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DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

October 26, 2015

Ken May, General Manager
Canyon Fuel Company, LLC
597 South SR24
Salina, Utah 84654

Subject: 2014 Annual Report Review Completion, Sufco Mine, C/041/0002, Task ID #4819

Dear Mr. May:

The Division staff has completed the review of the 2014 Annual Report. Enclosed is a copy of the review with each reviewer's comments.

Thank you for your diligence in completing the Annual Report. If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron R. Haddock
Coal Program Manager

DRH/sqs
Enclosure
O:\041002.SUF\WG4819 ANNUAL REPORT\ReviewCompletionLetter.doc

1594 West North Temple, Suite 1210, Salt Lake City, UT 84116
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UTAH DNR OIL, GAS & MINING

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Annual Report

This Annual Report shows information the Division has for your mine. Submit the completed document and any additional information identified in the Appendices to the Division by the date specified in the cover letter. During a complete inspection an inspector will check and verify the information.

GENERAL INFORMATION

Company Name	Canyon Fuel Company, LLC	Mine Name	Sufco Mine
Permit Number	C/041/0002	Permit expiration Date	05/21/2017
Operator Name	Canyon Fuel Company, LLC	Phone Number	+1 (435) 286-4480
Mailing Address	597 South SR 24	Email	arichard@bowieresources.com
City	Salina		
State	Utah	Zip Code	84654

		DOGM File Location or Annual Report Location
Excess Spoil Piles	☐ Required ☒ Not Required	
Refuse Piles	☒ Required ☐ Not Required	Certified reports previously submitted
Impoundments	☒ Required ☐ Not Required	Certified reports previously submitted
Other:		

OPERATOR COMMENTS

REVIEWER COMMENTS ☒ Met Requirements ☐ Did Not meet Requirements

The annual report included copies of the quarterly inspection of the Refuse pile competed on: 3/18/14, 6/26/149/18/14, 12/17/14 for the Waste rock disposal site. The inspection reports were completed by John Byars, a Utah PE certified professional engineer. The field inspections state that all foundation preparation was completed according to design specification. The reports detail that all slopes showed no signs of instability such as rills, gullies, or sloughage. The Permittee has addressed the requirements of this commitment. (CP)

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: To determine if there are active nest sites and the number of juveniles fledged within 1/2 mile of surface mining activities or areas that may be impacted by subsidence. The surveyor should obtain nest location data from DWR prior to conducting the survey. All data collected should be provided to DWR to update the database.
Frequency: Annually
Status: Ongoing
Reports: Annual
Citation: MRP, Volume 1, Chapter 3, page 3-9
Operator Comments

Raptor Survey report included in the annual report under confidential information.

Reviewer Comments ☒ Met Requirements ☐ Did Not Meet Requirements

Tetra Tech, Inc conducted raptor nest surveys as directed by Bowie Resources. There are several issues that need to be addressed with provided report and all future reports must contain qualifying information in support of the objective of the monitoring. The report provided does not address any correlation between the location of the nests and mining activities. The map provided does not show where subsidence is occurring, where it is expected to occur in the next year, nor where surface activities are located. It does not even have a mining area boundary (with exception to the waste rock site). Therefore, from the report and map provided alone it is not possible to ascertain if mining has or could have any impact to the active nests located during the survey. Only after a detailed review of the entire mine plan and a thorough digitization of several maps was it possible to determine that one active Golden Eagle nest has the potential to be impacted from subsidence in Area 13 (TT11 GOEA) and one active Golden Eagle Nest is adjacent to the haul road (TT12). The report lacks any discussion of the two nests and the potential for mining activity to impact them.
All future reports MUST provide enough information to determine if a raptor nest is located inside the current planned mining subsidence areas, or those areas to be subsided in the following year. Pursuant to the approved MRP, Vol. 1, Ch. 3, page 3-9, any raptor nest that has the potential to be disturbed by subsidence will be evaluated with DWR and FWS and an appropriate plan of action will be developed on a case by case basis. Please contact Division Biologist, Lisa Reinhart for future coordination. A written analysis of potential impacts and proposed mitigation should those impacts occur, should be provided for discussion between the Division, DWR, and FWS. (LR 6/10/15)

Title: SUBSIDENCE MONITORING
Objective: To document the amount of subsidence that has occurred.
Frequency: Annually
Status: Ongoing
Reports: Annual
Citation: MRP, Volume 1, Chapter 5, page 5-29

Operator Comments

Report is included in the annual report under Subsidence Monitoring.

Reviewer Comments ☒ Met Requirements ☐ Did Not Meet Requirements

The Permittee included a subsidence mine map, report, and summary table with the annual report. The subsidence map shows the subsidence contours for the Sufco Mine as of 2014. The report details how the majority of the monitoring areas are dormant, Areas 1-12. Mining was completed in Area 13 and Area 14 in 2012 and the sites continue to be monitored. Mining activities began in Area 15 in 2012 and Area 16 and 17 are future acquisitions. Baseline information for said areas was collected in 2011. The maximum subsidence witnessed in 2014 was seven feet with the overall max of nine feet. The Permittee has addressed the requirements of this commitment. (CP)

Title: CLIMATOLOGICAL DATA
Objective: Collect climatological data to aid in determining the impact to runoff, stream flow and local springs from mining.
Frequency: Annually
Status: Ongoing
Reports: Annual
Citation: MRP, Volume 2, page 7-51E

Operator Comments

Climatological data is included in the annual report under Climatological Data.

Reviewer Comments ☒ Met Requirements ☐ Did Not Meet Requirements

The report provided by the Permittee includes rainfall information and certain monitoring location data analysis. The requirement has been met. (AD)

Title: WASTE ROCK SAMPLING
Objective: To document chemical characteristics of waste rock and protect surface and groundwater. Quarterly sampling, Number of samples/volume not described. Refer to tables 3 and 8 in the Division's 2008 Soils and Overburden Handling Guide.
Frequency: Quarterly, during periods of deposition at the waste rock site.
Status: Ongoing
Reports: Annual, indicate frequency of sampling (#samples/volume).
Citation: MRP, Volume 3, Section 3, page 3-4

Operator Comments

Results are included in the annual report under Waste Rock Samples.

Reviewer Comments ☐ Met Requirements ☐ Did Not Meet Requirements

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: 2008 photos completed, 2013 photos completed, due in 2018.
Reports: Annual
Citation: MRP, Volume 1, Chapter 3, page 3-45, Chapter 5, page 5-29

OPERATOR COMMENTS (OPTIONAL)

REVIEWER COMMENTS

Noted in last year's report: "Some cursory analysis has been completed in comparing the 2008 and 2013 photos. There are many variables associated with this type of comparison and as such the Division is suggesting that a representative from the mine, Division and qualified botanist determine if these photos can provide the information needed to assess changes in vegetation." Please contact Division Biologist, Lisa Reinhart, to determine if this effort should be continued.

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:

Reviewer Comments

Title: Northwater Spring Mitigation
Objective: Mitigate for water loss.
Frequency: on-going
Reports: During the second year of operation, a summary report of the systems performance and maintenance will be included in the mines 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: Vol. 9, Appendix 7-25, page 5
Analysis: On 10/16/2014, Amanda Richard submitted the Northwater Mitigation Report. The report summarizes the status of the project and in general the solar pump/piping system was ineffective at producing required amounts of water for livestock and wildlife in 2014. The level of effort to maintain available drinking water is extremely high and Sufco continues to cooperate with regulatory agencies to refine the system.

Title: Vegetation of South Fork Quitchupah
Objective: To provide sufficient data to make a determination of the degree of impacts.
Frequency: Repeat vegetation community condition observations two times a year (beginning and end of growing season) at spring(s) and monitoring locations. The survey will be conducted prior to mining (2012) and then two times a year for the first two years (2013 & 2014) and the fifth year following undermining (2018). Two reports shall be provided and the Division will provide the second copy to the Fishlake National Forest.
Reports: Annual 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.
Citation: Vol. 5, appendix 3-14, page 5
Analysis: Baseline data was collected in 2012. A 2013 has been completed and thus this report is for the year 2nd after mining. The next veg sampling report will be for the fifth year of undermining (2018). At that time the report should include sufficient information to make a determination as to the degree of impacts from subsidence. Since the study is designed to make comparisons to document major impacts to the plant communities, a statement in that regard should be made by the biologist conducting the study.

MAPS

Copies of mine maps, current and up-to-date, are to be provided to the Division as an attachment to this report in accordance with the requirements of R645-301-525.240. The map copies shall be made in accordance with 30 CFR 75.1200 as required by MSHA. Mine maps are not considered confidential.

Map Name	Map Number	Included		Confidential	
		Yes	No	Yes	No
Annual subsidence map		☒	☐	☐	☒
Mine Map		☒	☐	☐	☒
		☐	☐	☐	☐
		☐	☐	☐	☐
		☐	☐	☐	☐

Reviewer Comments ☒ Met Requirements ☐ Did Not Meet Requirements

The Permittee included a mine map with the approximate dates associated with panels are projected to be mined. Planned mining operations are shown on the Sufco mine timing projection map until 2018. The Annual report also included a subsidence map showing the subsidence contours for the mined out areas. These mine maps meet the Division's requirements to show at least five years of projected mining annually. (CP)