



Suzanne Steab <suzannesteab@utah.gov>

2018 Annual Report Review Completion

Suzanne Steab <suzannesteab@utah.gov>
To: Vicky Miller <vmiller@wolverinefuels.com>
Cc: "Christensen, Steve" <stevechristensen@utah.gov>

Thu, Jun 13, 2019 at 2:18 PM

The Division staff have completed the review of the 2018 Annual Report for the Sufco Mine. Attached is a copy of the review with comments.

No hard copy will follow.

Thank you for your diligence in completing the Annual Report.

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 **Sufco.pdf**
42K

2018 ANNUAL REPORT

Submit the completed document and any additional information identified to the Division by March 31, 2019.

GENERAL INFORMATION

Company Name	Canyon Fuel Company, LLC	Mine Name	Sufco Mine
Permit Number	C/041/0002	Permit Expiration Date	2022-05-21
Operator Name	Sufco Mine	Phone Number	+1 (435) 286-4489
Mailing Address	597 South SR 24	Email	arichard@wolverinefuels.com
City	Salina		
State	Utah	Zip Code	84654

DOGM File Location or Annual Report Location

Excess Spoil Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	
Refuse Piles	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	Required reports previously submitted.
Impoundments	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	Required reports previously submitted.
Other:		

OPERATOR COMMENTS

REVIEWER COMMENTS Met Requirements Did Not Meet Requirements

COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the Mining and Reclamation Plan and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If additional written response is required, it should be filed as an attachment to this report.

Title: RAPTOR SURVEYS

Objective: Determine existence and status of raptor nests that may be impacted by mining. Any raptor nest that has the potential to be disturbed will be evaluated with DWR and FWS and an appropriate plan of action will be developed on a case by case basis.

Frequency: Any area with suitable habitat where raptor nests could be adversely affected will be monitored during the year that it will be subsided for both known and potential new nests on a yearly basis using aerial or ground surveys near the end of May.

Status: Ongoing

Reports: Upon receipt from consultant and evaluation of permittee.

Citation: Chapter 3, page 3-10 & 3-42

OPERATOR COMMENTS

The 2018 Raptor survey for Sufco was submitted to the Division in August 2018.

REVIEWER COMMENTS



Met Requirements



Did Not Meet Requirements

The 2018 raptor survey was submitted to the Division and accepted into the MRP in September of 2018 (Task #5727). Two surveys were completed in the summer of 2018, one on May 27-28th and another on June 19th. A general raptor survey was conducted on both occasions and a northern goshawk broadcast vocalization survey was also conducted during the June 19th survey. The results of the surveys indicate one active golden eagle nest with one nestling which was observed during both surveys, and one active red-tailed hawk nest with an adult seen sitting on the nest during the first visit and 2-3 nestlings seen during the second visit. No northern goshawk or other raptor nesting activity was found during the survey. The report includes a map showing survey boundaries and nest locations, color photos, and raptor survey forms. TM

Title: SUBSIDENCE MONITORING

Objective: To document the amount of subsidence that has occurred.

Frequency: Annually

Status: Ongoing

Reports: Annual

Citation: Chapter 5, page 5-29

OPERATOR COMMENTS

The Subsidence Monitoring report is located on the thumb drive under Subsidence Report.

REVIEWER COMMENTS



Met Requirements



Did Not Meet Requirements

A comprehensive subsidence monitoring report has been included in the annual report. This report is based on photogrammetric data collected in 2018, and is a compliment to Map 1. Map 1 is a PE certified map that contains all of the subsidence features across the entire permit area. According to the subsidence contours on Map 1, the bulk of the subsidence in 2018 occurred in shorter longwall panels in Areas 17 and 18. Vertical displacement of up to 4 feet was recorded. Longwall mining in 3R4E occurred in late 2018 but the photogrammetric survey data for this area won't show up until next year. In addition to the subsidence contours, known tension cracks and monitored springs are also documented. This map has been signed and stamped by Jacob D. Smith, Professional Engineer in the State of Utah. JE

FUTURE COMMITMENTS AND CONDITIONS

The following commitments are not required for the current annual report year, but will be required by the permittee in the future as indicated by the "status" field. These commitments are included for information only, and do not currently require action. If you feel that the commitment is no longer relevant or needs to be revised, please contact the Division.

Title: COLOR INFRARED PHOTOGRAPHY

Objective: To assess changes in vegetation due to mining. Photos submitted after 2008 must include an analysis between 2008 and current photos to assess changes in vegetation due to subsidence.

Frequency: Once every 5 years beginning in 2008.

Status: Due in 2018.

Reports: Annual

Citation: Chapter 3, page 3-45, Chapter 5, page 5-29

Title: PROTECTION OF WILDLIFE DURING EXCLUSIONARY PERIODS

Objective: To avoid disturbance to wildlife during critical periods of their life cycle. Surface activities are curtailed from Nov. 1-April 1, & May 1 and July 1 in the calving area, except in the portal areas, for wintering elk. Any maintenance requiring heavy equipment will require monitoring from Dec. 1 -April 15 for big game winter range and from Jan. 1-Aug 15 for raptors.

Frequency: During surface disturbing activity

Status: When construction or mitigation activities during wildlife exclusionary periods

Reports: Not Required, Contact DOGM if disturbance occurs during exclusion period

Citation: Chapter 3, page 3-42 through 3-44 and 3-9

Title: VEGETATION SURVEY OF SOUTH FORK QUITCHUPAH

Objective: To provide sufficient data to make a determination of the degree of impacts of subsidence on riparian vegetation.

Frequency: Surveys will be conducted the fifth year following undermining (2018)

Status: Ongoing, Reports were provided in 2013. Next report due 2018.

Reports: 2018, (Reports shall provide information and data collected before the area is mined, throughout the mining period, and after mining is past. Monitoring and data collection will continue until the mine, Division and Forest agree that mining impacts, if any, have occurred, have been mitigated, and no further impacts are anticipated. Two reports shall be provided and the Division will provide the second copy to the Fishlake National Forest.)

Citation: Appendix 3-14 page 5

Title: TOPSOIL SAMPLING AT RECLAMATION

Objective: "The topsoil will be tested for need of nutrients and soil amendments following application and grading at the rate of one sample/acre. The depth of sampling should be the surface six inches of distributed topsoil. Parameters for testing will include plant available nitrogen, phosphorus and potassium. Section 528 contains the sampling commitments for the placed waste rock. Application will be on an as needed basis as determined by the tests."

Frequency: Reclamation

Status: Reclamation

Reports: Confer with the Division and include in the Annual Report (where easily found at bond release)

Citation: Chapter 2, Sec. 231.300 and Section 243.

Title: NORTHWATER SPRING MITIGATION

Objective: Mitigation for water loss

Frequency: 3 years prior to mining cessation

Status: The system is completed but perpetual maintenance must be determined 3 years prior to cessation of mining.

Reports: A summary report of the systems performance and maintenance was included in the 2014 Annual Report. By 2017, a perpetual maintenance agreement needs to be constructed between the Division, USFS and Sufco. Three years prior to cessation of mining, the hydrologic condition of the Northwater area will be evaluated. A report will describe conditions of water systems and future mitigation will be evaluated.

Citation: Appendix 7-25, page 5

Title: SUBSIDENCE CRACKS

Objective: Protect livestock and wildlife from physical hazards of surface cracks

Frequency: Upon discovery of subsidence cracks

Status: Subsidence cracks observed Summer 2016

Reports: Annual Report

Citation: Chapter 3 page 3-42

REPORTING OF OTHER TECHNICAL DATA

Please list other technical data or information that was not included in the form above, but is required under the approved plan, which must be periodically submitted to the Division.

Please list attachments:

Stock Pond Monitoring

Sufco has to monitor one (1) set of stock ponds annually. Also one (1) set of stock ponds are monitored during high flow (Spring) and low flow (Fall). Photographs are added to each inspection. The reports are located under Stock Pond Monitoring on the thumb drive.

REVIEWER COMMENTS

The annual report meets the State of Utah requirements for surface water monitoring.

The annual report provides photo documentation and brief descriptions of the stock water ponds within the Pines Tract and Quitchupah Lease areas for 2018. All of the ponds were photographed on 5/5/18 except Joes Mill Pond was photographed on 5/22/18. Seven of the ponds appear to have no standing water within them. Big Ridge East Draw and Box Pond contained 18 inches of standing water and Big Ridge South Draw contained 4 inches. The photos and field notes document the pond bottoms showed no cracking due to subsidence.

The annual report also includes spring and late-fall monitoring of the ponds within and adjacent to the Greens Hollow Lease. The monitored ponds are M-P 02 – 05, 07 -10 and GHP01 – 09. For the spring survey the following ponds held water: GH-P01, GH-P03, and MP-03. No subsidence cracks were observed within or near the ponds. During the late fall survey only pond MP-03 held water. No subsistence cracks were overserved within or adjacent to the ponds. (KS 6/11/2019)

