GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

May 26, 2016

Karin Madsen, Resident Agent
Andalex Resources, Inc.
P. O. Box 910
East Carbon, Utah 84520-0910

Subject: Request for Additional Information, Kenilworth Lease Addition, Andalex Resources, Inc., Centennial Mine, C007/0019, Task ID #4763

Dear Ms. Madsen:

The Division has reviewed your application to add the Kenilworth Lease to the permit area and Mining and Reclamation Plan (MRP) for the Centennial Mine. The Division has identified deficiencies that must be addressed before final approval can be granted. The deficiencies are listed as an attachment to this letter.

The deficiencies authors are identified so that your staff can communicate directly with that individual should questions arise. Please submit the required information as an addendum to your existing application.

The Kenilworth Lease Addition to the Centennial Mine (Task #4763) will remain pending until the requested information is received. If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron R. Haddock

Daron R. Haddock
Coal Program Manager

DRH/sqs
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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0070019
TaskID: 4763
Mine Name: CENTENNIAL MINE
Title: KENILWORTH LEASE ADDITION

General Contents

Permit Application Format and Contents

Deficiencies Details:

R645-301-121.200: The amendment does not meet the State of Utah R645 requirements for Clear and Concise. The following deficiencies must be addressed prior to final approval:

It is difficult to interpret mostly all of the tables in Chapter 7. It appears when the document was reformatted the column and row spacing was modified so values no longer line up properly. All tables must be formatted so columns and rows properly line up.

The PHC in the amendment includes a water monitoring plan and supporting map (Figure 6) for surface and groundwaters. This plan does not match the proposed water monitoring plan in Chapter 7 and the supporting water monitoring map Plate 7-8. The water monitoring plan must be consistent throughout the amendment.

kstorrar

Permit Application Format and Contents

Deficiencies Details:

The amendment does not meet the State of Utah R645-120.200 requirements for being clear and concise. The following deficiency must be addressed prior to final approval:

R645-120.200: The Permittee must clean up the plan to make it clear and concise. Specific examples are provided in other sections of this analysis. The table of contents must be accurate. The introduction to the chapters must be inclusive of the entire permit area and not just what the amendment is proposing.

lreinhart

Environmental Resource Information

Historic and Archeological Resource Information

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-411 requirements for historic and archeological information.

The following deficiency must be addressed prior to final approval:

R645-301-411: The Permittee must provide the Division with Cultural and Historic Resource Information including:
A narrative which describes the nature of cultural and historic resources listed or eligible for listing in the National Register of Historic Places
Evidence of SHPO consultation with the information described above.
A map showing the permit boundaries, including public parks and locations of cultural or historic resources. The map must include locations of cemeterys within 100 feet of the permit area.
If eligible resources are confirmed by SHPO, the Permittee must provide measures to present adverse impacts. The Division may require the applicant to protect properties listed or eligible for listing on the NRHP through appropriate mitigation and treatment measures

lreinhart

Vegetation Resource Information

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-300 requirements for vegetation resource information. The following deficiency must be addressed prior to final approval:

R645-301-300: The amendment must describe plant communities within the proposed permit area and any reference areas. The description must be adequate to predict the potential for reestablishing vegetation and include productivity measurements on all lands that will be disturbed. Productivity will be expressed as average yield of food, fiber, forage, or wood products under high levels of management.

Prior to approval, the permittee must:

Correct typo for the reference map located in paragraph 2, line 5, page 3-3, Section 321.100. "See plate 9" should say, "See Plate 7-1". Reference areas for the GVHs are located on Plate 1-6 and should be referenced for clarity.
Correct plates need to adequately show what reference areas are to be used for the GVH.
Provide production rates for reference areas.

lreinhart

Fish and Wildlife Resource Information

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-322 requirements for fish and wildlife information.

Prior to approval, the Permittee must address the following in accordance with R645-301-322:

As noted in Section 322 on Page 3-7, Plates 3-3A, 3-3B, 3-3C, and 3-3D are wildlife maps. However, the maps are identified as 3-4A, B, C &D. The Permittee must reconcile the map titles and references to each.

The Permittee must analyze potential impacts of mining on species identified by Division of Wildlife Resources and U.S. Fish and Wildlife Service as having habitat in the general area.

The Permittee must update Table III-11 to include current species.

The Permittee must updated the birds section to include current birds of special interest.

The Permittee must incorporate DWRâ€™s comments in regards to Greater Sage-grouse.

The Permitte must correct references to TES information. Fish and Wildlife Service provided information listed in Appendix A.

lreinhart

Land Use Resource Information

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-120.200 requirements for being clear and concise. The following deficiency must be addressed prior to final approval:

R645-301-120.200. The Permittee must clarify the last sentence in 411.120 which causes confusion. "The AEP Lease Area has the same land-use as that of the original permit area". What is the AEP and how is it different than the original permit?

lreinhart

Geologic Resource Information

Deficiencies Details:

Much of the narrative discusses previous mining and mining in other leases such as the Graves lease and the AEP lease and describes the overburden as being from 0 to 2700 feet (see pages 6-4, 6-10 and 6-11). Page 6-4 describes the bulk of the coal being under less than 1500 feet of cover. This is not the case in the Kenilworth lease. There seems to be some hold-over information from the original Centennial mining and reclamation plan which has not been up-dated. A more accurate description of the overburden in the Kenilworth lease needs to be provided.

dhaddock

Hydro Baseline Information

Deficiencies Details:

R645-301-724: The amendment does not meet the State of Utah R645 requirements for Baseline Information. The following deficiency must be addressed prior to final approval:

The amendment must establish a comprehensive surface and groundwater monitoring plan for the Kenilworth Lease and monitor these sites for a minimum two consecutive water years to establish baseline.

kstorrar

Probable Hydrologic Consequences Determination

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Probable Hydrologic Consequences. The following deficiencies must be addressed prior to final approval:

R645-301-728.320: The application must outline how the mine will be de-watered and how the water discharge will comply with UPDES permitted effluent limits.

R645-301-724.520; R645-301-728.320: The application must provide a narrative and a map of the mine pool that has developed in the mine workings since the mine went into temporary cessation. The narrative must include a calculation of the volume mine water impounded and an analyzed sample of the mine pool water quality.

kstorrar

Hydro SurfaceWater Monitoring Plan

Deficiencies Details:

R645-301-731.200: The amendment does not meet the State of Utah R645 requirements for Surface-water monitoring plan. The following deficiency must be addressed prior to final approval:

Monitoring must continue at the water monitoring sites B262, B263, B32, AC-1 and SC-1. These sites may not be released from the water monitoring schedule at this time.

kstorrar

Maps Monitoring and Sampling Locations

Deficiencies Details:

R645-301-731.730: The amendment does not meet the State of Utah R645 requirements for Monitoring and Sampling Location Maps. The following deficiency must be addressed prior to final approval.

The amendment includes Plat 7-8 as the Operational Water Monitoring Locations map. This map does not match the proposed Table A water monitoring locations. The amendment must be corrected so the map and table match.

kstorrar

Maps Subsurface Water Resources

Deficiencies Details:

R645-301-722.100: The amendment does not meet the State of Utah R645 requirements for Subsurface Water Resources Maps. The following deficiency must be addressed prior to final approval:

The amendment must include a potentiometric map of the contiguous regional aquifer found within the Star Point sandstone within and adjacent to the Kenilworth Lease area in the Book Cliffs.

kstorrar

Maps Vegetation Reference Area

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-323 requirements for maps and photographical information. The following deficiency must be addressed prior to final approval:

R645-301-323: The Permittee must provide, or reference, a map showing the location and boundary of proposed reference areas to be used for GVH. The Permittee must reconcile map numbers on the map with those referenced in the narrative.

lreinhart

Operation Plan

Air Pollution Control Plan

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-422 requirements for air pollution control plan. The following deficiency must be addressed prior to final approval:

R645-301-422: The Permittee must correct references to include Appendix J for the permit. The Permitttee must provide a description of coordination and compliance efforts which have been undertaken by the applicant with the Utah Division of Air Quality. Due to the addition of the new lease area and the time lapse since the last documented coordination with the air quality regulatory authority, it is prudent to provide recent coordination efforts between the applicant the Utah Department of Air Quality. The projected production rates from the Kenilworth lease addition shall be considered in the air pollution control plan.

lreinhart

Fish and Wildlife Protection and Enhancement Plan

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-332 requirements for mitigating impacts of subsidence on raptors. The Permittee must clarify and discuss the raptor survey protocol so that expectations are clear between the Division and Permittee.

lreinhart

Hydrologic Ground Water Monitoring

Deficiencies Details:

R645-301-731.200: The amendment does not meet the State of Utah R645 requirements for Groundwater monitoring plan. The following deficiency must be addressed prior to final approval:

The groundwater monitoring plan must include monitoring water levels in the strata above, within and below the coal seam in the Kenilworth Lease. The groundwater monitoring plan must include monitoring groundwater levels within strata within and adjacent to the Kenilworth Lease.

kstorrar

Hydro Surface Water Monitoring

Deficiencies Details:

R645-301-731.223: The amendment does not meet the State of Utah R645 requirements for Surface Water Monitoring. The following deficiency must be addressed prior to final approval:

The amendment must establish surface water monitoring sites on all streams and springs within and adjacent to the Kenilworth Lease area. The water monitoring plan must include measuring quantity and quality of surface waters on a quarterly basis.

The sentence stating, "Due to weather, the steep grade of the access road is impassible year-round" must be clarified. If the road identified as impassible is used to access water monitoring sites, an alternative transportation route or other means of access to the water monitoring sites must be taken. The amendment may not absolve itself of water monitoring requirements on this basis alone.

kstorrar

Reclamation Plan

PostMining Land Use

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-412 requirements for postmining land use.

R645-301-412: The Permittee must provide surface landowner comments in accordance with 412.200.

lreinhart

Hydrological Information Reclamation Plan

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Reclamation of Impoundments. The following deficiency must be addressed prior to final approval:

R645-301-724.320, -742.221.32: Pond E-PM does not provide adequate detention time calculations to show the pond will settle suspended solids and meet UPDES permitted effluent standards.
Pond E-PM reclamation design does not meet the minimum containment or treatment of a 10-year, 24-hour event.

kstorrar

Revegetation General Requirements

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-341 requirements for revegetation plan. The following deficiency must be addressed prior to final approval:

R645-301-341: The Permittee must reconcile contradictions as to whether shrubs will be planted and to what extent.

lreinhart

Revegetation Standards for Success

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-120.200 requirements for being clear and concise in regards to revegetation standards for success. The Permittee must identify the purpose and results of the test plot and identify if results should be incorporated into the final reclamation plan.

lreinhart