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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

June 30, 2016

Kirk Nicholes, Resident Agent  
Alton Coal Development, LLC  
463 North 100 West, Suite 1  
Cedar City, Utah 84720

Subject: 2015 Annual Report Review Completion, Alton Coal Development, LLC, Coal Hollow Mine, C/025/0005, Task ID #5149

Dear Mr. Nicholes:

The Division staff has completed the review of the 2015 Annual Report for the Coal Hollow Mine. Enclosed is a copy of the review with each reviewer's comments. Additional information has been requested. Please submit by August 5, 2016.

- 1) Per a commitment in the Mining and Reclamation Plan (MRP) to conduct a nesting bird survey in the north lease area if mining activities commence after the first of March, please provide the results of the 2015 survey.

Thank you for your diligence in completing the Annual Report. If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron Haddock,  
Program Manager

DRH/sqs  
Enclosure  
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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    | Alton Coal Development, LLC | Mine Name              | Coal Hollow Mine        |
| Permit Number   | C/025/0005                  | Permit expiration Date | November 8, 2020        |
| Operator Name   | Alton Coal Development, LLC | Phone Number           | +1 (435) 867-5331       |
| Mailing Address | 463 N 100 West Suite 1      | Email                  | knicholes@altoncoal.com |
| City            | Cedar City                  |                        |                         |
| State           | Utah                        | Zip Code               | 84721                   |

## DOGM File Location or Annual Report Location

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

## OPERATOR COMMENTS

Certified inspection of sediment ponds 1, 1B, 2, 3 and 4 was completed on February 10, 2015. Certified inspection of the Excess Spoils Pile was completed on a quarterly basis on February 10, 2015, June 24, 2015 August 20, 2015 and December 9, 2015. Copies of the inspection reports can be found at the ACD Cedar City office and the Coal Hollow Mine office. They were also emailed to the Division each quarter and are included with this Annual Report.

## REVIEWER COMMENTS

Met Requirements  Did Not meet Requirements

Excess spoil pile inspections were completed on a quarterly basis and emailed to the Division. Inspections of the excess spoil pile were completed by Dan Guy with a stamped, dated, and sign PE certification. The first quarter inspection, completed on 2/2/15 of the excess spoil pile stated the temporary excess spoil pile was being removed to backfill pits. The second quarter inspection of the excess spoil pile was completed on 6/24/15. The inspection's text states the remaining capacity was 5,755,000CY. Minor toe erosion and slope erosion was witnessed but the area was still in active backfill. A proctor test was completed on 5/13/13 and had 88%-98% maximum compaction. The third quarter inspection was completed on 8/20/15 and states remaining capacity of 5,988,000CYThe fourth quarter inspection was completed on 12/09/15 and stated that the capacity had grown to 7,717,000 CY with the work to backfill the highwall trenches (CP-6/14/16).

# 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: TOPSOIL AND SUBSOIL SALVAGE AND FINAL RECLAMATION PLACEMENT

**Objective:** Monitor topsoil and subsoil salvage by suitability criteria and depth described in Appendix 2-1, Table 4-1.

**Frequency:** During operations. Sampling regime will be reviewed and updated as necessary. In 2015 monitoring, add-in water soluble selenium analysis to the list of parameters run on replaced topsoil/subsoil.

**Status:** Long term

**Reports:** Provide laboratory reports and keep a tally of volumes salvaged, stockpiled and live hauled. In 2015 monitoring, add-in water soluble selenium analysis to the list of parameters run on replaced topsoil/subsoils.

**Citation:** MRP, Volume 1, Chapter 2, Section 231.300 (topsoil sampling), Section 232.500 (subsoil sampling), and Appendix 2-1, pg. 4-2.

Operator Comments

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Topsoil Stockpile: #1 25,289 cyds | Subsoil Stockpiles: #1 73,070 cyds |
| #2 137,021 cyds                   | #2 174,675 cyds                    |
| #3 Consumed in 2013               | #3 Consumed in 2014                |
| #4 33,070 cyds                    |                                    |
| #5 Consumed in 2015               |                                    |
| Livehaul Topsoil: 25,211 cyds     | Livehaul Subsoil: 53,260 cyds      |

Reviewer Comments  Met Requirements  Did Not Meet Requirements

6/3/2016 pwb. The above numbers record the use of 8,761 CY of topsoil from the #5 stockpile and 18,164 CY from #4 topsoil stockpile (a third (36%) of the original volume of the #4topsoil stockpile) in 2015. All together with the livehaul stated above, a total of 52,136 CY were redistributed over 29 acres (according to Dwg 5-38 revised 4/11/16. That is an average topsoil redistribution depth of 1.11 ft . This report indicates that subsoil pile #2 was reduced in volume by 67,596 CY since December 2014. In combination with the livehaul, The average subsoil redistribution over 29 acres was 2.58 feet. Total cover over the spoil averaged 3.69 feet or 44.28 inches.

## Title: PREDATOR CONTROL

**Objective:** To effectively manage predators and increase the population of birds at the Alton lek.

**Frequency:** Annually

**Status:** Ongoing

**Reports:** Annual summary of work completed to date. Include data, locations, summary and analysis of predator control efforts. Please include any reports from USDA Wildlife Services.

**Citation:** MRP, Volume 2, Chapter 3, Appendix 3-5 page 26

Operator Comments

ACD, through a contract with Wildlife Services effective from May 17, 2011 through May 16, 2016, continued it's predator control program in 2015. Wildlife Services annual summary of this work is included in the report titled "Greater Sage-grouse Population Monitoring and Habitat Improvement, Alton - Sink Valley, Utah, November 24, 2015"

Reviewer Comments  Met Requirements

Did Not Meet Requirements

ACD will continue to implement its predator control program through the Ag departments Division of Wildlife Services. Discussions with mine personnel and Dr. Peterson indicate that the program has been beneficial to the sage grouse population near the mine.

**Title: WILDLIFE AWARENESS PROGRAM**

**Objective:** To provide protection for the resident wildlife and minimize impacts (collisions) from vehicles and heavy equipment.

**Frequency:** Continuous and as needed for new employees throughout the life of the mine.

**Status:** Ongoing

**Reports:** Annual, log of employee awareness meetings, road kills for deer, elk, sage grouse and domestic livestock from the mine site to highway 89.

**Citation:** MRP, Volume 2, Chapter 3, pages 3-54, 55.

Operator Comments

Wildlife Awareness training was held on January 31, 2015 for all employees. Instruction was given by Kirk Nicholes. Attendance sheet and slides from the training presentation have been included with this submittal. no new employees were hired during 2015. There were no employee road kills for deer, elk, sage-grouse or domestic livestock from the mine site to highway 89.

Reviewer Comments  Met Requirements

Did Not Meet Requirements

A key component of the awareness program has been the identification of sage grouse and employee sightings. This seems to compliment the other monitoring programs for the birds. [JCH]

**Title: GPS Monitoring of Sage-grouse**

**Objective:** Monitor impacts from mining activities, recruitment, mortality and behavior patterns of the sage-grouse in the Alton and associated leks in Sink Valley. Develop management strategies for habitat restoration and population expansion.

**Frequency:** As required by USU sage-grouse research contract.

**Status:** A revised monitoring program needs to be completed prior to conducting mining activities in the proposed North Lease area.

**Reports:** As required by USU contract.

**Citation:** Appendix 3-8

Operator Comments

In October and November 2014, ACD was allowed to collar sage-grouse in the Alton/Sink Valley area again. The report generated from data collected from these collars is included in the report titled "Annual Report of GPS Satellite Telemetry, February 22, 2016". This

report is provided with this DOGM Annual Report.

Reviewer Comments  Met Requirements  Did Not Meet Requirements

During the review of the monitoring plan for the North lease Dr. Frey indicated that she would like to see more feedback from the mine when data from the collars is sent to Alton Coal. It was suggested that be done during the bimonthly CCARM meetings but that has recently been changed to quarterly. It is suggested that Alton Coal, DOGM and Dr. Frey develop a comfortable frequency for exchanging and analyzing the data from the GPS collars. [JCH]

**Title: SAGE GROUSE CONSERVATION AREA**

**Objective:** To protect and develop a 72 acre parcel of sage grouse habitat.

**Frequency:** Annual summary until complete

**Status:** Ongoing. The remaining acreage was to be treated in 2015.

**Reports:** Annual summary of work in annual sage-grouse report.

**Citation:** MRP, Volume 2, Chapter 3, Appendix 3-5, page 13.

Operator Comments

In the Fall of 2015, the remaining 27 acres of mountain big and basin big sagebrush located in the Conservation Area were treated to reduce sagebrush cover and open sites for intercanopy plant establishment. Decadent sagebrush areas were disked for a post-treatment target cover of 15%. After diskings this area, a seed mix consisting of perennial grasses and forbs was broadcast using a ATV mounted spreader. A summary of this work is included in the report "Greater Sage-grouse Population Monitoring and Habitat Improvement, Alton - Sink Valley, Utah, February 24, 2015"

Reviewer Comments  Met Requirements  Did Not Meet Requirements

DOGM would like discuss the results of the report with Alton Coal and Dr. Peterson. [JCH]

**Title: RECLAMATION TIMETABLE**

**Objective:** To ensure timely reclamation

**Frequency:** Acreage to be reclaimed annually is itemized and shown on Dwg. 5-38

**Status:** The report needs to be updated to reflect the correct information.

**Reports:** Annual summary of work completed to date.

**Citation:** MRP, Volume 2, Chapter 3, page 56, Chapter 5, page 5-59.

Operator Comments

An updated drawing 5-36 has been submitted for inclusion into the MRP with this Annual Report.

Reviewer Comments  Did Not Meet Requirements  Met Requirements

6/3/2016 pwb. Drawing 5-38 presented with the 2014 Annual report anticipated 71 acres being reclaimed in 2015. The Dwg 5-38 revision dated 4/11/2016 which was included with the 2015 Annual report records 29 acres being reclaimed in 2015 and 13.5 acres of reclaimed land re-disturbed in the excess spoil pile. In the year 2016, ACD projects that 110 acres will be reclaimed. The 2016 reclamation includes much of the excess spoil pile and all mining pits, except the underground Pit 10. Of the 110 acres to be reclaimed in 2016, 31 acres received Phase 1 bond release on May 2, 2016. Drawing 5-38 shows the UG mine and facilities area being reclaimed in 2017.

[Drawing 5-38 was also reviewed under Task 5171 and has been revised to more clearly show the status of the previously reclaimed excess spoil pile.]

**Title: SAMPLING FINAL GRADED, TOPSOILED SURFACE**

**Objective:** To ensure a fertile growth medium.

**Frequency:** One composite sample every 2-5 acres based on variability.

**Status:** Contemporaneous with reclamation.

**Reports:** Laboratory analysis of available phosphorus, soluble potassium and nitrate-nitrogen.

**Citation:** MRP, Volume 1, Chapter 2, Section 231.300 and 243.

Operator Comments

Fifteen topsoil samples were collected and analyzed in 2015 for topsoil placed in reclaimed areas. They have been included with the Annual Report along with an updated Figure 1 depicting sample locations.

Reviewer Comments  Met Requirements  Did Not Meet Requirements

6/3/2016 pwb. Labeling on Figure 1 is not clear and so the analyses can't be related to position in the landscape or reclamation management. A new figure was requested under the review of Task 5171.

**Title: Evaluate Mine Discharges for Impacts to Kanab Creek AVF**

**Objective:** To evaluate discharges that may impact the designated AVF on Kanab Creek.

**Frequency:** Annually

**Status:** Ongoing

**Reports:** An annual finding should be placed in the Annual Report during operation and reclamation of any adverse impacts to the channel, diminution of water quality and impacts to wildlife

**Citation:** Coal Hollow Permit, Attachment A, Special Condition #5

Operator Comments

A copy of the findings as evaluated by Eric Petersen of Petersen Hydrologic, LLC dated March 28, 2016 has been included with the Annual Report.

Reviewer Comments  Met Requirements

Did Not Meet Requirements

The annual report meets the State of Utah R645 Hydrologic requirements for mining adjacent to an Alluvial Valley Floor.

Coal Hollow mine's annual report meets Special Condition #5 of the Permit to provide an analysis of mining impacts to the AVF located on Kanab Creek. The report found the active mining operation had little to no impact on the AVF. The UPDES discharge monitoring data is displayed in Table 1.

**Title: RESTORATION OF LEK**

**Objective:** To restore the original lek at the end of mining activities.

**Frequency:** Once

**Status:** Restoration of the lek will begin at final reclamation.

**Reports:** Annual summary of work completed after reclamation begins.

**Citation:** MRP, Volume 2, Chapter 3, Appendix 3-5, page 12.

Operator Comments

Final reclamation of the area of the original lek was completed some of which has one growing season, the remainder has been seeded, but the growing season has not began. Several observations have been made of the sage grouse utilizing this and various other areas of reclamation around the mine site during the 2016 lekking season.

Reviewer Comments  Met Requirements

Did Not Meet Requirements

**Title: SAGE GROUSE MONITORING**

**Objective:** To monitor the population densities at the Hoyt's ranch and Alton leks and migration patterns in between as long as the birds are living.

**Frequency:** Annual summary

**Status:** Ongoing, meet with the Division and other interested parties each October to discuss the sage grouse monitoring data collected that year and to provide recommendations for monitoring in the upcoming year.

**Reports:** Annual Summary of work completed.

**Citation:** MRP, Volume 2, Chapter 3, Appendix 3-5, page 14, 15, and 20.

Operator Comments

Updates of DWR's lek counts have been provided in the report titled "Greater Sage-grouse Population Monitoring and Habitat Improvement Alton - Sink Valley, Utah November 24, 2015" in Section 1.4.

Reviewer Comments  Met Requirements  Did Not Meet Requirements

As noted in the GPS monitoring commitment Dr. Frey indicated that she would like to see more feedback from the mine when data from the collars is sent to Alton Coal. It was suggested that be done during the bimonthly CCARM meetings but that has recently been changed to quarterly. It is suggested that Alton Coal, DOGM and Dr. Frey develop a comfortable frequency for exchanging and analyzing the data from the GPS collars. [JCH]

**Title: Dames Lease Annual Vegetation Survey**

**Objective:** To determine if mining or mining related activities are having an impact on the wet meadow habitat

**Frequency:** Annual

**Status:** Sampled in 2015

**Reports:** Annual Summary including species composition, percent cover and plant density

**Citation:**

Operator Comments

Although mining (highwall mining) did not occur within the Dame Lease, a vegetation survey was completed on Oct. 3, 2015. Data results including species composition, percent cover and plant density are provided in Section 2.3 of the "Greater Sage-grouse Population Monitoring and Habitat Improvement, Alton - Sink Valley, Utah, November 24, 2015." Results indicate that a shift in plant species and composition was not evident based on this vegetation sampling. Annual monitoring will continue in 2016.

Reviewer Comments  Met Requirements  Did Not Meet Requirements

DOGM appreciates Alton Coal's willingness to keep a pulse on the vegetation in this area as it has proven to be valuable brood rearing habitat for the grouse. [JCH]

## 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.

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**Title: REVIEW AND EVALUATE THE FACILITIES SPILL PLAN (APPENDIX 7-5)**

**Objective:** To ensure the accuracy of the Facilities Spill Plan and to determine if additional or more effective spill prevention and control technology that is applicable to the facility must be added.

**Frequency:** At least once every five years.

**Status:** Last review 2015, next review due 2019.

**Reports:** Completed Plan Review form submitted for incorporation into Appendix B of Appendix 7-5.

**Citation:** MRP, Volume 7, Chapter 7, Appendix 7-5, Section 2.2 PLAN REVIEW, page 2.

**OPERATOR COMMENTS (OPTIONAL)**

**REVIEWER COMMENTS**

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## 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:

Nesting bird survey for the North lease area. This was required in order to ensure compliance with the Migratory Bird Treaty Act.

Reviewer Comments

The MRP includes a commitment to conduct a nesting bird survey in the north lease area if mining activities commence after first of March. Archaeological clearance for the site was granted on the 8th of March. The Division is requesting Alton Coal to include the results of the survey for the North lease area in the annual report. [JCH]

# 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                                  |
| MSHA Surface Mine Map 20160101 |            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| MSHA UGround Map 20160101      |            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| MRP Chapter 5, Drawing 5-38    |            | <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"/>            |

Reviewer Comments  Met Requirements  Did Not Meet Requirements

The Permittee included a mine map with the approximate dates associated with panels are projected to be mined. Planned mining operations are shown on the timing projection map until 2017. These mine maps meet the Division's requirements to show at least five years of projected mining annually. The Permittee should be noted that the plan panels detailed on the mining projection MSHA Uground Map 20160101 do not match the currently approved plan. An amendment updating the mine plan to show the plans detail within the annual report should be submitted to the Division prior to operations commencing beyond the approved area. Drawing 5-38 also still contains error in the text presented on the drawing that needs to be corrected, in Task #5171. (CP)