## TABLE OF CONTENTS - CHAPTER 4
**R645-301-400 LAND USE AND AIR QUALITY**

<table>
<thead>
<tr>
<th>REGULATION NUMBER</th>
<th>CONTENTS</th>
<th>PAGE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>R645-301-410</td>
<td>Land Use</td>
<td>1</td>
</tr>
<tr>
<td>R645-301-411</td>
<td>Environmental Description</td>
<td>1</td>
</tr>
<tr>
<td>R645-301-412</td>
<td>Reclamation Plan</td>
<td>4</td>
</tr>
<tr>
<td>R645-301-413</td>
<td>Performance Standards</td>
<td>5</td>
</tr>
<tr>
<td>R645-301-420</td>
<td>Air Quality</td>
<td>7</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS - APPENDICES
R645-301-400 CHAPTER 4

<table>
<thead>
<tr>
<th>APPENDIX NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPENDIX 4-1</td>
<td>An Intensive Cultural Resources Survey and Inventory of the Proposed West Ridge Prospect Mine Site and Borrow Area (Confidential Report)</td>
</tr>
<tr>
<td>APPENDIX 4-2</td>
<td>Correspondence Concerning Archeological Clearances</td>
</tr>
<tr>
<td>APPENDIX 4-3</td>
<td>Summary of Archeological Studies Performed On Federal And State Land For The Proposed West Ridge Project Area (Confidential Report)</td>
</tr>
<tr>
<td>APPENDIX 4-4</td>
<td>Postmining Land Use Comments</td>
</tr>
<tr>
<td>APPENDIX 4-5</td>
<td>Air Quality Approval Order</td>
</tr>
<tr>
<td>APPENDIX 4-6</td>
<td>C Canyon Road Gate Amendment</td>
</tr>
</tbody>
</table>
### TABLE OF CONTENTS - MAP LIST
R645-301-400  CHAPTER 4

<table>
<thead>
<tr>
<th>MAP NUMBER</th>
<th>DESCRIPTION</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAP 4-1*</td>
<td>Existing Land Use</td>
<td>1&quot;=1000'</td>
</tr>
<tr>
<td>MAP 4-2*</td>
<td>Archeology Map</td>
<td>1&quot;=1000'</td>
</tr>
</tbody>
</table>

*Not included on disk
R645-301-410 LAND USE

Pre-mining land use of the C Canyon/West Ridge region in and around the permit area includes grazing, wildlife habitat, coal mining and recreational activities such as hunting. No agricultural activities have been or are currently being conducted in or around the proposed permit area.

Post-mining land use will be the same as those which existed prior to construction of the mine. Land use will include grazing, wildlife habitat, and recreational activities such as hunting.

R645-301-411 ENVIRONMENTAL DESCRIPTION

411.110 Land use of the C Canyon/West Ridge region in and around the permit area consist primarily of grazing, wildlife habitat, coal mining and recreational activities such as hunting. No agricultural activities (other than grazing) are currently being conducted in or around the proposed permit area. This is primarily because of lack of an available water source and the steep, rugged terrain. Refer to Map 4-1, Existing Land Use, for the grazing allotment boundaries and existing land uses.

There is no evidence that the land use in this area has changed within the last five years prior to the submittal of this permit application.

Grazing allotments in the West Ridge region have remained the same for the last ten years or more. The permit area is located primarily within the Bear Canyon Allotment and, to a smaller extent, in the Grassy Trail and Mud Springs Allotments. The Mud Springs Allotment lies along the western sloping pediment surfaces of the Book Cliffs. The vegetation consists of native Pinyon-Juniper close to the cliff face and Grassland on the lower pediment surfaces. About 338 cattle use the allotment from October 20 - December 20 and April 10 - June 10, for a total of 2,314 AUM’s. Water for the cattle is hauled to the northeast portions of the allotment. The Grassy Trail allotment lies to the south and east of the Bear Canyon allotment. The allotment is active from November 1 to March 31, with a total of 50 AUM’s. The Bear Canyon allotment lies to the north and east of the Mud Springs Allotment. The allotment is used to graze 42 cattle from June 10 to October 31. This allotment contains 100 AUM’s.
The land surface of the permit area consists of rugged, southwest-facing cliffs which are deeply dissected by steep ephemeral drainages. The elevation ranges from 6,800 near the minesite to 8,800 feet on top of the ridge two miles to the northeast. Large boulders and sandstone slabs from cliff weathering lie along the sides of the canyon bottoms. Given the rugged terrain and lack of available water in the region, this area has limited historical usage other than for wildlife habitat, grazing and coal mining.

The SCS performed a range capacity survey of the mine site area in 1985 and found the range condition to be fair with an estimated vegetation yield of about 300 pounds per acre of forage per year.

Due to the topography, limited available water resources, limited access and remote location, the capability of the land to support a variety of uses is limited. The narrow, steep topography of this area as well as lack of available water limits its use for agricultural or residential purposes. The greatest variety of compatible uses for this land is a combination of recreation, wildlife habitat, grazing and coal mining.

Carbon County’s zoning classification for the mine area is Mining and Grazing. Carbon County has also issued a Conditional Use Permit to WEST RIDGE Resources, Inc. for a Major Underground And Surface Mine Development for the West Ridge mine in C Canyon. Grazing is the most pervasive existing use of the land in the West Ridge area. Previous mining activity also has taken place in B and C Canyons. The road along the bottom of C Canyon was first constructed in the mid-1950's for a drill site in the right hand fork. The road was improved again in 1985 to facilitate drilling equipment for a drill hole site also in the right hand fork. A road also leads up the left hand fork to the coal outcrop where the coal seam was exposed and coal was mined for testing purposes.

The BLM and SITLA are the land managers for most of the area. Within the permit area, most of the permit acreage is managed by the BLM and SITLA. There is a small area of privately owned land (surface only) in the permit area on the east side. Also, the surface and subsurface of the proposed topsoil borrow area is owned by the School and Institutional Trust Lands Administration. Refer to Map 5-2.

Archeological investigations have been performed in the vicinity of the permit area in the past. Refer to Map 4-2, Archeology Map, for the locations of previous survey work. Appendix 4-3 includes information from previous survey work as well as a compilation of previously known archeological sites within and adjacent to the permit area. Detailed archeological ground surveys have been conducted at the mine site and topsoil borrow area by Senco-Phenix personnel. The surveys found no evidence of cultural resources within either of these proposed disturbed areas. Refer to the Senco-Phenix report which is included as Appendix 4-1. No sites eligible for the National Register of Historic Places were found within the proposed disturbed areas. Clearance letters from SHPO to the BLM and State School Trust can be found in Appendix 4-2.
411.141.1 The locations of cultural and historical resources listed in the National Register of Historic Places and known archaeological sites within and adjacent to the permit area are presented in Appendix 4-3. The file search was prepared by Senco-Phenix.

411.141.2 No cemeteries are located in or within 100 feet of the proposed permit area.

411.141.3 No land within the proposed permit area is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System.

411.142 As discussed under 411.140, no cultural resources of significance were located. SHPO has issued a determination of No Historic Properties for the proposed minesite and the topsoil borrow area.

No publicly owned parks or places listed on the National Register of Historic Places would be adversely affected by the proposed coal mine.

411.200 Previous Mining Activity

Previous mining and exploration activities have occurred with the proposed permit area within the last 20 years. In the mid-1950's, the road along the bottom of C Canyon was constructed to a drill site located in the right fork. The road was improved again in 1985 to facilitate drilling equipment for a water monitoring drill hole site in the right fork. Another road also leads up the left fork to the coal outcrop where the coal seam was exposed and bulk coal samples were collected for testing purposes. Coal was probably removed from the outcrop with hand tools or a front-end loader. The excavation indicates only a small amount of coal was previously removed. Coal was removed from the Lower Sunnyside Seam. Only a small amount of coal (less than one ton) was removed for testing purposes. The exact date of the coal outcrop excavation is unknown, but done sometime in the late 1960's or early 1970's. The land use prior to the outcrop excavation was the same as currently exists in the area, which is: wildlife habitat, grazing, and coal exploration and mining.

Mining has also occurred underground within this lease from the Sunnyside No. 2 mine. During 1959 and 1960 Kaiser Coal mined a two entry exploration section northwestward into the center of the coal lease (SL-068754), for a total distance of 11,000 feet along the strike of the Lower Sunnyside coal seam. A section was developed off from this main entry in which mining proceeded in an up-dip direction to the west for approximately 2,000' before breaking out in B Canyon. This breakout was utilized as an intake air portal until 1991 when the portal was sealed and backfilled. This mining was conducted utilizing continuous mining equipment, no longwall mining was done in this lease. Only development work was performed, no pillars were pulled. The land use in B Canyon prior to portal development was wildlife habitat, grazing and coal exploration and mining.
No cemeteries are located in or within 100 feet of the proposed permit area.

No land within the proposed permit area is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System.

As discussed under 411.140, no cultural resources of significance were located. SHPO has issued a determination of No Historic Properties for the proposed minesite and the topsoil borrow area.

No publicly owned parks or places listed on the National Register of Historic Places would be adversely affected by the proposed coal mine.

Previous Mining Activity

Previous mining and exploration activities have occurred with the proposed permit area within the last 20 years. In the mid-1950’s, the road along the bottom of C Canyon was constructed to a drill site located in the right fork. The road was improved again in 1985 to facilitate drilling equipment for a water monitoring drill hole site in the right fork. Another road also leads up the left fork to the coal outcrop where the coal seam was exposed and bulk coal samples were collected for testing purposes. Coal was probably removed from the outcrop with hand tools or a front-end loader. The excavation indicates only a small amount of coal was previously removed. Coal was removed from the Lower Sunnyside Seam. Only a small amount of coal (less than one ton) was removed for testing purposes. The exact date of the coal outcrop excavation is unknown, but done sometime in the late 1960’s or early 1970’s. The land use prior to the outcrop excavation was the same as currently exists in the area, which is: wildlife habitat, grazing, and coal exploration and mining.

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412.100 Post mining land use will be the same as currently exists today, that being: wildlife habitat, grazing and limited recreational activities.

412.110 After all mining activity has been completed and the disturbed area regraded and reseeded, the site will enter a post reclamation phase. During the first ten years the site will be monitored for vegetative success and erosion control. The reclaimed, revegetated area may be fenced to discourage livestock grazing until final reclamation has been achieved and the reclamation bond released.

Support activities to achieve the postmining land use plan include: site monitoring, remedial actions including regrading, reseeding, remulching and replanting; and fencing as necessary to restrict access and grazing on the site until the reclamation bond has been released.

412.120 After the reclamation bond has been released, the property will be returned to the care of the surface land owner which in this case is the BLM and SITLA. Management of the site will be according to the BLM and SITLA’s current range management plan for the region existing at that time.

412.130 Not applicable.

412.140 This postmining program is in accordance with the Carbon County and BLM management framework plans.

Based on the desire expressed by the BLM, SITLA or Carbon County, at the time of reclamation of the mine site, WEST RIDGE Resources, Inc. would agree to work with the BLM, SITLA and/or Carbon County to achieve future land use objectives.

412.200 Resumption of the original land use at the mine site should not need approval of the land management agency.

412.300 WEST RIDGE Resources, Inc. does not propose to leave fills containing excess spoil.

INCORPORATED
NOV 1 2 2008
Div. of Oil, Gas & Mining
PERFORMANCE STANDARDS

413.100 All disturbed areas will be restored to the conditions equal to or better than existed prior to disturbance.

413.200 Wildlife habitat and grazing will resume following reclamation activities of the mine site.

413.300 No alternative postmining land use is being proposed at this time.
AIR QUALITY

Coal mining and reclamation activities will be conducted in compliance with appropriate state and federal air quality regulations.

The applicant is in the process of applying for an air quality permit from the Utah Division of Air Quality. The Air Quality Approval Order is included in Appendix 4-5.

All mining will be conducted by underground mining methods. Efforts will be made through seeding, mulching and erosion control technologies to eliminate excessive fugitive dust resulting from erosion.

Areas where rills and gullies have formed will be repaired and reseeded as soon as possible with an interim or permanent seed mix.

Fugitive dust will be controlled by establishing temporary vegetative coverage where possible and by watering road and other unpaved surfaces frequently used by mine vehicles.

The air quality permit for the West Ridge Mine is included in Appendix 4-5. Mining activities will meet the requirements of the air quality permit issued by the State of Utah in accordance with applicable State and Federal air quality regulations.

Climatological Information

The U.S. Geological Survey's "Final Environmental Statement, Development of Coal Resources in Central Utah" (1979) provides climatological information for the region as well as for the C Canyon area. Daily climatic information is also collected at a National Weather Service station in Sunnyside, Utah.

Precipitation in the permit area consists of occasional winter snow, with an average annual accumulation of about one foot of snow and summer thundershowers which occur during July, August and September. Figure 7-1 in Chapter 7 shows the mean annual precipitation for the Sunnyside area to be about thirteen inches. Snow accumulation over the permit area varies with elevation, topography and aspect. At the mouth of Whitmore Canyon, elevation 6750, snow accumulations range from 0 to 21 inches during October through March.
while snow accumulations at an elevation of 7,280 ranged from 0 to 50 inches. Mean, minimum and maximum daily snow accumulations have been collected and compiled for a 10 year period for years 1973 through 1983 and are presented below.

**SNOW ACCUMULATION 1973-1983 (Inches)**

<table>
<thead>
<tr>
<th></th>
<th>Maximum</th>
<th>Mean Maximum</th>
<th>Mean Daily</th>
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<tbody>
<tr>
<td>October</td>
<td>6.5</td>
<td>1.35</td>
<td>0.73</td>
</tr>
<tr>
<td>November</td>
<td>6.0</td>
<td>1.69</td>
<td>0.28</td>
</tr>
<tr>
<td>December</td>
<td>14.00</td>
<td>4.42</td>
<td>1.73</td>
</tr>
<tr>
<td>January</td>
<td>21.00</td>
<td>9.86</td>
<td>4.01</td>
</tr>
<tr>
<td>February</td>
<td>21.00</td>
<td>6.44</td>
<td>2.84</td>
</tr>
<tr>
<td>March</td>
<td>15.00</td>
<td>5.30</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Ground accumulations of snow are characteristically of short duration due to melting and sublimation.

Temperature ranges of the permit area are typical for the semi-arid region. Colder temperatures would be encountered above 8,000 feet above the mine site.

The pan evaporation rate for the area is 0.69.

**Wind**

Canyon topography dominates both wind direction and speed. The wind high in the atmosphere tend to be strong but decease toward the surface where obstructions and surface friction come into play. Thus high ridges and plateaus will generally have stronger winds than the valleys. Upper level winds, 1,600 feet or more above the ground level, are generally from the southwest during most of the year. During the winter, air flow from the northeast is more common.

Night air flow in the region is primarily drainage controlled, generally following the canyon bottoms from the mountains down to the valleys. Wind speed is induced by decent of colder air and is generally light. The daytime flow is strongly influenced by surface heating effects which result in mixing between the surface and upper flows. There is a general air flow toward the north and northeast during the day, and movement toward the southwest away from the high surface elevations during the night. Winds are usually light to moderate (less than 20 mph) unless influenced by localized thunderstorms or moving frontal systems.
The area around the permit area has been designated as a Class II air area for the purpose of determining significant air quality deterioration. The mine will not have a wash plant or coal processing plant. The conveyor belt leading across the yard to the coal pile will be covered. Parking areas and roads will be paved to control dust. Gravel areas will be sprayed with a chemical surface stabilizer, such as potassium chloride, or sprayed with water to control dust during prolonged dry spells. Refer to R645-301-526.400 for a complete discussion of the air quality control measures proposed for the West Ridge Mine.
(CONFIDENTIAL REPORT)

APPENDIX 4-1

AN INTENSIVE CULTURAL RESOURCES SURVEY AND INVENTORY OF THE PROPOSED WEST RIDGE PROSPECT MINE SITE AND BORROW AREA

SENCO-PHENIX
P.O. Box 187
Mount Pleasant, Utah 84647
June 4, 1997

Mark E. Bailey, Acting Area Manager
Bureau of Land Management
Price River/San Rafael Resource Area
125 South 600 West
P. O. Box 7004
Price UT 84501

RE: Westridge Mine and Borrow Area U-97-SC-0216bps

In Reply Please Refer to Case No. 97-0684

Dear Mr. Bailey:

The Utah State Historic Preservation Office received the above referenced report on June 2, 1997. After consideration of Senco-Phenix report, the Utah Preservation Office concurs with the determination of NO HISTORIC PROPERTIES.

This information is provided on request to assist the Bureau of Land Management with its Section 106 responsibilities as specified in 36CFR800. If you have questions, please contact me at (801) 533-3555, or Barbara L. Murphy at (801) 533-3563. My email address is: jdykman@history.state.ut.us

As ever,

James L. Dykmann
Compliance Archaeologist

JLD:97-0684 BLM/NP/NE

c: Senco-Phenix; P. O. Box 187, Mt. Pleasant UT 84647-0187
June 4, 1997

Kenneth L. Wintch, Archaeologist
Utah School and Institutional State Trust
Lands Administration
675 East 500 South, Suite 500
Salt Lake City UT 84102

RE: West Ridge Prospect Mine Site and Borrow Area U-97-SC-0216bps

In Reply Please Refer to Case No. 97-0698

Dear Kenny:

The Utah State Historic Preservation Office received the above referenced report on June 2, 1997. After consideration of the Senco-Phenix report, the Utah Preservation Office recommends a determination of No Historic Property.

This information is provided on request to assist Trust Lands Administration with its state law responsibilities as specified in U.A.C. 9-8-404. If you have questions, please contact me at (801) 533-3555. My email address is: jdykman@history.state.ut.us

As ever,

James L. Dykman
Compliance Archaeologist

JLD:97-0698 Lands/NE/NP

c: Senco-Phenix, P. O. Box 187, Mt. Pleasant UT 84647-0187

Preserving and Sharing Utah's Past for the Present and Future
March 31, 2005

Ms. Kristine Curry
SITLA
675 East, 500 South, Suite 500
Salt Lake City, UT 84102-2818

RE: ML 47711, ML 49287

Dear Kristine,

The West Ridge Mine of West Ridge Resources, Inc. is proposing to expand their underground mining operation in Carbon County, Utah. The expansion will be for the underground operations and no surface disturbance will occur. No subsidence is anticipated. The expansion leases will be into SITLA lands as follows:

- ML 47711 includes the SW ¼ of Section 36, T13S, R14E and all of Section 2, T14S, R13 E.
- ML 49287 includes all of Section 3 and W1/2 of the W1/2 of the NW ¼, the SW/SE ¼ and the SW ¼ of Section 10, both T14S, R13 E.

There have been a number of archeological projects in or near the proposed lease expansion as follows:

- 1980, AERC performed block survey on the SW ¼ of Section 3, T14S, R13E. No cultural resources were located. (Hauck and Weder, 1980)
- 1984 Nickens and Associates surveyed three 160-acre blocks in Sections 35 & 34, T13S, R13 E. This project is north of the current project but in similar terrain. No cultural resources were located.
- 1997, SENCO-PHENIX surveyed 115 block acres and .5 miles of access road in Section 15 & 16, T14S, R13E No cultural resources were located. (Senulis, 1997)
- 2003, SENCO-PHENIX surveyed several more drill hole sites and access roads in Section 24, No cultural resources were located. (Senulis, 2003)

Because of the general lack of cultural resources and because there will be no surface disturbance, we feel no historic properties will be affected and no further cultural resource inventory is necessary prior to the lease expansion. Archeological clearance is recommended without additional cultural resource survey work.

Sincerely,

John A Senulis
Principal Investigator
Jas: bhoh

Cc: Shaver, West Ridge Resources, DOGM

References

Hauck, F. R. & D. G. Weder
1980 Intensive Archaeological Surface Evaluation of the Proposed Sage Point-Dugout Canyon Project in Carbon County, Utah, Archeological-Environmental Research Corporation Paper Number 19, Salt Lake City. (79-475)

Reed, Alan D. and Susan Chandler
1984 A Sample Oriented Cultural Resource Inventory in Carbon, Emery and Sanpete Counties, BLM through Nickens and Associates, Montrose Colorado. (84-30)

Senulis, John A.
1997 An Intensive Cultural Resource Survey and Inventory of the Proposed West Ridge Prospect Mine Site and Borrow Area, SENCO-PHENIX Archeological Consultants, Price, Utah. (97-216)
APPENDIX 4-3

SUMMARY OF ARCHEOLOGICAL STUDIES PERFORMED ON FEDERAL AND STATE LAND FOR THE PROPOSED WEST RIDGE PROJECT AREA

SENCO-PHENIX
P.O. Box 187
Mount Pleasant, Utah 84647

INCORPORATED
EFFECTIVE:
APR 01 1999

UTAH DIVISION OIL, GAS AND MINING
APPENDIX 4-4
POSTMINING LAND USE COMMENTS
March 6, 1998

Mr. Mark Mackiewicz, Realty Specialist
Bureau of Land Management
125 South 600 West
Price, Utah 84501

Dear Mark:

As you are aware, Andalex Resources, Inc. is proposing to construct and operate a coal mining facility in C Canyon, approximately 6 miles north of East Carbon City, Utah. Andalex has filed a Permit Application Package with the Division of Oil, Gas and Mining which discusses, in detail, the plans to construct, operate and reclaim this 29 acre mine site. Reclamation of the minesite involves removing all facilities from the site and regrading the area to the approximate, pre-existing configuration. Andalex, through the reclamation of the minesite, would be restoring the pre-existing landuses in that area, which are grazing, wildlife habitat and limited recreational use. Although a primitive road now exists into the site, post-mining plans call for retaining the upgraded Carbon County road to the perimeter of the site and terminating it in a turn-around loop. This would allow public access for hiking, hunting or land management purposes. Therefore, the proposed post-mining land use of this site will essentially be the same as that which exists today prior to any construction.

The Utah Coal Mining Rules (specifically R645-301-412.200) require Andalex to seek comment from the land management agency which would approve or authorize the proposed post-mining land use. Therefore, Andalex would like to request that the Bureau of Land Management respond to the proposed post-mining land use with comments in letter form. I am including a copy of the regulations and also the page from the West Ridge Mine Permit Application Package which specifies the proposed post-mining land use for the mine site area. Should you have any questions regarding this request, please contact me.

Sincerely,

Jean Semborski
Project Engineer

Enclosure
Ms. Jean Semborski  
Andalex Resources Inc.  
P. O. Box 902  
Price, Utah 84501

Dear Ms. Semborski:

We received your letter regarding the post-mining land use for the public lands within the West Ridge project area. The post-mining land use for the subject lands would be wildlife habitat, grazing and incidental recreation.

If you have any additional questions, please feel free to contact Mark Mackiewicz of my staff at (435) 636-3600.

Sincerely,

Mark E. Bailey  
Acting Field Manager
March 27, 1998

Mr. Jim Cooper, Assistant Director
School and Institutional Trust
   Lands Administration
675 East, 500 South  Suite 500
Salt Lake City, Utah  84102

Dear Mr. Cooper:

As you are aware, Andalex Resources, Inc. is proposing to construct and operate a coal mining facility in C Canyon, approximately 6 miles north of East Carbon City, Utah. Andalex has filed a Permit Application Package with the Division of Oil, Gas and Mining which discusses, in detail, the plans to construct, operate and reclaim this 29 acre mine site. Reclamation of the minesite involves removing all facilities from the site and regrading the area to the approximate, pre-existing configuration. In conjunction with reclamation of the site, Andalex is proposing to utilize a 9.6 acre area in the NE1/4 SE1/4 Section 16, T 14 S, R 13 E as a potential source of topsoil material. If Andalex should disturb this area during the reclamation process it would be reclaimed to a condition very similar to what exists there now. Andalex, through the reclamation of the minesite, would be restoring the pre-existing landuses in that area, which are grazing, wildlife habitat and limited recreational use. Therefore, the proposed post-mining land use of this site will essentially be the same as that which exists today prior to any disturbance.

The Utah Coal Mining Rules (specifically R645-301-412.200) require Andalex to seek comment from the land management agency which would approve or authorize the proposed post-mining land use. Therefore, Andalex would like to request that the School and Institutional Trust Land Administration respond to the proposed post-mining land use with comments in letter form. I am including a copy of the regulations and also the page from the West Ridge Mine Permit Application Package which specifies the proposed post-mining land use for the topsoil area referred to above. Should you have any questions regarding this request, please contact me.

Sincerely,

Jean Semborski
Project Engineer

Enclosures
March 30, 1998

Ms. Jean Semborski
Andalex Resources, Inc.
P.O. Box 902
Price, UT 84501

RE: Post-mining Land Use
NE/4SE/4 Sec. 16, T14S, R13E
Carbon County, Utah

Dear Ms. Semborski:

Thank you for providing the School and Institutional Trust Lands Administration (the "Trust Lands Administration") with the opportunity to comment on the proposed post-mining land use for the NE/4SE/4, Sec. 16, T14S, R13E, located in Carbon County, Utah. As you know, these lands are managed by the Trust Lands Administration for the benefit of common schools. Historically, these lands have been for used for a multiple of purposes, including mineral exploration, grazing, limited recreational use and wildlife habitat.

Should Andalex Resources, Inc. disturb the surface of the subject lands in the course of its permitted operations relative to the C Canyon facility, the proposal to re-establish the current land uses is the preferred alternative and acceptable to the Trust Lands Administration.

Should you have any questions please feel to contact me.

Sincerely,

School and Institutional Trust Lands Administration

James D. Cooper
Assistant Director

INTEGRATED EFFECTIVE:
APR 01 1999
Utah Division Oil, Gas and Mining
Ms. Jean Semborski  
Andalex Resources Inc.  
P. O. Box 902  
Price, Utah 84501  

Dear Ms. Semborski:

We received your letter regarding the post-mining land use for the public lands within the West Ridge project area. The post-mining land use for the subject lands would be wildlife habitat, grazing and incidental recreation. With regard to the proposed Carbon County road accessing the proposed mine site, the Bureau of Land Management acknowledges and finds acceptable the retention of the road, following reclamation, of the West Ridge Mine site. The BLM finds this and acceptable post mining land use.

If you have any additional questions, please feel free to contact Mark Mackiewicz of my staff at (435) 636-3600.

Sincerely,

Blaine Miller  
Acting Field Manager
APPENDIX 4-5

AIR QUALITY APPROVAL ORDER

INCORPORATED
EFFECTIVE:
APR 01 1999
Utah Division Oil, Gas and Mining
STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

APPROVAL ORDER FOR A NEW COAL MINE IN C CANYON

Prepared By: Maung Maung, Engineer
801-536-4153

APPROVAL NUMBER

DAQE-055-99

Date: January 14, 1999

Source

West Ridge Resources, Inc.
David Shaver
435-637-5385

Ursula K. Trueman
Executive Secretary
Utah Air Quality Board

INCORPORATED
EFFECTIVE:

APR 01 1999

UTAH DIVISION OIL, GAS AND MINING
Abstract

West Ridge Resources, Inc. proposes to operate an underground coal mine. West Ridge is located approximately 5 miles northwest of the city of Sunnyside in C Canyon in Carbon County. The mine will produce 3.5 million tons of coal annually. Carbon County is in compliance with the national air quality standards for all pollutants. National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations do not apply to this source. New Source Performance Standards (NSPS) subparts A and OOO regulations apply to this source. Therefore, the source is subject to Title V regulations. The source will be required to use water sprays to fulfill the Best Available Control Technology (BACT) requirements. The emissions, in tons per year, will be as follows: \( PM_{10} \), 5.30; \( NO_x \), 2.87; \( SO_2 \), 0.26; \( CO \), 1.05; Aldehydes 0.30. A 30-day public comment period was required before granting an Approval Order.

The above-referenced project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307) and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this AO reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order:

General Conditions:

1. This AO applies to the following company:

   Facility Office
   West Ridge Resources, Inc.
   West Ridge Mine
   P. O. Box 902
   Price, Utah 84501
   Phone Number: (435) 637-5385
   Fax Number: (435) 637-8860

   The equipment listed below in this AO shall be operated at the following location:

   PLANT LOCATION:

   Direction to mine-site: Take I-15 south to the Spanish Fork/State Route (SR) 6 exit. Take SR 6 through Wellington to the Sunnyside Junction exit. Turn left onto SR 123. Travel approximately 3 miles east on SR 123 then left on to the new C Canyon County Road. Travel 7.7 miles onto C Canyon Road which will lead directly to the mine-site.

   Universal Transverse Mercator (UTM) Coordinate System:
   4,384.517 kilometers Northing; 547.909 kilometers Easting; Zone 12

2. Definitions of terms, abbreviations, and references used in this AO conforming those used in the Utah Administrative Code Rule 307 (UAC R307), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence, unless specifically defined otherwise herein.
3. West Ridge Resources, Inc. shall operate the West Ridge underground coal mine according to the terms and conditions of this AO as requested in the Notice of Intent dated August 26, 1998, and additional information submitted to the executive secretary dated September 22, 1998.

4. At least once per calendar year, all employees who operate equipment (operator) that produces and/or controls emissions to the air shall receive proper training as to their responsibilities in operating that equipment according to all relevant conditions of this AO. The training for each operator shall be for all equipment that operator operates. The equipment shall include all of the equipment listed below in Condition # 6 and any other equipment that affects or produces air emissions that the operator operates. Within 60 days of every time this AO is modified or reissued, those employees who operate equipment that produces and/or controls emissions to the air that is affected by the AO changes shall receive proper training as to their responsibilities in operating equipment according to all relevant conditions of this AO. Within 60 days of a new operator being employed or assigned with the job responsibility to operate any of the equipment that produces and/or controls emissions to the air, the new operator shall receive proper training as to their responsibilities in operating the equipment according to all relevant conditions of this AO. Records of operator training shall be made available to the executive secretary or executive secretary’s representative upon request and the records shall include the two-year period prior to the date of the request. This AO shall be made available to all employees who operate the equipment listed in this AO.

5. The executive secretary shall be notified in writing upon start-up of the installation, as an initial compliance inspection is required. Eighteen months from the date of this AO the executive secretary shall be notified in writing of the status of construction/installation if construction/installation is not completed. At that time, the executive secretary shall require documentation of the continuous construction/installation of the operation and may revoke the AO in accordance with R307-401-11, UAC. If construction is complete and operation has commenced, a notice is not required on the status of the construction/installation.

6. The approved installations shall consist of the following equipment or equivalent* located at the site:

   A. Enclosed Screen: Double-deck scalping screen* 8' x 20'
      Tabor rated capacity 500 tons/hour
   B. Enclosed Crusher: Impact Crusher*
      Jeffrey 54 FT rated 200 tons/hour
   C. 54" reclaim conveyor*, 60" slope conveyor* and 48" loadout conveyor*
   D. Load-out/Storage Bins
   E. Stockpiles
   F. Paved and Unpaved Haul Roads
   G. Front End Loaders
   H. Haul Trucks

* Equivalency shall be determined by the executive secretary.

INCORPORATED EFFECTIVE: APR 01 1999

UTAH DIVISION OIL, GAS AND MINING
Limitations and Tests Procedures

7. Visible emissions from the following emission points shall not exceed the following values:
   
   A. Crusher - 15% opacity
   B. Screen - 10% opacity
   C. All conveyor transfer points - 10% opacity
   D. All diesel engines - 20% opacity
   E. Conveyor drop points - 20% opacity
   F. All other points - 20% opacity

   Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. Visible emissions from intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. Any time-interval with no visible emissions shall not be included.

8. The following production limits shall not be exceeded without prior approval in accordance with R307-401, UAC:

   3,500,000 tons of coal per rolling 12-month period
   41,000 gallons of diesel fuel per rolling 12-month period

   Compliance with the annual limitation shall be determined on a rolling monthly total. Within the first five days of each month a new 12-month total shall be calculated using the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Records of production shall be made available to the executive secretary upon request, and shall include a period of two years ending with the date of the request. Production shall be determined by truck scale records. The records of production shall be kept on a daily basis.

Roads and Fugitive Dust

9. All unpaved roads and other unpaved operational areas shall be water sprayed and/or chemically treated to the extent necessary to prevent, as far as practicable, the generation of fugitive dusts as dry conditions warrant or as determined necessary by the executive secretary. Records of treatment shall be made available to the executive secretary upon request and shall include a period of two years prior to the date of request. The length of paved road under the owner/operator's jurisdiction shall be periodically swept or sprayed clean as dry conditions warrant or as determined necessary by the executive secretary. Records of cleaning of paved road shall be made available to the executive secretary upon request and shall include a period of two years prior to the date of request. All records shall include the following items:

   A. Date;
   B. Number of treatments made;
   C. Rainfall received, if any, and approximate amount;
   D. Time of day treatments were made.
Also, owner/operator of this source who through his/her operations deposit materials which may create fugitive dust on a public or private road is required to clean the road such that fugitive dust as a result of his/her operations is minimized.

10. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the executive secretary or the executive secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made ½ vehicle length or greater behind the vehicle and at approximately ½ the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

11. The storage piles shall be watered to minimize generation of fugitive dusts, as dry conditions warrant or as determined necessary by the executive secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation. Records of water and/or chemical treatment shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request.

12. The haul road limitations shall be:
   A. 0.20 miles in length
   B. 15 miles per hour

   These limitations shall not be exceeded without prior approval in accordance with R307-401, UAC. The haul road speed shall be posted.

13. Run of Mine (ROM) coal shall have an average moisture content of no less than 6.0 % by weight. The moisture content shall be tested if directed by the executive secretary using the appropriate American Society of Testing and Methods (ASTM) method. Coal transfer system shall use covered conveyor belts and enclosed transfer points to control fugitive emissions. Crushing and screening operations shall be within an enclosed steel structure. All transfer points within the structure shall also be enclosed.

Fuels

14. The sulfur content of any fuel oil or diesel burned shall not exceed 0.5 percent by weight. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the executive secretary.

Federal Limitations and Requirements

15. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS)\textsuperscript{1} Subparts A and OOO, 40 CFR 60.1 to 60.18 and 40

\textsuperscript{1} NSPS = New Source Performance Standards.
CFR 60.670 to 60.676 (Standards of Performance for Nonmetallic Mineral Processing Plants) apply to those equipment listed below. This facility must operate in accordance with the most current version of 40 CFR 60 applicable to this source. The opacity standards shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9. The observations shall be conducted no later than 180 days after initial startup. It is the responsibility of the owner/operator of the source to supply these observations to the executive secretary within 30 days after completion of the observations. A currently certified observer must be used for these observations. When determining compliance with the fugitive emissions standard for any affected facility described under Sec. 60.672(b) of Subpart OOO, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(i) There are no individual readings greater than 10 percent opacity; and
(ii) There are no more than 3 readings of 10 percent for the 1-hour period.

When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under Sec. 60.672(c) of Subpart OOO, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(i) There are no individual readings greater than 15 percent opacity; and
(ii) There are no more than 3 readings of 15 percent for the 1-hour period.

Emission points that are subject to the initial observations are:

A. Impact Crusher
B. Double-deck scalping screen
C. All conveyor transfer points

If the initial compliance opacity observations have been performed for these points, a repeat of the observations is not required.

Records & Miscellaneous

16. All installations and facilities authorized by this AO shall be adequately and properly maintained. All pollution control equipment approved by this approval order shall be installed, maintained, and operated according to the standard operating procedures that will ensure that the air quality limits set forth in this AO will be met. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years. All necessary equipment control and operating devices, such as pressure gauges, amp meters, volt meters, flow-rate indicators, temperature gauges, CEMS, etc., shall be installed and operated properly and easily accessible to compliance inspectors. A copy of all the manufacturers' and company's own subsequent operating instructions for pollution control equipment and pollution emitting equipment shall be kept on site. These instructions shall be available to all employees who operate the equipment and shall be made available to compliance inspectors upon their request.
Maintenance records shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request.

17. The owner/operator shall comply with R307-155, UAC. This rule addresses criteria pollutant and hazardous air pollutant emission inventory reporting requirements, and emission statement inventory requirements. Each owner or operator of a stationary source subject to the emission statement inventory (R307-155-3) rule shall maintain for a period of four years from the due date of each emission statement, a copy of the emission statement submitted to the Division of Air Quality and records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used. All other inventory records required by R307-155, UAC shall be made available to the executive secretary or executive secretary's representative upon request and the records shall include the two-year period prior to the date of the request.

18. The owner/operator shall comply with R307-107, UAC. This rule addresses unavoidable breakdown reporting requirements. Any breakdown lasting longer than two hours shall be reported to the executive secretary within three hours of the breakdown if reasonable, but in no case longer than 18 hours after the beginning of the breakdown. During times other than normal office hours, breakdowns for any period longer than two hours shall be initially reported to the Environmental Health Emergency Response Coordinator. Within seven calendar days of the beginning of any breakdown lasting longer than two hours, a written report shall be submitted to the executive secretary. The owner/operator shall calculate/estimate the excess emissions (amount above AO limits) whenever a breakdown occurs. The total of excess emissions per calendar year shall be reported to the executive secretary with the inventory submittal, as directed by the executive secretary. The owner or operator of an installation suffering an unavoidable breakdown shall assure that emission limitations and visible emission limitations are exceeded for only as short a period of time as reasonable. The owner or operator shall take all reasonable measures which may include but are not limited to the immediate curtailment of production, operations, or activities at all installations of the source if necessary to limit the total aggregate emissions from the source to no greater than the aggregate allowable emissions averaged over the periods provided in the source's AO.

All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the executive secretary or executive secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for a period of two years. A summary of those records that are required as part of this AO is included herein. This summary shall not be considered an additional requirement, but is included for informational purposes only. The condition that requires that these records be kept as part of the compliance with this AO is listed following the individual record. Examples of records to be kept at this source shall include the following as applicable:
Upset, breakdown episodes

(Condition number 18)

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-401-1, UAC.

The Environmental Protection Agency (EPA) has informed the State of Utah that “Facilities have the responsibility to take whatever steps are necessary to ensure continued full compliance with environmental laws and regulations including undertaking whatever steps are necessary and appropriate to assure the accuracy of information and data required to be reported to the U.S. EPA and state programs. This includes a full Y2K issues assessment of the possible vulnerabilities of data systems, monitoring and operating systems and embedded computer chips that are relied upon for business operation or as part of the data gathering and reporting process. Failure to comply with requirements because of Year 2000 problems may be considered violations and may result in enforcement.”

The executive secretary shall be notified in writing if the company is sold or changes its name. The notification shall be submitted within 30 days of such action.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the UAC R307.

Annual emissions for this source are currently calculated at the following values:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. PM$_{10}$</td>
<td>5.30</td>
</tr>
<tr>
<td>B. SO$_2$</td>
<td>0.26</td>
</tr>
<tr>
<td>C. NO$_x$</td>
<td>2.87</td>
</tr>
<tr>
<td>D. CO</td>
<td>1.05</td>
</tr>
<tr>
<td>E. Aldehydes</td>
<td>0.30</td>
</tr>
</tbody>
</table>

The annual emission estimations above are for the purpose of determining the applicability of Prevention of Significant Deterioration, nonattainment area, maintenance area, and Title V source requirements of the UAC R307. They are not to be used for purposes of determining compliance.

Approved By:

Ursula K. Trueman, Executive Secretary
Utah Air Quality Board

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UTAH DIVISION OIL, GAS AND MINING