Content Copy Of Original



Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A582395

Issue Date: November 21, 2019

Newmont Canada Corporation Golden Giant Mine, Yellow Brick Rd Post Office Box, No. 40 Marathon, Ontario P0T 2E0

Site Location: Golden Giant Mine

Yellow Brick Rd Hwy # 17 at Kilometer Marker 876.5 Bomby Unorganized Township, District of Thunder Bay P0T 2E0

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

a landfill site consisting of a 1.08 hectare fill area within a total site area of 20 hectares;

For the purpose of this environmental compliance approval, the following definitions apply:

- " *Approval*" means this Environmental Compliance Approval including all Notices of Amendment:
- " **CAZ** " means a Contaminant Attenuation Zone, as defined in Section 4 of Regulation 232;
- " *Director* " means the person(s) appointed for the purposes of Part II.1 of the Environmental Protection Act:
- " **District Manager** " means the District Manager in the Ministry's Thunder Bay District Office
- " **EPA** " means the Environmental Protection Act, R.S.O. 1990, C.E-19 as amended;
- " Ministry " means the Ontario Ministry of the Environment, Conservation and Parks;
- " Operator " and "Operator" means Newmont Canada Corporation;
- " OWRA " mean the Ontario Water Resource Act, R.S.O 1990, Chapter O.40
- "PA" means the Pesticides Act, R.S.O. 1990, c. P-11, as amended from time to time;
- " *Reasonable Use Guideline* " means the Ministry Guideline B-7 entitled "Incorporation of the Reasonable Use Concept into MOE Groundwater Management Activities, dated April 1994, as amended
- " Regulation 347" means Regulation 347 R.R.O. 1990;
- "Regulation 232" means Regulation 232 R.R.O. 1990;
- " **Site** " means the waste disposal site located at Golden Giant Mine, Yellow Brick Rd Hwy # 17 at Kilometer Marker 876.5, Bomby Unorganized Township, District of

Thunder Bay.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

GENERAL

Compliance

- 1. (1) The Owner and Operator shall ensure compliance with all the conditions of this Approval and shall ensure that any person authorized to carry out work on or operate any aspect of the Site is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) The Owner shall ensure that MOE Guideline B-7 Reasonable Use Guideline are applied and met at all points on the property line which are impacted by leachate generated at the Site.
- 2. Any person authorized to carry out work on or operate any aspect of the Site shall comply with the conditions of this Approval.

In Accordance

3. Except as otherwise provided for in this Approval, the Site shall be designed, developed, built, operated and maintained in accordance with the original application for this Approval, the condition herein this Approval and the supporting documentation listed in Schedule "A".

Interpretation

- 4. Where there is a conflict between a provision of any document, including the application, referred to in this Approval, and the conditions of this Approval, the conditions in this Approval shall take precedence.
- 5. Where there is a conflict between the application and a provision in any documents listed in Schedule "A", the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and that the Ministry approved the amendment.
- 6. Where there is a conflict between any two documents listed in Schedule "A", other than the application, the document bearing the most recent date shall take precedence.
- 7. The conditions of this Approval are severable. If any condition of this Approval, or the application of any condition of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

Other Legal Obligations

- 8. The issuance of, and compliance with, this Approval does not:
 - a. relieve any person of any obligation to comply with any

provision of any applicable statute, regulation or other legal requirement; or

b. limit in any way the authority of the Ministry to require certain steps be taken or to require the Owner and Operator to furnish any further information related to compliance with this Approval;

Adverse Effect

- 9. The Owner and Operator shall take steps to minimize and ameliorate any adverse effect on the natural environment or impairment of water quality resulting from the Site, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.
- 10. Despite an Owner, Operator or any other person fulfilling any obligations imposed by this Approval the person remains responsible for any contravention of any other condition of this Approval or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the adverse effect to the natural environment or impairment of water quality.

Change of Owner

- 11. The Owner shall notify the Director, in writing, and forward a copy of the notification to the District Manager, within 30 days of the occurrence of any changes in the following information:
 - a. the Ownership of the Site;
 - b. the Operator of the Site;
 - c. the address of the Owner or Operator;
 - d. the partners, where the Owner or Operator is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R. S. O. 1990,
 - c. B.17, shall be included in the notification;
- 12. No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance. In the event of any change in Ownership of the works, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

Certificate of Registration

- 13. Pursuant to Section 197 of the EPA, no person having an interest in the Site shall deal with the Site in any way without first giving a copy of this Approval to each person acquiring an interest in the Site as a result of the dealing.
- 14. Two copies of a completed Certificate of Registration, containing a registerable

description of the Site, shall be submitted to the District Manager and the Director for the Director's signature within sixty (60) calendar days of the date of this Approval.

15. The Certificate of Registration shall be registered in the appropriate land registry office on title to the Site and a duplicate registered copy shall be submitted to the District Manager and the Director within ten(10) calendar days of receiving the Certificate of Registration signed by the Director.

Inspections

16. No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, or the PA, of any place to which this Approval relates, and without limiting the foregoing:

- a. to enter upon the premises where the approved works are located, or the location where the records required by the conditions of this Approval are kept;
- b. to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
- c. to inspect the Site, related equipment and appurtenances;
- d. to inspect the practices, procedures, or operations required by the conditions of this Approval; and
- e. to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the EPA, the OWRA or the PA.

Information and Record Retention

- 17. a) Any information requested, by the Ministry, concerning the Site and its operation under this Approval, including but not limited to any records required to be kept by this Approval shall be provided to the Ministry, upon request, in a timely manner.
- b) Records shall be retained for 5 years except for as otherwise authorized in writing by the Director.
- 18. The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this Approval or under any statute, regulation or other legal requirement, in relation to the information, shall not be construed as:
 - a. an approval, waiver, or justification by the Ministry of any act or omission of any person that contravenes any term or condition of this Approval or any statute, regulation or other legal requirement; or
 - b. acceptance by the Ministry of the information's completeness or accuracy.

Site Capacity and Service Area

- 19. The approved capacity for the Site is 50,600 cubic meters of waste. This volume includes the total amount of waste and daily cover, but does not include the volume required for final cover. The Owner shall construct, operate and manage the Site in accordance with the Design and Operations Plan listed as Item (2) of Schedule "A". 20. The Site may dispose of waste only in the approved 1.08 hectare fill area as identified in Item (2) of Schedule "A". The maximum elevation of waste shall not exceed 350.3 m AMSL.
- 21. Every six years, a topographical survey of the Site must be completed and provided to the Director in the Monitoring Report required by Condition 38.
- 22. Only solid non-hazardous domestic wastes generated at the closed Golden Giant Mine may be landfilled at this Site. Prior to receipt of filter cake from the adjacent waste water treatment plant, the Owner must submit evidence that the waste is solid non-hazardous waste by providing the results of analysis of representative samples to the Director, for approval.

Site Operations

- 23. The Owner shall ensure that all Site employees receive initial and ongoing training with respect to the following: the Approval and conditions attached to the Approval, conceptual design and operations; relevant waste management regulations and legislation; environmental concerns related to the waste being handled at the Site; occupational health and safety concerns pertaining to the waste being handled at the Site; fire fighting protocol; and emergency and contingency measures for the preventing of off-site impacts.
- 24. A sign shall be posted in a prominent location at the Site entrance clearly stating the following:
 - i. Owner's name;
 - ii. Approval Number:
 - iii. Prohibition against unauthorized use; and
 - iv. Contact telephone number to call with complaints or in the event of an emergency.
- 25. Waste shall only be deposited at the Site by employees or authorized contractors of the Owner. Public access is not permitted.
- 26. Scavenging of waste is not permitted. Burning of waste is not permitted with the exception of clean wood waste which may be burned with approval of the District Manager.
- 27. During non-operating hours, the Owner shall ensure that the Site entrance and exit gates are locked and the Site is secured against access by unauthorized persons.
- 28. Waste may be stored in one steel shipping container prior to landfilling in accordance with the following requirements:
- (a) Waste must be removed from the container and placed into the landfill on an annual

basis, or when the container is filled;

- (b) The container shall remain secured and locked to prevent unauthorized access;
- (c) Waste must be removed if it becomes a source of odour or an attractant to vermin or wildlife; and
- (d) The container shall be continually vented to prevent the accumulation of gas.
- 29. Waste shall be deposited in a manner that minimizes the area of exposed waste at the working face and shall be compacted before cover material is applied.
- 30. The Owner shall notify any employees or contractors working at the Site of the potential to encounter landfill gas at the Site and shall implement measures to protect the health and safety of people who are working at the Site.

Landfill Covers

- 31. At the end of each day that landfilling operations occur, all waste shall be covered with 0.15 m of soil.
- 32. Any part of the fill area that is not expected to receive waste for 3 months, shall be covered with an intermediate cover of at least .3 m of soil.
- 33. Final cover shall be applied progressively, as each part of the Site reaches final grades. Vegetation of completed final cover shall occur within one month of its placement, or as soon as weather permits.

Litter and Vermin

- 34. The Owner shall take all practical steps to prevent the escape of litter from the Site. Pick-up of litter at the Site and along roads in the vicinity of the Site shall be carried out as required. If windblown litter becomes a recurring problem, then the Owner shall install litter fencing around any areas of exposed waste.
- 35. Vermin are to be adequately controlled at the Site. Should vermin become a problem, a licensed exterminator shall be engaged by the Owner at a frequency necessary to bring the problem under control.

Hydrogeological Monitoring

- 36. The Owner shall conduct groundwater monitoring at the Site in accordance with Schedule "B" and Item 2 of Schedule "A".
- 37. The Owner shall ensure that all groundwater monitoring wells are properly labelled, capped, secure and protected from damage. Any well that is damaged must be replaced forthwith with a suitable replacement well with written concurrence by the District Manager.

Inspections and Record Keeping

38. The Owner shall establish and maintain a written record of operations at the Site. This record must be in a form of a log or a dedicated electronic file and it shall include as a minimum the following information:

- a) date of record;
- b) hours of operation;
 - c) an approximation of the type, amount and source of waste received and removed from the site;
- d) type of the emergency situation and the resulting environmental impact;
- e) actions taken to address the impact; and
 - f) actions taken to prevent the re-occurrence of a similar emergency situation in the future.
- g) date and time of any complaints received at the Site and their nature;
- h) name, address and telephone number of the complainant;
- i) nature of the complaint;
 - j) date and description of any remedial actions taken to address the received complaints; and
- k) actions taken to prevent the re-occurrence of a similar incident, in the future. **Reporting**
- 39. By June 1, 2026 and by every six years thereafter, the Owner shall submit, to the District Manager, a report covering the previous reporting period. The report shall be prepared by a qualified Professional Engineer or Professional Geoscientist in the Province of Ontario. The report shall contain, but is not limited to, the following information:

a.

- a. A scale site plan or plans of the entire site illustrating significant site features such as fill areas, mine facilities, rivers, seeps, ponds, ditches, collection and treatment facilities, and roadways, as well as all of the sampling locations.
- b. A scale location map illustrating the site relative to nearby potentially sensitive groundwater/surface water features (lakes, streams, wells, etc.).

- c. the topographical survey of the Site required by Condition 21;
- d. A water table contour map.
- e. Stratigraphic cross-sections which clearly illustrate the subsurface distribution of geological materials.
- f. Borehole logs for all monitoring wells.
- g. Tables illustrating historical water chemistry and water level data.
- h. Graphs illustrating historical water quality trends with time for the key analytical parameters.
- i. An assessment of monitoring data to evaluate the impact on receiving bodies and offsite groundwater.
- j. Assessment of the monitoring criteria with respect to the trigger mechanisms identified in the Design and Operations Plan dated September 2018, and discussion related to requirements for contingency measures to be implemented.
- k. Recommendations for future monitoring and/or remedial actions.
- I. A section detailing the field sampling protocols and QA/QC measures.

Site Closure

40. Two years prior to the Site reaching capacity, the Owner must submit, for approval by the Director, a written closure plan for the Site. This plan must include, as a minimum, a description of the work that will be done to facilitate closure of the Site and a schedule for completion of that work.

Schedule "A"

This Schedule "A" forms part of this Approval.

- 1. Application for a Certificate of Approval for a waste disposal site, dated January 23, 1984.
- 2. Document entitled "Design and Operations Plan, Newmont Canada Corporation, Golden Giant Mine Landfill', dated September 2018 and prepared by Wood Environment and Infrastructure Solutions, a Division of Wood Canada Limited.

Schedule "B"

This Schedule "B" forms part of this Approval.

Well ID	Sampling Frequency	Field Parameters	Laboratory Parameters
LF01, LF02,	2	Water level	Arsenic
LF05, LF06,	times/year,	рН	Benzene
LF08-I, LF09-	Spring &	conductivity	Boron
I, LF09-II	Fall	temperature	Chloride

LF03-I, LF03- II, LF04-I, LF04-II, LF07, LF08-II, LF10, LF11, LF12,	times/year, Spring &	oxidation reduction potential dissolved oxygen Water levels	Iron Sulphate
LF13 LF01, LF02, LF05, LF06, LF08-I, LF09-II, LF03-I, LF04-I, LF11, LF12, LF13, SW1 LF06, LF13,	Every third year Every third	Water level pH conductivity temperature oxidation reduction potential dissolved oxygen	pH, conductivity, turbidity, ammonia (total), ammonia (un-ionized), TKN, nitrate, nitrite, chloride, fluoride, sulphate, hardness, alkalinity (total), TDS, COD, DOC, Metals (Al, As, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, K, Se, Si, Ag, Na, Sr, Sb, Sn, Ti, U, V, Zn), phosphorus (total), Benzene, 1,1-Dichloroethane, Toluene, 1,1,1-Trichloroethane, Trichloroethene, m&p-Xylene, o-xylene, Total Phenols Petroleum hydrocarbons (F1
SW1	year		to F4)

The reasons for the imposition of these terms and conditions are as follows:

- 1. The reason for inclusion of the definitions is to define the specific meaning of terms and simplify the wording of conditions in this Approval.

 2.
- 3. The reason for Condition 3 is to ensure that the Site is designed, operated, monitored and maintained in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.
- 5. The reason for Conditions 1, 2, 4, 5, 6, 7, 8, 9, 10, 17 and 18 is to clarify the legal rights and responsibilities of the Owner under this Approval.

6.

7. The reasons for Condition 12 is to restrict potential transfer or encumbrance of the

Site without the approval of the Director and to ensure that any transfer of encumbrance can be made only on the basis that it will not endanger compliance with this ECA of Approval.

8.

- 9. The reasons for Conditions 11 is to ensure that the Site is operated under the corporate name which appears on the application form submitted for this approval and to ensure that the Director is informed of any changes.

 10.
- 11. The reason for Conditions 13, 14 and 15 is to ensure that, pursuant to section 197 of the EPA, any persons having an interest in the Site are aware that the land has been approved and used for the purposes of waste disposal.

 12.
- 13. The reason for Condition 16 is to ensure that appropriate Ministry staff have ready access to the Site for inspection of facilities, equipment, practices and operations required by the conditions in this ECA of Approval. These conditions are supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA and OWRA. 14.
- 15. The reasons for Condition 24 are to ensure that users of the Site are fully aware of important information and restrictions related to Site operations under this ECA of Approval.

16.

- 17. The reasons for Conditions 25 and 27 is to specify site access to/from the Site and to ensure the controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no site attendant is on duty.

 18.
- 19. The reasons for Conditions 23, 26, 28, 29, 34 and 35 are to ensure the site is operated in an manner in which as adverse effect does not occur. This is to ensure the long-term protection of the environment and human health.

20.

- 21. The reason for Condition 22 is to specify the approved areas from which waste may be accepted at the Site and the types and amounts of waste that may be accepted for disposal at the Site, based on the Owner's application and supporting documentation. 22.
- 23. The reason for Condition 19 and 20 is to specify restrictions on the extent of landfilling at this Site based on the Owner's application and supporting documentation. These limits define the approved footprint and volumetric capacity of the site. Approval to landfill beyond these limits would require an application with supporting documentation submitted to the Director.

24.

25. The reason for Condition 21 is to ensure that the Owner verifies on a regular basis that waste is being landfilled within the approved waste fill area and within approved grades.

26.

27. The reason for Condition 30 is to ensure that any person using or working at the

Site is aware of the potential hazard created by the existence of methane gas originating from waste disposal operations or naturally occurring and are able to undertake measures to protect their health and safety.
28.

- 29. The reason for Condition 31, 32 and 33 is to ensure that landfilling operations are conducted in an environmentally acceptable manner. Daily and intermediate cover is used to control potential nuisance effects, to facilitate vehicle access on the site, and to ensure an acceptable site appearance is maintained. The proper closure of a landfill site requires the application of a final cover which is aesthetically pleasing, controls infiltration, and is suitable for the end use planned for the site.
- 31. The reason for Condition 19 is to ensure that the Site is supervised and operated by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person.
 32.
- 33. The reason for Conditions 36 and 37 is to demonstrate that the landfill site is performing as designed and the impacts on the natural environment are acceptable. Regular monitoring allows for the analysis of trends over time and ensures that there is an early warning of potential problems so that any necessary remedial/contingency action can be taken..

34.

- 35. The reason for Conditions 38 and 39 is to ensure that regular review of site development, operations and monitoring data is documented and any possible improvements to site design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.

 36.
- 37. The reasons for Condition 40 is to ensure that final closure of the Site is completed in an aesthetically pleasing manner and to ensure the long-term protection of the natural environment.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A582395 issued on December 21, 1984

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;

b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary* Environmental Review Tribunal Toronto, Ontario M5G 1E5

The Minister of the Environment, Conservation and Parks 655 Bay Street, Suite 1500 AND 777 Bay Street, 5th Floor AND and Parks Toronto, Ontario M7A 2J3

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment, Conservation 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 21st day of November, 2019

> Mohsen Keyvani, P.Eng. Director appointed for the purposes of Part

II.1 of the *Environmental Protection*Act

IP/ c: District Manager, MECP Thunder Bay - District Tomas Cihula, Wood