curve number = 73.0
Area = 14.6 acres
Hydraulic length = 1000.00 Feet
Elevation change = 460.0 feet.
Concentration time = 0.04 hours
Concentration time type = Kirpich
Unit hydrograph type = Agriculture

-- Watershed data for watershed # 4
Curve number = 78.0
Area = 4.5 acres
Hydraulic length = 1000.00 Feet
Elevation change = 220.0 feet.
Concentration time = 0.05 hours
Concentration time type = Kirpich
Unit hydrograph type = Agriculture

Reclamation Plan:

The proposed reclamation plan for the pond area is shown on the enclosed Plate 2, with cross-sections on Plate 3. A description of the proposed plan is as follows:

(1) ***All existing rip-rap from the pond overflows will be removed and temporarily stored for re-use;***

(2) ***The berm along the lower cell will be pushed into the cell and compacted as fill;***

(3) ***The dam of the upper cell will be lowered by approximately 5' and compacted into the lower cell area as backfill;***

(4) ***The 36" culvert will be installed from the upper basin across the Mill Fork Road;***

(5) ***Rip-rap on the existing pond inlet will be re-set with voids filled in with existing soil;*** Re Grade?

(6) ***The basin and culvert inlet structure will be rip-rapped using 9" D50 or larger rock with soil in the voids;***

(7) ***The culvert outlet structure (rip-rap apron) will be installed using 6" D50 or larger rip-rap placed to a minimum depth of 9" over a bedding of filter fabric;***

(8) ***All exposed soil areas will be roughened by hand and/or using the backhoe teeth;***

(9) ***The entire re-disturbed area will be seeded and mulched, using the approved seed mix in the permit;***

(10) ***The road drainage will be restored, and the temporary fence will be replaced along the pond side of the road.***

The flow from the culvert will discharge onto a rip-rap apron prior to discharge to the stream. The rip-rap apron is proposed to be 15' in length with a bottom width from 3' - 9' and 2h:1v side slopes. Rip-rap will be 6" D50, as described under the Reclamation Section of this Appendix. A proposed design for the rip-rap apron is shown in Attachment A of this Appendix.

The following is a list of the parameters used and results obtained:

100 year / 6 hour event (in.)	*2.12*
Undisturbed Area (ac.)	*78.08*
Undisturbed Runoff CN	*75*
Undisturbed Time of Concentration (hrs.)	*0.07*
Undisturbed Peak Flow (cfs)	*28.52*
Disturbed Area (ac.)	*6.38*
Disturbed Runoff CN	*90*
Disturbed Time of Concentration (hrs.)	*0.289*
Disturbed Peak Flow (cfs)	*5.60*
Total Peak Flow 100/6 (cfs)	*34.12*
Culvert Manning's Number	*0.025*
Culvert Slope (%)	*3.50*
Velocity (fps)	*7.82*
Required Culvert Diameter (ft.)	*2.36*
Proposed Culvert Diameter (ft.)	*3.00*

As shown above, the proposed culvert diameter of 3' is more than adequate to carry the flow from a 100 year-6 hour storm event for this area. Computer backup information is included in Attachment A of this Appendix.

Appendix 10
Sediment Pond Removal

Introduction:

On March 20, 1995, the Utah Division of Oil, Gas & Mining granted approval of the Phase II Bond Release for the Huntington Canyon No. 4 Mine, conditional upon removal of the sediment ponds. This Appendix will address the proposed plans and designs for final removal of the sediment ponds.

General Plan:

The proposed plan for sediment pond removal consists of total removal and recontouring of the lower cell, and reduction of the upper cell to a basin. A 36" culvert will then be installed to carry the drainage from the minesite and basin to Mill Fork Creek. The existing pond configuration is shown on Plate 1 of this Appendix. The proposed, final reclamation in shown on Plates 2 and 3.

Hydrology:

The runoff for the entire drainage area was calculated for a 100 year-6 hour storm event of 2.12". Acreages, slopes, runoff curve numbers and times of concentration for both the undisturbed and disturbed (reclaimed) areas were taken from Chapter 7 of the approved permit. Expected flows from both the undisturbed and disturbed areas were calculated using the OSM "Storm 6.0" computer program. The total flow was then routed through a culvert using the Haested "Flowmaster" program to determine minimum culvert size.

APPENDIX 10

SEDIMENT POND REMOVAL

FOR

PHASE II BOND RELEASE

Circular Channel Analysis & Design
Solved with Manning's Equation

Open Channel - Uniform flow

Worksheet Name: #4 MINE DRAINAGE

Comment: SEDIMENT POND REMOVAL - 36" CULVERT

Solve For Full Flow Diameter

Given Input Data:

Slope.....	0.0350 ft/ft
Manning's n.....	0.025
Discharge.....	34.12 cfs

Computed Results:

Full Flow Diameter.....	2.36 ft
Full Flow Depth.....	2.36 ft
Velocity.....	7.82 fps
Flow Area.....	4.36 sf
Critical Depth....	2.00 ft
Critical Slope....	0.0331 ft/ft
Percent Full.....	100.00 %
Full Capacity.....	34.12 cfs
QMAX @.94D.....	36.70 cfs
Froude Number.....	FULL

Open Channel Flow Module, Version 3.43 (c) 1991
*Haestad Methods, Inc. * 37 Brookside Rd * Waterbury, Ct 06708*

```
VDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD7
:Project Title         = #4 MINE DRAINAGE-DISTURBED (100/6)                     :
:WATERSHED HYDROGRAPH                                                            :
:     Inflow into structure #  1                                                 :
:     Structure type:          Null                                              :
:                                                                                :
:                                                                                :
:-- Watershed data for watershed # 1                                             :
:    Curve number            =    90.0                                           :
:    Area                    =     6.4 acres                                     :
:    Hydraulic length        =    0.00 feet                                      :
:    Elevation change        =     0.0 feet.                                     :
:    Concentration time      =    0.29 hours                                     :
:    Unit hydrograph type = Disturbed                                            :
:                                                                                :
:-- Total Area               =    6.4 acres                                      :
:                                                                                :
:-- Storm data                                                                   :
:    Total precipitation     =     2.1 inches                                    :
:    Storm type              = SCS 6 hour design storm                           :
:    Peak Discharge          =    5.60 cfs                                       :
:    Discharge volume        =    0.64 acre ft                                   :
:                                                                                :
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VDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD7
:Project Title          = #4 MINE DRAINAGE-UNDISTURBED (100/6)                    :
:WATERSHED HYDROGRAPH                                                             :
:      Inflow into structure #  1                                                 :
:      Structure type:          Null                                              :
:                                                                                 :
:                                                                                 :
:-- Watershed data for watershed # 1                                             :
:     Curve number             =    75.0                                        :
:     Area                     =    78.1 acres                                  :
:     Hydraulic length         =    0.00 feet                                   :
:     Elevation change         =     0.0 feet.                                  :
:     Concentration time       =    0.07 hours                                  :
:     Unit hydrograph type = Disturbed                                           :
:                                                                                 :
:-- Total Area              =    78.1 acres                                      :
:                                                                                 :
:-- Storm data                                                                    :
:     Total precipitation  =     2.1 inches                                     :
:     Storm type           = SCS 6 hour design storm                             :
:     Peak Discharge       =   28.52 cfs                                         :
:     Discharge volume     =    2.87 acre ft                                     :
:                                                                                 :
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Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015

June 20, 1995

Susan White
Reclamation Specialist
Utah Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED
JUL 05 1995
DIV. OF OIL, GAS & MINING

Re: Proposed Sediment Pond Removal
Mountain Coal Co.
Huntington Canyon No. 4 Mine
INA/015/004
Emery County, Utah

Dear Susan:

Mountain Coal Co. is herein submitting 8 copies of a proposed plan for final removal of the Sediment Pond at the Huntington Canyon No. 4 Mine, for your approval.

These plans have been discussed with the U.S. Forest Service, and this is the scenario they preferred. A copy of this proposal has also been given to Mr. Jeff Defreest of the Price U.S.F.S. Office for comment and approval.

This proposal is being submitted as an Appendix to the Permit for ease of review, and should be added at the end of Volume 2. I have also enclosed the required Permit Change Forms with this submittal.

As you know, the Phase II Bond Release for this mine is approved, conditional to removal of the Sediment Pond. We are prepared to start on this project immediately upon approval.

If you have and questions, or need any further information, please let me know.

Respectfully,

Dan W. Guy,
for Paige B. Beville

cc: Paige B. Beville - MCC
Scot Anderson - Arco
Jeff Defreest - U.S.F.S.
File

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

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

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)

August 8, 1995

TO: Joe Helfrich, Inspection and Amendment Supervisor

FROM: Sharon Falvey, Senior Reclamation Hydrologist SF

RE: Proposed Sediment Pond Removal, Mountain Coal Company, Huntington #4 Mine, ACT/015/004-95B, Emery County, Utah

Folder #2

SYNOPSIS

On March 8, 1995, the Division determined the Huntington #4 Mine reclaimed areas would not contribute additional suspended solids outside of the permit area, and that Phase II bond release was contingent upon removal of the Huntington #4 Mine pond. This amendment presents the Permittee's proposal for the final configuration and regrading of the pond area. The Forest Service has deemed the proposal acceptable through the memo received at the Division on August 2, 1995. However, additional changes were incorporated at the request of the Division, through phone conversations with Dan Guy, then resubmitted on August 2, 1995. Since the changes in the August 2, 1995 proposal are not significantly different from the original proposal, it is not expected that the Forest Service will have any additional comment on the changes.

Analysis:

The Operator proposes the following:

- Existing rip-rap from the pond inlets and outlets will be removed and temporarily stored for re-use;
- The berm along the lower cell will be pushed into the cell and compacted as fill:
- The dam of the upper cell will be lowered by approximately 8' and compacted into the lower cell area as backfill;
- A 36" culvert will be installed from the upper basin across the Mill Fork Road;
- Riprap on the existing pond inlet will be re-set with voids filled in with the existing soil;

- The basin and culvert inlet structure will be rip-rapped using a 12" D50 or larger rock with soil in the voids;
- The culvert outlet will be installed using 6" D50 or larger rip-rap placed to a minimum depth of 9" over a bedding of filter fabric;
- All exposed soil areas will be roughened by hand and/or using the backhoe teeth;
- The entire re-disturbed area will be seeded and mulched using the approved seed mix in the permit;
- The road drainage will be restored, and the temporary fence will be replaced along the pond side of the road.

The Permittee uses hydrologic information for the 36 inch culvert design using operational CN's and Watershed Areas. The postmining topography and watershed areas vary somewhat to the operational area. The permittee however, has used a conservative CN value of 90 for the reclaimed areas. The Division has compared the Permittee's results with values obtained using postmining topography and watershed boundaries on Plate 1 in the Phase II bond release amendment. The Division divided the watershed according to areas draining to the main culvert. CN's were obtained using TR-55 methodology while precipitation design values were obtained from the NOAA Precipitation Frequency Atlas. The Division's calculated peak flow rate indicate the Permittee's calculated peak flow is adequate and the proposed 3 foot culvert exceeds design requirements for a 100 year-6 hour storm event.

The Permittee provided designs for the proposed D50 riprap for the channel leading to the 36 inch culvert and for the culvert inlet and outlet. Presently, the channel leading to the culvert is an inlet to the existing pond, and has shown some erosive movement. This channel has seen a few significant events, according to Susan White, DOGM inspector, but has not had a complete failure. No designs were presented during the operational phase for this channel section as it was the inlet to the pond. The Permittee now provides a design for a trapezoidal channel with a 4 foot bottom width, a one foot depth, and 2:1 side slopes. The average channel bottom slope is 45.71 % and a design riprap D50 of 20 inches was obtained from a diagram of the "Design of Road Side Drainage Channels" Hydraulic Design Series No. 4, May 1965, U.S. Department of Commerce, Bureau of Public Roads. It should be noted however, this design method assumes channel slope or bottom at 12:1 and provides additional design based on the side slopes. The Division calculated a D50 for a channel slope of 45 % would be 5' to obtain a safety factor of one, using the tractive force methodology in Barfield Warner and Haan (1981). However, the slope of this channel exceeds the limitations of the testing of these design methodologies. Since the slope of this

channel exceeds the design standards for available methodologies, the following riprap construction similar to what might be present on a slope in this area is proposed.

- The channel area will be defined according to the design shown in Attachment A;
- Riprap will be re-set in the channel with the largest available at the base of the slope and decrease in size up the slope;
- Larger riprap will be placed on top of one another in a stair step fashion as much as possible;
- A mixture of gravel and fine materials (i.e. soil) will be compacted around the block with vibrating foot tamper or other tool able to achieve similar compaction.
- The area will be reseeded along with the reclaimed pond area.

If equipment access is deemed impractical in the field as much of the above procedure as possible will be performed by hand.

The Permittee's grading plan includes retention of a surge basin prior to entering the culvert. This design will reduce velocity and cause sediment deposition prior to discharge through the culvert and may require infrequent maintenance so the entrance remains clear. The length of the proposed culvert could have been reduced thus providing additional fill which may have been used to decrease the upstream gradient. However, the Permittee has chose to utilize the existing sandstone outcrop to provide the control for the basin and has reduced the previously existing pond embankment.

Riprap for the 36" CMP inlet was sized to be 20 " by the Permittee using the methodology discussed previously. The Permittee is proposing a 12" riprap size for this section indicating a 20 " size is not practical. Because the channel drops into the "surge basin", there is a change in gradient prior to the inlet to the culvert. This basin will slow the velocity at the inlet. Although no designs were computed for this section, the proposed sizing should be adequate due to the grade change.

The Permittee proposes the 36" culvert outlet be protected using an energy dissipation apron. The design is based on a method identified in Barfield Warner and Hann, developed by the EPA for 0 % outslope and a tail water depth greater than half the diameter of the culvert (TW $\geq$ .5 D). This method assumes the culvert is flowing full. It is not clear whether the proposed design uses the discharge through a 2.38 ft culvert flowing full which is equal to the 100 year-6 hour discharge, or discharge flowing full through a 3 foot culvert.

It appears the Permittee has presented a minimized design based on conditions of TW $\geq$ .5 D. However, a condition of TW $\leq$ .5 D more likely to occur in ephemeral systems before equilibrium is reached. The following design deminsions were determined by the Division for a culvert flowing full that is slightly smaller than that carrying the design flow and the proposed culvert flowing full.

Culvert Diameter/Apron Design	27"D/length of apron	27"D/width of apron	30"D/length of apron	30"D/ width of apron
TW $\geq$ .5 D	21'	10.7'	27'	13.8'
TW $\leq$ .5 D	18'	10.2'	22'	25'

For TW $\leq$ .5 D, the Permittee's proposed design length is 15', the proposed design width is 9', and the proposed D50 is 6 inches. The Permittee has provided a conservative design flow but has minimized the energy dissipation apron design. The maximum velocity expected from the 34.12 cfs discharged through a 2.38 ft (28.5 inch) culvert flowing full would equal the 100 year-6 hour discharge with a velocity of 7.82 fps. The same discharge flowing through a 3 foot culvert would however discharge at greater velocity of 9.3 fps.

The existing 24 " culvert is proposed to remain. The volume of flow this culvert receives from an approximate 7.4 acres is 2.98 cfs. The minimal amount of flow this culvert receives for the design event makes justification for retention questionable. However, this culvert does receive drainage from the Forest Service road. The Forest Service has deemed the general configuration of this plan acceptable in the memo received at the Division on August 2, 1995.

RECOMMENDATION

It is recommended this proposal be approved. The Permittee should consider increasing the length and width of the energy dissipation apron. The Forest Service has deemed the proposal acceptable in the memo received at the Division on August 2, 1995. The Permittee however, resubmitted this plan for approval on August 2, 1995. The approval letter received from the Forest Service did not indicate the recent changes were acceptable. Since the changes in the August 2, 1995 proposal are not significantly different from the original proposal, it is not expected that the Forest Service will have any additional comments. Prior to approval the Division should provide documentation of the Forest Service acceptance for the most recent changes through phone communication or approval letter. A response was requested on August 7, 1995.

cc: Susan White
HUNN#4PO.BON

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

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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)

August 8, 1995

FIELD(001)

Re: Sediment Pond Removal, Mountain Coal Company, Huntington Canyon Mo. 4 Mine, ACT/015/004-95B, Folder #2, Emery County, Utah

Dear Mr. **FIELD**(002):

Enclosed is a copy of Mountain Coal's resubmitted plans for removal of the Sediment Pond (95B) for the Huntington Canyon #4 Mine. This proposal should replace the previous submittal for pond removal dated July 5, 1995. The pond removal is a part of preparing for final bond release for this site.

The Division anticipates approving this permit change on August 10, 1995. If you have any questions or need additional information, please contact me or Joseph C. Helfrich, Permit Supervisor, at your earliest convenience.

Sincerely,

Joseph C. Helfrich for

Susan M. White
Senior Reclamation Biologist

Enclosure
cc: P. Beville, Mountain Coal
Dan Guy
FOURPD.95B

James Fulton, Chief
Denver Field Division
Office of Surface Mining
Reclamation and Enforcement
1999 Broadway, Ste. 3320
Denver, CO 80202-5733

Art Abbs, Acting Director (Letter)
Office of Surface Mining
Reclamation and Enforcement
505 Marquette N.W., Ste. 1200
Albuquerque, NM 87102

Janette S. Kaiser, Forest Supervisor (2 copies)
U. S. Forest Service
Manti-LaSal National Forest
599 West Price River Road
Price, UT 84501

Mark Page, Regional Engineer
Utah Division of Water Rights
Southeastern Regional Office
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P. O. Box 718
Price, UT 84501-0718

Brent Bradford, Deputy Director
Office of the Executive Director
Department of Environmental Quality
168 North 1950 West
P. O. Box 148810
Salt Lake City, UT 84114-4810

Robert Valentine, Director
Utah Division of Wildlife Resources
1596 West North Temple
Salt Lake City, UT 84116

Price Field Office (1 official copy)
Division of Oil, Gas and Mining

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* Distributed only for new areas (surface or surfaces) involved in permitting actions, otherwise the "new" copies are review copies.

Revised August 8, 1995

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FAX TRANSMITTAL

Forest Supervisor's Office
and Price Ranger District
599 West Price River Drive
Price, Utah 84501

To: Sue White

From: Carter Reed

Subject: Hunt Cyn. #4 Sediment Pond Removal

Total Pages Including Cover: 2

FAX Machine No.: 801-637-4940

Commercial Telephone No.: 801-637-2817

Date: 8/16/95

Time: 2:30 PM

Comments:

A copy will also be sent in regular mail.

United States Department of Agriculture | Forest Service | Manti-La Sal National Forest | 599 West Price River Dr. Price, Utah 84501

Reply to: 2820

Date: August 16, 1995

Utah Coal Regulatory Program
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
Attention: Pamela Grubaugh-Littig

RE: Sediment Pond Removal, Mountain Coal Company, Huntington Canyon No. 4 Mine, ACT/015/004-95B, Folder #2, Emery County, Utah

Dear Ms. Littig:

We have reviewed the resubmitted plans for removal of the sediment pond for the Huntington Canyon #4 Mine and find that they adequately address our concerns. We hereby consent to the plans and immediate implementation. A joint UDOGM/Forest Service inspection should be conducted after the work is completed. Please contact Jeff DeFreest to schedule this inspection.

If you have any questions, contact Jeff DeFreest or Carter Reed at the Forest Supervisor's Office in Price, Utah.

Sincerely,

Reed W. Lewis

for
JANETTE S. KAISER
Forest Supervisor

cc:
D-2/3
C.Reed

United States Department of Agriculture | Forest Service | Manti-La Sal National Forest | 599 West Price River Dr., Price, Utah 84501

Reply to: 2820

Date: August 16, 1995

Utah Coal Regulatory Program
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
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If you have any questions, contact Jeff DeFreest or Carter Reed at the Forest Supervisor's Office in Price, Utah.

Sincerely,

Reed W. Larsen

for
JANETTE S. KAISER
Forest Supervisor

cc:
D-2/3
C.Reed