Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 / Fax (435) 867-1192

Received 8/3/17
C/025/0005
Task #5505

August 2, 2017

Daron R. Haddock
Coal Program Manager
Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Re: **Phase 2 Bond Release, Alton Coal Development, LLC, Coal Hollow Project, Kane County, Utah, C/025/0005**

Dear Mr. Haddock:

Pursuant to R645-301-880.300, enclosed on behalf of Alton Coal Development, LLC is a copy of the application for Phase 2 Bond Release for select areas of the Coal Hollow Mine as follows:

- Application for Phase 2 Bond Release
- C1 and C2 Forms
- Public Notice for Bond Release Application
- Plan view Figure of "Proposed Phase 2 Bond Release"

Also, as required by R645-301-880.600, notifications of the proposed bond release have been made to the following:

- Southern Utah News
- Alecia Swapp Dame Trust - Richard Dame
- C. Burton Pugh
- BLM-KFO
- Darlynn Sorensen
- Kane County Planning Commission
- Kane County Water Conservancy District
- Alton Mayor – Alton, Utah

Please contact me at 435-691-1551 should you have any questions or comments. This submittal is being provided electronically, a hard copy with certified drawings will follow.

Sincerely

B. Kirk Nicholes
Environmental Specialist

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change ☐ New Permit ☐ Renewal ☐ Exploration ☐ Bond Release ☒ Transfer ☐

Permittee: Alton Coal Development, LLC
Mine: Coal Hollow Mine **Permit Number:** C/025/0005
Title: Phase 2 Bond Release

Description, Include reason for application and timing required to implement:
Phase 2 Bond Release Application

Instructions: If you answer yes to any of the first eight questions, this application may require Public Notice publication.

☐ Yes ☒ No 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ ☐ increase ☐ decrease.
☐ Yes ☒ No 2. Is the application submitted as a result of a Division Order? DO# _____
☐ Yes ☒ No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
☐ Yes ☒ No 4. Does the application include operations in hydrologic basins other than as currently approved?
☐ Yes ☒ No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
☒ Yes ☐ No 6. Does the application require or include public notice publication?
☐ Yes ☒ No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
☐ Yes ☒ No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
☐ Yes ☒ No 9. Is the application submitted as a result of a Violation? NOV # _____
☐ Yes ☒ No 10. Is the application submitted as a result of other laws or regulations or policies?
Explain: _____
☒ Yes ☐ No 11. Does the application affect the surface landowner or change the post mining land use?
☐ Yes ☒ No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
☐ Yes ☒ No 13. Does the application require or include collection and reporting of any baseline information?
☐ Yes ☒ No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes ☒ No 15. Does the application require or include soil removal, storage or placement?
☐ Yes ☒ No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
☐ Yes ☒ No 17. Does the application require or include construction, modification, or removal of surface facilities?
☐ Yes ☒ No 18. Does the application require or include water monitoring, sediment or drainage control measures?
☒ Yes ☐ No 19. Does the application require or include certified designs, maps or calculation?
☐ Yes ☒ No 20. Does the application require or include subsidence control or monitoring?
☐ Yes ☒ No 21. Have reclamation costs for bonding been provided?
☐ Yes ☒ No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
☐ Yes ☒ No 23. Does the application affect permits issued by other agencies or permits issued to other entities?
☐ Yes ☒ No 24. Does the application include confidential information and is it clearly marked and separated in the plan?

Please attach three (3) review copies of the application. If the mine is on or adjacent to Forest Service land please submit four (4) copies, thank you. (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

B. Kirk Nicholes	Environmental Specialist	07/31/2017	B. Kirk Nicholes
Print Name	Position	Date	Signature (Right-click above choose certify then have notary sign below)

Subscribed and sworn to before me this 31 day of July, 2017

Notary Public: Marty Nicholes, state of Utah.

My commission Expires: 09-11-2017
Commission Number: 670359
Address: 1670 E Millstone Cir
City: Enoch State: UT Zip: 84721

} ss:

Notary Public
MARTY NICHOLES
Commission #670359
My Commission Expires
Sept 11, 2017
State of Utah

For Office Use Only:	Assigned Tracking Number:	Received by Oil, Gas & Mining

Form DOGM- C1 (Revised December 10, 2007)

APPLICATION FOR COAL PERMIT PROCESSING
Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: Alton Coal Development, LLC
Mine: Coal Hollow Mine
Permit Number: C/025/0005
Title: Phase 2 Bond Release

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☒ Add	☐ Replace	☐ Remove	Figures 1 (add to end of Chapter 8 Drawing section)
☐ Add	☐ Replace	☐ Remove	
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Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.	Received by Oil, Gas & Mining

Application for Phase 2 Bond Release
Coal Hollow Mine

Alton Coal Development, LLC
463 N 100 W, Suite 1
Cedar City, UT 84721

Permit # C/025/0005
Permit Approval 11/08/2010

Alton Coal Development, LLC ("ACD") files this application with the Utah Division of Oil, Gas and Mining for Phase 2 Bond Release for 77.431 acres of the Coal Hollow Mine, C/025/0005.

ACD has met the requirements of the Coal Hollow Mine ("CHM"), Mining and Reclamation Plan ("MRP") and the Utah Coal Rules as to whether the lands to which the release would be applicable are contributing suspended solids to streamflow or runoff outside the permit area in excess of the water quality requirements for Phase 2 Bond Release (refer to R645-301-880.300). Phase III requirements are not considered as part of this Phase 2 release. No sediment control structures have been included as part of this release, and all bond associated with these structures remains unchanged. This application for Phase 2 bond release is for the following described areas of the Coal Hollow Mine ("Reclaimed Coal Mine") as shown on Figure 1:

I. LEGAL DESCRIPTION.

1. BRP2 - 1

The following described lands located in Kane County, Utah within the SE 1/4, SE 1/4 of Sec. 19, and the NE 1/4, NE 1/4 of Sec. 30 T39S, R5W:

Beginning from the Section Corner 19-24-25-30 T39S, R5W, proceeding S 89°41'16" E a distance of 2530.4389' along the section line to the 1/4 Corner 19-30, T39S, R5W; thence S 76°50'27" E a distance of 394.0000' to the true point of beginning; thence S 89°50'30" E a distance of 238.96'; thence N 89°45'26" E a distance of 225.42'; thence S 89°53'25" E a distance of 224.53'; thence N 44°27'32" E a distance of 297.84'; thence N 02°34'10" E a distance of 369.27'; thence N 02°51'13" E a distance of 686.82'; thence N 79°09'35" W a distance of 15.07'; thence S 69°22'04" W a distance of 162.97'; thence N 87°17'14" W a distance of 171.53'; thence N 84°23'12" W a distance of 303.92'; thence S 89°28'35" W a distance of 217.51'; thence S 84°25'23" W a distance of 84.29'; thence S 57°45'44" W a distance of 62.07'; thence S 26°28'31" W a distance of 79.45'; thence S 01°26'55" E a distance of 134.43'; thence S 10°06'39" E a distance of 329.60'; thence S 26°00'56" E a distance of 181.37'; thence S 06°06'00" W a distance of 253.25'; thence S 05°29'52" E a distance of 92.46'; thence S 13°23'38" W a distance of 175.20'; which is the true point of beginning, having an area of 1124467.61 square feet, **25.814 acres.**

2. BRP2 - 2

The following described lands located in Kane County, Utah within the E 1/2, E 1/2 of Sec. 30 T39S, R5W:

Beginning from the East 1/16 Corner 30-31 T39S, R5W; thence N 00°19'31" E a distance of 215.25'; thence N 00°17'53" E a distance of 340.85'; thence N 00°20'32" E a distance of 242.65'; thence N 00°23'44" E a distance of 262.84'; thence N 00°17'41" E a distance of 293.53'; thence N 00°20'32" E a distance of 301.19'; thence N 00°21'23" E a distance of 322.82'; thence N 00°21'33" E a distance of 416.36'; thence N 00°21'33" E a distance of 334.62'; thence S 71°04'12" E a distance of 41.29'; thence S 84°58'24" E a distance of 35.43'; thence S 84°58'24" E a distance of 1.46'; thence N 84°55'20" E a distance of 301.82'; thence N 81°50'49" E a distance

of 157.77'; thence S 00°14'08" W a distance of 325.30'; thence S 18°58'14" E a distance of 126.01'; thence S 09°37'32" E a distance of 169.89'; thence S 00°41'59" E a distance of 340.73'; thence S 11°22'49" E a distance of 305.19'; thence N 90°00'00" E a distance of 566.12'; thence S 14°56'07" W a distance of 574.71'; thence S 22°46'15" W a distance of 266.30'; thence S 05°15'32" W a distance of 44.41'; thence S 71°04'45" E a distance of 55.33'; thence S 85°03'48" E a distance of 43.81'; thence S 54°56'39" E a distance of 51.96'; thence S 01°47'43" E a distance of 61.95'; thence N 89°51'07" E a distance of 85.29'; thence S 00°00'43" E a distance of 355.34'; thence N 90°00'00" W a distance of 252.18'; thence N 90°00'00" W a distance of 428.78'; thence N 14°30'01" W a distance of 97.81'; thence N 89°24'32" W a distance of 263.80'; thence S 00°11'21" W a distance of 91.20'; thence N 89°02'33" W a distance of 247.82'; which is the true point of beginning, having an area of 2248435.06 square feet, **51.617 acres.**

II. RECLAMATION TREATMENTS UTILIZED

BRP2 - 1 includes the former Pit 3, Pit 5 and Pit 6 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2013, 2014 and 2016 for various portions of BRP2-1. The Lower Robinson Creek stream channel, diverted during mining, was reconstructed to its original location with 15" D50 rip-rap placed to a depth of at least 24" along the flow path in September of 2015. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following top soiling and mulching, the prepared portions were seeded in October of 2013, November and December of 2014 and March of 2016. The grasses and forbs were drill seeded, while the shrubs were broadcast from a broadcaster mounted on the drill using the following seed mix:

Revegetation Seed Mixture for the Sagebrush/Grass Community at the Coal Hollow Project

	Rate** (# PLS/Ac)	Seeds/ft2
SHRUBS		
Artemisia nova	0.20	4.16
Artemisia tridentata	0.10	5.74
Ceratoides lanata	1.00	1.26
Purshia tridentata	2.00	0.69
Symphoricarpos oreophilus	1.00	1.72
FORBS		
Achillea millefolium	0.03	1.91
Hedysarum boreale	1.00	0.77
Linum lewisii	0.70	4.47
Lupinus argenteus	1.00	0.29
Penstemon palmeri	0.30	4.20
Sphaeralcea grossulariifolia	0.40	4.59
Viguiera multiflora	0.20	4.84

GRASSES		
Elymus smithii	1.50	4.34
Elymus trachycaulus	1.50	5.51
Poa pratensis	0.10	5.00
Poa secunda	0.20	4.25
Stipa hymenoides	1.00	4.32
Sterile Triticale - Quick Guard	10.00	4.59
TOTALS	22.23	62.66

BRP2 - 2 includes the former Pit 21A, Pit 21B, Pit 22, Pit 23, Pit 24, Pit 25, Pit 26, Pit 27, Pit 28, Surface 6 and Surface 7 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2014, 2015 and Spring of 2016 for various portions of BRP2-2. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed on the soil surface. Following top soiling and mulching, the prepared portions were seeded in November of 2014, December 2014, January 2015 and March of 2016. The grasses and forbs were drill seeded, while the shrubs were broadcast from a broadcaster mounted on the drill (following the approved MRP Drawing 3-7, Reclamation Treatments, Monitoring & Sampling Locations) using the following seed mixes:

Revegetation Seed Mixture for the Sagebrush/Grass Community at the Coal Hollow Project

	Rate** (# PLS/Ac)	Seeds/ft2
SHRUBS		
Artemisia nova	0.20	4.16
Artemisia tridentata	0.10	5.74
Ceratoides lanata	1.00	1.26
Purshia tridentata	2.00	0.69
Symphoricarpos oreophilus	1.00	1.72
FORBS		
Achillea millefolium	0.03	1.91
Hedysarum boreale	1.00	0.77
Linum lewisii	0.70	4.47
Lupinus argenteus	1.00	0.29
Penstemon palmeri	0.30	4.20
Sphaeralcea grossulariifolia	0.40	4.59
Viguiera multiflora	0.20	4.84
GRASSES		
Elymus smithii	1.50	4.34
Elymus trachycaulus	1.50	5.51

Poa pratensis	0.10	5.00
Poa secunda	0.20	4.25
Stipa hymenoides	1.00	4.32
Sterile Triticale - Quick Guard	10.00	4.59
TOTALS	22.23	62.66

Revegetation Seed Mixture for the Pasture Lands at the Coal Hollow Project

(Final determination to be made by landowners)	Rate* (# PLS/Ac)	Seeds/ft2
SHRUBS		
FORBS		
Achillea millefolium var. occidentalis	0.04	2.55
Astragalus cicer	1.5	4.22
Hedysarum boreale	1	0.77
Linum perenne	1	6.39
Medicago sativa	1	5.21
GRASSES		
Bromus inermis	1	2.45
Dactylis glomerata	0.2	0.00
Pascopyrum smithii	1.5	4.34
Elymus lanceolatus ssp. lanceolatus	1.5	5.27
Psathyrostachys juncea	1	0.00
Thinopyrum intermedium	2	0.00
Phleum pretense	0.2	0.00
Poa pratensis	0.1	5.00
Sterile Triticale - Quick Guard	10.00	4.59
TOTALS	22.04	40.78

Revegetation Seed Mixture for the Pinyon-Juniper Community at the Coal Hollow Project

	Rate* (# PLS/Ac)	Seeds/ft2
SHRUBS		
Amelanchier Utahensis	5.00	2.96
Artemisia nova	0.20	4.16
Artemisia tridentata vaseyana	0.07	4.02
Ceratoides lanata	3.00	3.79
Purshia tridentata	12.00	4.13
Symphoricarpos oreophilus	2.50	4.30
FORBS		
Artemisia ludoviciana	0.04	4.13
Eriogonum umbellatum	1.00	4.80
Hedysarum boreale	5.00	3.86
Lupinus argenteus	15.00	4.30
Sphaeralcea coccinea	0.50	5.74
Viguiera multiflora	0.20	4.84
GRASSES		
Elymus spicatus	1.00	3.21
Elymus smithii	1.50	4.34
Elymus trachycaulus	1.50	5.51
Poa pratensis	0.10	5.00
Poa secunda	0.20	4.25
Stipa hymenoides	1.00	4.32
Sterile Triticale - Quick Guard	10.00	4.59
TOTALS	59.81	82.25

III. VEGETATION ANALYSIS DEMONSTRATION THAT AREA IS NOT CONTRIBUTING SUSPENDED SOLIDS OUTSIDE PERMIT

See attached report "Vegetation Monitoring for Phase II Bond Release 2017 at the Coal Hollow Mine Kane County, Utah" prepared by Mt. Nebo Scientific, Inc.

IV. SURETY BOND REDUCTION

The Phase 2 bond release application is for a liability reduction of $ 483,314 from the current disturbance liability of $ 12,730,495. The current bond for Coal Hollow Mine will remain at $12,750,000. All of the above-described areas within the Reclaimed Coal Mine meet the

requirements of the MRP and the Division's regulations for post mine land use and for backfilling, regrading and drainage control standards.

V. PUBLIC NOTICE

As required by R645-301-880.600, notification of the proposed bond release has been made to the following:

- Southern Utah News
- Alecia Swapp Dame Trust - Richard Dame
- C. Burton Pugh
- BLM-KFO
- Darlynn Sorensen
- Kane County Planning Commission
- Kane County Water Conservancy District
- Alton Mayor – Alton, Utah

Copies of these notices are attached.

VI. CERTIFICATION

I hereby certify to the best of my information and belief that all information contain in this request for bond release is true and correct, to the best of my knowledge and that all applicable reclamation activities have been accomplished in accordance with the requirement of the Act, the regulatory program and the approved reclamation plan.

By Bill Wilcoxa

Title Environmental Specialist

Subscribed and Sworn to before me this 31 day of July ~~2015.~~ 2017

Notary Public Marty Nicholes

My Commission Expires: 9-11-2017

Attest: State of Utah

County of Iron

Notary Public
MARTY NICHOLES
Commission #670359
My Commission Expires
Sept 11, 2017
State of Utah

Notary Public
MARTY NICHOLES
Commission #670359
My Commission Expires
Sept 11, 2017
State of Utah

VEGETATION MONITORING
FOR
PHASE II BOND RELEASE

2017

AT THE
COAL HOLLOW MINE
KANE COUNTY, UTAH

Reclaimed Site at the Coal Hollow Mine

Prepared by

MT. NEBO SCIENTIFIC, INC.
330 East 400 South, Suite 6
P.O. Box 337
Springville, Utah 84663
(801) 489-6937

by

Patrick Collins, Ph.D.

for

ALTON COAL DEVELOPMENT, LLC
463 North 100 West
Cedar City, Utah 84721

August 2017

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PLANT NAMES USED IN THIS DOCUMENT . . . . . (Appendix A)

SAMPLE LOCATION MAP . . . . . (Attachment)

INTRODUCTION

Purpose of the Study

The Coal Hollow Mine has been mining coal in Kane County, Utah since February 2011. As the mining operations have continued and the coal has been extracted, several areas have been reclaimed and reseeded with the final seed mixtures. Reclaimed mine sites are required to provide enough time for acceptable plant establishment before applications can be made for bond releases. One such time-frame, called the *Responsibility Period*, prescribes at least 10 years before the mine operator can submit a request for *Final* or *Phase III Bond Release* through the State of Utah, Division of Oil, Gas & Mining (DOGM). It has been estimated that this period of time is long enough to determine whether or not adequate re-establishment of a given reclaimed plant community has occurred on sites at this precipitation zone in the western United States.

Prior to the end of the Responsibility Period required for Final Bond Release, a portion of the bond can be recovered through the *Phase II Bond Release* process. State Code regulation R646-301–880.321 states that at the completion of Phase II, after revegetation has been established on the regraded mined lands in accordance with the approved reclamation plan, a portion of bond may be released. Phase II Bond Release success standards are primarily based on establishing vegetation to meet runoff control requirements as stated in the regulation that "*no part of the bond or deposit will be released under this paragraph so long as the lands to which the release would be applicable are contributing suspended solids to streamflow or runoff outside the permit area in excess of the requirements set by UCA 40-10-17(2)(j) of the Act and by R645-301-751*".

One method to address the requirements for Phase II Release and to show the limits for the contribution of excess *suspended solids to streamflow or runoff outside the permit area,* is to employ erosion control and soil loss measurements. Another way to meet these requirements involve vegetation monitoring studies on the reclaimed lands. The purpose of this report is to address the latter – to conduct a study and record quantitative data to ascertain whether or not the revegetated areas have enough vegetation cover to adequately control soil loss. The reclaimed areas have been compared to the background

conditions, or nearby native plant communities that have not been disturbed by mining operations. Consequently, the total living cover of the vegetation in the reclaimed areas have been quantitatively sampled along with those areas chosen for final revegetation success standards, some which are *reference areas,* whereas other standards have been "pre-determined" in advance. *Reference areas* are often native, undisturbed plant communities chosen beforehand that approximate the mine site before it was disturbed by the mining activities. Using this approach, data are recorded in the reference areas to be compared with the reclaimed areas.

Study Areas

Reclaimed Areas - To determine if there are major differences between areas, whether it was problems areas or success areas, the reclaimed areas were separated and sampled in specific divisions. First, the areas were divided by the seed mixtures used in reclamation along with their respective revegetation success standards. Next, each of these areas were further subdivided into the years they were seeded. The following table shows these divisions and subdivisions.

Table 1: Reclaimed Area, Seed Mixtures Used and Revegetation Success Standards.

SITE NAME	YEAR SEEDED	SEED MIXTURE USED	REVEGETATION SUCCESS STANDARD
LAS 02	2013	Sagebrush/Grass	Sagebrush/Grass Reference Area
LAS 04	2014	Sagebrush/Grass	Sagebrush/Grass Reference Area
LAS 05	2015	Sagebrush/Grass	Sagebrush/Grass Reference Area
LAS 06	2014	Pinyon-Juniper	Sagebrush/Grass Reference Area
LAS 07	2014	Pinyon-Juniper	Sagebrush/Grass Reference Area
LAS 08	2014	Pasture Lands	Pre-Determined Total Living Cover Standard
LAS 10	2015	Pasture Lands	Pre-Determined Total Living Cover Standard
LAS 13	2016	Pinyon-Juniper	Sagebrush/Grass Reference Area

Reference Area - There was only one reference area that will be used for final revegetation success standards in these particular reclaimed areas, the Sagebrush/Grass Reference Area. The reclaimed Pasture Land will use a pre-determined and approved cover standard.

METHODS

Quantitative and qualitative data were taken of the vegetation in the reclaimed areas and reference area at the Coal Hollow Coal Mine in July 2017. Methodologies used for sampling were performed in accordance with the guidelines provided by DOGM.

Transect and Quadrat Placement

Random/regular placement of sample quadrats were designed as an attempt to provide unbiased accuracy of the data compiled. This was accomplished by establishing long transect lines along the entire lengths of the reclaimed and reference areas. At regular intervals along the transect lines, random numbers were generated and used to measure distances at right angles to determine sample locations. Whether these random numbers were odd or even determined which side of the transect line a given quadrat was placed. The number of transect lines and random numbers selected were of ample size to insure that the sample locations reached the entire lengths and widths of each study area. This insured that the sample quadrats were placed randomly over the entire study area in an attempt to adequately represent the site as a whole.

Cover, Frequency and Composition

Cover estimates were made using ocular methods with meter square quadrats. Species composition and relative frequencies were also assessed from the quadrats. Additional information recorded on the raw data sheets were: slope, exposure, problem areas, grazing use, animal disturbance and other appropriate notes. Plant nomenclature followed "A Utah Flora" (Welsh et al. 2008).

Sample Size & Adequacy

Sampling adequacy was calculated using the formula given below.

$$nMIN = \frac{t^2 s^2}{(dx)^2}$$

where,

nMIN = minimum adequate sample
t = appropriate confidence t-value
s = standard deviation
x = sample mean
d = desired change from mean

The values used for "t" and "d" insured that sample adequacy was met with 80% confidence within a 10% deviation from the true mean.

Photographs

Color photographs of each sample area were taken at the time of sampling and submitted with this report.

RESULTS

Separated Data

Table 2 shows the total living cover of each reclaimed area at the Coal Hollow Mine in 2017. The table also includes the revegetation success standard for total living cover of each area, whether it was from the reference area or the pre-determined standard. With this degree of data separation, the table shows that almost every reclaimed site met or exceeded that of its revegetation success standard.

Table 2: Reclaimed Area, Seed Mixtures Used and Revegetation Success Standards.

SITE NAME	RECLAIMED AREA PERCENT TOTAL LIVING COVER	SUCCESS STANDARD PERCENT TOTAL LIVING COVER
LAS 02	68.33	63.50
LAS 04	58.00	63.50
LAS 05	66.40	63.50
LAS 06	73.00	63.50
LAS 07	62.00	63.50
LAS 08	67.00	64.50
LAS 10	65.13	64.50
LAS 13	62.00	63.50

For locations of the sample areas refer to MAP 1. Color photographs of each sample area are shown following the data summary tables.

Figure 1 is an illustration of the total living cover for each reclaimed area just south of the mine office. These areas included LAS 02, LAS 04 and LAS 05. Prior to disturbance by the mining the vegetation these areas were composed of Sagebrush/Grass and Pasture Lands. Each of these reclaimed areas were reclaimed using the Sagebrush/Grass seed mixture and will use the Sagebrush/Grass Reference Area for revegetation success standards. Additionally, the reference area success standard for cover has been included in the graph.

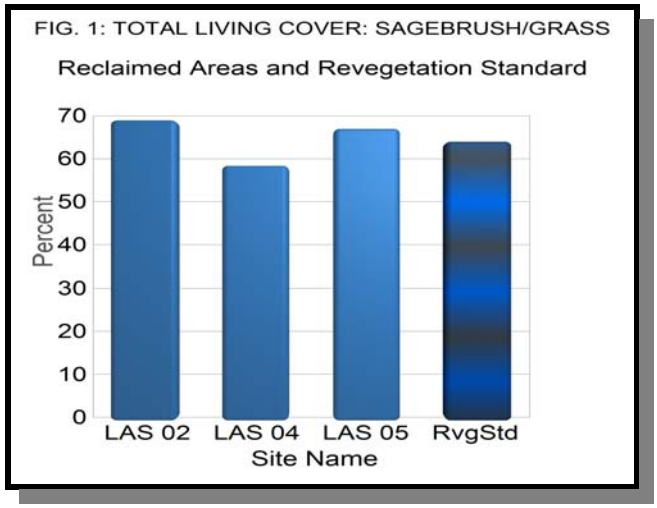
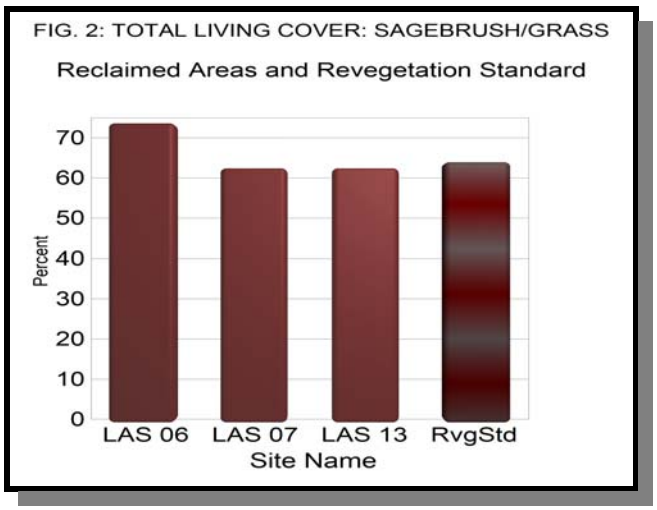
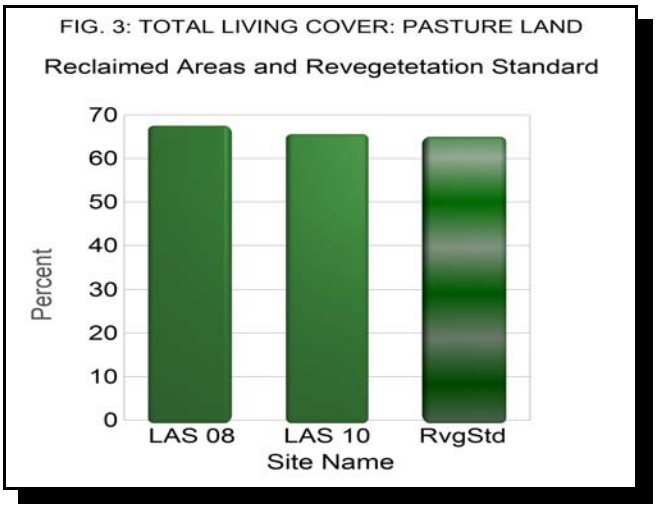


Figure 2 shows the separate total living cover values for another major reclaimed area further south than the above described area. This area was divided into LAS 06, LAS 07 and LAS 13. Prior to disturbance, these areas supported Pinyon-Juniper and Sagebrush/Grass plant communities. This area was seeded with the Pinyon-Juniper seed mix. The Sagebrush-Grass Reference Area will again be used for revegetation success standards here.



Finally, the last major reclaimed area in this study was comprised of Pasture Lands prior to its

disturbance (includes LAS 08 and LAS 10). These areas were seeded with the Pasture Land seed mix and will use an approved and pre-determined cover standard for revegetation success (see Figure 3).



Lumped Data

It was logical, however, to lump certain datasets together for final Phase II Bond Release comparisons. Consequently, these data were separated by geographic locations on the mine site, then lumped together according to the seed mixtures used for revegetation and their revegetation success standards. For example, LAS 02, 04 and 05 were located in the major area just south of the mine office (MAP 1). These areas were seeded with the Sagebrush/Grass seed mixture and will use the Sagebrush/Grass Reference Area for revegetation success standards at the time of Final Bond Release. Accordingly, these areas were lumped together for Phase II Bond Release comparisons in this document. For a more detailed review of the findings, complete dataset summaries of the lumped data are provided below in Tables 3 through 10. These tables include cover by species, frequency, total cover and composition for each dataset of the reclaimed areas as well as the appropriate reference area. Scientific and common plant names used in the document are provided in Appendix A. Statistical comparisons between the covers of the reclaimed areas and success standards are shown in Figure 4.

FIG. 4. Statistical Analyses - Student's t-tests comparing total living cover of the reclaimed sites with the revegetation success standards (2017).

Reclaimed Areas: LAS 02, 04, 05: $\bar{x}$=67.83; s=11.88; n=60
Reference Area Sagebrush/Grass: $\bar{x}$=63.50; s=10.38; n=20
t =1.4541; df =78; SL= NS

Reclaimed Areas: LAS 06, 07, 13: $\bar{x}$=67.50; s=7.83; n=30
Reference Area Sagebrush/Grass: $\bar{x}$=63.50; s=10.38; n
t =1.5522; df =48; SL= NS

Reclaimed Areas: LAS 08, 10: $\bar{x}$=65.93; s=11.38; n=70
Pre-Determined Standard: $\bar{x}$=64.50; s=n/a; n=n/a

t=n/a (no statistical application)

$\bar{x}$= sample mean,
s = sample standard deviation,
n = sample size,
NS = non-significant,
t = Student's t-value,

DISCUSSION

Approval by the State of Utah, Division of Oil, Gas & Mining for Phase II Bond Release is dependent on several factors. One of the most important factors may be whether or not the reclaimed site is controlling erosional sediments as outlined in the INTRODUCTION of this report. Comparing "background" conditions (or in this case the approved reference area or pre-determined standards), it has been shown that the total living cover values, so important for erosion control, of the reclaimed area is not statistically dissimilar than the cover standards for revegetation success.

DOGM also encourages the collection of quantitative data that will show what plant species are growing on the reclaimed sites along and the measured values for each species. Reporting cover in this study by species, frequency and lifeform composition enables the reviewer to see that the reclaimed areas are dominated by desirable plant species suggesting that they will eventually be "*diverse, effective and permanent*", important characteristics for Phase II and Phase III Bond Release applications.

In conclusion, the data and analyses presented in this report suggest that the revegetation at the Coal Hollow Mine is progressing well and Phase II bond release through DOGM may be warranted.

Table 3: Coal Hollow Mine. Living Cover and Frequency by Plant Species (2017).

Reclaimed Sites: LAS 02, 04, 05 n=60	Mean Percent	Standard Deviation	Percent Frequency
SHRUBS			
Artemisia tridentata	0.33	1.80	3.33
Atriplex canescens	0.92	3.59	6.67
Gutierrezia sarothrae	0.17	1.28	1.67
Krascheninnikovia lanata	0.33	1.80	3.33
FORBS			
Achillea millefolium	0.85	3.34	6.67
Convolvulus arvense	0.08	0.64	1.67
Hedysarum boreale	0.25	1.42	3.33
Iva axillaris	0.25	1.42	3.33
Linum lewisii	1.75	3.85	18.33
Medicago sativa	1.58	4.52	13.33
Melilotus officinalis	3.25	6.31	23.33
Tragopogon dubius	0.17	0.90	3.33
GRASSES			
Agropyron cristatum	0.75	2.86	6.67
Bromus tectorum	6.33	12.51	26.67
Elymus hispidus	3.17	9.08	11.67
Elymus junceus	1.08	5.09	3.33
Elymus lanceolatus	0.17	1.28	30.00
Elymus smithii	39.33	22.92	85.00
Elymus trachycaulus	3.92	9.58	5.00
Hordeum jubatum	0.42	2.29	3.33
Poa pratensis	1.83	6.58	8.33
Stipa hymenoides	0.92	4.23	5.00

Table 4: Coal Hollow Mine. Total Cover and Composition (2017).

Reclaimed Sites: LAS 02, 04, 05		n=60
A. TOTAL COVER	**Mean Percent**	**Standard Deviation**
Understory	67.83	11.88
Litter	13.00	5.76
Bareground	16.87	12.51
Rock	2.30	2.15
B. % COMPOSITION		
Trees & Shrubs	2.71	6.90
Forbs	13.01	16.11
Grasses	84.28	17.39

Table 5: Coal Hollow Mine. Living Cover and Frequency by Plant Species (2017)

Reclaimed Sites: LAS 06, 07, 13 n=30	Mean Percent	Standard Deviation	Percent Frequency
SHRUBS			
Artemisia tridentata	0.17	0.90	3.33
FORBS			
Achillea millefolium	1.00	3.00	10.00
Artemisia dracunculus	0.17	0.90	3.33
Helianthus annuus	0.33	1.80	3.33
Linum lewisii	0.33	1.80	3.33
Medicago sativa	5.50	8.88	33.33
Melilotus officinalis	3.00	5.72	26.67
Salsola tragus	2.67	9.98	6.67
GRASSES			
Bromus carinatus	3.17	7.69	16.67
Elymus junceus	1.33	5.62	6.67
Elymus lanceolatus	5.00	8.27	30.00
Elymus smithii	35.50	23.96	86.67
Elymus spicatus	5.50	10.44	26.67
Hordeum jubatum	1.33	4.27	6.67
Poa pratensis	2.50	6.16	16.67

Table 6: Coal Hollow Mine. Total Cover and Composition (2017).

Reclaimed Sites: LAS 06, 07, 13		n=30
A. TOTAL COVER	**Mean Percent**	**Standard Deviation**
Understory	67.50	7.83
Litter	12.00	5.03
Bareground	16.57	7.90
Rock	3.93	2.74
B. % COMPOSITION		
Shrubs	0.21	1.12
Forbs	21.30	25.98
Grasses	78.49	25.93

Table 7: Coal Hollow Mine. Living Cover and Frequency by Plant Species (2017)

Reclaimed Sites: LAS 08, 10 n=70	Mean Percent	Standard Deviation	Percent Frequency
SHRUBS			
Gutierrezia sarothrae	0.21	1.32	2.86
FORBS			
Achillea millefolium	0.50	2.95	2.86
Astragalus cicer	1.14	4.32	8.57
Hedysarum boreale	0.29	1.67	2.86
Iva axillaris	0.36	1.76	4.29
Linum perenne	1.00	3.00	10.00
Medicago sativa	15.86	12.53	75.71
Melilotus officinalis	4.86	8.15	34.29
Salsola tragus	0.36	2.97	1.43
Triticum aestivum	0.79	3.93	4.29
GRASSES			
Agrostis stolonifera	0.71	5.93	1.43
Bromus inermis	7.43	9.77	41.43
Bromus tectorum	2.64	11.24	7.14
Elymus hispidus	12.71	14.36	57.14
Elymus junceum	0.64	3.77	2.86
Elymus lanceolatus	1.64	6.48	8.57
Elymus smithii	7.29	11.64	37.14
Elymus spicatus	2.00	5.94	11.43
Hordeum jubatum	2.00	5.76	12.86
Poa pratensis	3.50	10.15	12.86

Table 9: Coal Hollow Mine. Total Cover and Composition (2017).

Reclaimed Sites: LAS 08, 10		n=70
A. TOTAL COVER	**Mean Percent**	**Standard Deviation**
Understory	65.93	11.38
Litter	12.21	5.03
Bareground	15.56	9.13
Rock	6.30	5.05
B. % COMPOSITION		
Shrubs	0.28	1.70
Forbs	39.20	21.89
Grasses	60.52	21.96

Table 9: Coal Hollow Mine. Living Cover and Frequency by Plant Species (2017).

Reference Area: Sagebrush/Grass	Mean Percent	Standard Deviation	Percent Frequency
TREES & SHRUBS			
Artemisia nova	31.00	18.75	85.00
Artemisia tridentata	9.25	20.39	20.00
Chrysothamnus nauseosus	6.75	9.26	40.00
Juniperus osteosperma	0.50	2.18	5.00
FORBS			
Erigeron religiosus	2.25	4.02	25.00
Iva axillaris	1.00	3.00	10.00
Penstemon sp.	1.00	2.55	15.00
GRASSES			
Bromus tectorum	3.75	7.89	20.00
Elymus spicatus	3.50	7.92	20.00
Juncus arcticus	1.50	3.57	15.00
Poa secunda	2.25	4.60	15.00
Stipa hymenoides	0.75	3.27	5.00

Table 10: Coal Hollow Mine. Total Cover and Composition (2017).

Reference Area: Sagebrush/Grass		n=?
A. TOTAL COVER	**Mean Percent**	**Standard Deviation**
Understory	63.50	10.38
Litter	11.40	5.60
Bareground	22.90	12.30
Rock	2.20	1.66
B. % COMPOSITION		
Trees & Shrubs	74.37	15.73
Forbs	6.44	10.69
Grasses	19.19	17.66

Reclaimed Site: LAS 02

Reclaimed Site: LAS 04

Reclaimed Site: LAS 05

Reclaimed Site: LAS 06

Reclaimed Site: LAS 07

Reclaimed Site: LAS 13

Reclaimed Site: LAS 10

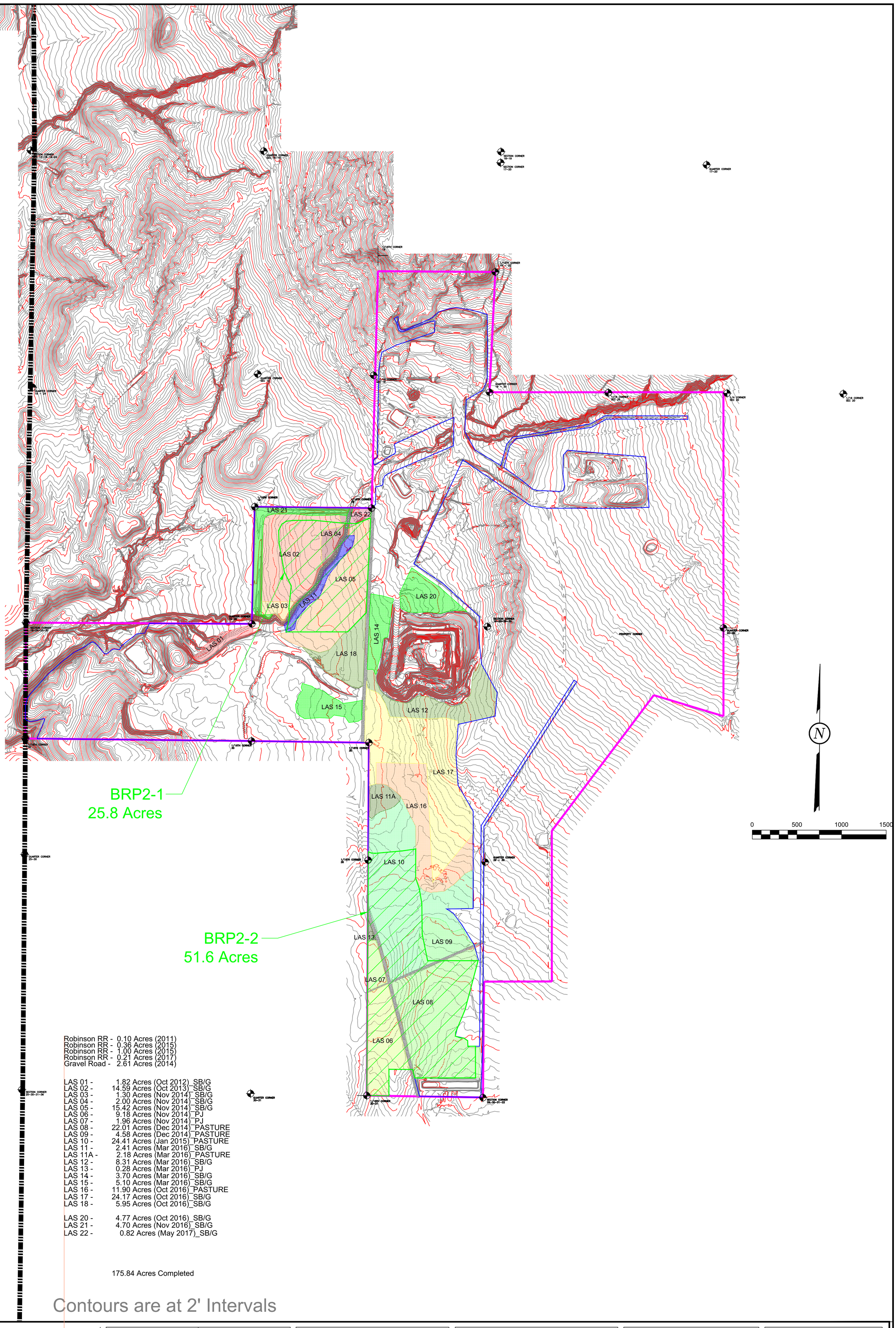
Reclaimed Site: LAS 08

Reference Area: Sagebrush/Grass

APPENDIX A

Plants Names Used in This Document

Scientific Name	**Common Name**
Achillea millefolium	Yarrow
Agropyron cristatum	Crested wheatgrass
Agrostis stolonifera	Redtop
Artemisia dracunculus	Tarragon
Artemisia nova	Black sagebrush
Artemisia tridentata	Big sagebrush
Astragalus cicer	Cicer milkvetch
Atriplex canescens	Fourwing saltbush
Bromus carinatus	Mountain Brome
Bromus inermis	Smooth Brome
Bromus tectorum	Cheatgrass
Chrysothamnus nauseosus	Rubber rabbitbush
Convolvulus arvense	Bindweed
Elymus hispidus	Intermediate wheatgrass
Elymus junceus	Russian wildrye
Elymus lanceolatus	Thickspike wheatgrass
Elymus smithii	Western wheatgrass
Elymus spicatus	Bluebunch wheatgrass
Elymus trachycaulus	Slender wheatgrass
Erigeron religiosus	Religous daisy
Gutierrezia sarothrae	Broom snakeweed
Hedysarum boreale	Northern vetch
Helianthus annuus	Common sunflower
Hordeum jubatum	Foxtail barley
Iva axillaris	Poverty weed
Juncus arcticus	Wiregrass
Juniperus osteosperma	Utah juniper
Krascheninnikovia lanata	Winterfat
Linum lewisii	Lewis flax
Linum perenne	Blue flax
Medicago sativa	Alfalfa
Melilotus officinalis	Yellow sweetclover
Penstemon sp.	Penstemon
Poa pratensis	Kentucky bluegrass
Poa secunda	Sandberg's bluegrass
Salsola tragus	Russian thistle
Stipa hymenoides	Indian ricegrass
Tragopogon dubius	Goatsbeard
Triticum aestivum	Wheat



Robinson RR - 0.10 Acres (2011)
Robinson RR - 0.36 Acres (2015)
Robinson RR - 1.00 Acres (2015)
Robinson RR - 0.21 Acres (2017)
Gravel Road - 2.61 Acres (2014)

LAS 01 - 1.82 Acres (Oct 2012)_SB/G
LAS 02 - 14.59 Acres (Oct 2013)_SB/G
LAS 03 - 1.30 Acres (Nov 2014)_SB/G
LAS 04 - 2.00 Acres (Nov 2014)_SB/G
LAS 05 - 15.42 Acres (Nov 2014)_SB/G
LAS 06 - 9.18 Acres (Nov 2014)_PJ
LAS 07 - 1.96 Acres (Nov 2014)_PJ
LAS 08 - 22.01 Acres (Dec 2014)_PASTURE
LAS 09 - 4.58 Acres (Dec 2014)_PASTURE
LAS 10 - 24.41 Acres (Jan 2015)_PASTURE
LAS 11 - 2.41 Acres (Mar 2016)_SB/G
LAS 11A - 2.18 Acres (Mar 2016)_PASTURE
LAS 12 - 8.31 Acres (Mar 2016)_SB/G
LAS 13 - 0.28 Acres (Mar 2016)_PJ
LAS 14 - 3.70 Acres (Mar 2016)_SB/G
LAS 15 - 5.10 Acres (Mar 2016)_SB/G
LAS 16 - 11.90 Acres (Oct 2016)_PASTURE
LAS 17 - 24.17 Acres (Oct 2016)_SB/G
LAS 18 - 5.95 Acres (Oct 2016)_SB/G

LAS 20 - 4.77 Acres (Oct 2016)_SB/G
LAS 21 - 4.70 Acres (Nov 2016)_SB/G
LAS 22 - 0.82 Acres (May 2017)_SB/G

175.84 Acres Completed

Contours are at 2' Intervals

LEGEND:
PERMIT BOUNDARY
BOND POLYLINE
FOUND SECTION CORNER
BONDED AREA

MAP 1

DRAWN BY:	CHECKED BY:
K NICHOLES	ARC
DRAWING: FIGURE 1	DATE: 06/13/2017
	SCALE: 1" = 500'
JOB NUMBER: 1400	SHEET

REVISIONS

DATE:	BY:
08/01/17	KN

VEGETATION SAMPLE LOCATIONS

Phase II Bond Release

COAL HOLLOW PROJECT
ALTON, UTAH

PROFESSIONAL ENGINEER 10230818 ANDREW R. CHRISTENSEN STATE OF UTAH

Alton Coal Development
Coal Hollow Project

463 North 100 West, Suite 1
Cedar City, Utah 84721
Phone (435)867-5331
Fax (435)867-1192

PUBLIC NOTICE PHASE 2 BOND RELEASE APPLICATION
COAL HOLLOW MINE,
ALTON COAL DEVELOPMENT, LLC

Public Notice
Phase 2 Bond Release Application
Coal Hollow Mine (CHM)
Alton Coal Development, LLC
463 N 100 W, Suite 1
Cedar City, UT 84721
MSHA # 42-02519
Permit # C/025/0005
Permit Approval 11/08/2010

Notice is hereby given that Alton Coal Development, LLC has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas and Mining for Phase 2 Bond Release on approximately 77.431 acres of the Coal Hollow Mine ("CHM" or the "Reclaimed Coal Mine").

All areas for bond release have met the standards of the Utah Coal Program as to the vegetation and water quality requirements for Phase 2 Bond Release (refer to R645-301-880). The locations of the Reclaimed Coal Mine areas in Kane County, Utah are as follows:

> **BRP2 - 1 -** A portion of the CHM within the SE 1/4, SE 1/4 of Sec. 19, and the NE 1/4, NE 1/4 of Sec. 30 T39S, R5W containing **25.814** acres. **BRP2 - 1** includes the former Pit 3, Pit 5 and Pit 6 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2013, 2014 and 2016 for various portions of BRP2-1. The Lower Robinson Creek stream channel, diverted during mining, was reconstructed to its original location with 15" D50 rip-rap placed to a depth of at least 24" along the flow path in September of 2015. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following top soiling and mulching, the prepared portions were seeded in October of 2013, November and December of 2014 and March of 2016.
>
> **BRP2 - 2 -** A portion of the CHM within the E 1/2, E 1/2 of Sec. 30 T39S, R5W containing **51.617** acres. **BRP2 - 2** includes the former Pit 21A, Pit 21B, Pit 22, Pit 23, Pit 24, Pit 25, Pit 26, Pit 27, Pit 28, Surface 6 and Surface 7 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2014, 2015 and Spring of 2016 for various portions of BRP2-2. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following top soiling and mulching, the prepared portions were seeded in November of 2014, December 2014, January 2015 and March of 2016.

The Phase 2 bond release application is for a liability reduction of $ 483,314 from the current disturbance liability of $ 12,730,495. The current bond for Coal Hollow Mine will remain at $12,750,000. All of the above-described areas within the Reclaimed Coal Mine meet the requirements of the MRP and the Division's regulations for post mine land use and for backfilling, regrading and drainage control standards.

A copy of the Phase 2 bond release application with the complete legal description for each area may be examined at the office of Division of Oil, Gas and Mining, 1594 West North Temple, Suite 1210, Salt Lake City, Utah 84114-5801 and written comments, objections, or requests for an informal conference may be submitted to the Salt Lake City address. Said comments must be submitted thirty (30) days from the date of the last publication of this notice. This notice is being published to comply with the Surface Mining Control and Reclamation Act of 1977, the Utah Coal Mining and Reclamation Act and State and Federal regulations promulgated pursuant to said Acts. Published in the Southern Utah News Aug. 3rd, 10th, 17th & 24th.

Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 / Fax (435) 867-1192

August 2, 2017

Alecia Swapp Dame Trust
c/o Richard Dame, Trustee
1620 Georgia Ave.
Boulder City, Nevada 89005

Dear Mr. Dame:

Notice is hereby given that Alton Coal Development, LLC (ACD) has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas and Mining for Phase 2 Bond Release on approximately 77.431 acres of Coal Hollow Mine (CHM or Reclaimed Coal Mine). A portion of the area subject to the Phase 2 Bond Release is leased by ACD from the Alecia Swapp Dame Trust.

All areas for bond release have met the standards of the Utah Coal Program as to the vegetation and water quality requirements for Phase 2 Bond Release (refer to R645-301-880). The locations of the Reclaimed Coal Mine areas in Kane County, Utah are as follows:

BRP2 - 1 - A portion of the CHM within the SE 1/4, SE 1/4 of Sec. 19, and the NE 1/4, NE 1/4 of Sec. 30 T39S, R5W containing **25.814** acres. **BRP2 - 1** includes the former Pit 3, Pit 5 and Pit 6 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2013, 2014 and 2016 for various portions of BRP2-1. The Lower Robinson Creek stream channel, diverted during mining, was reconstructed to its original location with 15" D50 rip-rap placed to a depth of at least 24" along the flow path in September of 2015. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following top soiling and mulching, the prepared portions were seeded in October of 2013, November and December of 2014 and March of 2016.

BRP2 - 2 - A portion of the CHM within the E 1/2, E 1/2 of Sec. 30 T39S, R5W containing **51.617** acres. **BRP2 - 2** includes the former Pit 21A, Pit 21B, Pit 22, Pit 23, Pit 24, Pit 25, Pit 26, Pit 27, Pit 28, Surface 6 and Surface 7 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2014, 2015 and Spring of 2016 for various portions of BRP2-2. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following

top soiling and mulching, the prepared portions were seeded in November of 2014, December 2014, January 2015 and March of 2016.

The Phase 2 bond release application is for a liability reduction of $ 483,314 from the current disturbance liability of $ 12,730,495. The current bond for Coal Hollow Mine will remain at $12,750,000. All of the above-described areas within the Reclaimed Coal Mine meet the requirements of the MRP and the Division's regulations for post mine land use and for backfilling, regrading and drainage control standards.

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If you have any questions, please call me at (435) 867-5331 or (435) 691-1551.

Sincerely,

B. Kirk Nicholes

B. Kirk Nicholes
Environmental Specialist

Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 / Fax (435) 867-1192

August 2, 2017

C. Burton Pugh
533 N 650 E.
Lindon, Utah 84042-1567

Dear Mr. Pugh:

Notice is hereby given that Alton Coal Development, LLC (ACD) has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas and Mining for Phase 2 Bond Release on approximately 77.431 acres of Coal Hollow Mine (CHM or Reclaimed Coal Mine). A portion of the area subject to the Phase 2 Bond Release is leased by ACD from the Alecia Swapp Dame Trust.

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BRP2 - 2 - A portion of the CHM within the E 1/2, E 1/2 of Sec. 30 T39S, R5W containing **51.617** acres. **BRP2 - 2** includes the former Pit 21A, Pit 21B, Pit 22, Pit 23, Pit 24, Pit 25, Pit 26, Pit 27, Pit 28, Surface 6 and Surface 7 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2014, 2015 and Spring of 2016 for various portions of BRP2-2. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following top soiling and mulching, the prepared portions were seeded in November of 2014, December 2014, January 2015 and March of 2016.

C. Burton Pugh

The Phase 2 bond release application is for a liability reduction of $ 483,314 from the current disturbance liability of $ 12,730,495. The current bond for Coal Hollow Mine will remain at $12,750,000. All of the above-described areas within the Reclaimed Coal Mine meet the requirements of the MRP and the Division's regulations for post mine land use and for backfilling, regrading and drainage control standards.

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If you have any questions, please call me at (435) 867-5331 or (435) 691-1551.

Sincerely,

B. Kirk Nicholes

B. Kirk Nicholes
Environmental Specialist

Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 / Fax (435) 867-1192

August 2, 2017

BLM-KFO
James Holland
669 South Highway 89A
Kanab, Utah 84741

Dear Mr. Holland:

Notice is hereby given that Alton Coal Development, LLC (ACD) has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas and Mining for Phase 2 Bond Release on approximately 77.431 acres of Coal Hollow Mine (CHM or Reclaimed Coal Mine).

All areas for bond release have met the standards of the Utah Coal Program as to the vegetation and water quality requirements for Phase 2 Bond Release (refer to R645-301-880). The locations of the Reclaimed Coal Mine areas in Kane County, Utah are as follows:

BRP2 - 1 - A portion of the CHM within the SE 1/4, SE 1/4 of Sec. 19, and the NE 1/4, NE 1/4 of Sec. 30 T39S, R5W containing **25.814** acres. **BRP2 - 1** includes the former Pit 3, Pit 5 and Pit 6 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2013, 2014 and 2016 for various portions of BRP2-1. The Lower Robinson Creek stream channel, diverted during mining, was reconstructed to its original location with 15" D50 rip-rap placed to a depth of at least 24" along the flow path in September of 2015. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following top soiling and mulching, the prepared portions were seeded in October of 2013, November and December of 2014 and March of 2016.

BRP2 - 2 - A portion of the CHM within the E 1/2, E 1/2 of Sec. 30 T39S, R5W containing **51.617** acres. **BRP2 - 2** includes the former Pit 21A, Pit 21B, Pit 22, Pit 23, Pit 24, Pit 25, Pit 26, Pit 27, Pit 28, Surface 6 and Surface 7 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2014, 2015 and Spring of 2016 for various portions of BRP2-2. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following top soiling and mulching, the prepared portions were seeded in November of 2014, December 2014, January 2015 and March of 2016.

BLM-KFO
James Holland

The Phase 2 bond release application is for a liability reduction of $ 483,314 from the current disturbance liability of $ 12,730,495. The current bond for Coal Hollow Mine will remain at $12,750,000. All of the above-described areas within the Reclaimed Coal Mine meet the requirements of the MRP and the Division's regulations for post mine land use and for backfilling, regrading and drainage control standards.

A copy of the Phase 2 bond release application with the complete legal description for each area may be examined at the office of Division of Oil, Gas and Mining, 1594 West North Temple, Suite 1210, Salt Lake City, Utah 84114-5801 and written comments, objections, or requests for an informal conference may be submitted to the Salt Lake City address. Said comments must be submitted thirty (30) days from the date of the last publication of this notice. This notice is being published to comply with the Surface Mining Control and Reclamation Act of 1977, the Utah Coal Mining and Reclamation Act and State and Federal regulations promulgated pursuant to said Acts. Published in the Southern Utah News Aug. 3rd, 10th, 17th & 24th.

If you have any questions, please call me at (435) 867-5331 or (435) 691-1551.

Sincerely,

B. Kirk Nicholes

B. Kirk Nicholes
Environmental Specialist

Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 / Fax (435) 867-1192

August 2, 2017

Darlynn Sorensen
P.O. Box 47
Orderville, Utah 84758

Dear Mr. Sorensen:

Notice is hereby given that Alton Coal Development, LLC (ACD) has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas and Mining for Phase 2 Bond Release on approximately 77.431 acres of Coal Hollow Mine (CHM or Reclaimed Coal Mine).

All areas for bond release have met the standards of the Utah Coal Program as to the vegetation and water quality requirements for Phase 2 Bond Release (refer to R645-301-880). The locations of the Reclaimed Coal Mine areas in Kane County, Utah are as follows:

BRP2 - 1 - A portion of the CHM within the SE 1/4, SE 1/4 of Sec. 19, and the NE 1/4, NE 1/4 of Sec. 30 T39S, R5W containing **25.814** acres. **BRP2 - 1** includes the former Pit 3, Pit 5 and Pit 6 of the South Private Lease. Phase 1 bond release was approved for this area on November 9, 2015. Topsoil (approximately 8") was placed in the fall of 2013, 2014 and 2016 for various portions of BRP2-1. The Lower Robinson Creek stream channel, diverted during mining, was reconstructed to its original location with 15" D50 rip-rap placed to a depth of at least 24" along the flow path in September of 2015. Straw mulch at a minimum of 1,500 lbs./acre and Nutri-Mulch® at a minimum of 1,500 lbs./acre was placed soil surface. Following top soiling and mulching, the prepared portions were seeded in October of 2013, November and December of 2014 and March of 2016.

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Darlynn Sorensen

The Phase 2 bond release application is for a liability reduction of $ 483,314 from the current disturbance liability of $ 12,730,495. The current bond for Coal Hollow Mine will remain at $12,750,000. All of the above-described areas within the Reclaimed Coal Mine meet the requirements of the MRP and the Division's regulations for post mine land use and for backfilling, regrading and drainage control standards.

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Sincerely,

B. Kirk Nicholes

B. Kirk Nicholes
Environmental Specialist

Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 / Fax (435) 867-1192

August 2, 2017

Kane County Planning Commission
180 West 300 North
Kanab, Utah 84741

Dear Mr. McBride:

Notice is hereby given that Alton Coal Development, LLC (ACD) has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas and Mining for Phase 2 Bond Release on approximately 77.431 acres of Coal Hollow Mine (CHM or Reclaimed Coal Mine).

All areas for bond release have met the standards of the Utah Coal Program as to the vegetation and water quality requirements for Phase 2 Bond Release (refer to R645-301-880). The locations of the Reclaimed Coal Mine areas in Kane County, Utah are as follows:

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Kane County Planning Commission
August 2, 2017

The Phase 2 bond release application is for a liability reduction of $ 483,314 from the current disturbance liability of $ 12,730,495. The current bond for Coal Hollow Mine will remain at $12,750,000. All of the above-described areas within the Reclaimed Coal Mine meet the requirements of the MRP and the Division's regulations for post mine land use and for backfilling, regrading and drainage control standards.

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Sincerely,

B. Kirk Nicholes

B. Kirk Nicholes
Environmental Specialist

Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 / Fax (435) 867-1192

August 2, 2017

Kane County Water Conservancy District
190 E. Center Street Suite 200
Kanab, Utah 84741

To whom it may concern:

Notice is hereby given that Alton Coal Development, LLC (ACD) has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas and Mining for Phase 2 Bond Release on approximately 77.431 acres of Coal Hollow Mine (CHM or Reclaimed Coal Mine).

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Kane County Water Conservancy District

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B. Kirk Nicholes

B. Kirk Nicholes
Environmental Specialist

Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720
Phone (435) 867-5331 / Fax (435) 867-1192

August 2, 2017

Alton, Utah
Mayor Cox
156 West 100 North
Alton, Utah 84710

Dear Mayor Cox:

Notice is hereby given that Alton Coal Development, LLC (ACD) has filed an application with the Utah Department of Natural Resources, Division of Oil, Gas and Mining for Phase 2 Bond Release on approximately 77.431 acres of Coal Hollow Mine (CHM or Reclaimed Coal Mine).

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Alton, Utah
Mayor Cox

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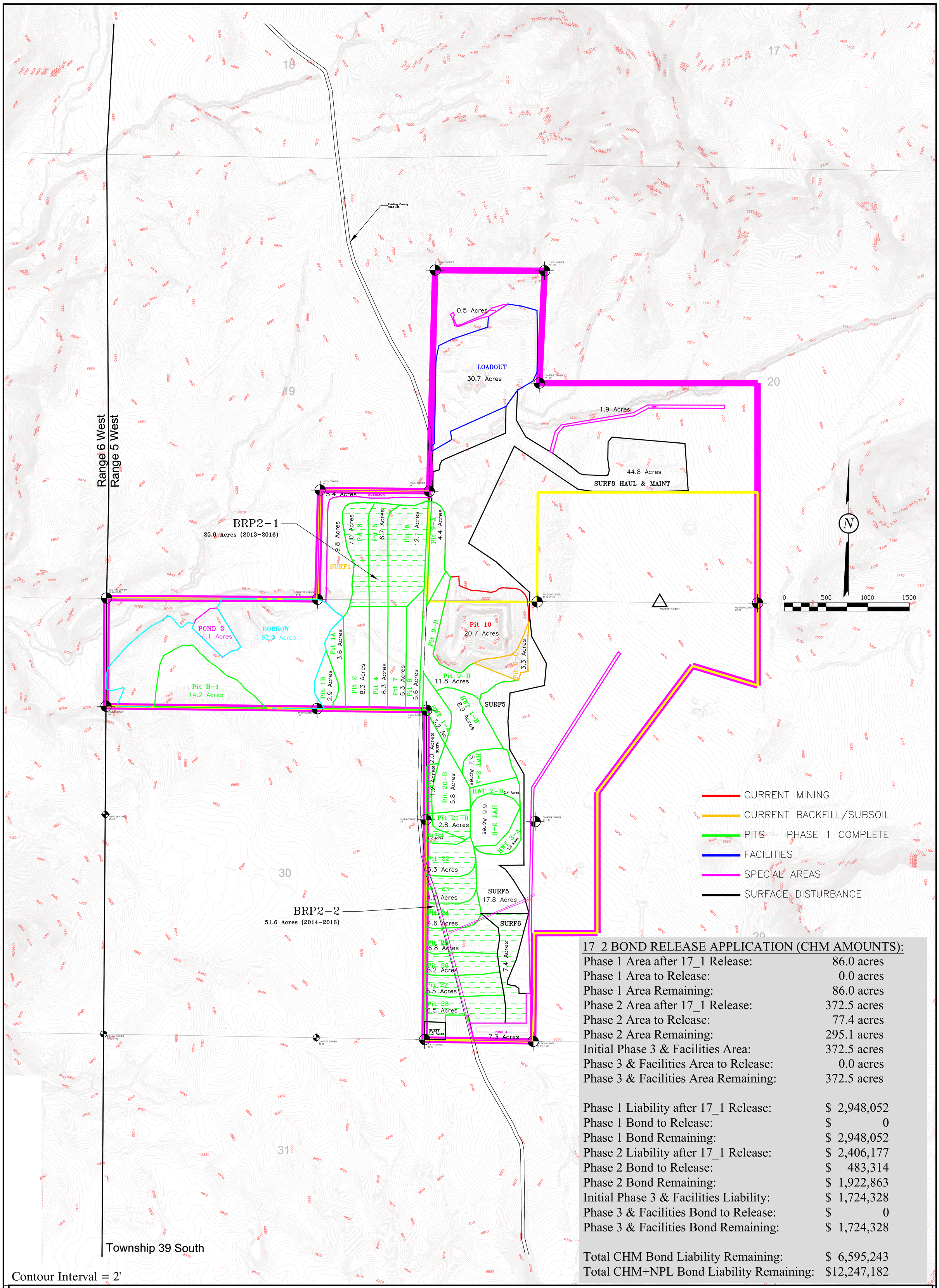
Sincerely,

B. Kirk Nicholes

B. Kirk Nicholes
Environmental Specialist



17_2 BOND RELEASE APPLICATION (CHM AMOUNTS):

Phase 1 Area after 17_1 Release:	86.0 acres
Phase 1 Area to Release:	0.0 acres
Phase 1 Area Remaining:	86.0 acres
Phase 2 Area after 17_1 Release:	372.5 acres
Phase 2 Area to Release:	77.4 acres
Phase 2 Area Remaining:	295.1 acres
Initial Phase 3 & Facilities Area:	372.5 acres
Phase 3 & Facilities Area to Release:	0.0 acres
Phase 3 & Facilities Area Remaining:	372.5 acres
Phase 1 Liability after 17_1 Release:	$ 2,948,052
Phase 1 Bond to Release:	$ 0
Phase 1 Bond Remaining:	$ 2,948,052
Phase 2 Liability after 17_1 Release:	$ 2,406,177
Phase 2 Bond to Release:	$ 483,314
Phase 2 Bond Remaining:	$ 1,922,863
Initial Phase 3 & Facilities Liability:	$ 1,724,328
Phase 3 & Facilities Bond to Release:	$ 0
Phase 3 & Facilities Bond Remaining:	$ 1,724,328
Total CHM Bond Liability Remaining:	$ 6,595,243
Total CHM+NPL Bond Liability Remaining:	$12,247,182

LEGEND:
- PERMIT BOUNDARY
- PRIVATE COAL OWNERSHIP
- ULTIMATE PIT BOUNDARY
- DISTURBANCE BNDY
- SECTION LINE
- FOUND SECTION CORNER
- FOUND PROPERTY CORNER

DRAWN BY:	CHECKED BY:
A. Christensen	KN
DRAWING: Fig. 1	DATE: 8/2/2017
	SCALE: 1" = 500' Printed on 24" x36"
JOB NUMBER:	SHEET

REVISIONS

DATE:	BY:
xx/xx/xx	xx

OVERVIEW PROPOSED BOND RELEASE 17_2

COAL HOLLOW PROJECT
ALTON, UTAH

Figure 1

PROFESSIONAL ENGINEER 10230818 ANDREW R. CHRISTENSEN STATE OF UTAH

Alton Coal Development
Coal Hollow Project
463 North 100 West, Suite 1
Cedar City, Utah 84721
Phone (435)867-5331
Fax (435)867-1192