

WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

March 10, 2017

TO: Internal File

THRU: Steve Christensen, Permit Supervisor 

FROM: Arati Umarvadia, Hydrologist 

RE: 2016 Third Quarter Water Monitoring, Sunnyside Cogeneration Association, Sunnyside Refuse/Slurry, C0070035, WQ16-3, Task ID #5336

The Sunnyside Refuse/Slurry Mine is currently operational. The facility mines the old Sunnyside Mine coarse refuse and slurry cells, blends the material and burns it at the adjacent co-generation facility. Sunnyside Cogeneration Association (SCA) started mining coal refuse at this site in 1993 and projects a total mine life of at least 20 years. Water monitoring requirements are described in the MRP in Section 730 and Appendix 7-8.

This report was prepared from monitoring data queried from the UDOGM database. The data that support this report were collected and submitted to the database by SCA. The data were downloaded into file O:\007035.SRS\Water Quality\Data\SunnysideRefuseWQ.xlsx for this review.

1. Was data submitted for all required sites?

Springs

YES NO

The Permittee is required to monitor and sample springs CRS, CRB and F-2 quarterly. Springs CRS was reported as "no flow". Spring CRB reported a flow of 100 gpm. Spring F-2 reported a flow of 5 gpm.

Streams

YES NO

The Permittee is required to monitor and sample Iceland Creek at location ICE-1 quarterly. Stream site ICE-1 reported a flow of 100 gpm during the third quarter 2016 monitoring event.

Wells

YES NO

The Permittee is required to monitor and sample the East Carbon City Well (a.k.a.

Dragerton Well or WELL-1) and well B-6 quarterly. Well B-6 was reported as dry during the third quarter 2016 sampling event. Well-1 reported all required parameters.

UPDES YES NO

There are six active UPDES sites at the Sunnyside Refuse/Slurry Mine. They are all under the permit UT0024759, and include outfalls 007, 008, 009, 012, 014, and 016. The Permittee is required to monitor each UPDES site monthly according to the permit. The Permittee monitored and reported no discharges during the months of July and August. In September, Outfalls 012 and 016 reported no flow. **Data for Outfalls 007, 008, 009, and 014 were not provided** for September.

2. **Were all required parameters reported for each site?**

Springs YES NO

Streams YES NO

Wells YES NO

UPDES YES NO

3. **Were irregularities found in the data?**

Springs YES NO

F-2: Dissolved Sulfate, Total Dissolved Solids

In the previous quarter, TDS exceeded the normal range. This quarter, SO4 and TDS exceeded the mean.

Streams YES NO

ICE-1: Dissolved Calcium, Dissolved Magnesium, Dissolved Sodium, Dissolved Potassium, Sulfate, Total Dissolved Solids, Conductivity

Parameters for this site have exceeded normal ranges for several years.

Wells YES NO

UPDES YES NO

4. On what date does the MRP require a five-year resampling of baseline water data.

MRP Appendix 7-8 states that "once every five years (prior to each application for permit renewal) one sample from each of the monitoring sites listed in Table 7-2A will be sampled and analyzed for the parameters listed in Table 7-2B". The Permittee monitored the complete list of baseline parameters during 2012.

5. Based on your review, what further actions, if any, do you recommend?

None.

Does the Mine Operator need to submit more information to fulfill this quarter's monitoring requirements? YES NO

**6. Follow-up from last quarter, if necessary.
Did the Mine Operator submit all the missing and/or irregular data (datum)?**

None required.