

# 4601

Sufco Mine

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May 27, 2014

Permit Supervisor, Utah Coal Regulatory Program  
 Utah Division of Oil, Gas and Mining  
 1594 West North Temple, Suite 1210  
 PO Box 145801  
 Salt Lake City, UT 84114-5801

Re: Revision Associated with the Undermining of Shelters, Task ID# 4583, Canyon Fuel Company, LLC,  
 Sufco Mine, C/041/002

Dear Sirs:

Enclosed with this letter are two copies of an amendment to address the deficiencies associated with the  
 undermining of the shelters. Appendix 4-2 attached is Confidential.

In response to the Division's review and concerns with the angle-of-draw for longwall mining, we have  
 included two documents in the appendix and revised the text. A surface subsidence analysis and an  
 illustration showing the definition of angle-of-draw as it relates to "collapsed longwall workings are  
 included in the appendix. In the case of Sufco Mine, draw angle is properly measured from the edge of the  
 longwall gob because the chain pillars maintain an ALPS Stability factor of 3.92 at the **shelter site** locations  
 in the 3 Right 2 South headgate. These pillars are considered abutment chain pillars that will not collapse,  
 which justifies the location of the projected subsidence on the drawing in the appendix and supports that  
 both shelters should be outside the subsidence impact area.

With the justification included in the Confidential Appendix, we have not altered the angle-of-draw line on  
 the drawing and have not included a mitigation plan for either shelter in this amendment.

If you have questions or need addition information please contact Vicky Miller at (435)286-4481.

CANYON FUEL COMPANY, SUFCO Mine

John Byars  
 Technical Services Manager

Encl.

cc: DOGM Correspondence File

RECEIVED

MAY 29 2014

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:** Sufco Mine

**Permit Number:** C/041/0002

**Title:** Revisions to M&RP to Revise Text Associated with Shelters in So. Fork Quitchupah, Task ID#4583

**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.

John D. Byars  
Print Name

JDB, Mgr. Tech Servs 5-23-14  
Sign Name Position Date

Subscribed and sworn to before me this 23 day of May, 2014

Jacquelyn Nebeker  
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>  <div style="text-align: center; color: blue; font-weight: bold; font-size: 1.2em;">RECEIVED</div> <div style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">MAY 29 2014</div> <div style="text-align: center; color: blue; font-weight: bold; font-size: 1.2em;">DIV. OF OIL, GAS &amp; MINING</div>
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## **CHAPTER 4**

### **LAND USE AND AIR QUALITY**

These sites include 42SV2690 which consists of a lithic scatter and 42SV3464 which consists of a lithic scatter associated with a small rock shelter. Both sites will be undermined under the present mine plan. This shelter is more of a terrace overhang that measures approximately 1.5 meters high and 4 meters wide at the opening and extends 1.5 meters beneath the rock to a tapered edge. The shelter shows signs of modern disturbance and it appears that some of the fill material has been disturbed by minor looting activities.

A cultural resource investigation plan for the 42SV3464 rock shelter was requested and approved between the U.S. Forest Service, Utah State Historic Preservation Office (SHPO), EnviroWest, LLC and Canyon Fuel Company, LLC since the shelter appeared to have been disturbed. Testing of the rock shelter for significance was conducted by EnviroWest and Fishlake National Forest Archaeologist in the fall of 2012. While the site was initially evaluated as being eligible for listing in the National Register of Historic Places, subsequent testing has found it to be ineligible for listing due to disturbance. A copy of the cultural resource investigation testing report and the Determination of Significance and Effect form are located in Appendix 4-2 in the Confidential folder of the M&RP. No further testing of the 42SV2690 lithic scatter was required.

#### South Fork of Quitchupah Canyon - 2013 Inventory

During July and August 2013 a file search of archeological/cultural resource records and a pedestrian inventory of the study area was performed by EnvironWest LLC. The report is located in Appendix 4-2, Confidential Folder. During the pedestrian inventory five new cultural resource sites were documented, three consisted of lithic scatters located on the bench area and two rock shelters in the canyon. The lithic scatters were recommended as ineligible for listing in the National Register of Historic Places (NRHP) and the two rock shelters were recommended to be eligible for listing in the NRHP (Determination of Significance and Effect, Appendix 4-2, Confidential).

Due to the length of time required for review of the information and the processing of the "Determination of Significance and Effect" documents, the opportunity for the recovery/excavation of the rock shelters has been **was** delayed until 2014 **when the information could be evaluated and probability of impact could be determined. No mining will occur beneath rock shelter Sites 42SV3550 and 42SV3551 which have been determined to be eligible for listing in the National Register of Historic Places. The applicant has solicited evaluations from two sources to determine the potential for impacted to either shelter by subsidence associated with mining. It is the conclusion of these evaluations that neither of the shelters should be impacted. An explanation and**

illustration showing the definition of angle-of-draw as it relates to "collapsed longwall workings" at the Sufco Mine is provided in Appendix 4-2 as is an analysis and drawing showing the location of the shelters in relation to the mine panels. The applicant commits not to mine beneath the rock shelters until the recovery/excavation of the two shelters or other recommendation of actions by the USDA Forest Service have been completed. The USDA Forest Service as the land owner will be made aware of this conclusion, upon approval of this amendment by the Division.

In accordance with previous commitments the mine has made in previous sections of this M&RP, protection of eligible cultural resources will be in accordance with regulatory authority and Utah SHPO requirements. The Applicant will also instruct its employees that it is a violation of federal and state laws to collect individual artifacts or to otherwise disturb cultural resources.

The Applicant agrees to notify the regulatory authority and the Utah State Historical Preservation Office (SHPO) of previously unidentified cultural resources discovered in the course of mining operations. The Applicant also agrees to have any such cultural resources evaluated in terms of National Register of Historic Places eligibility criteria.

#### **4.1.1.2 Previous Mining Activity**

Portions of the mine plan area were mined prior to the filing of this permit application. SUFCA Mine began a small operation mining the Upper Hiawatha Coal seam in 1941. There was no previous mining activity prior to the 1941 SUFCA operation.

From 1941 through 1974, the coal was removed by conventional mining techniques. From 1974 through 1978, both conventional and continuous mining methods were used. From 1978 until October 1985, all mining used continuous mining methods. Since October 1985 both continuous mining and longwall mining methods have been used. The portion of the seam mined by conventional methods was only partially extracted leaving all pillars for support. The majority of the mining done has been full extraction. All longwall mining is full extraction.

The quantity of coal mined prior to this permit application was approximately 37,058,100 tons. The earlier workings are shown on Plate 5-1 as an integral part of the mining operation.

Use of the land preceding mining was primarily grazing. The area also supported limited timbering in the Ponderosa stands and hunting.