

#4142
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TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 25, 2012

TO: Internal File

THRU: Daron Haddock, Coal Program Manager

FROM: Steve Christensen, Environmental Scientist *SC*

RE: Midterm Review Completion Response, Wildcat Loadout, Intermountain Power Agency, C/007/0033, Task ID #4142

SUMMARY:

On June 29th, 2012, the Division of Oil, Gas and Mining (the Division) received Intermountain Power Agency's (the Permittee) latest amendment relative to the mid-term review conducted by the Division.

The mid-term response is recommended for final approval.

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TECHNICAL ANALYSIS:

GENERAL CONTENTS

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R64S-301-120.

Analysis:

The MRP meets the Permit Application and Format and Contents requirements of the State of Utah R645-Coal Mining Rules Utah R645-Coal Mining Rules.

The previous technical analysis (Task ID #3931) had directed the Permittee to revise the Chapter 7 Table of Contents to accurately identify the page numbers of the respective sections. The table of contents has been revised accordingly.

Findings:

The amendment meets the Permit Application and Format and Contents requirements of the State of Utah R645-Coal Mining Rules.

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R64S-301-112

Analysis:

A previous technical analysis (Task ID #3931) had directed the Permittee to revise the approved Mining and Reclamation Plan (MRP) to accurately reflect that Andalex Resources, Inc. is no longer associated with the Wildcat Loadout Facility. References to Andalex Resources, Inc. were found throughout the MRP and must be removed and/or addressed by the Permittee to reflect the current ownership/information.

In response to the deficiency, the Permittee has provided a disclaimer on the cover page for each chapter in the MRP. The disclaimer indicates states, "**Please note -on May 11, 2011, Intermountain Power Agency (HIPA) acquired the Wildcat Loadout from Andalex Resources, Inc. (Andalex).*". References to Andalex will therefore occur herein. However, permit actions

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from May 11, 2011 forward will be the responsibility of IPA, regardless whether Andalex is referenced as the responsible party for such actions." The Division finds that the disclaimer addresses the deficiency.

Findings:

The Identification of Interests Information meets the requirements of the State of Utah R645-Coal Mining Rules.

OPERATION PLAN

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:

Sediment Control Measures

The MRP meets the Control Measure requirements of the State of Utah R645-Coal Mining Rules. The Permittee has demonstrated the use of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

The primary form of sediment control at the Wildcat Loadout site is the utilization of sedimentation ponds. Six sediment ponds (A, B, C, D, E, and F) are utilized to safely contain and treat the storm water runoff generated at the site. The design calculations and sizing considerations are provided in Appendix R, *Sedimentation and Drainage Control Plan*. The locations of the ponds are provided on Plate 2A, *Wildcat Loadout Proposed Drainage Map Response* to DO-04. Per the requirements of the Permittee's Utah Pollution Discharge Elimination System permit, the Permittee samples the effluent from the sediment ponds and provides the data quarterly to the Division's electronic water quality database.

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The other form of sediment control utilized at the site is the use of Alternative Sediment Control Areas (ASCA). The Permittee utilizes 7 ASCA areas to control sediment transport in areas where the storm water runoff is not readily routed to a sediment pond. The ASCA's that are utilized are primarily straw bales, berms and vegetation. The ASCA areas are shown on Plate 2. Chapter 5 provides a description of each one.

Straw bales, berms, and vegetation are used alone or in combination for sediment control on seven small ASCAs. The ASCAs treat a total of 17.51 acres or 26 percent of the total Page 6 disturbed area. These ASCAs are shown on Plate 2, and Chapter 5 contains complete descriptions of each area.

The previous technical analysis (Task ID #3931) identified several deficiencies relative to sediment control measures at the Wildcat Loadout facility. The deficiencies were primarily generated as a result of outstanding action items relative to Division Order DO-04.

The Permittee was directed to address the outstanding sediment control measures outlined on page 2 of Appendix P and page 1 of Appendix R. The MRP had discussed the elimination of Sediment Pond B and the construction of Sediment Pond G. Additionally, Appendix R discusses the construction of an additional ASCA (ASCA-8) upon the construction of Pond "G".

The Permittee was directed to revise Appendix R to reflect the sediment control measures to be implemented as agreed upon at the December 13th, 2012 meeting with the Division of Oil, Gas and Mining. A previous technical analysis directed the Permittee to revise page 2 of Appendix P and page 1 of Appendix R to address outstanding sediment control measures. Based upon the last amendment, Appendix R had not been updated. The Permittee has updated the 1st page of Appendix R.

A previous technical analysis (Task ID #3931) also identified a deficiency that directed the Permittee to revise the sediment control measures section of Appendix R to reflect current conditions at the site. The previous review determined that the design information for Sediment Pond B had been removed from the approved MRP. Additionally, Plate 3 B had been removed from the MRP. As Pond B was not removed (and is currently in use), the Permittee was directed to revise the MRP accordingly.

The Permittee has provided the design information as an addendum to Appendix R, "Sediment Pond B". The information provides the design parameters/considerations in the design of Sediment Pond B. The pond has been adequately sized to contain the runoff from a 10-year, 24-hour event as required by the State of Utah R645-Coal Mining Rules.

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The peak runoff was calculated using SEDCAD 4 for Windows by Civil Software Design. SEDCAD 4 utilizes the NRCS Method for Type II storms. Upon review of the Permittee's assumptions, the Permittee finds that the runoff curve number, sediment yield capacity, direct precipitation to the pond, sediment pond volume and spillway description are conservative and accurate.

However, the previously submitted Plate 3B, *Wildcat Loadout Sediment Pond HB*", was not stamped by a registered professional engineer as required by R645-301-512.100 and -512.200. The Permittee was directed to provide a professional engineered stamp on Plate 3B, *Wildcat Loadout Sediment Pond "B"*. The Division acknowledges that the Addendum to Appendix R, Sediment Pond B was stamped on the cover page by J. Thomas Paluso; however, R645-301-512.100 and -512.200 require that the cross-section and design drawings for Sediment Pond B must also be stamped by a professional engineer. The Plate 3B currently under review provides an electronic professional engineered stamp by Mr. Paluso.

The Permittee was directed during the previous technical analysis (Task ID #4095) to revise Plate 2A, *Wildcat Loadout Proposed Drainage Map Response to DO-04*. The previously submitted Plate 2A was exceedingly difficult to read/interpret due to its size and the use of one color. The Permittee was directed to re-submit Plate 2A in a large sizing in order to facilitate a more accurate assessment of the drainage configuration at the site. The Permittee has submitted Plate 2A in a sufficient size and color configuration to adequately review the drainage of the facility.

Findings:

The amendment meets the Hydrologic Information requirements of the State of Utah R645-Coal Mining Rules. The following deficiency must be addressed:

RECOMMENDATIONS:

The Division should approve the amendment.