

SL-14, Partial Phase I Bond Release

Proposed Decision
and
Findings of Compliance
for the

West Elk Mine

PERMIT NUMBER C-1980-007



Virginia Brannon, Director

Prepared by
Leigh D. Simmons
Environmental Protection Specialist

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Introduction

This document represents the proposed decision of the Colorado Division of Reclamation, Mining and Safety (the Division) in response to a request for partial Phase I bond release at the West Elk Mine, Division file number C-1980-007. The package contains four parts. These include: 1) procedures and summary of the bond release process; 2) criteria and schedule for bond release; 3) observations and findings of the Division regarding compliance with the bond release requirements of the Colorado Surface Coal Mining and Reclamation Act and regulations promulgated thereunder; and 4) the Division's proposed decision on the request for bond release.

Detailed information about the review process can be found in the Act and the Regulations of the Colorado Mined Land Reclamation Board for Coal Mining. All Rules referenced within this document are contained within the Regulations. Detailed information about the mining and reclamation operations can be found in the permit application on file at the Division offices, located at 1313 Sherman Street, Room 215, in Denver, Colorado.

The West Elk Mine is an underground mine which is permitted and operated by Mountain Coal Company, LLC. The ownership of the land for which bond release has been requested is federal, and the coal ownership was also federal. Reclamation for which bond release has been requested was conducted during 2019-20.

I. PROCEDURES AND SUMMARY OF THE REVIEW PROCESS

Mountain Coal Company, LLC (MCC) applied for Partial Phase I Bond Release under the Colorado Surface Coal Mining and Reclamation Act following reclamation of a portion of the West Elk Mine. The mine is located in Delta and Gunnison Counties. The mine permit area is located in: Portions of Sections 9 through 36 (inclusive), Township 13 South, Range 90 West; Portions of Sections 23 through 26 (inclusive), Township 13 South, Range 91 West; Portions of Sections 1 through 5, 8 through 12, 14 through 16, and 21 through 23, Township 14 South, Range 90 West; all of the 6th P.M.

Summary of Previous Bond Releases

Partial Phase I Bond Release SL-01 was received on July 19, 2004 and requested a release of 15.19 acres for the thermal event disturbance area. The Division approved the Partial Phase I Bond Release SL-01 on October 14, 2005 and released \$79,727.00

Partial Phase I Bond Release SL-02 was received on July 26, 2004 and requested a release of 5.5 acres for the Lone Pine Gulch facilities area. The Division approved the Partial Phase I Bond Release SL-02 on November 2, 2005 and released \$122,629.00

Partial Phase I Bond Release SL-03 was received on May 16, 2011 and requested a release of 47.65 acres. The release included the plugging and abandonment of 74 drill holes, the backfilling and regrading of 48 drill pads and the backfilling and regrading of approximately 8.5 miles of roads. The Division issued its proposed decision to approve the Partial Phase I Bond Release SL-03 on August 10, 2012 and released \$470,488.00

Partial Phase II Bond Release SL-04 was received on October 3, 2013 and requested a release of 67.6 acres. The release included the replacement of topsoil and revegetation to control erosion to pre-mining levels on vent shafts, drill pads and their associated light-use roads. The Division issued its proposed decision to approve the Partial Phase II Bond Release SL-04 on July 8, 2013 and released \$196,037.00

Partial Phase I Bond Release SL-05 was received on February 22, 2013 and requested a release of 13.85 acres. The release included the plugging and abandonment of 24 drill holes, the backfilling and regrading of 17 drill pads and the backfilling and regrading of approximately 2.1 miles of roads. The Division issued its proposed decision to approve the Partial Phase I Bond Release SL-05 on February 11, 2014 and released \$94,475.00

Partial Phase III Bond Release SL-06 was received on December 3, 2013 and requested the final bond release of 24.2 acres. The release included the Lone Pine area, the thermal event area and the West Point area. The Division issued its proposed decision to approve the Partial Phase III Bond Release SL-06 on June 12, 2015 and released \$69,761.00

Partial Phase I Bond Release SL-07 was received on May 1, 2014 and requested a release of 19.23 acres. The release included the plugging and abandonment of 22 drill holes, the backfilling and regrading of 22 drill pads and the backfilling and regrading of the associated light-use roads and road spurs. The release also included the Partial Phase I Release of the

Monument Dam Borrow Area. The Division issued its proposed decision to approve the Partial Phase I Bond Release SL-07 on April 13, 2015 and released \$97,871.00

Partial Phase I Bond Release SL-08 was received on May 18, 2015 and requested a release of 10.05 acres. The release included the plugging and abandonment of 15 Mine Ventilation Boreholes (MVBs), the backfilling and regrading of 11 drill pads, and the backfilling and regrading of the associated roads and road spurs (eight total). The Division issued its proposed decision to approve the Partial Phase I Bond Release SL-08 on November 20, 2015 and released \$110,452.00

Partial Phase III Bond Release SL-09 was received on November 4, 2015 and requested the final bond release of 22.1 acres. The release included the revegetation of 18 drill pads, including seven with associated spur roads, and four road segments in the Deep Creek, Long Draw, Long Draw Saddle, and West Point Road mining areas. The Division issued its proposed decision to approve the Partial Phase III Bond Release SL-09 on December 1, 2016 and released \$38,462.00

Partial Phase I Bond Release SL-10 was received on April 27, 2016 and requested a release of 9.97 acres. The release included the plugging and abandonment of 21 drill holes, and the backfilling and regrading of 17 associated pads and roads. The Division issued its proposed decision to approve the Partial Phase I Bond Release SL-10 on December 22, 2016 and released \$149,727.22

Partial Phase III Bond Release SL-11 was received on September 6, 2018 and requested a release of 15.25 acres. The release application included the successful revegetation of 15.25 acres of reclaimed drill pads and roads on the West Flatiron. The Division issued its proposed decision to approve the Partial Phase III Bond Release SL-11 on December 12, 2020 and released \$26,825.00

Partial Phase I Bond Release SL-12 was received on December 14, 2018 and requested the release of 22.58 acres. The release application included the plugging and abandonment of 33 Mine Ventilation Boreholes (MVBs), nine exploration drill holes (five of which were converted to MVBs) and nine monitoring wells; and the backfilling and regrading of 26 drill pads, and seven associated road segments. The Division issued its proposed decision to approve the Partial Phase I Bond Release SL-12 on July 3, 2021 and released \$295,827.06

Partial Phase II Bond Release SL-13 was received on August 27, 2020. The release included the successful redistribution of topsoil and the establishment of vegetative cover adequate to control erosion on 50.04 acres of predominantly Mine Ventilation Borehole pads and associated access roads. The Division issued its proposed decision to approve the Partial Phase II Bond Release SL-13 on October 13, 2021 and released \$81,667.48

The Division received MCC's application for a Partial Phase I Bond Release on March 4, 2021. The application was deemed complete on April 21, 2021, after the Division received proof of publication of the applicant's public notice. MCC published notice of the bond release application in the *Delta County Independent* once weekly for four consecutive weeks, beginning March 10, 2021. MCC also notified land owners within and adjacent to the mine permit area, and other interested parties of the application

for bond release, as required by Rule 3.03.2(1).

No comments, written objections, or requests for an informal conference regarding the bond release application were received by the Division.

The Division scheduled and conducted a bond release inspection on June 8-10, 2021, which allowed time for snow to melt and roads to dry out. The site inspection was conducted in accordance with Rule 3.03.2(2). The inspection was attended throughout by Leigh Simmons (Division) and Dan Gray (USFS), and at times by Nicki Poulos (MCC). No representatives of OSMRE or the BLM were present, although both agencies had been notified by certified mail. An initial adequacy review letter was sent to MCC on June 25, 2021, and a response was received by the Division on August 16, 2021. A second adequacy letter was sent to MCC on September 7, 2021, and a response was received on September 9, 2021. During the adequacy review period follow-up inspections were made on July 20, 2021 and September 14, 2021. Some of the sites included with the initial SL-14 application were withdrawn. Three monitoring wells and the two exploration holes that were originally included in the SL-13 Phase II application were transferred to SL-14. The agreed final list of sites to be included in the SL-14 application following the adequacy correspondence is given in Table 1.

Table 1*

Phase	Site Details	Type	Landowner/ manager	Acreage	Reclamation Date
I	E6-13 & road	E-seam MVB	USFS	0.81	2019
I	E7-1 & road	E-seam MVB	USFS	0.69	2019
I	E7-2 & road	E-seam MVB	USFS	0.4	2019
I	E7-3 & road	E-seam MVB	USFS	0.71	2019
I	E7-4 & road	E-seam MVB	USFS	2.25	2020
I	E7-5 & road	E-seam MVB	USFS	1.09	2019
I	E7-7 & road	E-seam MVB	USFS	0.74	2019
I	E7-10	E-seam MVB	USFS	0.61	2019
I	E7-11	E-seam MVB	USFS	0.5	2019
I	E8-1 & road	E-seam MVB	USFS	0.71	2020
I	E8-2 & road	E-seam MVB	USFS	0.47	2020
I	E8-3 & road	E-seam MVB	USFS	0.75	2020
I	E8-4	E-seam MVB	USFS	0.54	2020
I	E8-5 & road	E-seam MVB	USFS	0.76	2020
I	E8-7 & road	E-seam MVB	USFS	1.02	2020
I	Well 96-2-2	Monitoring well	USFS	0	2014
I	Well SOM-3B	Monitoring well	USFS	0	2013
I	Well SOM-3E	Monitoring well	USFS	0	2013
I	10LC01	E-seam exploration	USFS	0	2014
I	10LC02	E-seam exploration	USFS	0	2014
	Total acreage for SL-14			12.05	

*Monitoring wells are constructed with minimal disturbance, usually on existing pads. Exploration holes 10LC01 and 10LC02 were permitted as "Lick Creek Portal Investigation holes A-F" with MR-406, which allowed for a maximum of six holes to be drilled. No additional disturbance was permitted. Only two of the six holes were constructed.

II. CRITERIA AND SCHEDULE FOR BOND RELEASE

PHASE I

Rule 3.03.1(2)(a) states, "Up to sixty percent of the applicable bond amount shall be released when the permittee successfully completes backfilling, regrading, and drainage control in accordance with the approved reclamation plan." With regard to Phase I bond release, the approved reclamation plan for the West Elk Mine is given in section 2.05.4 of the Permit Application Packet (PAP). The parts of the reclamation plan applicable to the sites included in Table 1 call for the proper sealing of drill holes (see below), and the regrading of the drill pads and associated roads to approximate original contour. During regrading any highwalls and mudpits must be backfilled. None of the sites in Table 1 required the re-establishment of a permanent drainage.

Details of the procedures for the sealing of drill holes are given on page 2.05-87 of the PAP:

Exploration drill holes, MVBs, and other drill holes will be sealed in one of the following ways, dependent upon presence of ground water in the drill hole.

Exploration drill holes, and other drill holes not completed to aquifers will be sealed by replacing cuttings or other suitable material in the hole and placing an appropriate plug approximately ten feet below the ground surface. MVBs will be sealed by positioning a plug down the hole to the point of refusal, topping the plug with a hole-plug sealer and then backfilling the hole with cement or other suitable material to approximately ten feet below the ground surface. Then cement (or other suitable media) will be placed in the hole to a depth of approximately three feet below the ground surface. The remaining three feet will be filled with native earth or other suitable material. The hole will be marked.

Exploration drill holes and other drill holes completed in aquifers not exhibiting artesian flow will be sealed by placing a cement plug extending approximately twenty feet above and below the water bearing zone. A surface plug will be placed as with dry holes. In the case of a hole exhibiting artesian flow at the surface, the hole will be sealed by placing cement from the bottom of the hole to within approximately ten feet of the ground surface. A surface plug will then be installed. Holes will be marked.

In shallow soil borings not penetrating bedrock (typically 30 feet deep or less), MCC will abandon the dry holes by shoveling the cuttings back into the holes. No contamination will occur and natural healing will augment MCC efforts.

In instances where sealing of drill holes encountering alluvium or bedrock are not specifically addressed under a coal exploration drilling permit, MCC will prepare an abandonment report and submit the report as soon as possible following completion of the plugging and abandonment project, but typically by the end of the calendar year in which it was completed. The report will contain the information identified in Rule 4.07.3(3).

III. OBSERVATIONS AND FINDINGS

PHASE I

Plugging and abandonment reports are available for all the drill holes in Table 1. The location and marking of the abandoned holes has been verified by the Division.

Approximate original contour for the drill pads and roads was verified during the inspection by visual observation. All of the material that had been stockpiled on each site during the construction phase had been used during the reclamation phase to achieve approximate original contour (or used in the pad or road cut and fill).

No debris, trash, drilling related equipment or de-gas housings were found in the bond release areas. No mud pits were found. Borehole location markers were verified.

All backfill material has been properly regraded on disturbed areas in the bond release area, resulting in the disturbed lands blending well with the natural contour of adjacent, undisturbed lands. Cut slopes had also been regraded to blend with adjacent undisturbed lands. Access roads had uneven surfaces, as specified in the reclamation plan. Regraded areas were structurally stable. No tension cracks, head scarps, or compression bulges were found.

All areas displayed positive drainage at the time of the inspection, with no low spots in the regraded areas that would allow precipitation to pond. There were no signs of excessive erosion (e.g., rills, gullies, or sediment fans). The operator made use of downed trees and other slash in the bond release area for erosion control (and for preventing motor vehicle access) by placing the downed trees and slash across reclaimed pads and roads. Backfilling and grading on most of the disturbed sites has created gentle slopes having slope lengths less than approximately 300 feet long, indicating that surface flow is likely to drain across the disturbed area chiefly as sheet-flow, rather than more erosive concentrated-flow. No berms or other obstructions were left on the downslope edges of disturbed areas that would impede flow off of the disturbed lands. While not a Phase I standard, all of the topsoil had been replaced on the drill pads and roads and vegetative growth was apparent on all of the reclaimed drill pads and roads at the time of the inspection. This vegetation will help to further stabilize the reclaimed areas and control erosion.

Summary and Conclusions

Based upon a review of the mine permit, the applicant's bond release application, and site inspections, the Division finds that MCC has completed backfilling, grading and drainage reestablishment of the sites in Table 1 in accordance with the approved reclamation plan.

IV. PROPOSED DECISION

Based on the observations above, the Division proposes to approve MCC's request for a Partial Phase I bond release for the West Elk Mine. This proposed decision will release the applicant from liability for

backfilling, grading, and drainage reestablishment for the sites shown in Table 1, totaling 12.05 acres.

An accounting of the West Elk Mine's bond release history is provided in Table 2 below.

Table 2

West Elk Mine C-1980-007 Bond Release History						
	Phase I		Phase II		Phase III	
Release	Acres	Amount	Acres	Amount	Acres	Amount
SL-01	15.19	\$79,727.00	0.00	\$0.00	0.00	\$0.00
SL-02	5.50	\$122,629.00	0.00	\$0.00	0.00	\$0.00
SL-03	47.65	\$470,488.00	0.00	\$0.00	0.00	\$0.00
SL-04	0.00	\$0.00	67.60	\$196,037.00	0.00	\$0.00
SL-05	13.85	\$94,475.00	0.00	\$0.00	0.00	\$0.00
SL-06	0.00	\$0.00	0.00	\$0.00	24.20	\$69,761.00
SL-07	19.23	\$97,871.00	0.00	\$0.00	0.00	\$0.00
SL-08	10.05	\$110,452.00	0.00	\$0.00	0.00	\$0.00
SL-09	0.00	\$0.00	0.00	\$0.00	22.10	\$38,462.00
SL-10	9.97	\$149,727.22	0.00	\$0.00	0.00	\$0.00
SL-11	0.00	\$0.00	0.00	\$0.00	15.25	\$26,825.00
SL-12	22.58	\$295,827.06	0.00	\$0.00	0.00	\$0.00
SL-13	0.00	\$0.00	50.04	\$81,667.48	0.00	\$0.00
Total	144.02	\$1,421,196.28	117.64	\$277,704.48	61.55	\$135,048.00

Prior to the SL-14 application the total disturbed acreage (TDA) at the West Elk Mine was 554.53 acres, and the required surety (RS) was \$11,903,264.46. Rule 3.03.1(2) allows for the release of up to 60% of the applicable bond at Phase I, 25% at Phase II and the remaining 15% at Phase III, the calculation below shows the maximum dollar amount eligible for release with the approval of SL-14 (X):

$$X = \frac{SL14 \text{ acres}}{TDA} \times RS \times 0.6$$

$$X = \frac{22.58}{554.53} \times \$11,903,264.46 \times 0.6$$

$$X = \$155,195.57$$

Table 3

Maximum Bond Eligible For Release per Rule 3.03.1(2)				
	Prior to SL-14 (Acres)	Prior to SL-14 (Required Surety)	SL-14 (Acres)	Eligible for release with SL-14
Phase I - 60%		\$7,141,958.68	12.05	\$155,195.57
Phase II - 25 %		\$2,975,816.12	0.00	\$0.00
Phase III - 15%		\$1,785,489.67	0.00	\$0.00
Total	554.53	\$11,903,264.46		\$155,195.57

In the site-wide reclamation cost estimate (RCE) recently completed with the approval of Permit Renewal 07 (RN-07) the reclamation of sites included in the SL-14 application is accounted for in tasks 423a, 427a, 427b, 428a, 428b, 429a, 429b and 441 (all of which also include sites that are not addressed with SL-14); these tasks will need to be reconciled when the next site-wide RCE is calculated. The pro-rated total of the estimated direct costs associated with these tasks (Y) is \$146,798.23, as shown in table 4.

Table 4

RN7 Cost Estimate Task Number	Task Description	Task Direct Cost
423a	Lick Creek Portal Investigation Holes A-F, plug and seal	\$16,217.00
423b	Lick Creek Portal Investigation Holes A-F, regrade	\$10,106.00
427a	7 E-seam MVBs panels 2-6, plug and seal	\$24,409.00
	Task 427a pro-rated for 1 of 7 MVBs	\$3,487.00
427b	7 E-seam MVBs panels 2-6, backfill and regrade	\$35,016.00
	Task 427b pro-rated for 0.81 of 6.93 acres	\$4,092.78
428a	12 E-seam MVBs panel 7, plug and seal	\$41,839.00
	Task 428a pro-rated for 8 of 12 MVBs	\$27,892.67
428b	12 E-seam MVBs panel 7, backfill and regrade	\$41,433.00
	Task 428b pro-rated for 6.99 of 8.2 acres	\$35,319.11
429a	8 E-seam MVBs panel 8, plug and seal	\$27,886.00
	Task 429a pro-rated for 6 of 8 MVBs	\$20,914.50
429b	8 E-seam MVBs panel 8, backfill and regrade	\$36,056.00
	Task 429b pro-rated for 4.25 of 7.14 acres	\$21,461.90
441	33 Monitoring wells: plug and seal	\$80,380.00
	Task 441 pro-rated for 3 of 33 Monitoring wells	\$7,307.27
	Total applicable to SL-14	\$146,798.23

In order to (i) comply with rule 3.03.1(2) and (ii) ensure that the revised required surety is sufficient to cover the remaining reclamation liability at the mine, the Division will release whichever is the smaller of the two values X and Y. In this case, the smaller value, Y, is \$146,798.23.

The Division currently holds a performance bond of \$15,000,000. Based on the observations above, the Division proposes to release \$146,798.23. Following the approval of SL-14 the revised required surety will be \$11,756,466.23, which is sufficient to assure completion of the remaining reclamation work at the site if the work had to be performed by the Division, including the cost of reestablishing vegetation on any revegetated areas, should those areas fail. The Division estimates its cost to complete remaining reclamation work at the site to be \$11,756,466.23.

Table 5

West Elk Mine (C-1980-007) Bond Release Summary					
		Acres	Amount	Required Surety	Estimated Reclamation Liability
Prior to SL-14		554.53		\$11,903,264.46	\$11,903,264.46
Released with SL-14	Phase I	12.05	\$146,798.23		
	Phase II	0	\$0.00		
	Phase III	0	\$0.00		
Following approval of SL-14		554.53		\$11,756,466.23	\$11,756,466.23

Any person with a valid legal interest which might be adversely affected by this proposed decision may request a formal public hearing before the Mined Land Reclamation Board in accordance with Rule 3.03.2(6). Public notice of this proposed decision will be published twice in the *Delta County Independent* as soon as possible. Requests for public hearing must be submitted to the Division in writing within thirty days of the first publication in the *Delta County Independent*. If no hearing is requested within those thirty days, the Division's decision will become final.

C-SL-10