



Suzanne Steab <suzannesteab@utah.gov>

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## 2019 Annual Report Completion

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**Suzanne Steab** <suzannesteab@utah.gov>

Tue, Aug 4, 2020 at 11:09 AM

To: Gregg Galecki <ggalecki@wolverinefuels.com>

Cc: "Christensen, Steve" <stevechristensen@utah.gov>, Priscilla Burton <priscillaburton@utah.gov>

Hello Gregg,

The Division has completed the review of the Skyline 2019 Annual Report.

Skyline has now met all of the requirements. The report is attached.

Thank you for your diligence in completing the Annual Report.

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 **Skyline.pdf**  
43K

# 2019 ANNUAL REPORT

Submit the completed document and any additional information identified to the Division by March 31, 2020.

## GENERAL INFORMATION

Company Name	Canyon Fuel Company, LLC	Mine Name	Skyline Mine
Permit Number	C/007/0005	Permit Expiration Date	April 30, 2022
Operator Name	Gregg A. Galecki	Phone Number	+1 (435) 448-2636
Mailing Address	HC 35 Box 380	Email	ggalecki@wolverinefuels.com
City	Helper		
State	UT	Zip Code	84526

## 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	Quarterly Certified Refuse Pile Inspection reports were submitted electronically to the Division on 4/12/19, 7/30/19, 10/24/19, and 3/3/20 for the 1st through 4th quarters, respectively.
Impoundments	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	Quarterly Certified Pond Inspection reports were submitted electronically to the Division on 4/12/19, 7/30/19, 10/24/19, and 3/3/20 for the 1st through 4th quarters, respectively.
Other:		

## OPERATOR COMMENTS

**REVIEWER COMMENTS**     Met Requirements     Did Not Meet Requirements

Refuse pile and sediment pond inspections were reviewed during complete inspections. The reports meet the minimum requirements of the R645 Coal Rules.

The 4th Quarterly Certified Refuse Pile Inspection report was received 12/17/2019. The 1st Qtr 2020 report was received on 3/17/2020.  
PB - 5/6/2020

# 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: WASTE ROCK SAMPLING**

**Objective:** To document chemical characteristics and support reclamation plan using less than four feet of cover and to protect surface and groundwater.

**Frequency:** During periods of deposition at the waste rock site.

**Status:** Quarterly sampling, one sample per 2000 tons hauled to the disposal site.

**Reports:** Annual report

**Citation:** Chapter 4, Section 4.4, page 4-30 and 1988 Soils Guidelines Table 6

## **OPERATOR COMMENTS**

Lab Analysis report S2002097 for the two (2) samples collected (WRS2019-1 and WRS2019-2) during 2019 are attached to this report.

**REVIEWER COMMENTS**  Met Requirements  Did Not Meet Requirements

The 3rd Qtr report certified report received 10/22/2019 states an annual total of 2,140 tons hauled. The 4th Qtr 2019 report could not be found in the files. The 1st Qtr 2020 report states a 2,700 tons was hauled to the waste rock site. The Permittee cites this report for the 4th Qtr 2019 in the Annual Report, but it is identified as the 1st Qtr 2020 on the report. (Incoming 3/17/20). Two samples were analyzed by InterMountain Labs, Sheridan, WY. Samples WRS2019-1 and WRS2019-2 were received in February 2020. The second sample is unacceptable due to a pH of 9.2. It's texture was loamy sand with 10% very fine sand. Since the cover depth is 18 inches, the 2,700 tons of waste represented by these analyses must be buried beneath four feet of suitable cover. (PB - 5/6/2020)

Acid/Base accounting analysis was not run on these samples, initially. This oversight was corrected. The two 2019 samples were analyzed for acid/base accounting, selenium and boron by Pace Analytical Lab report (formerly Inter-Mountain Labs). That analytical report was received on 8/3/2020. There are no toxicity issues. PB, 8/4/2020

## **Title: RAPTOR SURVEYS**

**Objective:** To monitor known nest locations and identify new raptor nests that could be impacted from subsidence or new surface facilities. Damaged nests will be replaced immediately with an artificial structure in consultation with DWR.

**Frequency:** Annually and according to the Division's Raptor Survey Guidelines

**Status:** Ongoing

**Reports:** As Available

**Citation:** Chapter 4, Section 4.18, page 4-103

## **OPERATOR COMMENTS**

The 2019 Northern Goshawk, other Raptors, and General Wildlife surveys for subsidence titled, "2019AreaofPotentialSubsidenceWildlife.pdf" is attached to this report.

**REVIEWER COMMENTS**  Met Requirements  Did Not Meet Requirements

A raptor survey is included in the annual report. Results of the 2019 raptor survey did not indicate the presence of northern goshawk. Red-tailed hawks and one soaring golden eagle were observed during the survey. No elk calves or deer fawn were observed. TM

**Title: MACROINVERTEBRATE SURVEYS**

**Objective:** To determine if mining and mining related activities are impacting Eccles Creek.

**Frequency:** Conduct studies in the fall for two consecutive years then two years off.

**Status:** Surveys due 2019/2020

**Reports:** Annual

**Citation:** Appendix A-3, Volume 2, Volume 1A, Section 2.8, pages 2-70-2-71C Section 2.8, Table 2.8-1a

**OPERATOR COMMENTS**

Macroinvertebrate studies were conducted in 2019. The report titled, "Fish and Macroinvertebrate Assessment on Eccles and Boulger Creeks, 2019" is attached to this report.

**REVIEWER COMMENTS**



Met Requirements



Did Not Meet Requirements

Macroinvertebrate sampling was conducted in 2019 in both Eccles and Boulger Creeks. The macroinvertebrate report concludes that in Eccles Creek, macroinvertebrate taxa richness has increased since 1990 and is near or exceeding the 1979 baseline data, however, the taxonomic order diversity is somewhat low. The report author posits that calcification of the channel from increased calcium-rich water post-2001 is a likely culprit for this reduced diversity. Increased macroinvertebrate density was also recorded at one of the Eccles Creek stations but reduced density was observed at others. Overall, despite some encouraging trends indicating hardier species can survive and maintain populations in the creek, there is ample evidence to suggest the Eccles Creek system remains under stress. Anthropogenic interference is a likely contributor to this.

In Boulger Creek, the sampling conducted in 2019 will serve as baseline data for future sampling. TM

**Title: FISH SURVEY**

**Objective:** To determine if mining and mining related activities are impacting fish in Eccles Creek.

**Frequency:** In the fall every three years.

**Status:** Survey due 2019

**Reports:** Every three years

**Citation:** MRP, Volume 1A, Section 2.8, page 2-71d

**OPERATOR COMMENTS**

Fish studies were conducted in 2019. The report titled, "Fish and Macroinvertebrate Assessment on Eccles and Boulger Creeks, 2019" is attached to this report.

**REVIEWER COMMENTS**



Met Requirements



Did Not Meet Requirements

Fish surveys were conducted in 2019 in both Eccles and Boulger Creeks. In Eccles Creek, the survey report concludes that overall the fish population is healthy with a number of various species and ages of fish observed. The macroinvertebrate data show there is a food source for the fish, albeit with less-than-ideal diversity. In Boulger Creek, cutthroat trout survey data from 2019 will be used as baseline data going forward.

**Title: SUBSIDENCE MONITORING**

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

**Frequency:** Annually

**Status:** Ongoing

**Reports:** Annual Update of Drawing 4.17.3-1 and digitized area survey information and results of on the ground visual inspection.

**Citation:** Chapter 4, page 4-97 thru 4-99a

**OPERATOR COMMENTS**

The Cumulative Subsidence 1982 - 2019 map is attached. Note that since aerial flights are conducted in the summer not all of the 2019 potential subsidence is documented. Visual ground inspections of the 2019 full extraction mining areas was done in September-October in conjunction with water monitoring and seismic station maintenance. No hazardous conditions were observed during the inspections.

**REVIEWER COMMENTS**

Met Requirements

Did Not Meet Requirements

The cumulative subsidence map depicts an overall subsidence profile for all areas of the mine going back to 1982. Subsidence contours are clustered tightly around the areas that have experienced a high degree of vertical subsidence. The majority of subsidence is relatively minor, ranging between 2 and 4 feet. The maximum amount of subsidence is approximately 22 feet and occurs at the head of the South Fork Eccles Canyon. The area within the vicinity of Winter Quarters Ridge was surveyed by Aerographics and shows a maximum vertical displacement of -4 feet. (JE - 4/8/2020)

**Title: SUBSOIL SAMPLING AT WASTE ROCK SITE**

**Objective:** To provide chemical characteristics of purchased subsoil.

**Frequency:** Once. Sample purchased subsoil for parameters in Table 1 of the Utah 1988 Guidelines.

**Status:** Ongoing with contemporaneous reclamation at the waste rock site.

**Reports:** None specified. Suggest verbal communication with Division and lab analysis to be included in bond release application.

**Citation:** Volume 3, Section 4.6.4.1, page 4-38a and page 4-38b

**OPERATOR COMMENTS**

No contemporaneous reclamation was conducted at the Waste Rock site in 2019 and no subsoil was purchased.

**REVIEWER COMMENTS**

Met Requirements

Did Not Meet Requirements

PB - 5/6/2020.

**Title: AGE-MONITORING OF WATER**

**Objective:** To understand the possible sources of groundwater inflows.

**Frequency:** When inflows of 800 gpm are encountered.

**Status:** No significant inflows in the North Lease.

**Reports:** Immediately notify Division

**Citation:** Volume 1, page 2-35b

**OPERATOR COMMENTS**

**REVIEWER COMMENTS**

Met Requirements

Did Not Meet Requirements

**Title: SAMPLING PRIOR TO SLURRY PLACEMENT IN ABANDONED UNDERGROUND WORKINGS**

**Objective:** Protection of groundwater

**Frequency:** Every 450 feet of advance

**Status:** Report if placed slurry in abandoned underground workings.

**Reports:** Notification if parameters are out of compliance with Guidelines for Topsoil and Overburden.

**Citation:** Volume 2, Incorporation of 97K-1 and Section 1.2 (at the end of section 3.2)

**OPERATOR COMMENTS**

No slurry was placed in abandoned underground workings in 2018.

**REVIEWER COMMENTS**

Met Requirements

Did Not Meet Requirements

**Title: SAMPLING OF WASTE ROCK IN TEMPORARY STOCKPILES**

**Objective:** Protection of surface and groundwater

**Frequency:** one sample per 2000 tons of temporary stockpiled material if remains in temporary location longer than three months.

**Status:** Ongoing

**Reports:** Not specified. Assumed to be the same as disposal site sampling (previous paragraph on same page.)

**Citation:** Volume 3, page 4-30 and 1988 Soils Guidelines, Table 6

**OPERATOR COMMENTS**

No waste rock was stored in excess of three months in a temporary location. No samples were collected.

**REVIEWER COMMENTS**

Met Requirements

Did Not Meet Requirements

PB - 5/6/2020.

# 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: TOPSOIL SAMPLING**

**Objective:** To determine fertilizer application rate.

**Frequency:** At final reclamation sample redistributed topsoil for N, P, K, Fe, Mg, Mn, Zn, Ca and pH.

**Status:** At final reclamation

**Reports:** None specified. Suggest verbal communication with Division and lab analyses to be included in bond release application.

**Citation:** Section 4.5, page 4-32

## **Title: MONITORING OF REFERENCE AREAS**

**Objective:** Determine condition class of reference site to ensure the site is still appropriate for "reference"

**Frequency:** During last 2 years of mining leading up to reclamation

**Status:** Ongoing

**Reports:** Submit evaluation of all reference areas with determination of condition class as established by the NRCS.

**Citation:** Chapter 4, Page 4-47

# 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:

Lab Analysis report S2002097; "Fish and Macroinvertebrate Assessment on Eccles and Boulger Creeks, 2019";

**REVIEWER COMMENTS**  Met Requirements  Did Not Meet Requirements

