

LEONARDITE PRODUCTS-LLC



December 24, 2018, 2018

Dean K. Moos
Director- Reclamation Division
Public Service Commission
600 East Boulevard, Dept. 408
Bismarck, ND 58505-0480

Dear Director Moos,
The following pages will address the changes requested in the technical review of Bond Release No. 1 to Permit GRGR-0501 at the Stony Creek Mine dated December 7, 2018.

Application changes:

1. The date was corrected to 9/29/2017 deleting the extra "0".

Attachment VII - General Information

2. To follow up with item #6: The topsoil volume was changed to 45,433.

Attachment IX - Bond Calculation

3. Continuing the follow up to item #6. The third paragraph in attachment IX is consistent with the third paragraph in Attachment VII which is 45,433 cubic yards of topsoil and 23,297 cubic yards of subsoil.
4. To follow up with No. 10c: the worst case scenario was listed in the sixth paragraph of Attachment IX is now \$170,102.
5. Attachment IX has been changed to correspond with the fall 2018 excavation of Pit B-3 and C-1.
 - a. The fifth and sixth paragraphs list adds C-1 and mined in 2018, as basis of the reclamation worst case scenario.
 - b. Table O-1 has been changed to correspond with the fall 2018 excavation. The beginning mining quarter is 4/2018 for Pit C-1.
 - c. The mining and reclamation of Pit E-1 on Table O-1 has been adjusted to reflect activity post 1/2021.
 - d. The introductory sentence of reclamation costs on Page 7 has deleted E-1 at 1.84 acres and included C-1 at 1.82 acres. The last sentence describes subsoil on the parking lot.

Please contact me with any questions or recommendations.

Sincerely,

A handwritten signature in blue ink that reads "Cherie Harms".

Cherie Harms
President
701-471-2704

cherie@leonarditeproducts.com

cc: Lonni Fleck- Interstate Engineering, Inc. (lonni.fleck@interstateeng.com)

13 RC-17-369 Filed 12/04/2018 Pages: 6
Response to third technical review letter
Leonardite Products LLC
Cherie Harms



APPLICATION FOR FINAL RELEASE OF BOND FOR SURFACE COAL MINING AND RECLAMATION OPERATIONS

PUBLIC SERVICE COMMISSION
 RECLAMATION DIVISION
 SFN 19813 (1-2004)

Date 9/29/2017

Name of Permittee Leonardite Products, LLC	Bond Release Number Final Bond Release No. 1	Permit Number GRGR-0501	
Post Office Address PO Box 548	City Williston	State ND	Zip Code 58802

Pursuant to the provisions of NDCC 38-14.1-17, the above named Permittee hereby makes Application for Final Release of Bond for Surface Coal Mining and Reclamation Operations for the above Bond Release Number and Permit Number.

Final release of bond is requested for the tracts clearly delineated on the attached map, **Attachment I**, which are particularly described by the attached metes and bounds descriptions, **Attachment II**, and as follows:

TRACT NUMBER	ACRES	LOCATION				COUNTY
		SEC.	TWP.	RANGE		
FBR-0501-154-100-8	15.15	8	154	100	Williams	
TOTAL ACRES	15.15					

Final release of bond for the completion of all reclamation requirements set forth by NDCC Chapter 38-14.1 and NDAC Article 69-06.2 in the amount of \$ \$111,257. for the above-described tracts is requested for the following reasons (identify each tract number and provide separate reasons and the amount for each tract):

All coal removal operations have been completed. A separate entity, Eco Park Landfill, LLC, desires to develop and operate an inert waste landfill in the area of the proposed bond release. The North Dakota Department of Health has issued a permit for operation of the inert waste landfill. All surface mining operations on 15.15 acres of Industrial land in Permit GRGR-0501 have been completed and ECO Park Landfill, LLC is utilizing the bond release area for construction of an inert waste landfill.

Attachment IX – Bond Calculations

Leonardite Products, LLC will continue to mine within the remaining 96 acres in GRGR-0501 permit area post acceptance of this bond release application. The mining plan has been slightly altered to accommodate the current and extended plans of Eco Park Landfill.

The commercial leonardite/coal Pits A 1-3 and Pit F-3 has been removed along with the subsoil and topsoil from these pits. Overburden of 31,181 cubic yards has been removed from Pit A-1 and placed in Pit B-1. Pit A-1 is in the proposed bond release area included in this application. Pit B-1 remains in the GRGR 0501 permit area held by Leonardite Products, LLC.

Three stockpiles of overburden (29,476 cubic yards), subsoil (23,297 cubic yards), and topsoil (45,433 cubic yards) are located within the proposed bond release area and are dedicated to the development of the Eco Park, LLC inert waste disposal facility.

The cost of reclamation for Pits A 1-3 and Pit F-3, along with moving the overburden, subsoil and topsoil from these pits, no longer need be part of the worst case reclamation bond calculations for Leonardite Products, LLC.

Leonardite Products will continue to mine in the B and C-1 pits in 2018 and 2019, moving to the two remaining F pits and onto the E pits prior to the end of 2020. An updated Mining and Reclamation Sequence is included as Table O-1 revised the mining plan.

The progress of mining and reclamation for Pits B, C-1, F and E are the basis of the reclamation worst case cost calculations. The reclamation worst case cost calculations are included in this section of the application titled pages R-7 and R-8 which are revised mining plan pages. The worst case reclamation bond calculated through 2020 is \$170,102.

An updated Mine Plan Map (Map D) is also included in this section to illustrate the mining area post acceptance of this bond release application.

Mining Sub-area	Size (Acres)	Begin Mining Qtr/Yr	End Mining Qtr/Yr	Rough Grading Qtr/Yr	Final Grading and Subsoil Respread Qtr/Yr	Topsoil Respread and Revegetation Qtr/Yr
A-1	1.72	3/2005	3/2009	4/2010	Eco Park Landfill 1	Eco Park Landfill 1
A-2	1.75	3/2009	4/2010	4/2012	Eco Park Landfill 1	Eco Park Landfill 1
A-3	1.47	4/2012	2/2013	2/2014	Eco Park Landfill 1	Eco Park Landfill 1
B-1	1.75	2/2014	3/2017	3/2017	1/2020	1/2021
B-2	1.90	3/2017	2/2018	2/2019	1/2020	1/2021
B-3	1.44	3/2018	1/2019	2/2019	1/2020	1/2021
F-1	1.74	2/2019	4/2019	1/2020	1/2021	1/2022
F-2	1.75	2/2019	4/2019	1/2020	1/2021	1/2022
F-3	1.99	3/2013	3/2017	1/2020	Eco Park Landfill 1	Eco Park Landfill 1
E-1	1.84	1/2021	4/2021	1/2022	2/2023	1/2024
E-2	1.82	1/2021	4/2021	1/2022	2/2023	1/2024
E-3	1.82	1/2021	4/2021	1/2022	2/2023	1/2024
D-1	1.82	1/2021	4/2021	1/2022	2/2023	1/2024
D-2	1.79	1/2021	4/2021	1/2022	2/2023	1/2024
D-3	1.77	1/2021	4/2021	1/2022	2/2023	1/2024
C-1	1.82	4/2018	2/2019	2/2019	1/2020	1/2021
C-2	1.95	1/2022	4/2022	1/2023	3/2024	3/2025
C-3	1.44	1/2022	4/2022	1/2023	3/2024	3/2025
G-1	1.62	4/2022	1/2023	1/2023	3/2024	1/2025
G-2	1.65	1/2023	2/2023	3/2023	3/2024	1/2025
G-3	1.63	1/2023	2/2023	3/2023	3/2024	1/2025
K-1	1.59	3/2023	4/2023	1/2024	1/2025	3/2025
K-2	1.62	3/2023	4/2023	1/2024	1/2025	3/2025
K-3	1.63	3/2023	4/2023	1/2024	1/2025	3/2025
J-1	1.45	1/2024	2/2024	3/2024	2/2025	3/2025
J-2	1.48	1/2024	2/2024	3/2024	2/2025	3/2025
J-3	1.5	1/2024	2/2024	3/2024	2/2025	3/2025
I-1	1.7	3/2024	4/2024	1/2025	3/2025	1/2026
I-2	1.68	3/2024	4/2024	1/2025	3/2025	1/2026
I-3	1.66	3/2024	4/2024	1/2025	3/2025	1/2026
H-1	1.66	1/2025	2/2025	3/2025	3/2025	1/2026
H-2	1.69	1/2025	2/2025	3/2025	3/2025	1/2026
H-3	1.65	1/2025	2/2025	3/2025	3/2025	1/2026

Attachment VII – General Information

Leonardite Products, LLC is requesting final bond release on 15.15 acres of land located in the West Half, Section 8, T154N, R100W, as shown on Attachments 1, V, VI and VIII. This action will release the area for industrial use, which the 10 year revegetation liability requirements do not apply. The land is included in Permit GRGR-0501, which was approved by the Public Service Commission on November 2, 2005 and issued to GeoResources, Inc. The permit transferred to Leonardite Products, LLC on October 30, 2008. This land has been mined by GeoResources Inc. and Leonardite Products, LLC. The area to receive the final bond release will be developed into an inert waste disposal facility by Eco Park Landfill, LLC, in accordance with their Permit to Construct and Operate a Solid Waste Management Facility issued by the North Dakota Department of Health. The purpose of the bond release is to relieve Leonardite Products, LLC of all liabilities associated with the construction, operation, reclamation, and closure of the disposal facility, which will become the responsibility of Eco Park Landfill, LLC, as regulated by the North Dakota Department of Health.

Suitable plant growth materials (SPGM) were removed from this area in 2006. Commercial leonardite/Coal removal also began in 2006 and has been completed. Subsequent to Commercial leonardite/coal removal, the pit will be converted into an inert waste disposal facility. A permit for Solid Waste Management Facility was first issued by the NDDOH on June 28, 2016. A copy of the permit can be found in Attachment VIII. All grading, backfilling, and construction is scheduled to commence as soon as fall of 2017. The area is ready for complete regulation by the NDDOH.

Three stockpiles of overburden (29,476 cubic yards), subsoil (23,297 cubic yards), and topsoil (45,433 cubic yards) are located within the proposed bond release area and are dedicated to the development of the Eco Park, LLC inert waste disposal facility and will be in place until after all inventories from the piles are depleted.

The proposed bond release will not impact the quality of surface runoff from Permit GRGR-0501. No surface water has been discharged off the permit from the bond release tract during mining. Prior to mining there were no wetlands, water wells, stock dams or any other type of developed water resources located in with the bond release tract and hence; none of those features will require replacement in the post mine setting. Ground water monitoring and reporting requirements within the permit and adjacent area as required by NDAC 69-05.2-16 was deemed unnecessary by the Public Service Commission at the time of permit application because of the shallow mining depths and deep water table.

Each stockpile is surrounded by a containment dike that is three to four feet deep. The berms and stockpiles are stable. No erosion is evident. There is good vegetation on each stockpile and berm. The subsoil pile has the thinnest yet sufficient vegetation. The overburden pile was seeded in 2006. The subsoil and topsoil piles were seeded after the A Pits and F-3 were excavated in 2009, 2012 and 2013.

RECLAMATION COSTS

Estimated costs for the following items have been determined assuming reclamation for Pits B 1-3, C-1, F 1-2 and E 2-3. The worst case liability includes the following assumptions based on all areas disturbed by mining through 2020.

- Pit C-1, 1.82 acres will require overburden, subsoil, topsoil and revegetation
- Pits E-2 and E-3, each 1.82 acres, Pit B-1, 1.75 acres, and Pits F-1, 1.74 acres, and F-2, 1.75, acres will require subsoil, topsoil and revegetation.
- Pits B-2 and B-3, 1.75 and 1.9 acres, will require topsoil and revegetation.
- Total area requiring subsoil is 10.8 acres. Total area (mining and associated) requiring topsoil is 15.2 acres.
- Total area (mining and associated) requiring revegetation is 16.2 acres.
- Two acres of associated disturbance (subsoil from B Pits 1-3 and C-1 was placed on a former parking lot and do not require respread).

Volume Assumptions

Spoil Replacement

Final Mining Subarea Spoil Replacement	31,181	cubic yards
Drainage Taper and Grading	<u>21,373</u>	cubic yards
Sub Total	52,554	cubic yards

Subsoil and Topsoil Replacement

Mining Area		
Subsoil (10.8 acres @ 1.5 feet)	26,136	cubic yards
Topsoil (14.2 acres @ 1.5 foot)	34,364	cubic yards
Associated Disturbed (Including Roads and Buffers)		
Topsoil (1 acre @ 1.5 foot)- NE SS Pile	2,420	cubic yards
Sub Total	62,920	cubic yards

Total **115,474 cubic yards**

Reclamation Cost Summary

	cubic yards	cost per yard	
Assume \$1.20 per cubic yard for soil and overburden handling			
Spoil Replacement	31,181	\$1.20	\$37,417.20
Drainage Tapering	21,373	\$1.20	\$25,647.84
Subsoil Replacement	26,136	\$1.20	\$31,363.20
Topsoil Replacement	36,784	\$1.20	\$44,140.80
Total			\$138,569.04