PART 9: Reclamation Plan

9.1 Post-Mining Land Use.

9.1.1 Provide a Post-Mining Land Use/Capability Reclamation Map as required by the General Mapping Requirements.

Provide a detailed description of proposed post-mining land uses and capabilities employing land use and capability categories listed in Table 9.1: Post-Mining Land Use Capability. Complete acreage figures for each post-mining land use proposed and designate its capability classification. This information shall be broken down by landowner in addition to the composite land uses and capabilities. In addition, the applicant shall complete Table 9.1 – GRAND TOTAL: Post-Mining Land Use Capability Summary. This table is a compilation of all Post-Mining Land Use Capability tables filled out for each individual land owner.

For IBR applications complete Table 9.1: Post-Mining Land Use Capability for each landowner and update Table 9.1 – GRAND TOTAL Post-Mining Land Use Capability Summary.

NOTE: For Post-Mining Land Use change IPRs and Significant Revisions see Guidance Document TGD#4 and ***complete ONLY*** *Tables 9.1.1 and 9.1.2. In addition, applicant shall complete Table 9.1 - Post-Mining Land Use Capability for currently approved and proposed acreage changes for each individual landowner(s).*

For surface mines, acreage figures for post-mining land use must differentiate between mined and surface disturbance areas based on the mining line used in Part 2.2.3 of the application. **[1777.11(a)(3)]**

The post-mining land use within the permit area will be pasture. The refuse embankment slopes and impoundment cover will be revegetated with a diverse stand of perennial grasses and legumes. At bond release the vegetative ground cover will be at least 70% of the species approved as the final permanent vegetative ground cover. Refuse Cell 5 is a long-term support facility associated with the Gateway Mine coal processing operation. Exemption from prime farmland replacement standards is authorized under the pre-existing permits pursuant to 62 Ill Adm. Code 1823.11.b

9.1.2 Where a post-mining land use different from a pre-mining land use is proposed, provide:

a) A discussion explaining the consideration which has been given to making all the proposed surface mining activities consistent with surface owner plans and applicable state and local land use plans and programs. **[1780.23/1784.15]**

A proposed post- mine land use of pasture is best suited for the site following reclamation of Refuse Cell 5 Phase. Considering the post-mine grade and need to prevent future erosion of the impounding embankment. A permanent cover of suitable grass and legume ground cover species on the embankment slopes and on the impoundment cover is best suited. The Department further directed that pasture land use on the embankment is preferred as the post-mine land use. Mowing of the embankment will allow for required inspections to be conducted with improved accessibility and surface condition visibility.

b) A copy of the comments from the owner of the surface concerning the proposed land use of the proposed permit area and from the state or local government agencies which would have to initiate, implement, approve or authorize the proposed uses of the land following reclamation. In the event the surface land owner does not provide comments; the applicant shall provide proof of mailing to the surface owner soliciting comments to show that a good faith effort was made to provide the surface owner with the opportunity to comment. **[1780.23/1784.15]**

American Land Holdings of Illinois LLC and Central States Coal Reserves of Illinois LLC, both Peabody Energy holding companies, are owners of all surface properties within the permit area. Peabody Energy concurs with the proposed post-mine land use of pasture. See Attachment 9.1.2 for landowner comments from the authorized agent.

9.1.3 Provide a detailed timetable for completion for each major step in the proposed reclamation plan. The time table shall include for: **[1780.18(b)(1)/1784.13(b)(1)]**

9.1.3.1 Surface mine mining areas:

9.1.3.1.1 The timing of the rough grading, root medium, and topsoil during active mining to meet the standards of Section 1816.101(b)(1).

Note: If the plan proposes to reduce the time frames or distance to less than that allowed, it must be stated here and in the reclamation cost estimate section.

Not Applicable

9.1.3.1.2 The timing of the planting of initial and permanent vegetation after final grading as it relates to the proposed land use.

Not Applicable

9.1.3.2 Surface and underground mines, support areas, including refuse disposal areas:

9.1.3.2.1 The timing of the rough grading, root medium, and topsoil during active mining to meet the standards of Section 1816.101/1817.101

Following completion of refuse disposal to the design maximum, the impoundment will be allowed to decant for a period of approximately 12 to 18 months allowing slurry fines to settle and solidify to provide a stable surface upon which cover fill can be placed. An engineered cap consisting of 0.75 ft of topsoil over 2.75 feet of rooting media will be placed over a 1 ft layer of compacted clay to cover the impounded fine refuse. Progress in closure and coverage of the impounded slurry fines will be dependent on stability of the interior surface. Cover material will be graded out as the surface will support equipment and fill. Final grading and compaction will be completed according to all approved permit specifications to ensure slope stability. Stable and adequately designed drainage structures and outlets will be restored on site. Depressions will be eliminated to assure positive drainage and post-mine land use capability.

9.1.3.2.2 The timing of the planting of initial and permanent vegetation after final grading as it relates to the proposed land use.

The use of a cover crop will be the primary conservation practice during the initial stages of revegetation. Where the erosion hazard is such that especially quick establishment is desired and/or where a cover crop alone may not be sufficient to control erosion, mulch material will be applied. This material will typically be hay or straw, it will typically be crimped into the soil and the application rates will typically be one to two tons per acre. When the gradient of the slope, coupled with the length, becomes to great for mulch, terraces will be used as the secondary conservation practice. These shall be designed in accordance with the Natural Resource Conservation Service design criteria and shall meet post-construction certification requirements. They will be maintained until final release of the performance bond. Vegetation established on all sites will be maintained to maximize control of erosion from the initial revegetation to total bond release. On occasion, additional conservation structures or practices may be used where the above measures are not appropriate. Most soils will be redistributed during seasons that allow for rapid revegetation. These reclamation activities will occur during years 2 thru 5 following mine closure.

9.1.3.2.3 Any other reclamation proposed activities during the mining to minimize reclamation liability and its associated costs.

9.2 Backfilling and Grading.

9.2.1 Describe the methods to be used for backfilling and grading the proposed permit area, including soil stabilization and compaction practices in accordance with 62 Ill. Adm. Codes 1816.102/1817.102 through 1816.107/1817.107. To ensure the proposed final cut size and configuration as shown in Map 7 and Map 10 will be achieved, discuss how the active mining operations (overburden handling) sequence will be modified before the proposed limits of mining are reached. If no mining operation modification is proposed, describe any proposed backfill operation that will reduce the width of the final cut, as necessary, to ensure adequate space to reclaim required acreage of prime farmland and high capability land.

Not Applicable

9.2.1.1 Provide appropriate cross-sections to illustrate and define both the active mining pit and the proposed post-mining configuration of the permit area including the final cut, if proposed. The cross section must include the elevation of permanent pool of any proposed finals cut(s). These cross-sections shall be referenced on the Post-Mining Land Use/Capability Reclamation Map **[1780.18(b)(3)/1784.13(b)(3)]**

Not Applicable

9.2.2 To achieve the proposed post-mining configuration including cover requirements for refuse disposal areas, the Applicant shall provide soil balancing calculations to ensure an adequate quantity of material is available. These calculations shall include soil shrinkage and swell factors consistent with sound engineering practices as approved by the Department. **[1780.23(b)(1)/1784.15(b)(1)]**

NOTE: This information may be supplied as Attachment 9.2.2.

See Attachment 9.2.2 Reclamation Plan – Soil Cover Balance

9.2.2.1 Are borrow areas being proposed to provide a sufficient amount of material to achieve the post-mining configuration?

☒ YES ☐ NO

(Delineated and labelled on Operations Plan Map 6SF)

If YES, delineate the locations of the borrow areas on the Post-Mining Land Use/Capability Reclamation Map and complete the appropriate items included in Part 5.0: Drainage Control.

9.2.3 For surface mines, does the proposed surface coal mining and reclamation operation require disposal of excess spoil?

☐ YES ☐ NO ☒ N/A

If YES, provide the following:

9.2.3.1 Each application shall contain descriptions, including appropriate maps and cross-section drawings, of the proposed disposal site and design of the spoil disposal structures according to **62 Ill. Adm. Code 1816.71 through 1816.74**. These plans shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the site and structures. **[1780.35(a)]**

Not Applicable

9.2.3.2 Each application shall contain the results of a geotechnical investigation of the proposed disposal site that include the information outlined in **62 Ill. Adm. Code 1780.35(b)**.

Not Applicable

9.2.3.3 If, under 62 Ill. Adm. Code 1816.71(l), rocktoe buttresses or key-way cuts are required, the application shall include information as outlined in **62 Ill. Adm. 1780.35(c).**

Not Applicable

If NO, will the spoil and other waste materials available from the entire permit area be insufficient to restore the disturbed area to its approximate original contour as addressed in **62 Ill. Adm. Code 1816.104**?

Not Applicable

9.2.4 Describe the timing in which all grading and the construction and removal or renovation of water and erosion control structures will be complete and the sequence for accomplishing the work in relation to seasonal weather conditions. **[1780.25(a)/1784.16(a)]**

9.3 Shaft, Slope and Borehole Sealing. Each shaft, drift, adit, tunnel, exploratory hole, entryway, or other opening to the surface from underground shall be capped, sealed, backfilled, or otherwise properly managed, as required by the Department, in accordance with **62 Ill. Adm. Code Section 1816.13/1817.13**, Operator Memorandum No. 00-01, Operator Memorandum No. 2015-02, Operator Memorandum No. 17-09, consistent with **30 CFR 75.1711**, and provide the following: **[1816.15/1817.15]**

9.3.1 Temporary Seals. In the event the mine is temporarily closed or abandoned, provide information on temporary seals to be constructed for prevention of entry to all mine openings. Include an appropriate timetable for construction of these seals. **[1816.14/1817.14]**

Not Applicable

9.3.2 Permanent Sealing Plans.

9.3.2.1 Provide a description, including appropriate cross-sections and plan views, of the measures to be used to seal or manage mine openings, and to plug, case, or manage exploration holes, other boreholes, wells, and other openings within the proposed permit area, in accordance with **62 Ill. Adm. Code 1816.13/1817.13 through 1816.15/1817.15** and shall reflect the following concerns:

- Completion using a combination of backfilling and sealing.
- The type and grade of materials to be used for backfilling and the intervals in which they will be used.
- Sections of casing, entry linings, or collar to be demolished.
- Design of hydraulic seals, including construction material, reinforcing, method of placement, design thickness, and method of anchoring.
- Design of gas ventilation piping that will be incorporated in seal design.
- Finished grading at land surface.
- A description of a permanent monument marker identifying the seal as a mine opening.
- A description of the location of all sealed shafts, slopes, or other entrance tunnels to be recorded with the appropriate recorder of deeds. This is in Operator Memorandum 00-01 as a RECOMMENDATION.

9.3.2.2 For any deviation from the established guidelines for sealing, backfilling, and capping, provide an engineering and hydrologic justification. **[1780.18(b)(8)/1784.13(b)(8);** Operator Memorandum 00-01**;** Operator Memorandum 17-09**]**

Not Applicable

9.4 Abandonment and Closure of Refuse Disposal Areas.

9.4.1 Describe proposed reclamation for all coal refuse disposal areas in accordance with **62 Ill Adm. Code 1780.18(b)/1784.13(b), and 1816.83(c)(4)/1817.83(c)(4)**. The proposed reclamation plan shall include the following information:

- Timing of final coverage
- Cross sections of final cover and configuration.
- Type and amount of material proposed to be used for cover, including any coarse refuse used to provide a base over slurry prior to soil cover.
- Construction details of cover and caps, including the proposed soil depths and long-term groundwater protection measures.

- Design details of all proposed downdrain, terraces, benches or any other permanent surface drainage structure.
- Relationship of the refuse disposal area to the post-mining land use.
- Any plans of access roads and other use related facilities.
- Provide sampling plan of refuse material for neutralization material rates that will be used prior to soil covering. For guidance regarding neutralization material rate requests and required information, see Operator Memorandum No. 2020-02.
- If any variance from the required 4 feet of cover material is requested as a part of a Significant Revision or Insignificant Permit Revision, then the applicant shall utilize Technical Guidance Document TGD#5 and provide documentation of approval from the Department's Refuse Cover Variance Committee of the SCML-9 "Cover Variance Request Form".

NOTE: This information shall be provided as Attachment 9.4.1.

9.5 Bond Estimation.

9.5.1 Provide a detailed estimate of the cost of reclamation for the proposed operation required to be covered by a performance bond. Provide calculations and/or drawings, cross sections, etc., to support the reclamation cost estimate. Provide extra calculations for multiple pits or refuse areas. Complete the appropriate Table 9.5 sections. At a minimum, delineate all buildings, reinforced concrete structures and pavement/gravel areas to be reclaimed on the Bond Calculation Map. **[1780.18(b)(2)/1784.13(b)(2); 1800.14]**

The estimate of the cost of reclamation shall be based on:

- Bond Calculation Acreage *(Table 9.5.1.1)*
- Surface Mining Soil Reclamation *(Table 9.5.1.2)*
- Interior Grading (*(Table 9.5.1.3)*
- Boxcut Outslope Grading *(Table 9.5.1.4)*
- Incline/Highwall Reclamation *(Table 9.5.1.5)*
- Refuse Disposal Areas *(Table 9.5.1.6)*
- Incised Slurry Pond or Refuse Reclamation *(Table 9.5.1.7)*
- Support Area Reclamation *(Table 9.5.1.8)*
- Building Reclamation *(Table 9.5.1.9)*
- Reinforced Concrete Structure Reclamation *(Table 9.5.1.10)*
- Pavement/Gravel Area Reclamation *(Table 9.5.1.11)*
- Borehole/Monitoring Well Backfilling *(Table 9.5.1.12)*
- Shaft/Slope Backfilling *(Table 9.5.1.13)*
- Public Road Reclamation *(Table 9.5.1.14)*

NOTE: If incremental bonding is requested, provide a Bond Increment Map as required by the General Mapping Requirements of the Instructions and complete all appropriate Tables of this part.

9.5.2 If applicable, provide the location of buried volatile material storage facilities on the Bond Calculation Map and list the size of each facility. **[1800.14]**

Not Applicable

American Land Holdings of Illinois, LLC
566 Dickeyville Rd
Lynnville, IN 47619
812.922.1015

April 20, 2021

Mr. Nick San Diego, Supervisor
Land Reclamation Division, Office of Mines and Minerals
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271

Re: Post-mine Land Use Changes
Gateway Mine, Refuse Cell 5 Phase 2
Permit No.'s 53, 160, 225 and 426

To Whom it May Concern:

As authorized land agent for American Land Holdings of Illinois, LLC and the former Central States Coal Reserves of Illinois, I hereby acknowledge and provide comment in favor of the proposed post-mine land use change from cropland, water and wildlife-herbaceous to pasture for the pending revision to Gateway Mine, Refuse Cell 5 Phase 2 on Permit No.'s 53, 160, 225 and 426.

Sincerely,

James McKean
Manager - Land
Authorized Representative
American Land Holdings of Illinois, LLC

CC: Gateway Cell 5 Phase 2 File

Reclamation Plan – Soil Cover Balance

Soil cover for final reclamation of the Coal Yard / Plant Site and Refuse Cells 2, 3 and Cell 5 Phase 2 will be utilized from current soil stockpiles and designated borrow areas labeled on Operations Plan Map6SF. The calculations below assume 4 feet of soil cover for the Coal Yard / Plant Site, Refuse Cell 3, Refuse Cell 5 Phase 2 and 2 feet of soil for Refuse Cell 2 Final Cover. The available volumes of soil from the stockpiled soil and borrow areas are detailed below:

Soil cover for the Coal Yard, Refuse Cell 3 once final grade is reached: 189 ac X 4 ft depth = 1,219,680 cy
Soil cover for Refuse Cell 2 Final Cover 44 ac X 2 ft depth = 141,973.33 cy
Soil cover Cell 5 Phase 2 once final grade is reached: 198 ac X 4 ft depth = 1,277,760 cy

Total soil needed = 1,219,680 + 141,973.33 +1,277,760 = 2,639,413.33 cy
Soil available in current stockpiles:
361,200 cubic yards of topsoil + 277,000 cubic yards of subsoil = 638,200 cubic yards of soil.
Soil available in designated borrow areas (assumes 17 ft average borrow depth) 90 ac X 17 ft depth = 2,468,400 cy
Less a predicted 15% loss to shrinkage and handling = -95730 cy stockpiles, - 370,260 cy borrow areas.

Total Available Soil = 542,470 + 2,098,140 = 2,640,610 cubic yards

SOIL NEEDED	THICKNESS	ACRES	YARDS
Coal Yard / Plant Site	4	26.0	167,786.67
AREA #2 (Cell #2)	2	44.0	141,973.33
AREA #3 (Cell #3)	4	163.0	1,051,893.33
AREA #4 (Cell #4 and #5)	4	198.0	1,277,760.00
			2,639,413.33
SOIL STOCKPILES	**SOIL TYPE**		**YARDS**
#1	TS		150,000.00
#2	SUB		264,000.00
#3	TS		1,700.00
#4	SUB		13,000.00
#5	TS		70,000.00
#6	TS		2,000.00
#7	TS		40,000.00
#8	TS		11,500.00
#9	TS		45,000.00
#10	TS		41,000.00
TOTAL SOILS			638,200.00
TOTAL SOILS MINUS 15%			542,470.00
BORROW AREAS	**ACRES**	**DEPTH**	**YARDS**
#1	25.0	17.0	685,666.67
#2	14.0	17.0	383,973.33
#3	36.0	17.0	987,360.00
#4	15.0	17.0	411,400.00
TOTAL BORROW AREA SOILS			2,468,400.00
TOTAL BORROW AREA SOILS MINUS 15%			2,098,140.00
TOTAL SOILS			2,640,610.00
SURPLUS SOILS			1,196.67

Abandonment and closure of Refuse Cell 5 Phase 2

- Following completion of refuse disposal, the impoundment will be allowed to decant for a period of approximately 12 to 18 months allowing slurry fines to settle and solidify adequately to allow placement of cover fill. Cover material will be graded out as the surface will support equipment and fill. Progress in closure and coverage of the impounded slurry fines will be dependent on stability of the interior surface. Complete coverage is anticipated to take several years.

- An engineered cap of four (4) feet of soil material will be placed over a one (1) foot compacted layer of coarse refuse to cover the impounded fine refuse. See Cell 5 Phase 2 Cross-sections provided.

- The engineered low permeability cap will limit infiltration into the reclaimed impoundment (see Reclamation Cover Plan Diagram). The engineered cover plan will consist of twelve inches of coarse refuse (into which agricultural limestone is incorporated at a minimum rate of twice the material's potential acidity) compacted to a minimum permeability of $1x10^{-7}$ cm/sec, overlain by two six-inch layers of soil material compacted to a minimum permeability of $1x10^{-7}$ cm/sec. The compacted layers will then be overlain by a 27" layer of non-compacted rooting media and 9" of protective cover topsoil that will then be vegetated.

- Slurry Cell 5 Impoundment phase 1 was constructed with an engineered liner. The soil liner was compacted to at least 95% of the maximum standard Proctor dry unit weight at a moisture content within 3% (+ or -) of the optimum moisture based on the standard Proctor test. Soil samples were taken from locations beneath and surrounding the base of Cell 5. The individual soil samples were classified by type, and then subjected to a battery of tests, including moisture/density relationship and permeability. Permeability tests were performed on the remoulded samples at 95 percent of the standard Proctor density. The test results indicated that the permeability of the remoulded samples were between approximately $1x10^{-8}$ and $8x10^{-9}$ cm/sec. The liner underneath Cell 5 Phase 1 will provide for the long-term protection of groundwater.

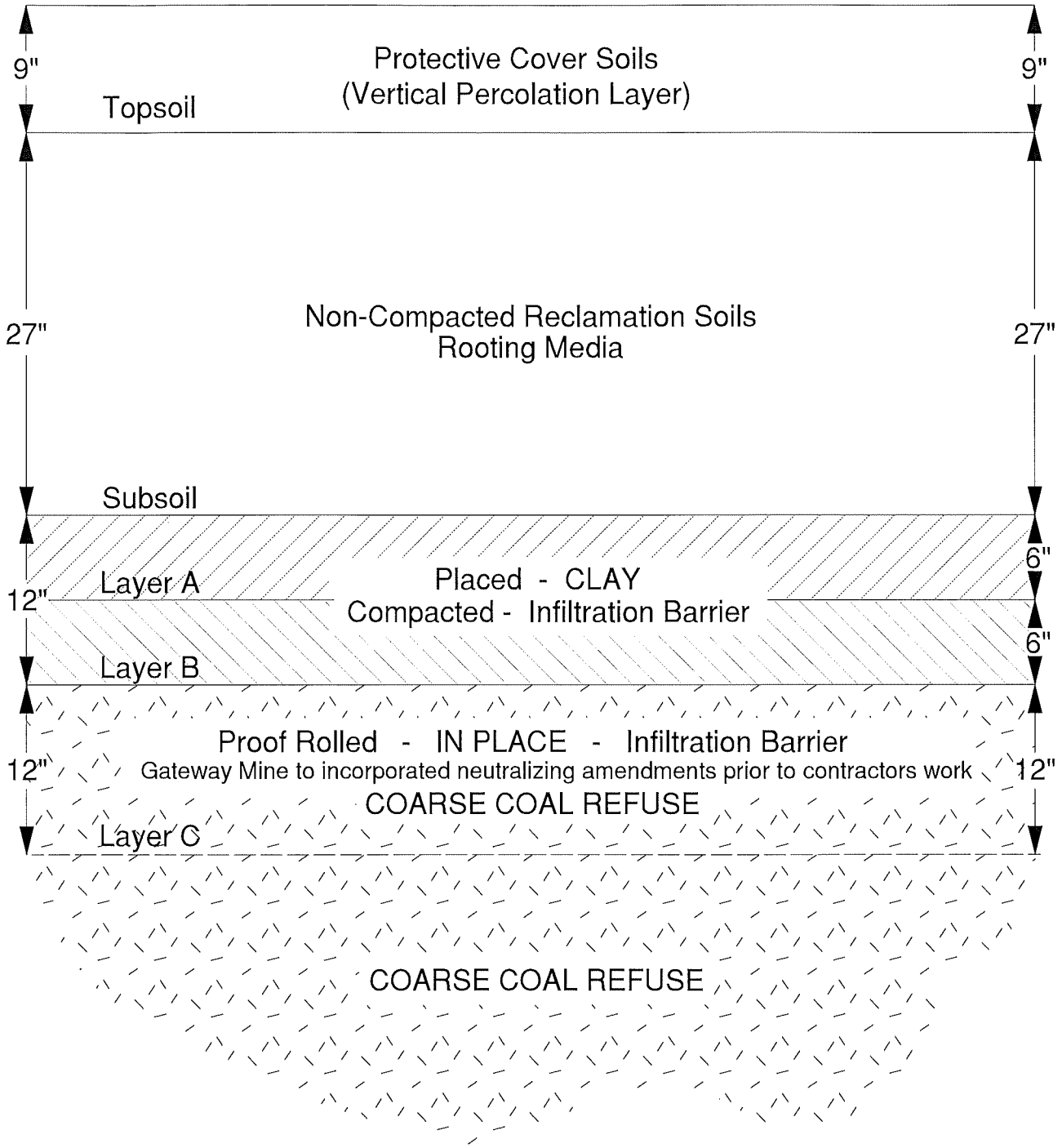
- Drainage control berms will direct runoff from the final covered surface of the impoundment. Collected runoff will be routed off the reclaimed impoundment by a series of downdrains. The downdrain structures will be designed to the required 100yr / 6hr design event. The number and location of downdrains will be specified in a detailed abandonment plan to be reviewed for approval as more site-specific parameters such as sub-basin watershed size, terrace / berm location and final impoundment size become known.

- Slurry Impoundment Cell 5 Phase 2 is part of the Gateway Central Preparation Facility which has been on the site for over four decades. The impoundment and other adjacent refuse disposal areas will serve as wildlife habitat post-mine. The wildlife-herbaceous land use will provide unique and attractive habitat to a variety of wildlife.

- Any access roads which may be established during final reclamation are unknown as this time.

- The coarse refuse cover will be composite sampled and analyzed (acid base accounting) to determine the net neutralization potential. Samples will be collected at a rate of approximately one composite sample per four acres. The composite samples will be collected from a four acre sample grid and be comprised of several grab samples mixed to make the representative composite sample. The analysis of the refuse composite samples will be provided to the Department for review along with analysis of the proposed neutralizing material and proposed application rate. Agricultural lime will be applied at twice the calcium carbonate equivalent rate of the average net neutralization, an estimated 228 ton / acre.

Reclamation Cover Plan Diagram
Compacted Infiltration Barrier System



Agricultural limestone incorporated at a rate of twice the potential acidity of coarse coal refuse prior to compaction.

G:\DWG\GATEWAY\Refuse Expansion Permit 426\Cell 5 Enhanced Reclamation Cover System 21Apr2021.dwg

Attachment 9.4.1
Rev. 04-21-2021

Table 9.5.1.6
Above Grade Refuse Disposal Areas

Revised 4/22/2021

Gob Pile or Gob Impounding Structure #:		Gateway Cell 5 Phase 2			**COST**	
Constructed to final grade or slope:		Yes [X] No [ ]				
Final height of pile:			feet			
Bottom dimension:	Width:		feet			
Average thickness of gob cover over slurry before soil cover			feet			
TOP of gob structure to be used for base capping before soil cover						
Slopes (x/l):	Inside:	2:01				
	Outside:	3.2:1				
Top dimension:	Width:	50	feet			
	Height	98	feet			
	Length:	8370	feet			
Other source for base capping	Haul distance	NA	feet			
Variable cover:		Yes [ ] No [ ]				
Top:	Acres:		acres			
	Thickness:		inches			
Side slopes:	Acres:		acres			
	Thickness:		inches			
Lime application:	Top:	100	tons/acre	$	287,835.00	top acreage times 100tons/acre time $15.5 per ton
	Side slopes:		tons/acre			
Engineered Cover		Yes [X] No [ ]				
Compacted Cover:	Acres:	185.70	acres	$	659,111.20	acreage to sq. ft times 2 foot to cubic yards times $2.2 per yard aro fleet rate
	Thickness:	12	inches			
Cover Soil:	Acres:	230.55	acres	$	2,454,896.40	acreage to sq. ft times 2 foot to cubic yards times $2.2 per yard aro fleet rate
	Thickness:	36	inches			
Lime application:	Top:	10	tons/acre	$	28,783.50	top acreage times 10tons/acre time $15.5 per ton
	Side slopes:	10	tons/acre	$	6,951.75	side slope acreage times 10tons/acre time $15.5 per ton
Haul distance for soil cover:		5280	feet			
Estimated downdrain:	Width:		feet			
	Length:		feet			
Est. downdrain riprap tonnage:			tons			
Synthetic liner over top		Yes [ ] No [ ]			**$0.00**	
			TOTAL:		**$3,437,577.85**	

NOTE: All acreage numbers must be reported to the hundreth of an acre (x.xx)

Table 9.1
Currently Approved Post-Mining Land Use Capability (Permit No. 53 portion of Refuse Cell 5 Phase 2)

Revised 9/10/2020

Land Owner: *American Land Holdings of Illinois LLC*

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE													Subtotal
		Cropland	Pasture	Forest	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Residential	Undeveloped	Developed Water Resources	Recreation	Industrial/Commercial		
													Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime Farmland														0.00
	Neg. Determination														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability		28.50												28.50
	Subtotal	0.00	28.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.50
Total Area	Prime Farmland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	0.00	28.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.50
	Subtotal	0.00	28.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.50

NOTE: All acreage numbers must be reported to the hundreth of an acre (x.xx)

Table 9.1
Currently Approved Post-Mining Land Use Capability (Permit No. 160 portion of Refuse Cell 5 Phase 2)

Revised 9/10/2020

Land Owner: *American Land Holdings of Illinois LLC*

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE													Subtotal
		Cropland	Pasture	Forest	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Residential	Undeveloped	Developed Water Resources	Recreation	Industrial/Commercial		
													Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime Farmland														0.00
	Neg. Determination														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability	38.03	53.29								5.13				96.45
	Subtotal	38.03	53.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.13	0.00	0.00	0.00	96.45
Total Area	Prime Farmland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	38.03	53.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.13	0.00	0.00	0.00	96.45
	Subtotal	38.03	53.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.13	0.00	0.00	0.00	96.45

NOTE: All acreage numbers must be reported to the hundreth of an acre (x.xx)

Table 9.1
Currently Approved Post-Mining Land Use Capability (Permit No. 225 portion of Refuse Cell 5 Phase 2)

Revised 9/10/2020

Land Owner: *American Land Holdings of Illinois LLC*

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE													Subtotal
		Cropland	Pasture	Forest	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Residential	Undeveloped	Developed Water Resources	Recreation	Industrial/Commercial		
													Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime Farmland														0.00
	Neg. Determination														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability		46.30												46.30
	Subtotal	0.00	46.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.30
Total Area	Prime Farmland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	0.00	46.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.30
	Subtotal	0.00	46.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.30

NOTE: All acreage numbers must be reported to the hundreth of an acre (x.xx)

Table 9.1
Currently Approved Post-Mining Land Use Capability (Permit No. 426 portion of Refuse Cell 5 Phase 2)

Revised 9/10/2020

Land Owner: *American Land Holdings of Illinois LLC*

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE													Subtotal
		Cropland	Pasture	Forest	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Residential	Undeveloped	Developed Water Resources	Recreation	Industrial/Commercial		
													Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime Farmland														0.00
	Neg. Determination														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability				85.31										85.31
	Subtotal	0.00	0.00	0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31
Total Area	Prime Farmland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	0.00	0.00	0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31
	Subtotal	0.00	0.00	0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31

Note: Acreage total includes 21.67 acres outside of the Cell 5 Phase 2 revision boundary which is included in proposed post-mine land use change of F&W Herb to Pasture.

NOTE: All acreage numbers must be reported to the hundreth of an acre (x.xx)

Table 9.1 - Grand Total
Post-mining Land Use Capability Summary

Refuse Cell 5 Phase 2 Permit NO.'s 53, 160, 225, 426

Revised 9/10/2020

NOTE: This table must reflect the summary of all individual Pre-Mining Land Use Capability tables

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE													Subtotal
		Cropland	Pasture	Forest	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Residential	Undeveloped	Developed Water Resources	Recreation	Industrial / Commercial		
													Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime														0.00
	Neg. Determination														0.00
	High Cap.														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability		230.55												230.55
	Subtotal	0.00	230.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	230.55
Total Area	Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	0.00	230.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	230.55
	Subtotal	0.00	230.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	230.55

NOTE: All acreage numbers must be reported to the hundreth of an acre (x.xx)

For PMLU Change IPRs and Significant Revisions Use Tables 9.1.1 and 9.1.2

Table 9.1.1

Currently Approved Post-Mining Land Use Capability Summary (Permit No.160 portion of Refuse Cell 5 Phase 2)

Revised 9/10/2020

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE													Subtotal
		Cropland	Pasture	Forest	*Wildlife	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Undeveloped	Developed Water Resources	Recreation	Industrial / Commercial		
													Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime Farmland														0.00
	Neg. Determination														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability	38.03	53.29								5.13				96.45
	Subtotal	38.03	53.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.13	0.00	0.00	0.00	96.45
Total Area	Prime Farmland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	38.03	53.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.13	0.00	0.00	0.00	96.45
	Subtotal	38.03	53.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.13	0.00	0.00	0.00	96.45

*** "Wildlife" post-mining land use is only applicable to older permits that were approved prior to Operator Memorandum No. 2015-01**

Table 9.1.2

<u>Proposed</u> Post-Mining Land Use Capability Summary (Permit No. 160 portion of Refuse Cell 5 Phase 2)

Revised 9/10/20

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE												Subtotal
		Cropland	Pasture	Forest	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Residential	Developed Water Resources	Recreation	Industrial / Commercial		
												Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland													0.00
	High Capability													0.00
	Limited Capability													0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime Farmland													0.00
	Neg. Determination													0.00
	High Capability													0.00
	Limited Capability													0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland													0.00
	High Capability													0.00
	Limited Capability		96.45											96.45
	Subtotal	0.00	96.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.45
Total Area	Prime Farmland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	0.00	96.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.45
		0.00	96.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96.45

For PMLU Change IPRs and Significant Revisions Use Tables 9.1.1 and 9.1.2

Table 9.1.1

Currently Approved Post-Mining Land Use Capability Summary (Permit No.426 portion of Refuse Cell 5 Phase 2)

Revised 9/10/2020

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE													Subtotal
		Cropland	Pasture	Forest	*Wildlife	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Undeveloped	Developed Water Resources	Recreation	Industrial / Commercial		
													Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime Farmland														0.00
	Neg. Determination														0.00
	High Capability														0.00
	Limited Capability														0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland														0.00
	High Capability														0.00
	Limited Capability					85.31									85.31
	Subtotal	0.00	0.00	0.00	0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31
Total Area	Prime Farmland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	0.00	0.00	0.00	0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31
	Subtotal	0.00	0.00	0.00	0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31

*** "Wildlife" post-mining land use is only applicable to older permits that were approved prior to Operator Memorandum No. 2015-01**

Table 9.1.2

Proposed Post-Mining Land Use Capability Summary (Permit No.426 portion of Refuse Cell 5 Phase 2)

Revised 9/10/20

DISTURB CATEGORY	LAND CAPABILITY	POST-MINE LAND USE ACREAGE												Subtotal
		Cropland	Pasture	Forest	Wildlife - Herb	Wildlife - Woody	Wildlife - Wetland	Wildlife - Water	Residential	Developed Water Resources	Recreation	Industrial / Commercial		
												Roads	Other I/C	
Mining or Disturbance Area	Prime Farmland													0.00
	High Capability													0.00
	Limited Capability													0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaffected (Optional)	Prime Farmland													0.00
	Neg. Determination													0.00
	High Capability													0.00
	Limited Capability													0.00
	Subtotal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Support	Prime Farmland													0.00
	High Capability													0.00
	Limited Capability		85.31											85.31
	Subtotal	0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31
Total Area	Prime Farmland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Neg. Determination	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	High Capability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Limited Capability	0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31
		0.00	85.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.31