

**From:** "cwmining" <cwmining@etv.net>  
**To:** "Jerriann Ernstsens" <jerriannernstsens@utah.gov>  
**Date:** 12/14/2004 11:21:53 AM  
**Subject:** RE: reference area

Sorry about getting it to you so late. I was finishing it up Friday morning and planned on mailing it to you, but I got called underground to make sure the head gate entries were just starting were headed in the right direction and have been there since. I complete forgot about this amendment or I would have had it sent yesterday.

-----Original Message-----

From: Jerriann Ernstsens [mailto:jerriannernstsens@utah.gov]  
Sent: Wednesday, December 08, 2004 4:49 PM  
To: cwmining@etv.net  
Subject: RE: reference area

Mark,  
Hold off sending the submittal until tomorrow.

I forgot about the riparian area. Did Patrick ever submit the veg analysis for the riparian area. I forgot what you said. If not, you may want to submit that request separately (next summer) so we can authorized this one. Just an idea.  
The areas highlighted in red are those paragraphs that would be removed if you decide to submit the riparian amendment separately. Of course there would be no deficiencies because you would submit the riparian data and map (which you probably already did with this latest submittal). Maybe we could issue this one as is with a condition that you'll submit the evaluation next summer??? I'd have to ask Pam about that one. Let me know.

The areas highlighted in blue: would you please let me know if I'm accurate. My maps are electronic and hard to piece together and they don't name the roads that same as you refer to them in conversation (and the text e.g. tank seam road). The critical point is the junction - is that right that you want to use TSARRA down to the junction???

I'm here if you want to call me, now.

Thanks

Jerriann Ernstsens, Ph.D.  
Division of Oil, Gas, & Mining  
Department of Natural Resources  
1594 West North Temple, Suite 3610  
SLC Utah 84114

801-538-5214  
jerriannernstsen@utah.gov

>>> "cwmining" <cwmining@etv.net> 12/8/2004 3:35:45 PM >>>  
Here is a copy of the amendment we area mailing out today.

-----Original Message-----

From: Jerriann Ernstsens [mailto:jerriannernstsen@utah.gov]  
Sent: Tuesday, December 07, 2004 5:27 PM  
To: cwmining@etv.net  
Cc: Pam Grubaugh-Littig  
Subject: reference area

Mark,  
Reference area (RA)

Follow up to our call (12/07/04):

Plate 3-1 (9-1):

- Remove wording "Shower House Pad" associated with WHRidge RA.
- Add the word "Previous" to the wording "Reference Area" that pertains to the RA in Trail Canyon (section 22).
- Add the GPS area for the riparian reference area located off the Tank SAR RA.

For now, you can submit the RA drawn on the map in the same detail as the RA already drawn. But, next summer you can submit the specifics of the RA. For next summer, make sure you clearly mark all RA either on the map or on the ground. If it's on the map, you'll need to provide more specificity to the map. If it's on the ground, then you'll need to stake a corner and GPS the other three corners and submit the ordinances. I really don't want to hold this amendment up for that commitment.

Table 3-2

- I think that you may need to make appropriate changes to this list of RA e.g. remove "main reference area" (I'm assuming that this is referring to the RA in Trail Canyon).

Page 3-1:

- Add to the 2nd paragraph the wording proposed in 2002 along with the two new areas (the sediment pond area near the office and the scale house area).
- Add the wording proposed in 2002 pertaining to the riparian RA.

I think that's it. I did a word search in your e-MRP and did not see any other incorrect references, you may want to recheck.

Thanks for your patience,

Jerriann Ernstsén, Ph.D.  
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## CO-OP MINING COMPANY

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December 14, 2004

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

To Whom It May Concern,

**Re: Application to Change existing Mining Plan, Vegetation Reference Area, Bear Canyon Mine, ACT/015/025, Task ID# 1504**

Enclosed are four (4) hard copies of our Vegetation Amendment. The following changes were made as requested by Jerriann Ernsten in the December 7, 2004 telephone conversation.

On Plate 9-1 the wording "Shower House Pad" associated with Wild Horse Ridge reference area was removed.

Added the word "Previous" to the wording "Reference Area" that pertains to the reference area in Trail Canyon.

On page 9-1 added in the second paragraph the sediment pond A, and scale house areas

On Page 9-4, table 9.2- Removed "Main reference area".

If you have any questions, please call me at (435) 687-5238.

Thank You,

Mark Reynolds

Enclosure(s)



**APPLICATION FOR COAL PERMIT PROCESSING**

Permit Change  New Permit  Renewal  Exploration  Bond Release  Transfer

**Permittee:** CO-OP MINING COMPANY

**Mine:** BEAR CANYON MINE

**Permit Number:** ACT/015/025

**Title:** Task ID #1504

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

Vegetation Reference Area

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

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

**Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) 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.

\_\_\_\_\_  
Print Name Sign Name, Position, Date

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Notary Public  
My commission Expires: \_\_\_\_\_, 20\_\_\_\_ }  
Attest: State of \_\_\_\_\_ } ss:  
County of \_\_\_\_\_

<b>For Office Use Only:</b>	<b>Assigned Tracking Number:</b>	<b>Received by Oil, Gas &amp; Mining</b>
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## 9 VEGETATION

### 9.1 SCOPE

A reference area, approximately one acre in size was selected in July 1983, encompassing pinyon-juniper-grass and riparian vegetation types (Plate 9- 1). The reference area was selected on the basis of similarity with vegetation types which were believed to have occurred within the disturbed area before mining. This was done in conjunction with Mr. Lynn Kunzler of the Utah Division of Oil, Gas and Mining (DOG M). Further discussion with the D.O.G.M. has determined that there are better reference areas nearer to the mine site, therefore this area will no longer be used as a reference area.

In 1993, reference areas were selected for the Shower House Pad disturbance and the Tank Seam Access Road disturbance. The areas were selected in conjunction with Susan White of the D.O.G.M. These areas are also shown on Plate 9-1. The Shower House Pad reference area will also be used for the shop, sediment pond A, scale house, and coal storage areas. The Tank Seam Access Road reference area will also be used for the mine access road.

In 1996, a reference area was selected by Patrick Collins for the proposed Wild Horse Ridge disturbance. In 2001 he selected an area for the Wild Horse Ridge Tank Seam Pad area. These areas are shown on Plate 9-1.

Shrub density and height were estimated along the same transects used for cover data. The height, number and species of shrubs whose stems rise within 50 cm on either side of the 50 m transect was recorded. Shrub heights were measured and recorded by two classes: less than 1 ft and equal to or greater than 1 ft. All data was recorded on standard forms.

### 9.2.5 Tree Density and Basal Area Estimation

A total count of all trees within the reference area was done.

### 9.2.6 Additional Reference Areas

Similar methodologies were used in measuring the Shower House Pad Reference Area, the Tank Seam Access Road Reference Area, and the Wild Horse Ridge Reference Area. The exact methodologies are described in Appendix 9-D (Shower House Pad), Appendix 9-A (Tank Seam Access Road) and Appendix 9-G (Wild Horse Ridge). All of these surveys were conducted by Patrick Collins. A summary of the reference areas are presented in Table 9.2-1.

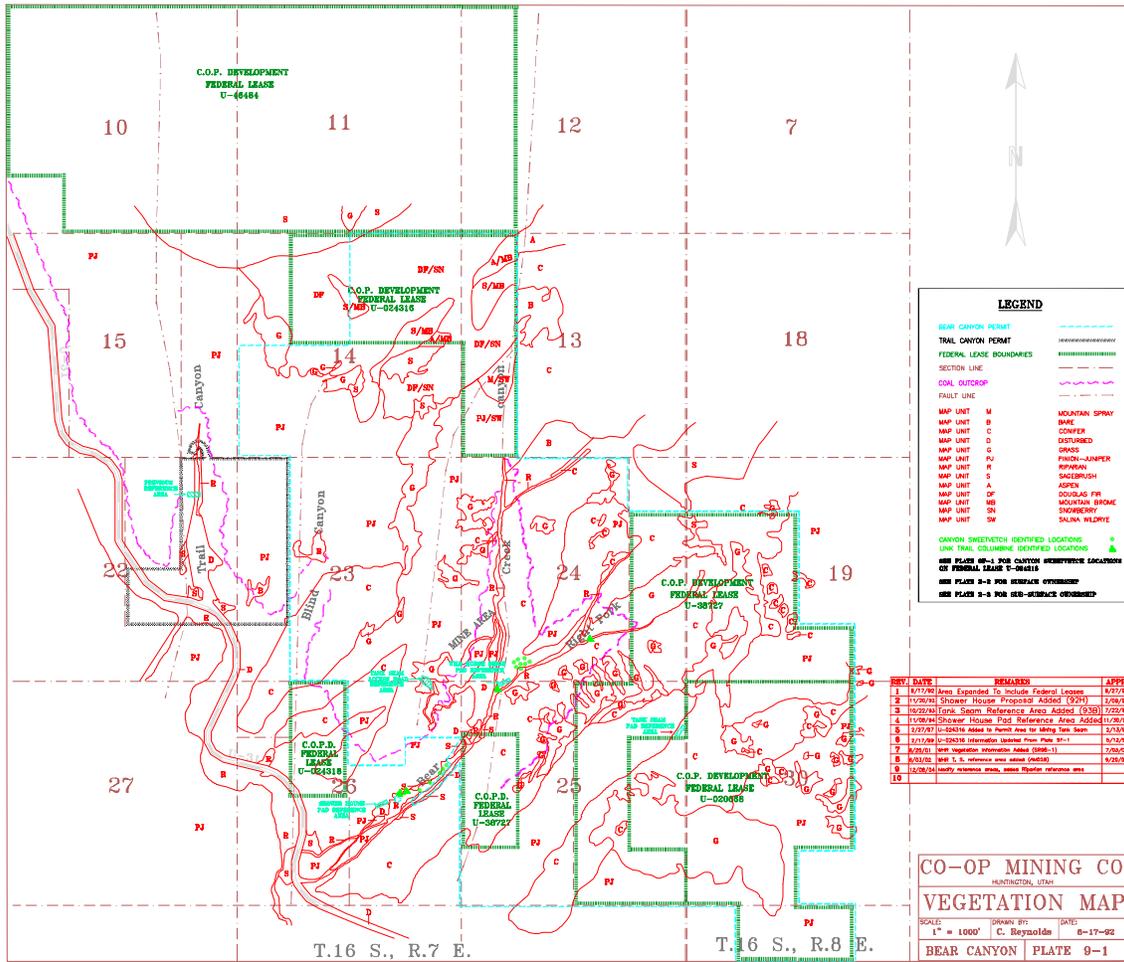
Table 9.2-1 Vegetation Reference Areas

<u>Reference Areas</u>	<u>Reference Type</u>
<del>Main Reference Area</del>	<del>Pinyon-Juniper-Grass</del>
Shower House Pad	Grass-Pinyon-Shrub
Tank Seam Access Road Reference Area	Pinyon-Juniper-Grass-Mt. Mahogany
Wild Horse Ridge Reference Area	Pinyon-Grass-Conifer

## 9.3 EXISTING RESOURCE

### 9.3.1 SCS Productivity Estimates

Productivity estimates and range condition for the reference were obtained from the local SCS Range Conservationist. (See Appendix 9-B.)



**LEGEND**

BEAR CANYON PERMIT

TRAIL CANYON BOUNDARIES

FEDERAL LEASE BOUNDARIES

SECTION LINE

ROAD OUTCROP

FAULT LINE

MAP UNIT M MOUNTAIN SPRAY

MAP UNIT B BARE

MAP UNIT C CONIFER

MAP UNIT D DISTURBED

MAP UNIT G GRASS

MAP UNIT J JUNOON-JUNIPER

MAP UNIT R RIFLEMAN

MAP UNIT S SAGEBRUSH

MAP UNIT A ASPEN

MAP UNIT DF DOUGLAS FIR

MAP UNIT MB MOUNTAIN BRACE

MAP UNIT SN SNOWBERRY

MAP UNIT SW SALINA WILDRIVE

CANYON SWITCHEXCH IDENTIFIED LOCATIONS

LINK TRAIL COLUMBINE IDENTIFIED LOCATIONS

SEE PLATE 9-1 FOR CANYON SWITCHEXCH LOCATIONS OF FEDERAL LEASE U-024316

SEE PLATE 9-2 FOR BARE-REFERENCE OBSERVATION

REV	DATE	REMARKS	APPR
1	8/27/92	Area Expanded To Include Federal Lease	8/27/92
2	1/28/94	Shower House Progress Added (020)	1/28/94
3	10/29/94	Link Seam Reference Area Added (038)	7/29/94
4	11/20/94	Shower House Post Reference Area Added	11/20/94
5	1/27/97	U-020316 Added to Permit Area for Mining Title Term	1/27/97
6	5/12/99	U-020316 Information Updated From Plat. 9-1	5/12/99
7	8/28/01	Vegetation Information Added (208-1)	7/28/01
8	8/28/02	Map U, V, W, Reference Area Added (208-2)	8/28/02
9	12/28/04	Vegetation Reference Area, Based Upon Reference Area	

**CO-OP MINING CO.**  
HUNTINGTON, UTAH

**VEGETATION MAP**

SCALE: 1" = 1000' DRAWN BY: C. Reysolds DATE: 8-17-92

BEAR CANYON PLATE 9-1