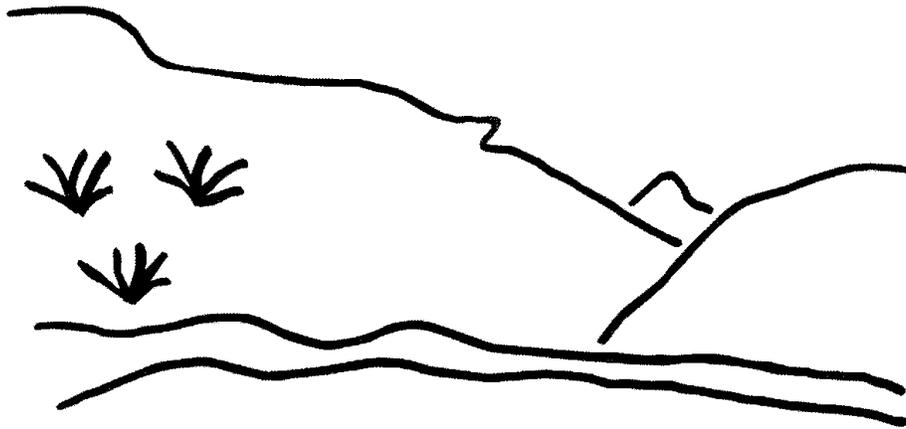


State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Mid-Term Permit Review

Sunnyside Refuse/Slurry
Sunnyside Cogeneration Association
Technical Analysis
November 22, 2005

TABLE OF CONTENTS

TECHNICAL ANALYSIS DESCRIPTION 1

GENERAL CONTENTS..... 3

 IDENTIFICATION OF INTERESTS 3

 VIOLATION INFORMATION..... 3

OPERATION PLAN 5

 SUBSIDENCE CONTROL PLAN..... 5

 Subsidence Control Plan 5

 SPOIL AND WASTE MATERIALS 5

 Refuse Piles..... 5

 Impounding Structures..... 6

 Excess Spoil:..... 6

 Endangered and Threatened Species 6

 HYDROLOGIC INFORMATION 6

 Water-Quality Standards And Effluent Limitations 7

 Sediment Control Measures 7

 Siltation Structures: Sedimentation Ponds..... 7

 Siltation Structures: Alternative Sediment Control Areas (ASCAs) 8

RECLAMATION PLAN..... 9

 BONDING AND INSURANCE REQUIREMENTS..... 9

 Determination of Bond Amount 9

TABLE OF CONTENTS

TECHNICAL ANALYSIS DESCRIPTION

The Division ensures that coal mining and reclamation operations in the State of Utah are consistent with the Coal Mining Reclamation Act of 1979 (Utah Code Annotated 40-10) and the Surface Mining Control and Reclamation Act of 1977 (Public Law 95-87). The Utah R645 Coal Mining Rules are the procedures to implement the Act. The Division reviews each permit or application for permit change, renewal, transfer, assignment, or sale of permit right for conformance to the R645-Coal Mining Rules. The Applicant/Permittee must comply with all the minimum regulatory requirements as established by the R645 Coal Mining Rules.

The regulatory requirements for obtaining a Utah Coal Mining Permit are included in the section headings of the Technical Analysis (TA) for reference. A complete and current copy of the coal rules can be found at <http://ogm.utah.gov>

The Division writes a TA as part of the review process. The TA is organized into section headings following the organization of the R645-Coal Mining Rules. The Division analyzes each section and writes findings to indicate whether or not the application is in compliance with the requirements of that section of the R645-Coal Mining Rules.

Page 2

C/007/0035

November 22, 2005

TECHNICAL ANALYSIS DESCRIPTION

GENERAL CONTENTS

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

The resident agent for Sunnyside Cogeneration Associates, Sunnyside Refuse and Slurry changed in 2005 from Randy J. Scott to Michael J. Blakey. This change was accomplished by the review and approval by the Division of Task # 2251. The remaining corporate structure was checked against the information contained in the Office of Surface Mining (OSM) Applicant Violator System (AVS) and found to be up to date.

Findings:

Information contained in this section of the application meets the minimum requirements.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

The approved Mining and Reclamation Plan (MRP) have been updated with the addition of NOV No. N04-49-3-1. This violation was issued at the Star Point Waste Fuel site, not the Sunnyside Refuse and Slurry site. The abatement for this violation has been met and penalties have been paid.

Findings:

Information contained in this section of the application meets the regulatory requirements.

OPERATION PLAN

OPERATION PLAN

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Subsidence Control Plan

There is no subsidence control plan within the approved Mining and Reclamation Plan (MRP), because “No material damage or diminution within the Permit Area will be caused by subsidence because no underground coal resources are available within the Permit Area which would cause subsidence. No past or future underground coal mining operations have or likely to occur within the SCA Permit Area.”

Findings:

Information contained in this section of the application meets the regulatory requirements.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Refuse Piles

Section 514 of the MRP indicates that quarterly inspections will be done by a registered P.E. in the State of Utah. These inspections will be followed by a certified report promptly after each inspection. In addition to the quarterly inspections the refuse pile is inspected once every 30 days (monthly). A variance from MSHA was given for the 30 day frequency from a seven day frequency on September 12, 2001.

Impounding Structures

Section 514 of the MRP indicates that quarterly inspections will be done by a registered P.E. in the State of Utah. These inspections will be followed by a certified report promptly after each inspection. In addition to the quarterly inspections, the east slurry cell is inspected once every 30 days (monthly). A variance from MSHA was given for the 30 day frequency from a seven day frequency on September 12, 2001. MSHA approved the abandonment of the West Slurry cell on September 10, 2001.

Excess Spoil:

The permittee has plans to increase the storage capacity of excess spoil pile #2 by increasing the slope of the pile. Task #2223 has been submitted to the Division to address this issue. The Task was returned to the permittee with deficiencies. Excess spoil pile #1 is currently not being used.

Findings:

Information contained in this section of the application meets the regulatory requirements.

Endangered and Threatened Species

Volumes of water consumed in mining processes in excess of 100-acre feet/year require mitigation with the U. S. Fish and Wildlife Service. Water consumption for the cogeneration facility is approximately 34.1-acre feet/year. The water consumption is derived from several sources, fugitive dust control, sediment pond evaporation, and the East slurry cell evaporation. This information can be found in Chapter 7 Section 728.310 pages 700-10 and 700-11 of the MRP. Section 728 is the PHC document for the facility.

Findings:

The information in the MRP is adequate to meet the requirements of this section of the regulations, the Mid-term review and the requirements of the Endangered Species Act.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

The plan contains commitments to use the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area. BTCA means that the operator is employing the best methods available at any one time. The Sunnyside Refuse/Slurry MRP contains the following commitments to BTCA in controlling sediment.

Water-Quality Standards And Effluent Limitations

The Permittee has a current Utah Pollutant Discharge Elimination System (UPDES) Permit, which it is abiding by. The Utah Division of Water Quality (DWQ) issued the current permit on August 1, 2002. It expires on July 31, 2007.

There are seven point sources covered under the UPDES Permit: UT0024759-004 (clear water pond to Icelander Creek), UT0024759-007 (rail cut pond to Icelander Creek), UT0024759-008 (old course refuse pond to Icelander Creek), UT0024759-009 (pasture pond to Icelander Creek), UT0024759-012 (pond at coarse refuse toe to Icelander Creek), UT0024759-014 (coal pile pond to Icelander Creek), and UT0024759-016 (borrow area pond to Icelander Creek).

The Permittee has complied with the UPDES permit conditions during the review period. Only outfalls 009 and 012 flowed during the past five years, each just once in October of 2004, for less than 24 hours. At that time the discharge was within the required limits, except that total iron was slightly high (1.09 and 1.5 mg/L, limit is 1.0 mg/L), most likely from iron scale within the pipes. The Permittee informed the Division of Water Quality of the situation, and no violations were issued.

Sediment Control Measures

The Permittee uses a series of culverts and ditches to divert all runoff from the undisturbed area away from the disturbed area to prevent excess sediment contribution from the disturbed area (Plate 7-1, designs Appendix 7-3). Each ditch and diversion is designed to pass the runoff from a 100-yr. 6-hr. storm. The sedimentation pond treats all runoff from the disturbed area, except in thirteen small areas where the Permittee uses alternative sediment controls.

Siltation Structures: Sedimentation Ponds

As stated previously, there are seven sedimentation ponds at the Skyline Mine, which treat runoff from the disturbed area. The Permittee designed each to pass the runoff from a 25-yr. 6-hr. storm, and to hold the runoff from a 10-yr. 24-hr. design storm until it meets UPDES

limits. A Professional Engineer has certified the design and construction of each pond, and the Permittee conducts inspections as required under the regulations.

A discussion of the ponds is on page 700-17 of the MRP, and calculations are in Appendix 7-3.

Siltation Structures: Alternative Sediment Control Areas (ASCAs)

To control sediment in areas that do not report to the sedimentation pond, the Permittee currently has thirteen approved Alternative Sediment Control Areas (ASCAs). The ASCAs are depicted on Plates 7-1 A-E, and discussed on page 700-20 of the MRP.

Findings:

The thirteen ASCAs represent the Best Technology Currently Available (BTCA) in controlling sediment in areas that do not report to the sedimentation ponds. The sedimentation ponds represent BTCA for controlling sediment in the rest of the disturbed area.

RECLAMATION PLAN

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

Determination of Bond Amount

The information in the MRP is adequate for the Division to determine the reclamation costs. As part of the midterm review, the Division escalates the bond amount for 5 years. Since the bond will be adjusted as part of the ongoing review of Task 2332 (riprap and crusher building), the Division will handle the required bond escalation with the processing of that amendment.

Findings:

The information in the MRP is adequate to meet the requirements of this section.