



State of Utah

GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

Department of  
Environmental Quality

L. Scott Baird  
*Executive Director*

DIVISION OF WATER QUALITY  
Erica Brown Gaddis, PhD  
*Director*

**VIA EMAIL**  
**READ RECEIPT REQUESTED**

October 8, 2020

Karin Madsen, Environmental Permitting Engineer  
Utah Land Resources, Inc. – Princess Mine  
PO Box 910  
East Carbon, Utah 84520-0910

Subject: Reconnaissance Inspection for the former Crandall Canyon Mine Facility  
**UPDES Permit No. UT0024368**

Dear Ms. Madsen:

Enclosed for your records are the results of a recent reconnaissance inspection conducted by the Division of Water Quality (DWQ) for the above referenced facility. The inspection was conducted while DWQ was already in the area for another site visit. No deficiencies were observed and no formal response is required at this time.

Thanks for your continued permit compliance efforts and in helping to protect Utah's Water Quality. If you have any questions with regards to this matter, please contact Jeff Studenka at (801) 536-4395 or [jstudenka@utah.gov](mailto:jstudenka@utah.gov).

Sincerely,

  
Jeffrey Studenka (Oct 7, 2020 16:30 MDT)

Jeff Studenka, Permit Facilitator  
UPDES Surface Water Section

DH/JAS/cjh

Enclosure: Inspection Report w/ Photos (DWQ-2020-020254)

cc: Orion Rogers, Southeast Utah Health Department  
Russell Seeley, DEQ SE District Engineer  
Steve Christensen, DOGM Coal Program Manager

DWQ-2020-020252  
FILE: UPDES Section 6

## **INSPECTION PROTOCOL**

UPDES Permit #: UT0024368 – Former Crandall Canyon Mine Facility  
Inspection Type: Reconnaissance Inspection  
Inspection Dates: September 24 and October 2, 2020  
Weather Conditions: Sunny and mild, ~70°F (on site)

Jeff Studenka of the Division of Water Quality (DWQ) visited the Crandall Canyon mine facility (mine) while at a nearby site visit. The purpose of the inspection was to observe the outfalls, receiving waters and iron treatment system while already in the area. The current UPDES permit was issued as modified on June 1, 2020 and more recently to reflect the permit name change and transfer effective 9-30-2020. The permit is scheduled to expire 1-31-2023.

## **FACILITY DESCRIPTION**

Location: ~15 miles Northwest of Huntington, Utah off Hwy 10.

Discharge points: This facility has two discharge points. Outfall 001 is from the sedimentation pond which provides surface water runoff control for the entire disturbed area of the mine. This pond has not discharged in many years. Outfall 001 is located at latitude 39°27'38" north, longitude 111°09'59" west.

Outfall 002 is the discharge point for the continuous mine water flows. The mine was shut down in August of 2007 and has not operated since. However, mine water has continued to discharge via this outfall. Outfall 002 is located on latitude 39°27'38" north, longitude 111°09'59" west.

Flow: The mine has a total flow limit of 0.73 MGD as a maximum monthly average.

Receiving waters: Outfalls 001 & 002 currently discharge to Crandall Creek (which then discharges to Huntington Creek). However Outfall 002 will discharge directly to Huntington Creek once a pipeline has been installed and reclamation work begins in the near future. The UPDES Permit was modified earlier this year to accommodate the outfall location change.

Site Conditions: The mine is an inactive coal extraction facility that is undergoing final reclamation plans for the removal of the remaining structures, including the current outfalls discharging into Crandall Canyon Creek. Outfall 001 will be obviated once the sedimentation pond is removed and Outfall 002 will be relocated via a buried pipeline from the mine portal discharging directly into Huntington Creek as authorized in the UPDES Permit. Mine water that was previously elevated in total iron concentrations has been trending down for the past few years to a point where the treatment system will likely no longer be needed post-reclamation. Currently the iron treatment system is still operational and in use when needed, and is a continuous flow through system before discharging via Outfall 002.

### **INSPECTION SUMMARY**

The outfall locations (001 and 002) were observed as well as the receiving waters of Crandall Creek and Huntington Creek. Outfall 001 was not discharging, as the sedimentation pond was dry and there was no evidence of any recent discharges. Outfall 002 was discharging as expected from the iron treatment flow through system. Although some iron staining was observed proximal to the treatment system outlet structure, the mine water discharge itself was observed to be flowing steady and clear from the iron treatment pond into the Outfall 002 pipeline with no odor, color or other concerns. There was no iron staining observed in Crandall Creek. Site photos were collected and included herein. DWQ was on site from approximately 12:30 to 1:00 pm. No one else was on site at the time of the inspection. The UPDES Permit requirements, NetDMR submittals and compliance status were reviewed remotely at DWQ offices on October 2, 2020 to complete the inspection activities. No deficiencies or other UPDES Permit compliance issues were identified.

### **DEFICIENCIES OBSERVED**

None.

### **CORRECTIVE ACTION REQUIREMENTS**

None.

### **OTHER ITEMS**

Please keep DWQ informed as site conditions change, especially with regards to the relocation of Outfall 002 as appropriate.

**PHOTO LOG**

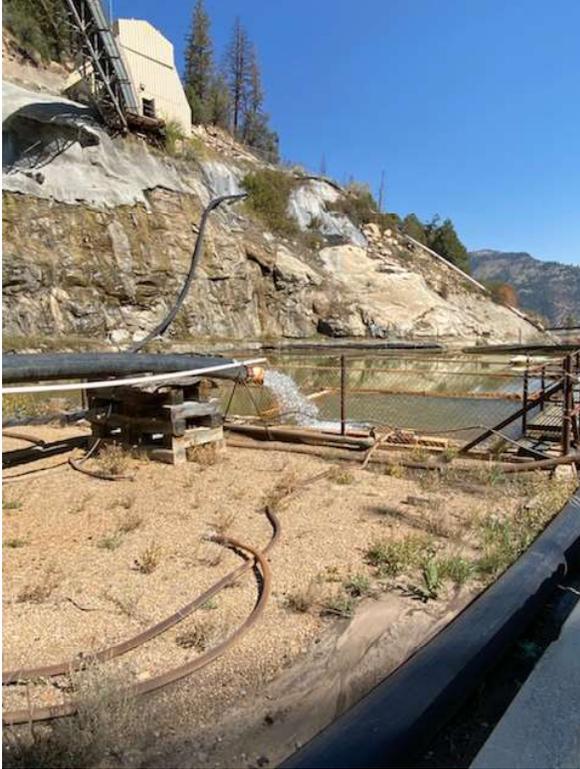
1. Entrance at the Crandall Canyon Mine site.



2. Sedimentation Pond (Outfall 001).



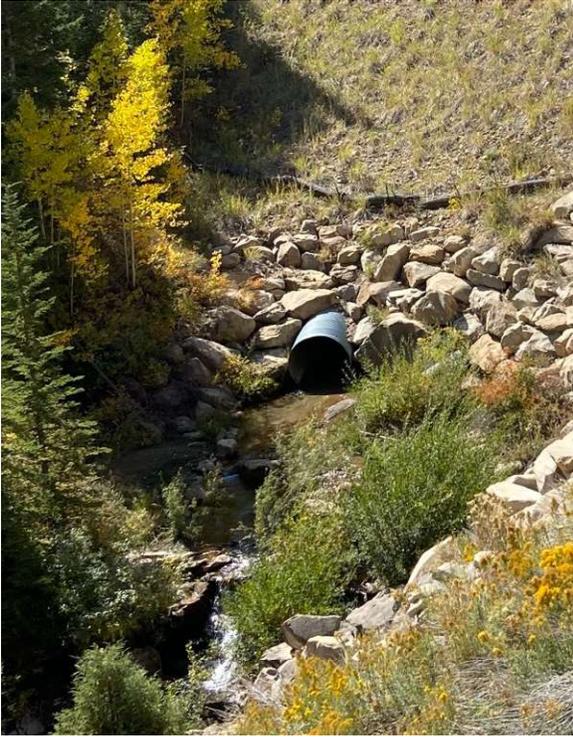
3. Mine water flowing from the mine portal pipeline above into the treatment pond.



4. Mine water flow post treatment pond to Outfall 002.



5. Crandall Creek culvert flowing below sedimentation pond (includes Outfall 002 discharges).



6. Crandall Creek flow just prior to mixing with Huntington Creek.

