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VIA: Email & U.S. Priority Mail March 19, 2015

Steve Christensen, Permit Supervisor
Utah Coal Regulatory Program
STATE OF UTAH
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

RE: Wellington Prep Plant(C/007/0012): Slurry Pond Fines Removal for Reclamation

Dear Mr. Christensen:

Attached please find the "**Clean Copy**" versions of the amendment to Wellington's Mining & Reclamation Plan (MRP). Also included are our responses to the Division's deficiencies that were provided in a Technical Analysis and Findings (TA) along with the appropriate C1/C2 forms as well as *Comments and Insertion Instructions* for the current MRP.

As a summary, Price River Terminal (PRT) is planning to have the slurry fines on the east side of the Price River removed as part of their continuing reclamation activities. The fines will be extracted and taken to the Sunnyside Cogeneration Plant in Sunnyside, Utah by Savage Services. An amendment for approval of these activities was first provided to the Division on December 31, 2014. The Division responded with a TA on February 4, 2015. PRT responded to the Division's TA with another submittal on February 26, 2015. This submittal was approved with a letter from the Division dated March 19, 2015.

Please contact me anytime with any questions or comments.

Sincerely,

Patrick D. Collins, Ph.D.
Resident Agent

Attachments

cc: T. Stanley (PRT)

330 East 400 South, Ste. 6, P.O. Box 337, Springville, Utah 84663
(801) 489-6937, (fax) 489-6779

APPLICATION FOR COAL PERMIT PROCESSING

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

Permittee: Price River Terminal
Mine: Wellington Prep Plant **Permit Number:** C/007/0012
Title: Slurry Pond Fines Removal for Reclamation (Clean Copies)
Description, Include reason for application and timing required to implement:
Proposed new reclamation activities

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

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

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.

PATRICK D. COLLINS — Print Name

Patrick Collins Res. Eng. 3/19/15 — Sign Name, Position, Date

Subscribed and sworn to before me this 19 day of March, 2015

Marcie S. Clark — Notary Public

My commission Expires: June 21, 2018

Attest: State of Utah } ss:
County of Utah

MARCIE S CLARK
NOTARY PUBLIC-STATE OF UTAH
COMMISSION# 677113
COMM. EXP. 06-21-2018

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: Price River Terminal
Mine: Wellington Prep Plant **Permit Number:** C/007/0012
Title: Slurry Pond Fines Removal by Sunnyside For Reclamation (Clean Copies).

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	Refer to "Deficiencies, Comments & Insertion Instructions" included in this amendment
☐ 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

Wellington Preparation Plant (C/007/0012)
Mining & Reclamation Plan

SLURRY FINES REMOVAL FOR RECLAMATION

Deficiencies, Comments & Insertion Instructions

March 19, 2015

(*"Clean Copy" Version*)

Price River Terminal, LLC
3215 West 4th Street
Fort Worth, Texas 76107

The following are proposed changes to the Wellington Preparation Plant permit along with DOGM deficiencies, PRT comments and instructions for insertion to the existing Mining & Reclamation Plan (MRP).

DOGM Deficiency:

R645-301-422: The amendment must contain a description of coordination and compliance efforts which have been undertaken by the applicant with the Utah Division of Air Quality.

R645-301-423, -301-424: Depending on whether the projected production rate is less than or greater than 1,000,000 tons per year, the Permittee will must address either R645-301-423 or R645-301-424.

PRT Comments:

PRT has been working with DEQ regarding air quality and the applicable permits required. It has been determined that the annual PM10 emissions will be below the five tons per year and therefore the operations will not require an approval order.

MRP Insertion Instructions:

- Sec. 4.20, p. 1, 3/19/15 of this submittal replaces
- Sec. 4.20, p. 1, 4/30/97 *plus* letters from DAQ (dated - April 3, 1997; October 28, 1992) of the Division's copy of the MRP.

DOGM Deficiency:

The application does not meet the minimum requirements of the Coal Mining Rules. The Division recommends sending the proposed amendment back deficient according to:

R645-301-523 Requires at a minimum a narrative description of the type and method of coal mining procedures and proposed engineering techniques, anticipated annual and total production of coal, by tonnage and the major equipment to be used for all aspect of those operations. The Permittee failed to describe the potential scenario that the coal refuse quality is too poor to be transported to Sunnyside Cogeneration plant and must remain at site. The narrative must include what the proposed operations and reclamation plans are for such material.

PRT Comments:

PRT has described the proposed fines re-mining methods and equipment to be used for the operations. As explained in the amendment, the methods and locations for the fines removal at the site will be refined once the process begins and the conditions encountered onsite are better known.

The first amendment submittal was evidently misleading suggesting that onsite sampling for coal quality may result in rejection of some of the fines material. Drilling refuse test holes has already been conducted to obtain the necessary coal quality information and to determine how the slurry removal process will proceed. No additional sampling to assess coal quality is needed at the Wellington site at this time. There will be <u>no reject fines</u> left onsite during the mining process. The language in Section 5.23 clarifies this process.

MRP Insertion Instructions:

- Sec. 5.22, p. 1, 3/19/15 of this submittal <u>replaces</u>
- Sec. 5.22, pp. 1-4 of the current MRP.

- Sec. 5.23, 3/19/15, pp.1-7 (plus figure) of this submittal <u>replaces</u>
- Sec. 5.23, pp 9/10/97, pp.1-2 of the Division's copy of the MRP

DOGM Deficiency:

R645-301-553.252, The Permittee must provide a commitment in the MRP for additional sampling of the slurry material. The commitment must outline additional sampling and analysis of the slurry and refuse chemical characteristics every five years. The commitment should outline that the results of the sampling will be provided to the Division starting with the annual report for 2016 (with subsequent sampling every five years thereafter). Samples should be obtained from four feet below the surface of the excavation areas. A diagram of the sampling plan and a description of the sampling protocol should be included in the narrative.

Additionally, please include in the commitment a final sampling event of the slurry material that will remain on site once slurry excavation activities have been terminated (i.e. any slurry material that will remain on site during final reclamation of the site). This final sampling event could aid in determining final reclamation requirements. Parameters to be analyzed should include those identified in Table 3-Analytical Methods for Baseline Soil Characterization and Table 7-Additional Analyses Required for Substitute Topsoil, Overburden, Spoil and Coal Mine Waste located in the Division of Oil, Gas and Mining's Guidelines for Management of Topsoil and Overburden.

PRT Comments:

PRT has made the recommended commitments. They have been written in the text of this amendment (refer to Section 5.23).

MRP Insertion Instructions:

- Instructions for insertion of the Sec. 5.23 were made in the previous deficiency.

DOGM Deficiency

R645-301-731 .300, -731 .310, -731 .311: The Permittee must provide a commitment in the MRP for additional sampling of the slurry material. The commitment must outline additional sampling and analysis of the slurry and refuse chemical characteristics every five years. The commitment should outline that the results of the sampling will be provided to the Division starting with the annual report for 2016 (with subsequent sampling every five years thereafter). Samples should be obtained from four feet below the surface of the excavation areas. A diagram of the sampling plan and a description of the sampling protocol should be included in the narrative.

Additionally, please include in the commitment a final sampling event of the slurry material that will remain on site once slurry excavation activities have been terminated (i.e. any slurry material that will remain on site during final reclamation of the site). This final sampling event could aid in determining final reclamation requirements.

Parameters to be analyzed should include those identified in Table 3-Analytical Methods for Baseline Soil Characterization and Table 7-Additional Analyses Required for Substitute Topsoil, Overburden, Spoil and Coal Mine Waste located in the Division of Oil, Gas and Mining's Guidelines for Management of Topsoil and Overburden.

PRT Comments

PRT has made the recommended commitments. They have been written in the text of this amendment (refer to Section 5.23).

MRP Insertion Instructions:

Instructions for insertion of the Sec. 5.23 were made in one of the above deficiencies.

4.20 AIR QUALITY (R645-301-420)

All operations at the Wellington Coal Preparation Plant will be conducted in compliance with the requirements of the Clean Air Act (42 U.S.C. Sec. 7410 et seq.) and any other applicable state and federal statutes and regulations containing air quality standards.

Past operations at the Wellington site performed activities under an approval order (AO) from the State of Utah, Department of Environmental Quality, Division of Air Quality (DEQ). The AO contained all pertinent information and descriptions necessary to be in compliance with the applicable regulations including operator addresses, coal stockpile information, equipment utilized, operational procedures, etc.

Notification of a company change from Castle Valley Resources to Earthco was approved by DEQ in the past. The AO dated DAQE-997-92, October 28, 1992, superseded AO DAQE-899-89, dated December 29, 1989, which superseded DAQE-762-89, dated November, 1989. Later, although the AO dated DAQE-997-92, October 28, 1992, showed Genwal Coal Company as the contact name, the approval letter from DEQ (dated April 3, 1997) reflected the name change. Therefore, at that time DEQ considered DAQE-997-92 (October 28, 1992) along with letter (April 3, 1997) the most current records for the AO.

Fugitive dust from current operations is minimized with the use of paved roads and water sprays on unpaved roads, reclamation areas and pad sites. For the current operations at the Wellington site, PRT has been working with DEQ regarding air quality and the applicable permits required.

The onsite fines removal activities will have a production rate of less than 1,000,000 tons per year. It has also been determined that the annual PM10 emissions will be below the five tons per year and therefore the operations will not require an approval order. Consequently, AO DAQE-997-92 is no longer active and does not apply to the Wellington property. Any reference to this AO should be removed from the text of the Mining & Reclamation Plan (MRP). That said, PRT has submitted a small source exemption registration form to the Utah Division of Air Quality.

If it is anticipated that the fines removal operations could exceed 1,000,000 tons per year in the future, PRT will submit an air pollution control plan and address applicable state regulations.

522 COAL RECOVERY (R645-301-522)

Refuse material (fines) was deposited on the Wellington site by previous owners who conducted coal cleaning activities. The current plan describes the slurry ponds to be reclaimed by burial with coarse refuse, followed by covering with topsoil, then revegetation. A modular coal fines wash plant was once used on the west bank of the Lower Slurry Pond when some of the fines were removed by Covol and later, Techmat. These operators were granted authorization by the State of Utah, Division of Oil, Gas & Mining (DOGM) to conduct a pilot study to remove coal slurry fines from the pond areas at the Wellington site. Primary purpose of these operations was to compare methodologies and costs for fines removal for reclamation and/or marketability.

Sunnyside Cogeneration has a contract with Price River Terminal (PRT) to remove coal refuse fines from the slurry ponds at the Wellington site. Removal of the fines will enable them to be used at a cogeneration power plant as well as being instrumental for initiation of final reclamation for that area of the Wellington site.

5.23 METHODS FOR REMOVING SLURRY FINES FOR RECLAMATION (R645-301-523)

Most of the refuse (slurry) fines are located within the existing slurry pond basins, with the possible exception of a lesser amount on the west side of the upper basin where they appear to have been placed as a means to increase the volume of the basin back when U.S. Steel Corp. operated the site as a coal cleaning facility. The Slurry Ponds are large,relatively old basins that contains a substantial amount of coal refuse from the past coal cleaning operations. The Lower Slurry Pond is separated from the Clearwater Pond on the southwest by a constructed dike. The upper and lower Slurry Ponds are also separated by a dike between them.

Historically, when the site was used for coal cleaning operations by U.S Steel, refuse was brought from the coal cleaning plant to the east side of the Price River by a pipeline in a slurry mixture. The coarser slurry material was first deposited in an area called the Coarse Slurry Pile. Next, the slurry mixture continued on to the Upper Slurry Pond where finer textured material was deposited and allowed to settle. The slurry mixture then moved on to the Lower Slurry Pond where more fines were once again allowed to settle. Ultimately, water from the refuse slurry mixture ended up in the Clearwater Pond where the "clean" water was recycled and pumped back to the west side of the Price River for use in the coal cleaning plant.

As described in Section 2.41, in the "best-case" scenario for reclamation, the fines would be removed from the slurry ponds prior to revegetation activities at the Wellington site. Sunnyside Cogeneration Plant, located near the town of Sunnyside in Carbon County, Utah, has a contract with PRT to remove the fines from the Upper and Lower Slurry Ponds as well as the fines that were removed and placed adjacent to the Upper Slurry Pond. Sunnyside Cogen has contracted Savage Services to conduct the excavation activities and transportation of the fines to their plant site.

Activities will include excavation and haulage of coal refuse waste. It is expected that the annual, monthly, and daily mined quantities will vary, but the onsite fines removal activities will have a production rate of less than 1,000,000 tons per year. Records will be maintained to account for the amount of refuse removed and transported.

Mining methods will use a standard mobile fleet of excavation equipment that may include all or some of the following: dozers, front-end loaders, end-dump trucks, belly dump haul trucks, scrapers, track-hoes, and support equipment (water truck, maintenance vehicles). Excavation will be carried out in lifts (following MSHA regulations) across the top of the refuse pile and slurry ponds or by pushing material from the top of the refuse pile down the slopes and pushing material across the slurry ponds. These

methods have been selected to assure continued stability of the refuse pile and slurry ponds. One or more or a combination of the above described mining methods may be used throughout the life of this operation, and at all times the outer slopes of the refuse pile will be maintained in a safe and stable condition.

If the fines are too wet to haul when first excavated, they will be temporarily set aside in piles where they will be allowed to dry out somewhat. These low piles will be placed in the same area (footprint) as the mining operations. No crushing or screening operations will take place at the Wellington site. No surface blasting has been planned.

Drilling refuse test holes have been conducted to assist in obtaining the necessary coal quality information and to determine how the slurry removal process will proceed. No additional sampling to evaluate coal quality is needed at the Wellington site at this time. However, sampling will be conducted to assess toxicities related to final reclamation in the slurry pond area (see "Slurry Pond Material Sampling" below).

Existing pads, primary roads, ancillary roads, and pit roads will be utilized. Additional roads may be desired from time to time. Additional design and sediment control facilities for these roads if needed will be provided prior to construction of new roads.

Periodic watering of gravel and dirt roads for dust suppression will be conducted. Periodic grading of gravel and dirt roads to eliminate mud holes and maintain drainage will also be done.

The methods and locations for the fines removal at the site will be refined once the process begins and the conditions encountered onsite are better known. A figure showing the location of the operations and the direction in which the process will continue for the Phase I is provided below.

Slurry Pond Material Sampling

"Soil" (fines) sampling will be conducted in the slurry pond area on a regular basis to determine the chemical characteristics of the material remaining following extraction of the fines. An outline of the sampling methods and parameters to be analyzed follows.

- Sampling will be conducted every 5 years beginning in 2016.
- At each location, a composite sample will be taken from the ground surface to 4 ft in depth and will be analyzed at a soils laboratory.
- One composite sample will be taken at a frequency of every 3-5 acres. If the 5-year period mined area is 10 acres or less, a sample will be taken every 3 acres; if the mined area is more than 10 acres, a sample will be taken every 5 acres.
- The composite samples will be taken once and limited to areas where fines have been removed (mined). Additional samples will not be taken in the mined areas unless more fines were removed since the last samples were taken.
- Samples will not be taken in un-mined areas or if the re-mining (reclamation) operations cease.
- A final sample period will also be conducted in the entire slurry pond area once the fines removal activities have been terminated and before final reclamation of the site.

- Sample laboratory parameters and protocols will follow Tables 3 (Analytical Methods for Baseline Soil Characterization) and Table 7 (Additional Analyses Required of Substitute Topsoil, Overburden, Spoil and Coal Mine Waste) from the STATE OF UTAH, DIVISION OF OIL, GAS & MINING, *Guidelines for Management of Topsoil and Overburden* (2008). The applicable tables have been included below.
- Results of laboratory analyses, sampling methods and a diagram of the sample locations will be provided to the Division in Wellington Prep Plant's Annual Report for that sample year.

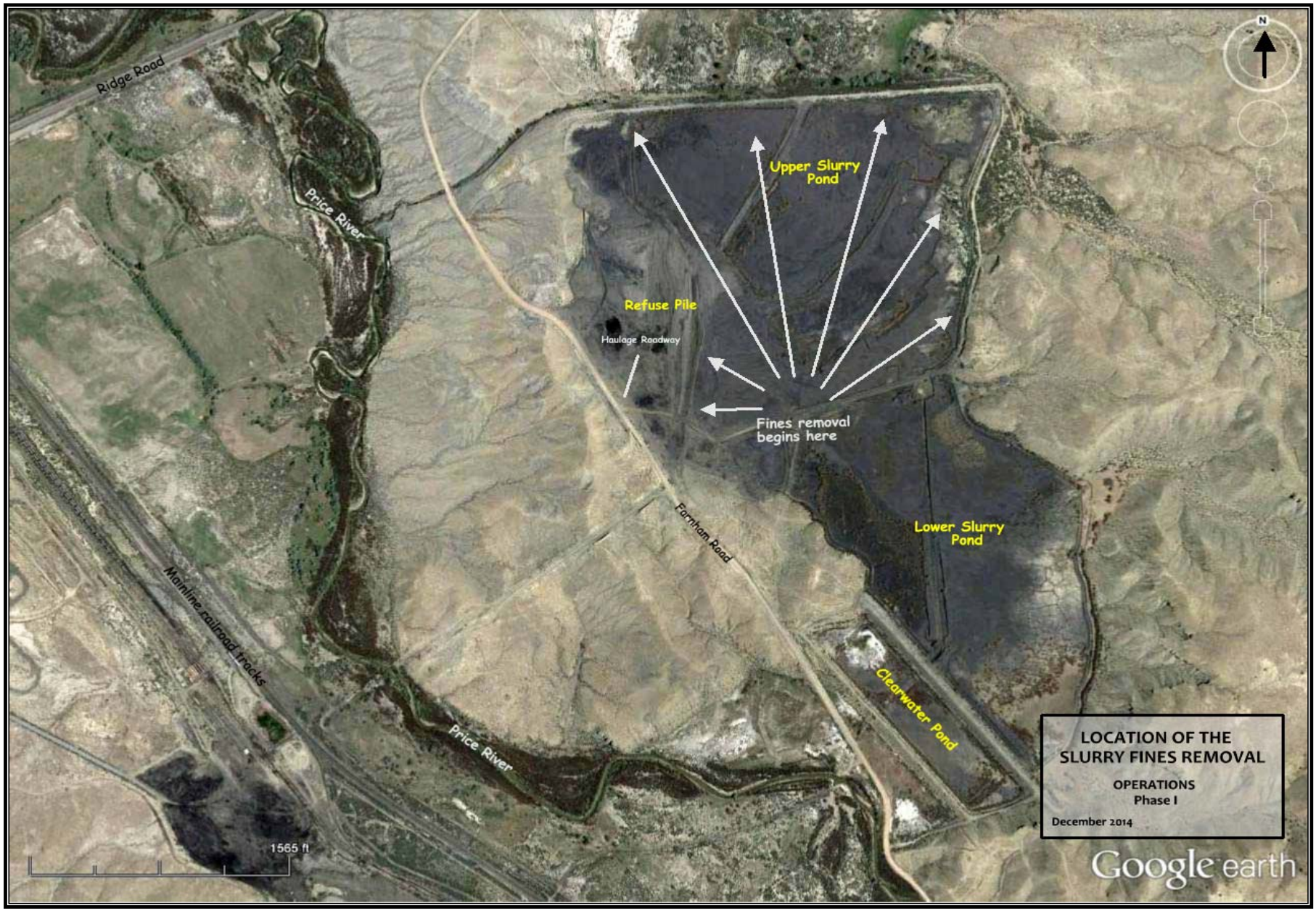
Analytical Methods For Baseline Soil Characterization. Table 3 *in* State of Utah, Division of Oil, Gas & Mining, *Guidelines for Management of Topsoil and Overburden* (2008).

Test to be Performed	Reported As	Suggested Methods[1]
pH	saturated paste standard units	Soil Science Society of America. 1996. Series No. 5. Methods of Soil Analysis: **Part 3** - Chemical Methods. Chapter 14, page 420 and Chapter 16, page 487.
Saturation %	%	USDA-NRCS.1996. Soil Survey Laboratory Methods Manual.(SSIR No 42) ver. 3.0, Method 8A, page 402.
EC_e	dS/m @ 25°C (or mmhos/cm)	Ibid. Chapter 14, pp 420 - 422 and pp 427 - 431.
Soluble Na, K, Mg, Ca	meq/L	Ibid. Chapters 14 pp 420-422 (saturation extract);Chapter 19 pp 555-557; Chapter 20 pp586-590 (spectroscopic methods).
Available NO_3-N	mg/Kg	Soil Science Society of America. 1996. Series No. 5. Methods of Soil Analysis: **Part 3** - Chemical Methods. Chapter 38. p 1129 (KCl extraction). For analysis follow: Sims, J.R. and G.D. Jackson. 1971. Rapid Analysis of Soil Nitrate with Chromotropic Acid. Soil Sci. Soc. Am. Proc. 35-603-606.
Available Phosphorus	mg/Kg	Soil Science Society of America. 1996. Series No. 5. Methods of Soil Analysis: **Part 3** - Chemical Methods. Chapter 32, page 895. ($NaHCO_3$ Extraction.)
Particle Size Analysis	% very fine sand, sand, silt, clay	Soil Science Society of America. 1986. Series No. 5. Methods of Soil Analysis: **Part 1** - Physical and Mineralogical Methods. Chapter 15 pp 398 and 404-409 (Hydrometer Method).
Organic Matter	%	Western States Laboratory Proficiency Testing Program Soil and Plant Analytical Methods. 1998. v 4.10. p 86. (Loss on Ignition, convert %LOI to OM by regression intercept value as noted in method)
$CaCO_3$ %	%	Ibid. p. 99 (Soil Carbonates, Gravimetric Determination after extraction with 3 M HCl.) Total Inorganic Carbon = %$CaCO_3$ x 0.12.
Extractable Potassium	meq/100 g^{-1}	Western States Laboratory Proficiency Testing Program Soil and Plant Analytical Methods. 1998. v 4.10. p 73

Additional Analyses Required for Substitute Topsoil, Overburden, Spoil, and Coal Mine Waste, Table 7 *in* State of Utah, Division of Oil, Gas & Mining, *Guidelines for Management of Topsoil and Overburden* (2008).

PARAMETERS*	Reported As	RECOMMENDED METHOD
Total Organic Carbon	%	Western States Laboratory Proficiency Testing Program Soil and Plant Analytical Methods. 1998. v 4.10. p 88. (Combustion Method)
Soluble Selenium	mg/kg	Soil Science Society of America. Methods of Soil Analysis: Part 3 - Chemical Methods. Series No. 5, 1996.Chapter 30. pp 805 - 811. (Hydride Generation Atomic Absorption-Spectrometry and Fluorimetry of water extractable selenium)
Available Boron	mg/kg	Soil Science Society of America. Methods of Soil Analysis: Part 3 - Chemical Methods. Series No. 5, 1996.Chapter 21. p 611 (saturation extract).
Acid Potential	% pyritic S	U.S. EPA, 1978, EPA 600/278-054. Method 3.2.6, pg 60
Neutralization Potential	Tons $CaCO_3$ equivalent/1000 tons	U.S. EPA, 1978, EPA 600/278-054. Method 3.2.3, pg 47

*Table 3 parameters of pH, EC, and soluble Na, K, Mg, Ca are also required to determine potential salinity and sodicity.


Ridge Road
Price River
Upper Slurry Pond
Refuse Pile
Haulage Roadway
Fines removal begins here
Farnham Road
Lower Slurry Pond
Mainline railroad tracks
Clearwater Pond
Price River
1565 ft
N
LOCATION OF THE SLURRY FINES REMOVAL
OPERATIONS
Phase I
December 2014
Google earth