

C/007039 Incoming

#4201

OK



Canyon Fuel Company, LLC

Dugout Canyon Mine

P.O. Box 1029

Wellington, Utah 84542

October 15, 2012

Coal Regulatory Program  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

RE: Amendment to Address the Abandonment of Mining Equipment Underground, Dugout Canyon Mine, Canyon Fuel Company, LLC, C/007/039, Carbon County, Utah

Dear Sirs:

Enclosed please find six copies of a revision to the M&RP to address the abandonment of mining equipment underground. The equipment is described on attached drawings which will be placed in Appendix 5-3.

Thank you for your timely review of this amendment. If you have any questions please call Dave Spillman at (435) 636-2872.

Sincerely yours,

A handwritten signature in black ink that reads "Vicky S. Miller". The signature is written in a cursive style.

Vicky S. Miller

cc: Dave Spillman

RECEIVED

OCT 17 2012

DIV. OF OIL, GAS & MINING

# APPLICATION FOR COAL PERMIT PROCESSING

Permit Change  New Permit  Renewal  Exploration  Bond Release  Transfer

**Permittee:** Canyon Fuel Company, LLC

**Mine:** Dugout Canyon Mine

**Permit Number:** C/007/039

**Title:** Revision to M&RP to Abandon Equipment Underground

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

**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.

David Spillman  
Print Name

David Spillman, Engineering Manager  
Sign Name, Position, Date 10/16/12

Subscribed and sworn to before me this 16<sup>th</sup> day of Oct, 2012

Mon S. Claus  
Notary Public

My commission Expires: \_\_\_\_\_, 2015 }  
Attest: State of UT. } ss:  
County of Carbon



<p><b>For Office Use Only:</b></p>	<p>Assigned Tracking Number:</p>	<p>Received by Oil, Gas &amp; Mining</p> <p style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">RECEIVED</p> <p style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">OCT 17 2012</p> <p style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">DIV. OF OIL, GAS &amp; MINING</p>
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C/007/039 Incoming

Canyon Fuel Company, LLC  
Dugout Canyon Mine  
P.O. Box 1029  
Wellington, Utah 84542



October 15, 2012

Coal Regulatory Program  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

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**Permit Number:** C/007/039

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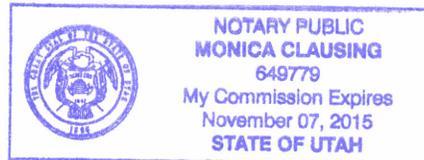
David Spillman  
Print Name

David Spillman, Engineering Manager  
Sign Name, Position, Date 10/16/12

Subscribed and sworn to before me this 16<sup>th</sup> day of Oct, 2012

Mon S. Claus  
Notary Public

My commission Expires: 11-7-, 2015 }  
Attest: State of UT. } ss:  
County of Carbon



<p><b>For Office Use Only:</b></p>	<p><b>Assigned Tracking Number:</b></p>	<p><b>Received by Oil, Gas &amp; Mining</b></p> <p style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">RECEIVED</p> <p style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">OCT 17 2012</p> <p style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">DIV. OF OIL, GAS &amp; MINING</p>
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**CHAPTER 5**  
**ENGINEERING**

## LIST OF PLATES

### Plate

- 5-1 Previously Mined Areas
- 5-2 Surface Facilities
- 5-3 Surface Facilities Cross Sections
- 5-4 Existing Surface Topography
- 5-5 Reclamation Surface Topography
- 5-6 Reclamation Cross Sections
- 5-7 Proposed Mine Sequence and Planned Subsidence Boundary

The following plates are located in Appendix 5-10

- PC 5-2 Pace Canyon Fan Surface Facilities and Cross-Sections
- PC 5-4 Pace Canyon Fan Existing Surface Topography
- PC 5-5 Pace Canyon Fan Reclamation Topography and Cross-Sections
- PC 5-6 Pace Canyon Fan Reclamation Treatment Map

## LIST OF APPENDICES

### Appendix

- 5-1 **DELETED IN MAY 1999 REVISION**
- 5-2 Approvals for Waste-Rock Disposal
- 5-3 Carbon County Waste Disposal Agreement & Abandoned Equipment Location Drawings
- 5-3A Dugout Canyon Mine Wastewater Disposal Approval
- 5-4 Slope Stability Analyses
- 5-5 Cut and Fill Calculations
- 5-6 Reclamation Bond Estimate

Canyon Mine (Refuse Pile Amendment, February 2003), SUFCo and/or Skyline Mines. Coal mine waste that is temporarily stored on the surface at the Dugout Canyon Mine prior to off-site disposal will be removed from the Dugout Canyon Mine prior to reclamation. Information regarding disposal practices and reclamation plans for these off-site disposal facilities is provided in their respective M&RPs.

**Disposal of Non-Coal Mine Wastes.** All non-coal (non-waste rock) waste generated from mining and reclamation operations will be disposed of as outlined in Sections 526.100 and 528.300. Following cessation of mining activities, non-coal mine waste that is still temporarily stored at the site will be removed and disposed of as outlined in Section 528.300. Non-coal waste that is generated during the course of reclamation that cannot be salvaged will be disposed of at an off-site permitted facility.

**Equipment Abandonment.** Periodically, due to difficult recovery conditions or roof collapse, mining equipment is abandoned underground. Prior to leaving the equipment underground, hazardous materials and lubricating fluids are drained with rare exceptions. Since the equipment is steel and have similar composition to the roof support throughout the mine, contamination to groundwater from the abandoned equipment is not anticipated. Calculations of the corrosion potential of the steel used in longwall mining machines was performed by the University of Utah for the BLM in 1998. It was reported that it would require thousands of years for the metal to corrode away. Drawings illustrating the location of the abandoned equipment and a description of the equipment are located in Appendix 5-3.

#### **542.800 Estimated Cost of Reclamation**

The existing bond, together with the estimated cost to reclaim the Dugout Canyon Mine surface facilities as modified by this submittal, is provided in Appendix 5-6.

### **550 RECLAMATION DESIGN CRITERIA AND PLANS**

#### **551 Casing and Sealing of Underground Openings**

Each underground opening to the mine will be sealed and backfilled when no longer needed for monitoring or other use approved by the Division upon a finding of no adverse environmental or health and safety effects. Permanent closure measures will be as described in Section 542.700.

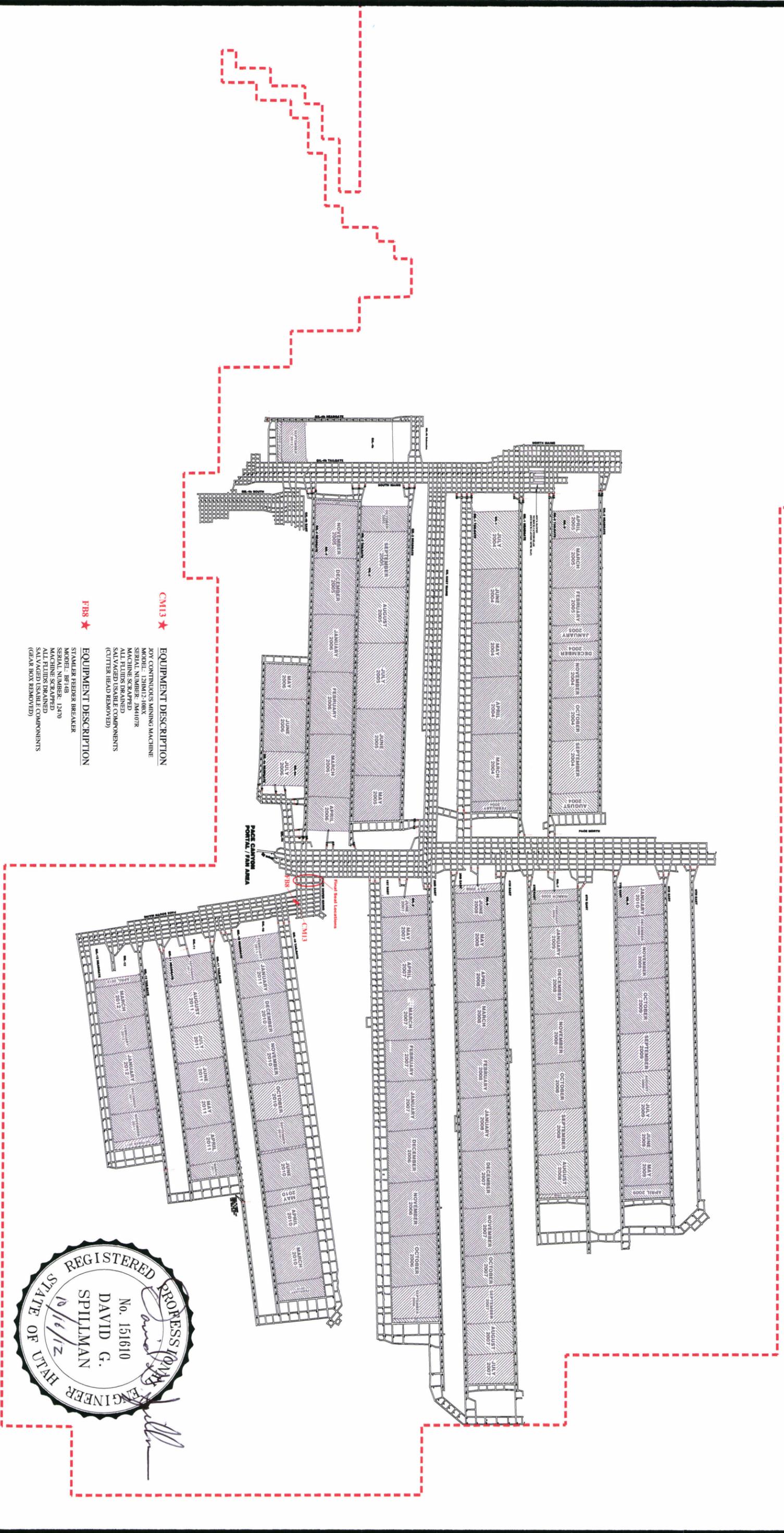
Canyon Fuel Company, LLC  
SCM/Dugout Canyon Mine

Mining and Reclamation Plan  
October 15, 2012 ~~April 25, 2005~~

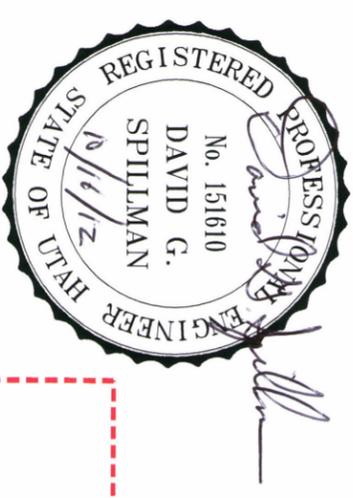
**APPENDIX 5-3**

Carbon County Waste Disposal Agreement  
and  
Abandoned Equipment Location Drawings

Permit Area Boundary



- CM13** ★ **EQUIPMENT DESCRIPTION**  
JOY CONTINUOUS MINING MACHINE  
MODEL: 12MB12-100X  
SERIAL NUMBER: 0707R  
MACHINE SKIPPED  
ALL FILTERS DRAINED  
SALVAGED USABLE COMPONENTS  
(CUTTER HEAD REMOVED)
- FB38** ★ **EQUIPMENT DESCRIPTION**  
STAMLER FEEDER BREAKER  
MODEL: BF14B  
SERIAL NUMBER: 12470  
MACHINE SKIPPED  
ALL FILTERS DRAINED  
SALVAGED USABLE COMPONENTS  
(GEAR BOX REMOVED)



**Canyon Fuel Company, LLC**  
Dugout Canyon Mine

**Gilson Seam Mine Map**  
Abandoned Mining Equipment Locations

REVISIONS OR UP-DATES		DATE	10/12/12
NO.	DATE	BY	DESIGNED BY:
			DRAWN BY: JKS
			CHECKED BY: DGS
			SCALE: No Scale

FILENAME: Abandoned Equipment Map 10\_12\_12.Dwg  
P.O. BOX 1029  
WELLINGTON, UTAH 84542  
DRAWING OR MAP NUMBER  
Figure 1 of 2

Appendix 5-3



CHAPTER 5  
ENGINEERING

## LIST OF PLATES

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Roads within the disturbed area have been designed with a width of 16 to 20 feet (see Section 527.200). The main canyon access road up- and downstream from the proposed disturbed area has a current width which generally ranges from 16 to 25 feet, averaging approximately 20 feet. Hence, post-reclamation retention of a road with a width of 16 to 20 feet will be compatible with adjacent roads, including those roads upstream from the disturbed area which will not be altered by mining activities. Therefore, this road width is considered appropriate for the post-mining land use.

#### **542.700 Final Abandonment of Mine Openings and Disposal Areas**

**Abandonment of Openings.** All mine openings (including Pace Canyon portal) will be sealed at least 25 feet inside the mine opening. Prior to installation of the seal, all loose material will be removed from the roof, floor, and rib of the mine within 3 feet of the seal area. The seal will then be constructed using solid concrete blocks (average minimum compressive strength of 1,800 psi) with nominal dimensions of 6 inches high, 8 inches wide, and 16 inches long. Mortar will consist of one part cement, three parts sand, and no more than 7 gallons of water per sack of cement.

The seal will be recessed at least 16 inches deep into each rib and 12 inches deep into the floor. No recess will be made into the roof. In the bottom course, each block will be laid with its long axis parallel to the rib. The long axis in succeeding higher courses will be perpendicular to the long axis of the blocks in the preceding course. An interlaced pilaster will be constructed in the center.

The seals will have a thickness of approximately 16 inches. Following seal construction, the entries will be backfilled from the seal to the outside surface with soil that is sloped at the surface to match the final slope at the entry. The soil will then be raked and revegetated with the approved seed mixture (see Chapter 3).

Alternatively, a cast-in-place MSHA approved seal will be installed with a minimum thickness of 3 feet and with a minimum compressive strength of 200 psi.

**Disposal of Excess Spoil.** No excess spoil will be generated in the permit area.

**Disposal of Coal Mine Waste.** All coal mine waste generated at the Dugout Canyon Mine will be disposed of either underground or at the waste-rock disposal sites associated with the Dugout Canyon Mine (Refuse Pile Amendment, February 2003), SUFCo and/or Skyline Mines. Coal mine

waste that is temporarily stored on the surface at the Dugout Canyon Mine prior to off-site disposal will be removed from the Dugout Canyon Mine prior to reclamation. Information regarding disposal practices and reclamation plans for these off-site disposal facilities is provided in their respective M&RPs.

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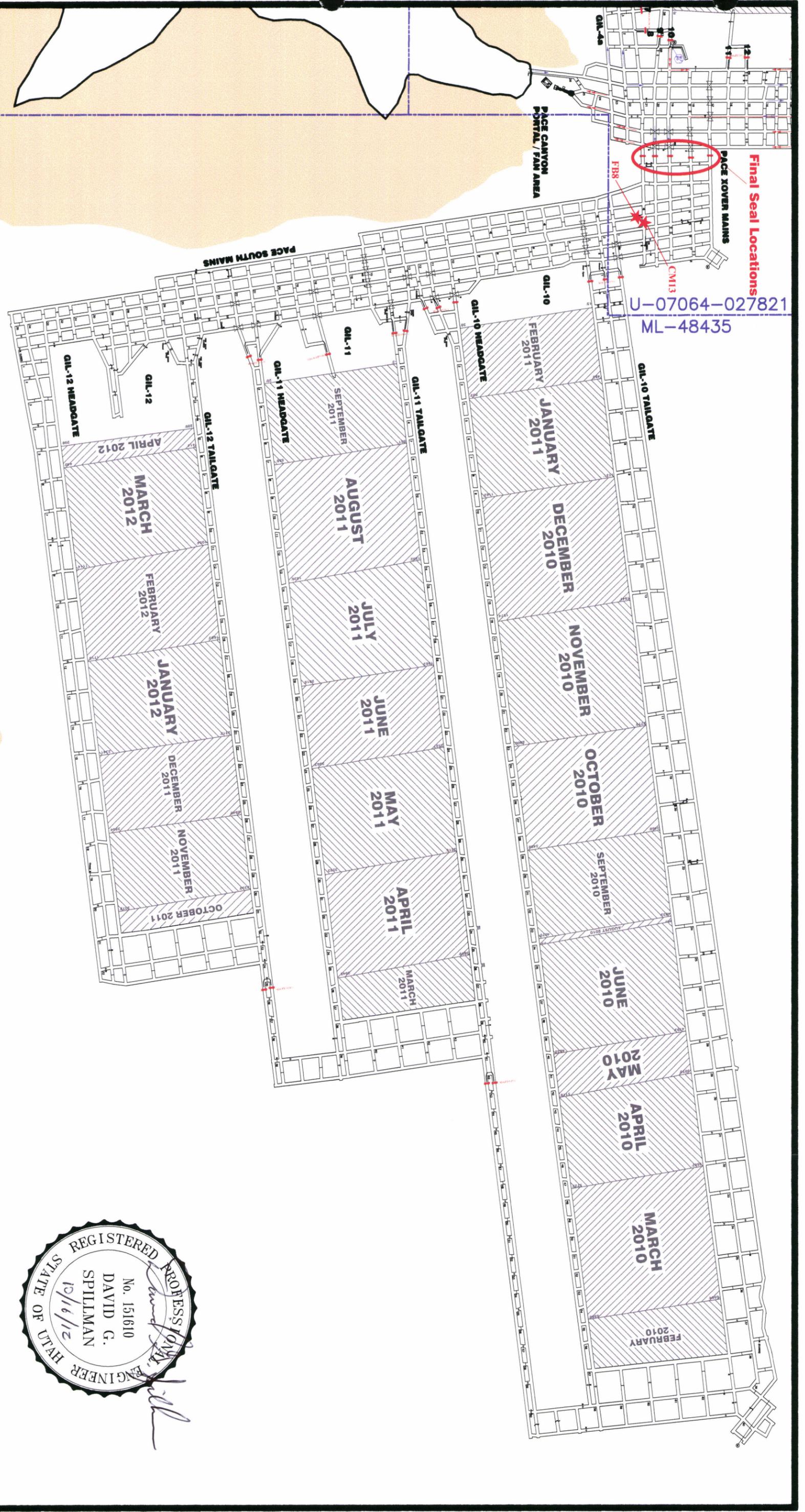
Canyon Fuel Company, LLC  
SCM/Dugout Canyon Mine

Mining and Reclamation Plan  
October 15, 2012

**APPENDIX 5-3**

Carbon County Waste Disposal Agreement  
and  
Abandoned Equipment Location Drawings





**\*\*Equipment Remaining In The South East Sealed Area**

- CM13** ★ **EQUIPMENT DESCRIPTION**  
 JOY CONTINUOUS MINING MACHINE  
 MOORE L23M2 230K  
 SMOKE EXHAUST SYSTEM  
 MACHINES STRIPPED  
 ALL FLUIDS DRAINED  
 (CUTTER HEADS REMOVED)
- FB8** ★ **EQUIPMENT DESCRIPTION**  
 STAMPER FEEDER BREAKER  
 MOORE L23M2 230K  
 SMOKE EXHAUST SYSTEM  
 MACHINES STRIPPED  
 ALL FLUIDS DRAINED  
 (CUTTER HEADS REMOVED)

Appendix 5-3

REVISIONS OR UP-DATES		DATE:
NO.	DATE	BY
		10/12/12
		DESIGNED BY: JKS
		DRAWN BY: DGS
		CHECKED BY: NTS
		SCALE: NTS

**Environ. and CERCLA Certification**  
 Gilson South East Sealed District  
 Equipment Remaining Underground

**Canyon Fuel Company, LLC**  
 Dugout Canyon Mine

P.O. BOX 1029  
 WELLINGTON, UTAH 84542

DRAWING OR  
 MAP NUMBER  
 Figure 2 of 2

