Hiawatha Coal Company

P.O. Box 1240
Huntington, UT 84528

Phone (801) 857-0399

C/007/0011
Received 3/19/21
Task #6293

arch 10, 2021

Steve Christensen
Utah Division of Oil, Gas & Mining
1954 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: **Upper Rail Yard Lead Sampling, Hiawatha Coal Company, Hiawatha Mine, C/007/0011**

Dear Mr. Christensen,

Enclosed is an amendment to Chapter 2 pages 2-5, 2-38 and 2-44 to address lead sampling in the upper rail yard at final reclamation. The submittal includes this cover letter, Forms C1 and C2, pages 2-5, 2-38 and 2-44 (included in the Submittal pdf file).

If you have any questions, please call me at (801) 857-0399 or email me at charles.reynolds@hiawathacoal.com.

Sincerely,

Charles Reynolds, PE
Mine Manager

APPLICATION FOR COAL PERMIT PROCESSING

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

Permittee: Hiawatha Coal Company, Inc.

Mine: Hiawatha Mine Complex **Permit Number:** C/007/0011

Title: Upper Rail Yard Lead Sampling

Description, Include reason for application and timing required to implement:

To amend upper rail yard reclamation soil sampling to include an investigation for soil lead content and potential remediation.

Instructions: If you answer yes to any of the first eight (gray) 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?

Please attach one (1) review copy of the application.

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.

N. J. Finley
Print Name

N J Finley
Sign Name, Position, Date

Subscribed and sworn to before me this 15 day of March, 2021

Notary Public

My commission Expires: Sept 15, 2021 }
Attest: State of Utah } } ss:
County of Salt Lake

CLOVER JEAN OWEN
NOTARY PUBLIC -STATE OF UTAH
My Comm. Exp September 15, 2021
Commission # 697023

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

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

Permittee: Hiawatha Coal Company, Inc.
Mine: Hiawatha Mine Complex **Permit Number:** C/007/0011
Title:

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 pp. 2-5, 2-38, 2-44
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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**

231.200 Suitability of Topsoil Substitutes or Supplements

Soils stockpiled or designated to be used as substitute material have been sampled and their chemical and physical properties discussed in the text and presented in table form. Selected overburden materials have been chosen for use as substitute topsoil materials during final reclamation. Most of the sites in the permit area were originally disturbed in the early 1900's and no topsoil was removed and stockpiled. Where no suitable substitute topsoil materials exist on site, substitute materials will be imported from the borrow areas. Some disturbed areas have substitute materials stockpiled in the form of mine pads, berms, embankments or uncontaminated areas. These materials have been tested and appear to be suitable for use as substitute topsoil material based on total depth, texture, percent coarse fragments, PH, areal extent and physical and chemical tests. On site field trials support the conclusion that these soils can successfully be utilized for final reclamation.

Physical and chemical results for each substitute soil site are presented and discussed next.

Hiawatha Area

U.S. Fuel Company proposes to utilize topsoil and substitute topsoil materials from Borrow Areas A, Lower Preparation Plant and Upper Rail Storage Yard (Exhibit II-4A) to reclaim disturbed areas associated with the Hiawatha preparation plant, slurry ponds and coal refuse embankments as well as the North Fork Vent Portal site. Analyses of the substitute soil areas indicate they are suitable for revegetation and their use will cause the least amount of disturbance to achieve compliance with regulatory requirements.

Five potential borrow area sites have also been designated and shown on Exhibit II-4A. These sites would only be utilized in the event the existing proposed sites couldn't provide adequate material. These potential borrow areas are designated B, C, D, E and the Ridge Area.

Information is presented for the borrow areas in Appendix II-4; however, at this time it appears that, of these, only Borrow Areas A and F and the Lower Preparation Plant and Upper Rail Storage Yard will have to be utilized. Borrow Area "F" was utilized to cover Pond 4 and refuse pile #2 and was then reclaimed. Borrow Area "A" was utilized to reclaim Pond 5 main cell and was then reclaimed. The remainder of borrow area "A" will be used to reclaim pond 5A. The Lower Preparation Plant and Upper Rail Storage Yard Borrow Areas should provide the substitute topsoil necessary to complete the Hiawatha Area reclamation. In 2018 and 2019, the landowner elected to allow a third party to utilize the Upper Rail Yard storage area as a gun range for training purposes. Though the majority of shooting activities result in the lead bullets landing well offsite, the Division expressed a concern of lead contamination in the soil. On July 15,2020, Division and Hiawatha representatives agreed that final soil sampling of the Upper Rail Yard will include lead analysis (Inspection report 6717). See the commitment on page Section 241, pg. 2-38. ~~As a result, Hiawatha has requested that the use be discontinued within the substitute topsoil borrow area while the impact on the substitute topsoil is evaluated. Hiawatha commits to meet with the Division staff in the spring, 2020, and establish an adequate procedure to analyze the material and determine the continued suitability of this material.~~

Non-refuse areas include the remainder of the preparation plant area, affected areas, borrow areas and sediment ponds. These areas are shown on Exhibit II-4A, designated as areas RA-1, portions of which have been completed.

When all mining operations have ceased and the facilities will no longer be required, the facilities will be dismantled. After the facilities are dismantled, all foreign debris and materials will be removed and disposed of, as previously described, in preparation for final reclamation. Only selected portions of the preparation plant and upper storage yard areas will need to be backfilled as a part of the reclamation activity (see Preparation Plant In Situ Soils in Operation Plan). Therefore, prior to any post-mining reclamation activity which would significantly harm or destroy the topsoil resources in these areas, approximately the upper 1.5 feet of topsoil and appropriate subsoil materials will be removed from selected areas and temporarily stockpiled and protected. Prior to removal, a qualified consultant will design a soil sampling and lead analysis plan for the Division to review, prior to its implementation. The sampling and analysis plan will utilize incremental sampling methodology to meet the objective of a total lead value below the EPA lead contaminant clean up level of 400 ppm in resident soil (EPA Regional Screening Level Summary Table, November 2020, accessed through https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables). The design will include QA/QC methods, sampling methods, analytical methods, and screening/decision level for remediation (400 ppm lead or greater). The samples will be sent to a laboratory that has been accredited by the National Lead Laboratory Accreditation Program. Soil total lead analysis will follow EPA recommended methodology; Total Metals SW846 EPA Method 6020. The results will be submitted to the Division with the Annual Report and included in Appendix II-4. The soil to be temporarily stockpiled will be removed using both front end loaders and large track mounted dozers. The soil thus removed will be taken to a temporary stockpile, to be located near the North and Middle Fork road junction (as shown on Exhibit II-4A) and protected from the deleterious effects of erosion by installation of straw bale dikes or temporary runoff diversions around the perimeter of the stockpile.

After the appropriate areas have been backfilled or significantly regraded, the stockpiled topsoil will be redistributed. It is anticipated that only a portion of the total area will require these measures. The area southeast of the prep. plant and the area between the railroad spur and the Middle Fork haul road can achieve the final grade without significant regrading and without temporarily stockpiling the topsoil, as only the upper few inches of topsoil have been previously disturbed, the present grade is near the proposed final grade and the soils present have sufficient chemical and physical properties to support vegetative regrowth and enhance reclamation. Laboratory tests (Appendix II-4) substantiate that the soil materials in the preparation plant area are adequate (both chemically and physically) to support vegetation and that no additional soils will need to be added to the area to enhance reclamation.

When the final grade has been achieved with a stable area having positive drainage, then the area will be prepared for seeding. Initially the regraded surface will be ripped to a depth of 18 to 24 inches. Stockpiled soil material will then be redistributed and disced along the contour. Next, fertilizer and then seed will be applied by either broadcasting, drilling or hydroseeding. Mulch will be applied at the rate of 1 ton per acre and will be either crimp-disced into the soil or bound to the soil with a binding agent added in the hydroseed mixture.

Slurry Ponds and Refuse Embankments Area

Where practical, U. S. Fuel Company is contemporaneously regrading the slurry ponds and refuse piles. These areas are being covered with the soil from substitute soil borrow sites east of the preparation plant site and slurry ponds. Because of the volume of slurry and refuse, regrading can not be done to original contour. However, the embankment slopes will be made less steep in order to reduce erosion. Structural foundations will be covered with available backfill material.

Sedimentation ponds and diversion structures will be removed and backfilled after vegetation is established on the reclaimed slurry ponds and refuse piles and after cleanup of any contributing affected areas. Topsoil has been salvaged for the sedimentation ponds. Once the sediment ponds are regraded, the stockpiled topsoil will be redistributed.

Reclamation of Lower Preparation Plant Borrow Area

U. S. Fuel Company proposes to remove approximately 24,300 cubic yards of substitute topsoil material from the Lower Preparation Plant Borrow Area by excavating the 3.93 acre area to a depth of approximately 40 inches. Based on the test pits and analyses (Appendix II-4), this will leave approximately 20 inches of the C-1 soil horizon in place for revegetation of the pit area.

After removal of the borrow material, the pit will be prepared for reclamation by regrading and shaping the area to drain. Since this pit is within the existing disturbed area, runoff will be collected in existing ditch DD-12 and carried to Slurry Pond 5A for final treatment (see Exhibit VII-18A).

To eliminate the deleterious effects of excessive compaction created by the machinery used to remove the substitute topsoil material, to promote root penetration, to aerate the soil, and to increase the permeability, the in-situ soil will be ripped, using a large track-mounted dozer. First, one ton per acre of organic material such as hay or sewer sludge will be applied. Then the soil will be ripped along the contour to a depth of 18 to 24 inches.

Immediately prior to the application of nutrients and soil amendments, a minimum of two samples will be collected, composited and submitted for laboratory analyses to identify any fertility deficiencies and to provide a final basis for the application of nutrients and soil amendments. Again, this will ensure that reclamation efforts are based on soil conditions at the time of reclamation.

Reclamation of Upper Rail Storage Yard Borrow Area

HCC proposes to remove approximately 75,543 cubic yards of substitute topsoil material from the Upper Rail Storage Yard Borrow Area. This material will be utilized to complete reclamation on the No. 1 Refuse Pile / Slurry Pond and track areas.

As noted in Appendix II-4, the area is covered with 3"-90" of coal and coal waste material. This material will be scraped off and placed along the toe of the cut slope to the south. Once the required amount of topsoil is removed, the coal and coal waste material will be covered with a minimum of 24" of soil from the pit area. The area will be graded to drain to Sediment Pond D003, and reseeded according to the plan.

Since this area is within the existing disturbed boundary, runoff will continue to be treated in Sediment Pond D003, as it presently is. This can be accomplished by starting the coal waste and soil removal on the east end (near the pond) and working to the west. In this manner, the area will slope to the sediment pond at all times.

To eliminate the deleterious effects of compaction, to promote root penetration, to aerate the soil and to increase permeability, the in situ soil remaining in the borrow area will be ripped using a large track mounted dozer. First, one ton per acre of organic material such as straw or hay will be applied. Then, the soils will be ripped along the contour to a depth of 18 to 24 inches. The topsoil temporarily stockpiled (as described on pg. 2-38) will then be re-applied.

Immediately prior to the application of nutrients and soil amendments, a minimum of six soil samples will be collected, composited and submitted to a laboratory for analyses and the laboratory test results analyzed to identify any fertility deficiencies and to provide a final basis for the application of nutrients and soil amendments. This will ensure that reclamation designs are based on the soil conditions at the time of reclamation.