

C/007/022 Incoming

#3937

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**SAVAGE**

Savage Services Corporation  
Coal & Power Services Group  
2025 East 5000 South  
Box 1001  
Price, UT 84501

(435) 637-5664  
Fax (435) 637-3418

Mr. Daron Haddock  
Coal Program Manager  
Utah Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

Re: Relocation of Truck Dump and Culverts  
Savage Service Corporation  
Savage Coal Terminal  
C/007/022 , Task #3892

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OCT 17 2011

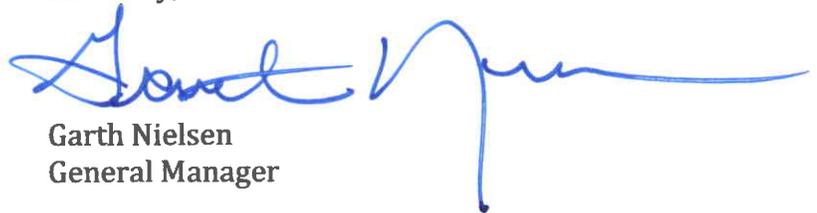
DIV. OF OIL, GAS & MINING

Dear Mr. Haddock:

Enclosed are 3 copies of a revised amendment to the Savage Coal Terminal MRP. The amendment is being resubmitted to show the relocation of a former temporary truck dump and to update the hydrology map to show the existing culverts, per the request in your letter of August 31, 2011. The Culvert Design Table 7-25 and the Refuse Pile Drainage Table 7-26 have also been revised to reflect present conditions.

Updated Plates 5-2, 7-2, and Tables 7-25 and 7-26 are included, along with required C1/C2 Forms. If you have any questions, or need additional information, please let me know.

Sincerely,



Garth Nielsen  
General Manager

Cc: Pete Hess, PFO  
Dan Guy  
File

## APPLICATION FOR COAL PERMIT PROCESSING

Permit Change  New Permit  Renewal  Exploration  Bond Release  Transfer

**Permittee:** Savage Services Corporation

**Mine:** Savage Coal Terminal

**Permit Number:** C/007/022

**Title:** Relocation of Truck Dump and Culverts

**Description,** Include reason for application and timing required to implement:

To update relocation of truck dump and culverts.

**Instructions:** If you answer yes to any of the first eight questions, this application may require Public Notice publication.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ <input type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 2. Is the application submitted as a result of a Division Order? DO# _____  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?                                     |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 4. Does the application include operations in hydrologic basins other than as currently approved?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 6. Does the application require or include public notice publication?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 7. Does the application require or include ownership, control, right-of-entry, or compliance information?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 9. Is the application submitted as a result of a Violation? NOV # _____   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 10. Is the application submitted as a result of other laws or regulations or policies?<br><i>Explain:</i> _____                                   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 11. Does the application affect the surface landowner or change the post mining land use?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)                                |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 13. Does the application require or include collection and reporting of any baseline information?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 15. Does the application require or include soil removal, storage or placement?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 16. Does the application require or include vegetation monitoring, removal or revegetation activities?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 17. Does the application require or include construction, modification, or removal of surface facilities?   |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 18. Does the application require or include water monitoring, sediment or drainage control measures?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 19. Does the application require or include certified designs, maps or calculation?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 20. Does the application require or include subsidence control or monitoring?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 21. Have reclamation costs for bonding been provided?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 23. Does the application affect permits issued by other agencies or permits issued to other entities?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 24. Does the application include confidential information and is it clearly marked and separated in the plan?                                     |

**Please attach three (3) review copies of the application. If the mine is on or adjacent to Forest Service land please submit four (4) copies, thank you.** (These numbers include a copy for the Price Field Office)

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.

Garth Nielsen                      General Manager                      10-12-11                      *Garth Nielsen*  
 Print Name                      Position                      Date                      Signature (Right-click above choose certify then have notary sign below)

Subscribed and sworn to before me this 12 day of October, 2011  
 Notary Public: Tami L. McKendrick, state of Utah.  
 My commission Expires: 07-02-2014  
 Commission Number: 583388  
 Address: 1303 SO. 1000 W.  
 City: PAICE State: Ut Zip: 84501



<b>For Office Use Only:</b>	<b>Assigned Tracking Number:</b>	<b>Received by Oil, Gas &amp; Mining</b> <span style="font-size: 1.5em; color: red;">RECEIVED</span> <span style="font-size: 1.2em;">OCT 17 2011</span> <span style="color: red;">DIV. OF OIL, GAS &amp; MINING</span>
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**TABLE 7-25  
CULVERT DESIGN SPECIFICATIONS**

Culvert Number	Discharge (cfs)	Diameter (ft)	Length (ft)	Normal Depth	Velocity (ft/sec)
C-1	0.81	1.0	30	0.45	2.38
C-1a	0.81	2.0	55	0.45	2.38
C-2	0.98	1.5	400	0.35	2.80
C-3	3.70	2.0	220	0.77	3.32
C-4	1.11	1.5	100	0.40	2.05
C-5	9.68	2.0	280	1.35	3.59
C-6	0.80	1.5	30	0.38	2.20
C-6A	0.80	2.0	300	0.38	2.20
C-7	10.56	2.0	40	1.43	4.40
C-8	0.77	1.5	60	0.38	2.20
C-9	1.44	1.5	50	0.51	2.70
C-10	11.97	2.0	40	1.60	4.44
C-12	5.11	1.5	40	1.11	3.64
C-13	5.11	1.5	130	1.17	4.73
C-13A	5.11	1.5	60	1.11	3.64
C-13B	5.11	1.50	100	1.11	3.64
C-15	20.50	2.0	30	2.87*	7.60*
<del>C-17</del>	<del>0.80</del>	<del>1.5</del>	<del>100</del>	<del>0.46</del>	<del>2.20</del>
C-18	0.80	1.5	100	0.46	2.20
C-19	0.22	1.0	50	0.28	1.19
C-20	0.22	1.0	50	0.28	1.19
C-21	1.11	2.0	200	0.34	2.05
<del>C-22</del>	<del>13.88</del>	<del>2.0</del>	<del>475</del>	<del>2.10*</del>	<del>11.49</del>
C-23	0.15	1.0	45	0.20	1.50
C-24	1.44	1.5	250	0.51	2.70
C-25	1.11	1.5	60	0.40	2.05
C-25A	1.11	1.5	50	0.40	2.05
C-26	1.44	1.5	50	0.51	2.70
C-27	1.44	1.5	50	0.51	2.70
<del>C-28</del>	<del>1.44</del>	<del>1.5</del>	<del>50</del>	<del>0.51</del>	<del>2.70</del>
C-29	0.48	1.5	40	0.44	3.11

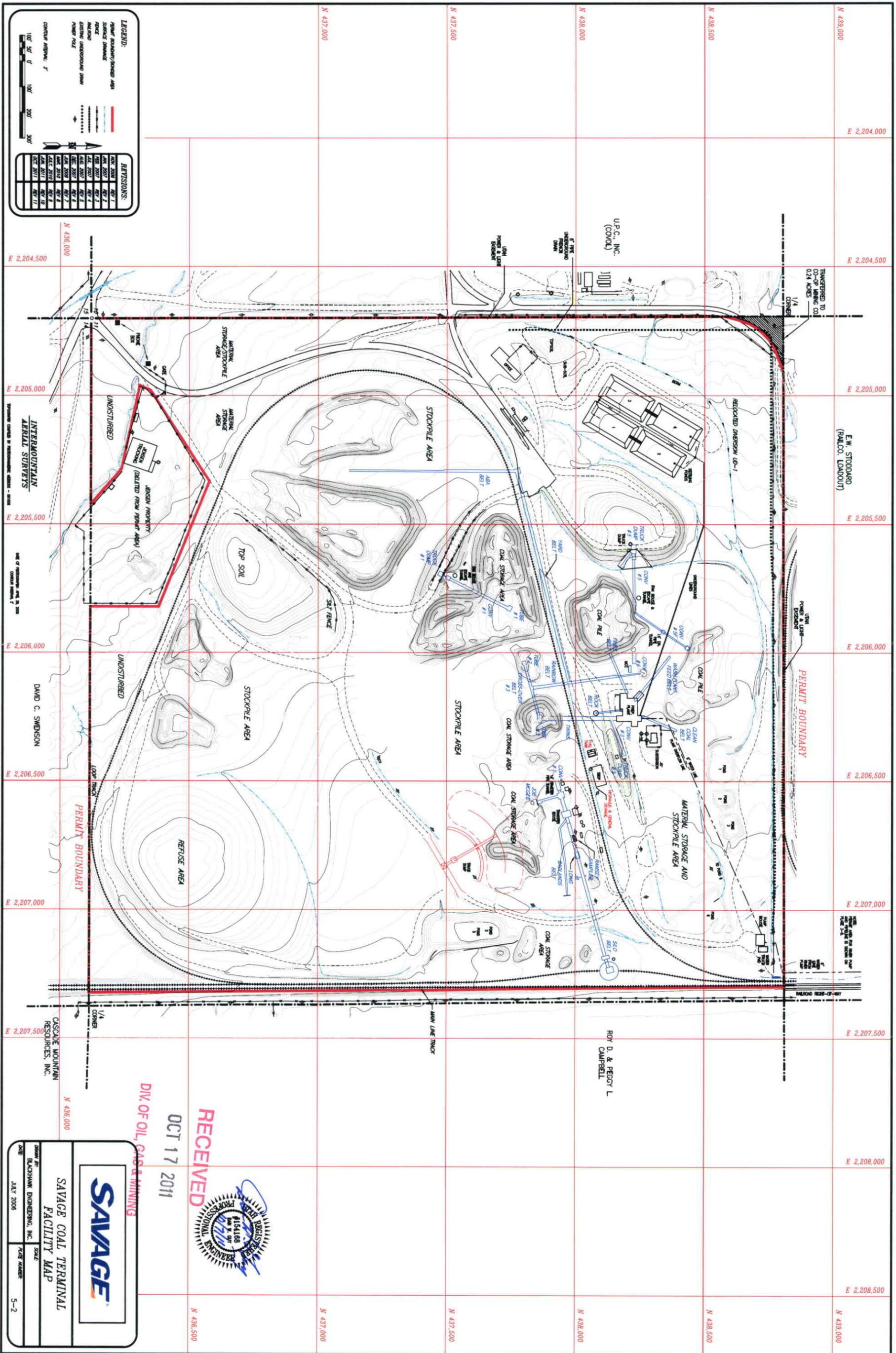
\*Head Water Depth = 3.50 ft.

\*\*\*Erosion to be minimized by the use of 9" med. diam. rip-rap at the culvert outlet.

**TABLE 7-26  
REFUSE PILE DRAINAGE**

Design Details			
Structure	CD-13	CD-7	<del>C-22</del>
Drainage Area (acres)	4.16	7.18	<del>16.45</del>
Precipitation: 100 year - 6 hour (inches)	1.91	1.91	<del>1.91</del>
Peak Discharge - Q100 (cfs)	5.20	8.98	<del>13.88</del>
Slope (%)	2.50	3.00	<del>2.00</del>
Bottom Width (feet)	0.00	2.00	<del>24" cmp</del>
Side Slope (H:V)	1:1	1:1	<del>N/A</del>
Manning's No.	0.035	0.035	<del>0.024</del>
Velocity (fps)	3.75	4.57	<del>11.49</del>
Runoff Curve No.	87	87	<del>87</del>
Rip-Rap Required (Y/N)	N*	N*	<del>N*</del>
Flow Depth (feet)	1.18	0.72	<del>2.10</del>
Time of Conc. (hours)	0.02	0.02	<del>0.30</del>

\* Channels will be constructed within Mancos Shale or compacted refuse where erosive velocities are estimated at 6 fps or greater ("Applied Hydrology and Sedimentology for Disturbed Areas," Table 3-2, p. 162, Barfield, Warner & Haan, 1973). If erosion becomes evident, channels will be rip-rapped as necessary.



**LEGEND:**

- PERMIT BOUNDARY/UNDISTURBED AREA
- SURFACE DIMENSION
- FENCE
- EXISTING UNDERGROUND DRAIN
- POWER PILE

**REVISIONS:**

NO.	DATE	BY	DESCRIPTION
REV 1	NOV 2008	REV 1	
REV 2	NOV 2008	REV 2	
REV 3	NOV 2008	REV 3	
REV 4	NOV 2008	REV 4	
REV 5	NOV 2008	REV 5	
REV 6	NOV 2008	REV 6	
REV 7	NOV 2008	REV 7	
REV 8	NOV 2008	REV 8	
REV 9	NOV 2008	REV 9	
REV 10	NOV 2008	REV 10	
REV 11	NOV 2008	REV 11	
REV 12	NOV 2008	REV 12	
REV 13	NOV 2008	REV 13	
REV 14	NOV 2008	REV 14	
REV 15	NOV 2008	REV 15	
REV 16	NOV 2008	REV 16	
REV 17	NOV 2008	REV 17	
REV 18	NOV 2008	REV 18	
REV 19	NOV 2008	REV 19	
REV 20	NOV 2008	REV 20	
REV 21	NOV 2008	REV 21	
REV 22	NOV 2008	REV 22	
REV 23	NOV 2008	REV 23	
REV 24	NOV 2008	REV 24	
REV 25	NOV 2008	REV 25	
REV 26	NOV 2008	REV 26	
REV 27	NOV 2008	REV 27	
REV 28	NOV 2008	REV 28	
REV 29	NOV 2008	REV 29	
REV 30	NOV 2008	REV 30	
REV 31	NOV 2008	REV 31	
REV 32	NOV 2008	REV 32	
REV 33	NOV 2008	REV 33	
REV 34	NOV 2008	REV 34	
REV 35	NOV 2008	REV 35	
REV 36	NOV 2008	REV 36	
REV 37	NOV 2008	REV 37	
REV 38	NOV 2008	REV 38	
REV 39	NOV 2008	REV 39	
REV 40	NOV 2008	REV 40	
REV 41	NOV 2008	REV 41	
REV 42	NOV 2008	REV 42	
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REV 46	NOV 2008	REV 46	
REV 47	NOV 2008	REV 47	
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REV 87	NOV 2008	REV 87	
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REV 90	NOV 2008	REV 90	
REV 91	NOV 2008	REV 91	
REV 92	NOV 2008	REV 92	
REV 93	NOV 2008	REV 93	
REV 94	NOV 2008	REV 94	
REV 95	NOV 2008	REV 95	
REV 96	NOV 2008	REV 96	
REV 97	NOV 2008	REV 97	
REV 98	NOV 2008	REV 98	
REV 99	NOV 2008	REV 99	
REV 100	NOV 2008	REV 100	

CONTOUR INTERVAL: 7'

100' 0" 100' 200' 300'

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SAVAGE

SAVAGE COAL TERMINAL FACILITY MAP

SCALE: AS SHOWN

DATE: JULY 2008

PROJECT NO.: 08-00000000

DATE: JULY 2008

SCALE: AS SHOWN

PROJECT NO.: 08-00000000

DATE: JULY 2008

SCALE: AS SHOWN

PROJECT NO.: 08-00000000

CASCADE MOUNTAIN RESOURCES, INC.

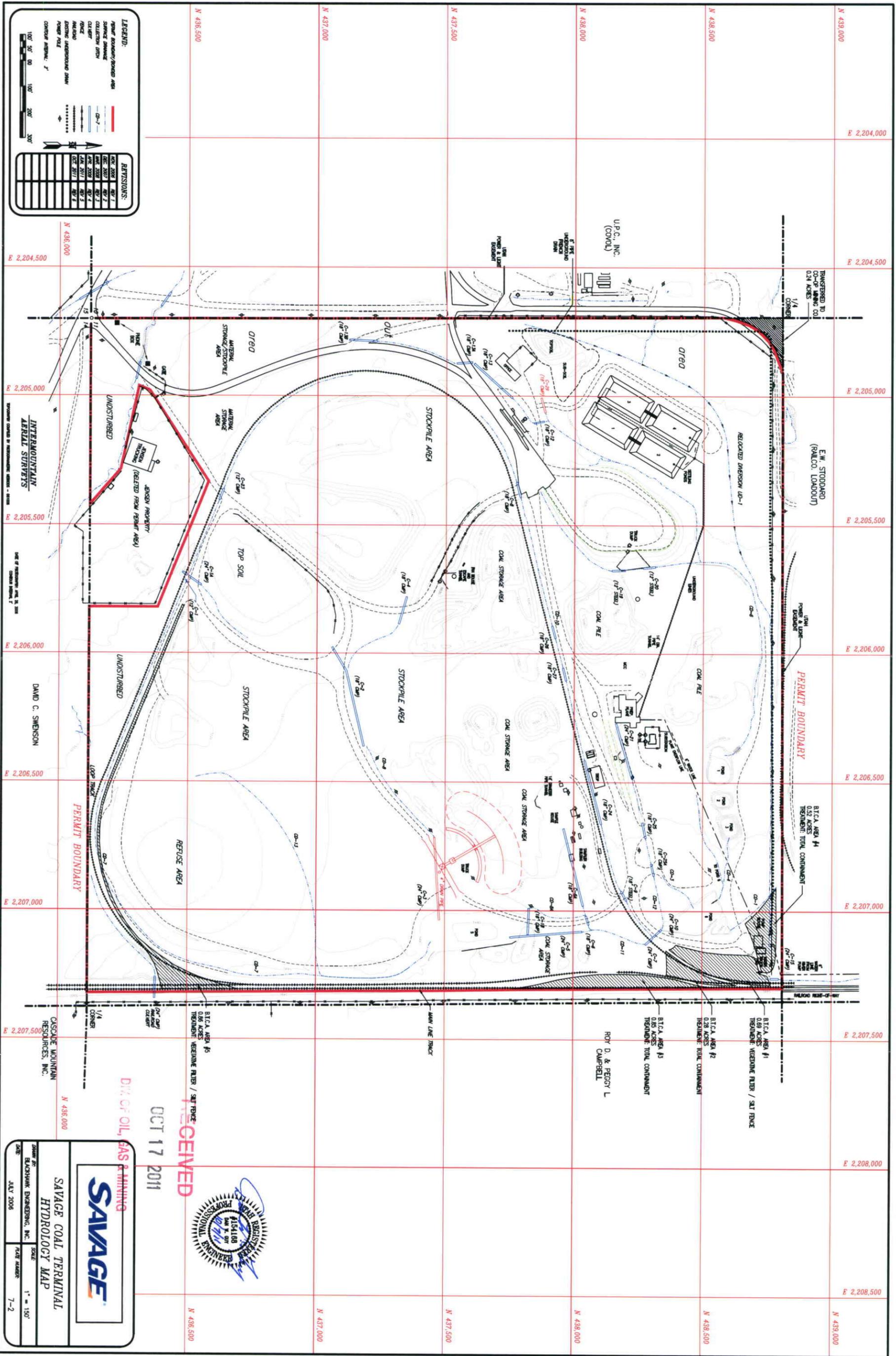
ROY D. & PEGGY L. CAMPBELL

DAND C. SWENSON

INTERMOUNTAIN AERIAL SURVEYS

U.P.C. INC. (COOL)

E.W. STOODARD (PALCO. LOADOUT)



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**Savage Coal Terminal Hydrology Map**  
 SCALE: 1" = 150'  
 DATE: JULY 2008

**LEGEND:**

- POINT SOURCE/PERMIT AREA
- CONTOUR
- COLLECTOR DITCH
- CHANNEL
- ROAD
- ADJACENT JURISDICTIONAL DRAIN
- PERMIT FOOT
- CONTOUR INTERVAL: 2'

**REVISIONS:**

NO.	DATE	BY	DESCRIPTION
1	07/01/08	BS	INITIAL DRAINAGE MAP
2	07/01/08	BS	ADD PERMIT BOUNDARY
3	07/01/08	BS	ADD DRAINAGE CANALS
4	07/01/08	BS	ADD COAL STORAGE AREAS
5	07/01/08	BS	ADD STOCKPILE AREAS
6	07/01/08	BS	ADD REFUSE AREA
7	07/01/08	BS	ADD DREDGE
8	07/01/08	BS	ADD PERMIT BOUNDARY
9	07/01/08	BS	ADD PERMIT BOUNDARY
10	07/01/08	BS	ADD PERMIT BOUNDARY
11	07/01/08	BS	ADD PERMIT BOUNDARY
12	07/01/08	BS	ADD PERMIT BOUNDARY
13	07/01/08	BS	ADD PERMIT BOUNDARY
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18	07/01/08	BS	ADD PERMIT BOUNDARY
19	07/01/08	BS	ADD PERMIT BOUNDARY
20	07/01/08	BS	ADD PERMIT BOUNDARY