

OGMCOAL DNR <ogmcoal@utah.gov>

#### **Request for Proposal- Skyline Mine, Flat Canyon Lease Area**

Wed, Sep 14, 2016 at 2:30 PM

To: OGMCOAL DNR <ogmcoal@utah.gov> Cc: Amanda Daniels <amandadaniels@utah.gov>, Daron Haddock <daronhaddock@utah.gov>, Dana Dean <danadean@utah.gov>

Good Afternoon,

Steve Christensen <stevechristensen@utah.gov>

The Utah Division of Oil, Gas and Mining Coal Program (the Division) is seeking an environmental engineering firm to review engineering, hydrologic and hydrogeologic information/data for proposed mining activity within the Flat Canyon Lease in central Utah (See Attached Scope of Work).

Your response is requested in an effort to determine the best qualified firm to perform these services. Once the Division has determined the best qualified firm, a Request for Quote will be made. Please do not send cost/pricing information with your initial response.

Respond by submitting a response and qualifications to the attached Scope of Work. All responses should be sent directly to Steve Christensen (stevechristensen@utah.gov) no later than September 21st, 2016 by 10:00 AM (MST).

We appreciate your consideration of this project.

Regards,

Steve

Steve Christensen Utah Division of Oil, Gas and Mining 1594 W North Temple, Suite 1210 Salt Lake City, Utah 84116 (801) 538-5350 stevechristensen@utah.gov

Skyline\_FlatCynLs\_Scope of Work.pdf

# Proposed Work Assignment

# Skyline Mine- Flat Canyon Lease Addition Scope of Work: Ground and Surface Water Hydrologic Review

#### Purpose:

Utah's Division of Oil, Gas and Mining (the Division) is tasked with the implementation of the Surface Coal Mining Reclamation Act (SMCRA). The Division requires a rigorous professional engineering, hydrologic and hydrogeologic review of proposed mining activity within the Flat Canyon Lease in central Utah. The Division will approve or deny the proposed mining activity based on the ability of the Permittee, Skyline Mine-Canyon Fuel Company (CFC), to provide the information required under SMCRA to demonstrate that the mine plan has been designed to prevent impacts to State Appropriated Water Rights and Electric Lake and if the proposed water monitoring plan is adequate to identify the aforementioned impacts.

#### Project Background:

The Skyline Mine is located in Carbon and Emery Counties, approximately five miles southwest of Scofield, Utah and 18 miles west of Helper, Utah. The Skyline Mine is operated by Canyon Fuel Company (CFC) under Utah Division of Oil, Gas & Mining (the Division) SMCRA Permit #C0070005.

CFC submitted a modification to their mine plan on October 13, 2015 for the inclusion of the Flat Canyon Federal Coal Lease Tract UTU-71144 into their existing permit. The Flat Canyon Coal Lease would extend the life of the mine by approximately 9 to 12 years and contains a probable maximum of 42 million tons of mineable coal.

Information and studies of the ground water systems in the area of the Flat Canyon Lease have been developed since the Skyline mine encountered more than 6,000 gallons per minute (gpm) of water while crossing a fault system during the development of the 10 Left Panel of Mine #2 in August of 2001. The proposed Flat Canyon Lease mine plan modification submitted by CFC indicates that they expect to encounter as much, if not more water in the Flat Canyon Lease than previously encountered in Mine #2. It is imperative to have a cohesive understanding of what substantive information can be drawn from the previous groundwater studies. Area stakeholders have raised concerns that the proposed coal mining activity could potentially impact State Appropriated Water Rights. The hydrogeology of the proposed mining area is complex. Several studies have been conducted to evaluate the groundwater systems in the area of Electric Lake. Additionally, years of water monitoring data have been conducted on both the ground and surface water systems in the area.

## Scope of Work/Objective:

The Division of Oil, Gas and Mining (the Division) is seeking a consultant to provide a third party review of proposed mining activity in the Flat Canyon Lease. The review would culminate in the production of a final written report that discusses the analysis of the information/data provided and make a determination as to whether the proposed mining plan and supporting data is adequate in determining whether the proposed mining has been designed to prevent impacts to State Appropriated Water Rights and Electric Lake and that the proposed water monitoring plan is adequate to identify impacts.

# Engineering and Hydrologic/Hydrogeologic Review:

The CONSULTANT shall:

- 1) Review the proposed underground mine plan of the Flat Canyon Lease.
- 2) Review available ground and surface water databases. Including, but not limited to:
  - i. Division of Oil, Gas and Mining: Utah Coal Mining Water Quality Database.
  - ii. Emery Water Conservancy District Database.
- 3) Review the proposed ground and surface water monitoring plan and determine if it is robust enough to detect potential impacts to hydrologic resources (ground and surface water).
- 4) Review previously produced reports/analyses of the Flat Canyon Lease area hydrology/hydrogeology and provide a determination of the strengths and/or weaknesses of the findings. Including:
  - i. 'Analysis of Groundwater Flow from Electric Lake Towards the Skyline Mine', Dr. Kip Solomon, Ph.D., June, 2005.
  - ii. 'Investigation of Groundwater And Surface-Water Systems in the Flat Canyon Tract and Adjacent Area; Probable Hydrologic Consequences of Coal Mining in the Flat Canyon Tract, Sanpete County, Utah', Petersen Hydrologic, LLC, August 2014.
  - iii. 'Groundwater Conditions in the Star Point Sandstone in the Vicinity of the Skyline Mine', Petersen Hydrologic, LLC, August 2014.

- iv. 'Investigation of Fault-related Groundwater Inflows at the Skyline Mine', Petersen Hydrologic, LLC, August 2016.
- v. *'Update of Groundwater Flow Model Skyline Mine Project Utah'*, SRK Consulting, July 2016.
- vi. 'Investigation of Technical Issues Related to the Electric Lake and Huntington Creek Drainage Controversy', PacifiCorp, June, 2003.
- vii. 'Electric Lake Update', PacifiCorp, July 2004.
- 5) Provide an evaluation of CFC's calculated final, post-mining mine pool.

### **Product/Deliverables:**

A final report will be provided to the Division addressing the above list of items. The report will be prepared and certified by both a Professional Engineer and Professional Hydrogeologist experienced and knowledgeable in Utah coal mining conditions and associated ground/surface water systems. The report will be compiled in a clear and concise manner and will include a narrative with supporting calculations and drawings when deemed appropriate. The report will make a final determination as to the adequacy of the aforementioned data/information in evaluating whether the Skyline Mine's Flat Canyon Lease mining plan has been designed to prevent impacts to State Appropriated Water Rights and Electric Lake and that the proposed water monitoring plan is adequate to detect potential impacts.