



Suzanne Steab <suzannesteab@utah.gov>

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## 2014 Annual Reports

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**Suzanne Steab** <suzannesteab@utah.gov>  
To: Jay Marshall <jmarshall@coalsource.com>

Mon, Dec 15, 2014 at 9:16 AM

Hello,

Please see the attached electronic Annual Report documents. Also, a letter from the Division outlining the Annual Report submittal requirement of March 27, 2015.

Thank you!

--

Suzanne Steab, Engineering Technician II  
Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

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### 5 attachments



**2014AnnualReport.pdf**  
64K



**Centennial.pdf**  
1144K



**Crandall Canyon.pdf**  
1228K



**Horse Canyon.pdf**  
1275K



**West Ridge.pdf**  
1235K



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

December 15, 2014

All Coal Operators

Subject: 2014 Coal Mining Annual Reports for Active and Inactive Coal Mines

Dear Mine Operator:

Enclosed, please find an electronic Annual Report document. You should be able to Save, and Email the form. When completed, it must be submitted to the Division *electronically* either by emailing the form with the associated report documents, uploading on the Division ePermitting site or by saving the form to a CD.

The 2014 Annual Report form includes entries for regulatory requirements, such as annual impoundment certification; however, many Mining and Reclamation Plans include unique, mine-specific commitments that also must be reported annually. Depending on the status of your mine (active or inactive), some of the sections of the annual report may not apply or may not require a response. Also, please be sure to submit the following items:

- 1) Raptor and archeology reports marked as confidential and in a separate folder marked confidential (R645-300-124.300);
- 2) Mine map identifying mining in 2014 as well as the mining proposed for the next five years [PE Certified] (R645-301-512 and R645-301-521); and
- 3) Notices of Proposed Mining sent to water conservancy districts and all owners and occupants of surface property above the underground workings (R645-301-525.700).

**Please submit the completed form by March 27, 2015.** If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron R. Haddock  
Coal Program Manager

DRH/ss

Print Form

Submit by Email

Reset Form

# Annual Report

This Annual Report shows information the Division has for your mine. Submit the completed document and any additional information identified in the Appendices to the Division by the date specified in the cover letter. During a complete inspection an inspector will check and verify the information.

## GENERAL INFORMATION

Company Name	Andalex Resources INC	Mine Name	Centennial Mine
Permit Number	C/007/0019	Permit expiration Date	
Operator Name		Phone Number	
Mailing Address		Email	
City			
State		Zip Code	

## DOGGM File Location or Annual Report Location

Excess Spoil Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	
Refuse Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	
Impoundments	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	
Other:		

## OPERATOR COMMENTS

## REVIEWER COMMENTS

Met Requirements     Did Not meet Requirements

# COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the Mining and Reclamation Plan and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If additional written response is required, it should be filed as an attachment to this report.

## Title: FIRE SUPPRESSION

**Objective:** Andalex will commit to prevent, control and suppress range forest and coal fires within the permit area.

**Frequency:** To the extent possible

**Status:** Ongoing

**Reports:** Report if range fires have occurred on the permit area during the year.

**Citation:** Volume 1, Chapter 3, page 3-10, paragraph 5

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements

## Title: SUBSIDENCE MONITORING

**Objective:** Determine subsidence effects from mining.

**Frequency:** Annually

**Status:** Ongoing

**Reports:** Provide annual subsidence monitoring data **and MAP** and report of impacts in annual report.

**Citation:** Volume 1, Chapter 5, Page 5-150a, 5-151.

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements

**Title: GAS VENT HOLE STATUS UPDATE**

**Objective:** To keep the Division apprised of the status of all wells drilled above the Aberdeen mine including any future venting of existing wells and / or development of non GVH pads and to ensure that reclamation of each disturbance is accomplished in a timely manner once the wells are no longer in use. "Provide a spreadsheet showing the progress of reclamation at each drill pad, indicating the date of interim or final grading; the date of seeding and mulching; stating whether the well is still producing; stating whether there is Blue Tip equipment (solar arrays, valves) still on site.

**Please comment on the status of plugging wells and removal of Blue Tip Energy equipment from these sites.**

**The landowner requested that final reclamation include construction of water bars on the road down to GVH 13. Please comment on the status of water bar construction.**

**App. X Section 341.200 states that wood fiber mulch is to be applied on top of the seed with hydroseeding equipment at the rate of 2,000 lbs/ac and anchored with a tackifier. Where work differed from this plan, please comment on the type and rate of mulch applied to each site.**

**Roads constructed to GVH 4, GVH 5A, GVH 6, GVh 8, GVH 8A, GVH 11, GVH 12, GVH 16, and GVH 17 will be reclaimed as shown on Figure 1-1. Please comment on the status of road reclamation.**

**Frequency:** Annually

**Status:** Ongoing

**Reports:** Annual report item

**Citation:** Appendix X, page 1-2

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements



# FUTURE COMMITMENTS AND CONDITIONS

The following commitments are not required for the current annual report year, but will be required by the permittee in the future as indicated by the "status" field. These commitments are included for information only, and do not currently require action. If you feel that the commitment is no longer relevant or needs to be revised, please contact the Division.

**Title: SAGE GROUSE NEST SITE EVALUATION**

**Objective:** Prior to development of the well site, a Sage Grouse nest site evaluation will be conducted by a knowledgeable wildlife biologist. If nests are located, an alternative drill site location will be determined.

**Frequency:** Based on the need to drill additional de-gas wells.

**Status:** Required in future if new de-gas wells are proposed.

**Reports:** Send with application

**Citation:** Appendix X, Chapter 3, page 3-5, paragraph 1

**Title: RECLAMATION SUCCESS**

**Objective:** Determine reclamation success.

**Frequency:** Reclaimed areas will be monitored monthly for the first two growing seasons following reclamation.

**Status:** Check at reclamation.

**Reports:** When monitoring commences.

**Citation:** Volume 1, Chapter 3, page 3-17 paragraph 5.

**Title: RECLAMATION ENHANCEMENT MEASURES**

**Objective:** Andalex will consult with the Division of Wildlife Resources, at the time of final reclamation, to determine exactly what reclamation designs, planting arrangements, and artificial structures would best enhance wildlife habitat.

**Frequency:** Once

**Status:** Will be required prior to final reclamation

**Reports:** Report reclamation plans to Division for incorporation into MRP

**Citation:** Volume 1, Chapter 3, page 3-23, paragraph 1

**Title: SEALING OF WELLS**

**Objective:** Permanent closure of wells using measures required by the Division to prevent access and contamination of groundwater.

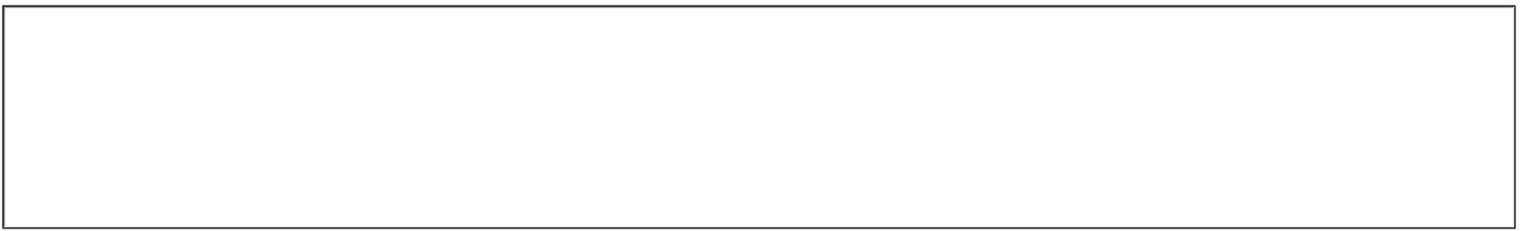
**Frequency:** When wells are no longer needed.

**Status:** Throughout mining

**Reports:** Report in Annual report the year when wells are completed.

**Citation:** Gob Gas Vent Wells: Appendix X R645-301.542.700 All other exploration and water wells: MRP - 301.529.100 301.755

**OPERATOR COMMENTS (Optional)****REVIEWER COMMENTS:**



## REPORTING OF OTHER TECHNICAL DATA

Please list other technical data or information that was not included in the form above, but is required under the approved plan, which must be periodically submitted to the Division.

Please list attachments:

Reviewer Comments

# MAPS

Copies of mine maps, current and up-to-date, are to be provided to the Division as an attachment to this report in accordance with the requirements of R645-301-525.240. The map copies shall be made in accordance with 30 CFR 75.1200 as required by MSHA. Mine maps are not considered confidential.

Map Name	Map Number	Included		Confidential	
		Yes	No	Yes	No
Mine Map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer Comments  Met Requirements  Did Not Meet Requirements

Print Form

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# Annual Report

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## GENERAL INFORMATION

Company Name	Genwal Resources Inc.	Mine Name	Crandall Canyon Mine
Permit Number	C/015/0032	Permit expiration Date	
Operator Name		Phone Number	
Mailing Address		Email	
City			
State		Zip Code	

## DOGM File Location or Annual Report Location

Excess Spoil Piles	<input type="checkbox"/> Required <input type="checkbox"/> Not Required	
Refuse Piles	<input type="checkbox"/> Required <input type="checkbox"/> Not Required	
Impoundments	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	
Other:		

## OPERATOR COMMENTS

## REVIEWER COMMENTS

Met Requirements     Did Not meet Requirements

# COMMITMENTS AND CONDITIONS

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## **Title: MACROINVERTEBRATE SAMPLING**

**Objective:** To monitor macroinvertebrate populations in Crandall Creek

**Frequency:** Annually, during the spring and fall beginning in 2009.

**Status:** Spring and Fall 2012 reports are due to the Division.

**Reports:** Submit surveys in annual report.

**Citation:** MRP, Volume A Text, Chapter 3, page 3-17.

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements

## **Title: SUBSIDENCE MONITORING**

**Objective:** To determine subsidence effects from mining. Please provide a map that shows the locations of the monitoring points to compare variations due to mining.

**Frequency:** Annually

**Status:** Ongoing.

**Reports:** Submit surveyed monitoring data and map to Division annually.

**Citation:** MRP, Volume B, Chapter 5, Section 5.25.14, page 5-25.

Operator Comments

Reviewer Comments  Met Requirements

Did Not Meet Requirements



# FUTURE COMMITMENTS AND CONDITIONS

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**Title: RECLAMATION OF CULVERT**

**Objective:** To reclaim part of the culverted section of the stream which provided habitat to the cutthroat trout population. And enhancement of the stream below the mine discharge point due to the impact on the stream habitat and aquatic wildlife that occurred because of the iron-laden water discharge.

**Frequency:** Once during reclamation.

**Status:** Needs to be completed as soon as possible.

**Reports:** Submitted to the Division upon project completion.

**Citation:** MRP, Volume A, Chapter 3, page 3-16

**Title: RAPTOR SURVEYS**

**Objective:** To monitor raptor activity and nesting within and adjacent to the permit area.

**Frequency:** Every three years, or annually if a.) UDWR recommends it, b.) it will not unduly harrass raptors, or c.) it is prudent to insure raptor safety and/or habitat. Raptor surveys are not required if the mine is not active AND no significant activity is taking place.

**Status:** Surveys required prior to installation of any discharge treatment facilities or prior to reclamation work.

**Reports:** In annual report.

**Citation:** MRP, Volume A, Chapter 3, page 3-17.

**OPERATOR COMMENTS (OPTIONAL)****REVIEWER COMMENTS**

## REPORTING OF OTHER TECHNICAL DATA

Please list other technical data or information that was not included in the form above, but is required under the approved plan, which must be periodically submitted to the Division.

Please list attachments:

Reviewer Comments

# MAPS

Copies of mine maps, current and up-to-date, are to be provided to the Division as an attachment to this report in accordance with the requirements of R645-301-525.240. The map copies shall be made in accordance with 30 CFR 75.1200 as required by MSHA. Mine maps are not considered confidential.

Map Name	Map Number	Included		Confidential	
		Yes	No	Yes	No
Annual subsidence map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mine Map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer Comments  Met Requirements  Did Not Meet Requirements

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# Annual Report

This Annual Report shows information the Division has for your mine. Submit the completed document and any additional information identified in the Appendices to the Division by the date specified in the cover letter. During a complete inspection an inspector will check and verify the information.

## GENERAL INFORMATION

Company Name	Utah American Energy	Mine Name	Lila Canyon Mine
Permit Number	C/007/0013	Permit expiration Date	
Operator Name		Phone Number	
Mailing Address		Email	
City			
State		Zip Code	

## DOGM File Location or Annual Report Location

Excess Spoil Piles	<input type="checkbox"/> Required	
	<input type="checkbox"/> Not Required	
Refuse Piles	<input type="checkbox"/> Required	
	<input type="checkbox"/> Not Required	
Impoundments	<input type="checkbox"/> Required	
	<input type="checkbox"/> Not Required	
Other:		

## OPERATOR COMMENTS

## REVIEWER COMMENTS

Met Requirements     Did Not meet Requirements

# COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the Mining and Reclamation Plan and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If additional written response is required, it should be filed as an attachment to this report.

## **Title: RAPTOR SURVEY**

**Objective:** Identify and monitor all raptors and nests.

**Frequency:** Annually

**Status:** Ongoing since 2005. The map must coincide with the data set and the data set must be discernible. The follow up survey data, if any, must also be submitted.

**Reports:** Annual Reports

**Citation:** MRP, Part B, Section 322.220, page 10, Section 330, page 20, Section 358.100 page 38

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements

## **Title: COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM**

**Objective:** Report water depletion for the CO River Endangered Fish Recovery Program

**Frequency:** Annually

**Status:** Ongoing

**Reports:** Annual

**Citation:** MRP, Section 322.220, page 11

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements



**Title: MAINTAIN RECORDS OF SOIL SALVAGE**

**Objective:** Records of soil salvage will be maintained and included in the annual report. A soil specialist will oversee the soil removal. Soil pedestals will be left to verify soil removal depths.

**Frequency:** During phase 1 and 2 construction, the soils specialist will record topsoil salvaged and placed in the topsoil stockpile and number of acres salvaged.

**Status:** Ongoing, Topsoil salvage will resume in 2012.

**Reports:** Provide an update to the number of acres salvaged and volumes salvaged in the Annual report "Topsoil Movement and Construction Record" and include a map of salvaged and undisturbed acreage.

**Citation:** R645-301-232.500 and R645-301-232.100 and N10045 abatement.

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements

**Title: SUBSOIL USED FOR CONSTRUCTION FILL**

**Objective:** To record location of subsoil placement for use in reclamation. The location of subsoil with suitable reclamation characteristics will be mapped for ease of recovery and replacement during reclamation.

**Frequency:** During construction

**Status:** Ongoing

**Reports:** Annual report, Submit As built maps showing where subsoil materials have been used as fill material.

**Citation:** MRP, Section 232.500, Section 241, and Section 242.100.

Operator Comments

Reviewer Comments  Met Requirements

Did Not Meet Requirements

**Title: MEXICAN SPOTTED OWL**

**Objective:** Conduct two-year calling survey at least two years but no more than four years prior to undermining identified habitat. Results will be submitted to USFWS, DWR, and the Division immediately following each nighttime survey. If owls are observed, the agencies will immediately coordinate to determine appropriate measures.

**Frequency:** Dependent on habitat and mine plan

**Status:** Please keep confidential map 5-3 updated with correct mine workings to indicate when mining will occur under MSO habitat.

**Reports:** Submit final reports in annual report.

**Citation:** MRP, Part B, Section 333, page 17.

Operator Comments

Reviewer Comments  Met Requirements

Did Not Meet Requirements

**Title: REACTIVATION OF OPERATIONAL MONITORING OF SURFACE WATER SAMPLING LOCATIONS**

**Objective:** Quarterly sampling to initiate at least two years prior to resuming underground mining activities on sites L-6-G, L-7-G, L-8-G, L-9-G, L-10-G, L-11-G, L-12-G, L-13-S, L-14-S, L-15-S, L-18-S, L-19-S, L-20-S, IPA-1, IPA-2, IPA-3

**Frequency:** Notify Division once, quarterly sampling

**Status:** Monitoring suspended as of October 2011, Division awaiting reactivation notification.

**Reports:** Annual Report, notify Division if/when mining is to occur.

**Citation:** MRP, Part B, Section 731.222, table 7-3

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements

**Title: GENEVA MINE/ LILA CANYON FAN PORTAL BARRICADES**

**Objective:** Inspect the Geneva Mine fan portal Barricades annually and report findings to Division and BLM.

**Frequency:** annually

**Status:** Ongoing

**Reports:** Annual Report.

**Citation:** MRP, Part B, Chapter 5, Section 529, page 54 and 55

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements

# FUTURE COMMITMENTS AND CONDITIONS

The following commitments are not required for the current annual report year, but will be required by the permittee in the future as indicated by the "status" field. These commitments are included for information only, and do not currently require action. If you feel that the commitment is no longer relevant or needs to be revised, please contact the Division.

**Title: SUBSOIL USE IN RECLAMATION**

**Objective:** Subsoils found to be contaminated with oil, grease, or salts through visual evaluation will be hauled to a landfill site.

**Frequency:** Once

**Status:** Ongoing

**Reports:** None

**Citation:** MRP, part B, Section 232.500

**Title: APPLICATION OF INNOCULUM**

**Objective:** An inoculum will be applied to the reclaimed soil surface to re-establish bacteria, mycorrhiza and mycelium in the soil. At the time of permitting, the exact product to be applied to the soil is not defined, however, the Division expects that the best technology available at the time of reclamation will be employed, as per R645-301-333.

**Frequency:** During Reclamation

**Status:** Ongoing

**Reports:** Division consultation

**Citation:** MRP, Part B, Section 241.

**Title: TWO MONITORING WELLS TO BE ESTABLISHED IN FUTURE BOREHOLES**

**Objective:** Monitor water levels and water quality within the permit and adjacent areas.

**Frequency:** If wells are established.

**Status:** To be done when and if additional holes are bored from the surface to the coal seam.

**Reports:** Water quality and quantity data will be included in the quarterly hydrology reports. The MRP (and CHIA) to be updated as needed.

**Citation:** Conditions to the Permit, attachment A, special conditions (December 21, 2007).

**Title: LILA CANYON MINE SALVAGE OF CRYPTOGRAMS ON TOPSOIL PILE PRIOR TO RECLAMATION.**

**Objective:** Salvaged cryptogams will be added to the wood fiber mulch and hydrosprayed on the surface of the reclaimed site.

**Frequency:** Immediately after seeding of the reclaimed site.

**Status:** During reclamation of the Lila Canyon Mine.

**Reports:** Success of cryptogamic establishment will be evaluated (by Division and Permittee) prior to collection from topsoil stockpile.

**Citation:** MRP, Part B, Section 232.100, and Section 234.230

**Title: VEGETATION MONITORING**

**Objective:** Submit color infrared photography. Submit and implement a mitigation plan, if results indicate impact from mining operations.

**Frequency:** Prior to any mining, and every 5 years after.

**Status:** Ongoing. Baseline submitted in 2011. Next round of photos are due in 2016. A comparison between 2016 and 2011 photos will be required in 2016.

**Reports:** Annual Report

**Citation:** MRP, Part B, Section 332, page 14.

**OPERATOR COMMENTS (OPTIONAL)**

**REVIEWER COMMENTS**

## REPORTING OF OTHER TECHNICAL DATA

Please list other technical data or information that was not included in the form above, but is required under the approved plan, which must be periodically submitted to the Division.

Please list attachments:

Reviewer Comments

# MAPS

Copies of mine maps, current and up-to-date, are to be provided to the Division as an attachment to this report in accordance with the requirements of R645-301-525.240. The map copies shall be made in accordance with 30 CFR 75.1200 as required by MSHA. Mine maps are not considered confidential.

Map Name	Map Number	Included		Confidential	
		Yes	No	Yes	No
Annual subsidence map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mine Map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer Comments  Met Requirements  Did Not Meet Requirements

Mine maps need to include 5 year projections of mining

Print Form

Submit by Email

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# Annual Report

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## GENERAL INFORMATION

Company Name	<input type="text" value="West Ridge Resources"/>	Mine Name	<input type="text" value="West Ridge Mine"/>
Permit Number	<input type="text" value="C/007/0041"/>	Permit expiration Date	<input type="text"/>
Operator Name	<input type="text"/>	Phone Number	<input type="text"/>
Mailing Address	<input type="text"/>	Email	<input type="text"/>
City	<input type="text"/>		
State	<input type="text"/>	Zip Code	<input type="text"/>

## DOGGM File Location or Annual Report Location

Excess Spoil Piles	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Not Required	<input type="text"/>
Refuse Piles	<input type="checkbox"/> Required <input type="checkbox"/> Not Required	<input type="text"/>
Impoundments	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	<input type="text"/>
Other:	<input type="text"/>	<input type="text"/>

## OPERATOR COMMENTS

## REVIEWER COMMENTS

Met Requirements     Did Not meet Requirements

# COMMITMENTS AND CONDITIONS

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## **Title: EXPERIMENTAL FIELD TRIALS**

**Objective:** Monitoring to support proposed experimental practice. Provide a comparison of growth on field trials with Douglas/Fir reference area.

**Frequency:** Annual evaluation in June

**Status:** Ongoing

**Reports:** Provide in annual report

**Citation:** MRP, Volume 1, Appendix 2-6 and Volume A, Map 2-4

Operator Comments

Reviewer Comments  Met Requirements  Did Not Meet Requirements

## **Title: SOIL SAMPLING OF FILL AT T1, T2 AND T3**

**Objective:** To protect buried substitute topsoil in the fill. Collect a composite sample from several locations near each site to obtain a more average value.

**Frequency:** Annual evaluation during field season.

**Status:** Ongoing beginning in 2010.

**Reports:** Annual report

**Citation:** MRP, Volume 1, Appendix 2-6 addendum and Volume A, Map 2-4

Operator Comments

Reviewer Comments  Met Requirements

Did Not Meet Requirements

**Title: SUBSIDENCE MONITORING**

**Objective:** To monitor subsidence from longwall mining practices. Subsidence monitoring of panels until the effects of mining have stabilized and vertical movement is less than six inches per year.

**Frequency:** annual

**Status:** Ongoing

**Reports:** annual report

**Citation:** MRP, Volume 2, Chapter 5, page 5-23b to 5-23e

Operator Comments

Reviewer Comments  Met Requirements

Did Not Meet Requirements

# FUTURE COMMITMENTS AND CONDITIONS

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**Title: RECLAMATION MONITORING**

**Objective:** Visually assess the revegetation success.

**Frequency:** Quarterly for the first three years and annually in June of each year thereafter

**Status:** Implement at reclamation

**Reports:** Annual Report

**Citation:** MRP, Volume 1, Chapter 3, page 3-16, paragraph 2

**Title: MEXICAN SPOTTED OWL SURVEY**

**Objective:** Conduct appropriate surveys for Mexican spotted owls on the lease tract areas with 40 percent or greater slopes, cliff habitat areas, riparian habitats, and mixed conifer forest habitats, prior to any future surface disturbing activity and/or any mining activity with the potential to interrupt surface spring flows. Inventory work must be conducted by parties approved and permitted for such survey work by the Fish and Wildlife Service and qualified in accordance with R645-301-132. Surveys must follow current protocol established by Fish and wildlife service.

**Frequency:** As needed

**Status:** ongoing

**Reports:** Annual

**Citation:** Permit condition attachment A, special condition #3.

**Title: SOIL SAMPLING OF FINAL GRADED FILL AT CATCHMENTS A, C AND E**

**Objective:** At final reclamation, the reclaimed surface soils of the catchments will be tested for pH, EC and SAR to allow for the evaluation of the salinity and the need for a revision or addition to the final seed mix to enhance germination and establishment.

**Frequency:** Once after final grading

**Status:** Future commitment

**Reports:** Provide information to the Division

**Citation:** MRP, Volume 2, Appendix 5-15, Attachment 9, page 14

**OPERATOR COMMENTS (OPTIONAL)****REVIEWER COMMENTS**

## REPORTING OF OTHER TECHNICAL DATA

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Reviewer Comments

# MAPS

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		Yes	No	Yes	No
Annual subsidence map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mine Map		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer Comments  Met Requirements  Did Not Meet Requirements