Ontario

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 3737-C7WHQH
Issue Date: November 29, 2021

Glencore Canada Corporation
11335 Highway 655 N P.O. Bag 2002
Timmins, Ontario
P4N 7K1

Site Location: Glencore Canada Corporation - Kidd Mine
11335 Highway 655 North
Lot 2, 3, and 4, Concession 4 and 5
Timmins City, District of Cochrane
P4N 7K1

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:

An underground mining facility for copper-zinc ore, with the Equipment and associated exhaust systems listed in Schedule A, discharging to the air;
all in accordance with the application for an Approval submitted by Glencore Canada Corporation, dated October 27, 2020 and signed by David Yaschyshyn, Manager, Environment and the supporting information, including the Emission Summary and Dispersion Modelling Report, submitted by RWDI Air Inc., dated November 27, 2020 and signed by Monika Greenfield, and additional information submitted by RWDI Air Inc. on October 18, 2021 and November 11, 2021.

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

1. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
2. "Best Management Practices Plan" means a document or a set of documents which describe measures to minimize dust emissions from the Facility and/or Equipment;
3. "Company" means Glencore Canada Corporation that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
4. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;

5. "EPA" means the *Environmental Protection Act,* R.S.O. 1990, c.E.19;
6. "Equipment" means the mining, material handling and ancillary equipment described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
7. "Facility" means the entire operation located on the property where the Equipment is located;
8. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
9. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf;
10. "Publication NPC-300" means the Ministry Publication NPC-300, “Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300”, August 2013, as amended.

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

TERMS AND CONDITIONS

1. **OPERATION AND MAINTENANCE**
    1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
        a. prepare, not later than three (3) months after the date of this Approval, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:
            i. routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
            ii. emergency procedures, including spill clean-up procedures;
            iii. procedures for any record keeping activities relating to operation and maintenance of the Equipment;
            iv. all appropriate measures to minimize noise and odorous emissions from all potential sources; and
            v. the frequency of inspection and replacement of the filter material in the Equipment, where applicable;

b. implement the recommendations of the Manual.

2. **RECORD RETENTION**
    1. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the recording activities required by this Approval, and make these records available for review by staff of the Ministry upon request. The Company shall retain:
        a. all records on the maintenance, repair and inspection of the Equipment; and
        b. all records of any environmental complaints, including:
            i. a description, time and date of each incident to which the complaint relates;
            ii. wind direction at the time of the incident to which the complaint relates; and
            iii. a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.

3. **NOTIFICATION OF COMPLAINTS**
    1. The Company shall notify the District Manager, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
        a. a description of the nature of the complaint; and
        b. the time and date of the incident to which the complaint relates.

4. **NOISE**
    1. The Company shall, at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.

5. **FUGITIVE EMISSIONS CONTROL**
    1. The *Company* shall:
        a. Review and evaluate on an annual basis, the Best Management Practices Plan for the control of fugitive dust emissions;
        b. record the results of each annual review and update, if required, the Best Management Practices Plan within two (2) months of the completion of the annual review;
        c. maintain the updated Best Management Practices Plan at the Facility and if changes were made to any practices, provide a copy to the

District Manager within one (1) month of the update;

d. implement, at all times, the most recent version of the Best Management Practices Plan.

2. The Company shall record, either electronically or in a log book, each time a specific preventative and control measure described in the Best Management Practices Plan is implemented. The Company shall record, as a minimum:
   a. the date when each emission control measure is implemented, including a description of the control measure;
   b. the date when each new preventative measure or operating procedure to minimize emissions is implemented, including a description of the preventative measure or operating procedure; and
   c. the date, time of commencement, and time of completion of each periodic activity conducted to minimize emissions, including a description of the preventative measure/procedure and the name of the individual performing the periodic activity.

Schedule A

This Schedule A forms part of this Environmental Compliance Approval

Primary Crusher (Building #50)

- One (1) multiclone dust collector, Source ID 16051, serving the sources within the primary crusher building, exhausting to the atmosphere at an approximate volumetric flow rate of 67.96 cubic metres per second through a stack, having an exit diameter of 1.83 metres, extending 9.8 metres above grade;
- One (1) dust collector, Source ID 16052, serving the sources within the primary crusher building, exhausting to the atmosphere at an approximate volumetric flow rate of 0.38 cubic metres per second through a stack, having an exit diameter of 1 metre, extending 3.0 metres above grade; and
- six (6) natural gas fired heaters having a combined maximum thermal input of 1,941,303 kilojoules per hour exhausting to the atmosphere through stacks or to plant air.

Loadout (Building #53)

- One (1) multiclone dust collector, Source ID 16044, serving the #3 Conveyor Area, exhausting to the atmosphere at an approximate volumetric flow rate of 7.079 cubic metres per second through a stack, having an exit diameter of 0.71 metres, extending 46 metres above grade and 2.4 metres above the local roof;

- One (1) multiclone dust collector, Source ID 16058, serving the #8 Conveyor Area, exhausting to the atmosphere at an approximate volumetric flow rate of 14.63 cubic metres per second through a stack, having an exit diameter of 0.91 metres, extending 45.1 metres above grade and 1.5 metres above the local roof;
- Two (2) multiclone dust collectors equipped with Bayley fans, Source IDs 16049 & 16050, serving the Loadout Building, each exhausting to the atmosphere at an approximate volumetric flow rate of 1.699 cubic metres per second through individual stacks, having an exit diameter of 0.3 metres, exhausting horizontally through the sidewall of the building approximately 2.5 metres above local grade;
- One (1) multiclone dust collector, Source ID LDOUT22, serving the #14 Conveyor Area, exhausting to the atmosphere at an approximate volumetric flow rate of 0.977 cubic metres per second through a stack, having an exit diameter of 0.3 metres, exhausting horizontally through the sidewall of the building approximately 2.5 metres above local grade;
- Fugitive dust emissions from Loadout drop operations from a maximum height of 4.6 metres (Source ID BLDG53-volume source); and
- Seven (7) natural gas fired heaters, having a combined maximum thermal input of 12,449,659 kilojoules per hour exhausting to the atmosphere through stacks or to plant air.

Schedule A continued

Shops & Warehouse Building (#54)

- One (1) diesel-fired backup generator, Source ID 17919, with a rating of 400 kilowatts per hour, exhausting to the atmosphere at an approximate volumetric flow rate of 1.4 cubic metres per second through a stack having an exit diameter of 0.2 metres, extending 12.5 metres above grade and 0.6 metres above the roof;
- One (1) welding exhaust, Source ID 16088, exhausting to the atmosphere at an approximate volumetric flow rate of 0.47 cubic metres per second through a stack having an exit diameter of 0.2 metres, extending 13.5 metres above grade and 1.5 metres above the roof;
- One (1) welding exhaust, Source ID 16085, exhausting to the atmosphere at an approximate volumetric flow rate of 0.47 cubic metres per second through a stack having an exit diameter of 0.1 metres, exhausting horizontally through the side wall of the building at a height of approximately 4.3 metres above grade;
- One (1) paint spray booth equipped with paint arrestor filter, discharging to the atmosphere at an approximate volumetric flow rate of 3.78 cubic metres per second, through a stack, Source ID EF_P, having an exit diameter of 0.51 metre, extending 1.6 metres above the roof and 9.2 metres above grade; and

- Twenty-seven (27) natural gas fired heaters, having a combined maximum thermal input of 7,401,218 kilojoules per hour exhausting to the atmosphere through stacks.

Feldman Lake Pumphouse (Building #66)

- One (1) emergency diesel-fired pump, Source ID 17910, with a rating of 22 kilowatts per hour, exhausting to the atmosphere at an approximate volumetric flow rate of 0.07 cubic metres per second through a stack having an exit diameter of 0.05 metres, exhausting horizontally through the side wall of the building at a height of approximately 2.75 metres above grade.

Fire Pumphouse (Building #69)

- One (1) emergency diesel-fired pump, Source ID 17901, with a rating of 97 kilowatts per hour, exhausting to the atmosphere at an approximate volumetric flow rate of 0.29 cubic metres per second through a stack having an exit diameter of 0.07 metres, exhausting horizontally through the side wall of the building at a height of approximately 2.75 metres above grade; and
- One (1) natural gas-fired heater and one (1) natural gas-fired boiler, having a combined maximum thermal input of 260,599 kilojoules per hour exhausting to the atmosphere through a stack.

Transfer and Electrical House (Building #70)

- One (1) multiclone dust collector, Source ID 16043, serving the Transfer & Electrical House, exhausting to the atmosphere at an approximate volumetric flow rate of 3.776 cubic metres per second through a stack, having an exit diameter of 0.53 metres, extending 9.7 metres above grade and 1.5 metres above the local roof; and
- Three (3) natural gas fired heaters, having a combined maximum thermal input of 2,954,156 kilojoules per hour exhausting to the atmosphere through stacks or to plant air.

Powerhouse (Building #72)

- Two (2) diesel-fired backup generators, Source IDs 17920 & 17921, each with a rating of 400 kilowatts per hour, each exhausting to the atmosphere at an approximate volumetric flow rate of 1.4 cubic metres per second through individual stacks having an exit diameter of 0.2 metres, exhausting horizontally through the side wall of the building at a height of approximately 7.6 metres above grade;

- One (1) diesel-fired backup generator, Source ID 17970, with a rating of 600 kilowatts per hour, exhausting to the atmosphere at an approximate volumetric flow rate of 2.4 cubic metres per second through a stack having an exit diameter of 0.25 metres, exhausting horizontally through the side wall of the building at a height of approximately 3.7 metres above grade;
- One (1) diesel-fired backup generator serving Mine “D”, Source ID 17997, with a rating of 910 kilowatts per hour, exhausting to the atmosphere at an approximate volumetric flow rate of 3.3 cubic metres per second through a stack having an exit diameter of 0.25 metres, extending 4.9 metres above grade and 0.6 metres above the roof;
- One (1) single-celled cooling tower, Source ID 10328, having a maximum capacity of 7,949 litres per minute, associated with the Powerhouse Building and located adjacent to the Administration Building, exhausting to the atmosphere at a volumetric flow rate of 37.4 cubic metres per section via a fan with an exit area of approximately 2 metres by 2.5 metres, at a height of 7 metres above grade; and
- One (1) dual-celled cooling tower, Source IDs 10318a and 10318b, with a combined having a maximum capacity of 15,898 litres per minute, associated with the Powerhouse Building and located adjacent to the Administration Building, each cell of the cooling tower exhausting to the atmosphere at a volumetric flow rate of 37.4 cubic metres per section via a fan with an exit area of approximately 2 metres by 2.5 metres, at a height of 7 metres above grade.

Schedule A continued

Administration (Building #74)

- Two (2) natural gas-fired boilers with a combined maximum thermal input of 13,255,721 kilojoules per hour, exhausting to the atmosphere through a common stack, Source ID BLDG74A, at an approximate volumetric flow rate of 1.66 cubic metres per second, having an exit diameter of 0.71 metres and extending 12.2 metres above grade and 4 metres above the roof;
- Two (2) natural gas-fired boilers and one (1) natural gas-fired water heater with a combined maximum thermal input of 1,582,583 kilojoules per hour, exhausting to the atmosphere through a common stack, Source ID BLDG74B, at an approximate volumetric flow rate of 0.22 cubic metres per second, having an exit diameter of 0.56 metres and extending 12.2 metres above grade and 4 metres above the roof;
- Two (2) natural gas-fired boilers with a combined maximum thermal input of 527,528 kilojoules per hour, exhausting to the atmosphere through a common stack, Source ID BLDG74C, at an approximate volumetric flow rate of 0.07 cubic metres per second, having an exit diameter of 0.36 metres and extending 10.7

metres above grade and 2.5 metres above the roof;

- Two (2) natural gas-fired water heaters with a combined maximum thermal input of 1,055,056 kilojoules per hour, exhausting to the atmosphere through a common stack, Source ID BLDG74D, at an approximate volumetric flow rate of 0.13 cubic metres per second, having an exit diameter of 0.36 metres and extending 10.7 metres above grade and 2.5 metres above the roof; and
- One (1) chiller cooling tower, Source ID 27267, having a maximum capacity of 250 litres per minute, exhausting to the atmosphere via a fan with an exit area of 2.4 by 3.7 metres, located at a height of 11.6 metres above grade and 2.4 metres above the roof.

No. 2 Headframe Building Including Electrical Shop (Building #84)

- One (1) natural gas fired Reznor heater, having a maximum thermal input of 263,764 kilojoules per hour exhausting to the atmosphere;

Water Tower

- Two (2) natural gas fired heaters, having a combined maximum thermal input of 342,893 kilojoules per hour, exhausting to the atmosphere through individual stacks.

Effluent Treatment – Lime Plant / CO_2 Plant

- One (1) passive baghouse dust collector, Source ID 16137, serving the Lime Plant transfer operations, having a maximum capacity of 0.03 cubic metres per second of air flow, exhausting to the atmosphere at an approximate volumetric flow rate of 0.03 cubic metres per second through a stack, having an exit diameter of 1.2 metres, extending 15 metres above grade and 2.9 metres above the local roof; and

Schedule A continued

One (1) diesel-fired backup generator, Source ID 17992, with a rating of 150 kilowatts per hour, exhausting to the atmosphere at an approximate volumetric flow rate of 0.5 cubic metres per second through a stack having an exit diameter of 0.1 metres, extending 2.0 metres above grade.

Paste Fill Plant

- Two (2) baghouse dust collectors, Source IDs PBP1 & PBP2 (Baghouse #1 & #2 Silo Dust Collectors), each exhausting to the atmosphere at an approximate

volumetric flow rate of 0.354 cubic metres per second through individual stacks, having an exit diameter of 0.2 metres, exhausting horizontally through the sidewall of the building at a height of 35 metres above grade;

- One (1) baghouse dust collector, Source IDs PBP3, Batch Mix Dust Collector, exhausting to the atmosphere at an approximate volumetric flow rate of 3.5 cubic metres per second through a stack, having an exit diameter of 0.2 metre, exhausting horizontally through the sidewall of the building at a height of 20 metres above grade;
- One (1) diesel-fired emergency fire pump, Source ID PBP33, having a maximum capacity of 55 horsepower, exhausting to the atmosphere at an approximate flow rate of 0.22 cubic metres per second through a stack with an exit diameter of 0.1 metres, exhausting horizontally through the side wall of the building at a height of 2.65 metres above grade;
- Twenty-eight (28) natural gas fired heaters, having a combined maximum thermal input of 6,103,498 kilojoules per hour, exhausting to the atmosphere through individual stacks; and
- One (1) vibrating screen used to process tailings, having a maximum processing capacity of 300 tonnes per hour, for use in the Paste Fill Plant, discharging fugitive dust emissions into the atmosphere;

Paste Fill Service Building

- One (1) diesel-fired backup generator, Source ID PFSB3, having a maximum capacity of 400 kilowatts per hour, exhausting to the atmosphere at an approximate flow rate of 1.4 cubic metres per second through a stack with an exit diameter of 0.3 metres, exhausting horizontally through the side wall of the building at a height of 2.5 metres above grade; and
- Seven (7) natural gas fired heaters and boilers, having a combined maximum thermal input of 4,992,630 kilojoules per hour exhausting to the atmosphere through stacks.

Refrigeration Plant

- Two Marley cooling towers, each with a maximum capacity of 15,000 litres per minute, Source IDs 10319A and 10319B, each exhausting to the atmosphere at a volumetric flow rate of 295 cubic metres per second via a fan with exit diameter of 3.5 metres, at a height of 8 metres above grade.

Schedule A continued

North Central Ventilation Raise (NCVR)

- Two (2) North Central Ventilation Raise Fans, Source IDs 27987 and 27988, each exhausting to the atmosphere at a volumetric flow rate of 550 cubic metres per second, through a horizontal stack with a diameter of 6 metres, at a height of approximately 4.6 metres above grade.

Portal Ventilation

- One (1) Portal Vent, Source ID 27989, exhausting to the atmosphere at a volumetric flow rate of 110 cubic metres per second, through a horizontal stack with a diameter of 2.2 metres, at a height of approximately 1.1 metres above grade.

Fugitive Sources – Material Handling

- Paste Fill Sand Pile (Source ID HPFSP);
- Active Landfill Cover Material Handling (Source ID HALCM);
- Landfill Cover Material Pile Handling (Source ID HLCMS);
- Lafarge 3/8” Stone Handling (Source ID HL8SP);
- Lafarge 3/4” Stone Handling (Source ID HL4SP);
- Lafarge Concrete Sand Handling (Source ID HLCSP);
- Lafarge Stone Handling (Source ID HLSP);
- Slime Dump Material Handling (Source ID HSLIME);
- Stacker Outdoor Ore Pile Handling (Source ID HSTCKR);
- Crusher Outdoor Ore Pile Handling (Source ID HCRSHR);
- Paste Fill Tailings Handling (Source ID HTLINGS);
- Northwest Rock Dump (Source ID HNWRDHLD);
- West Rock Dump (Source ID HWRDHLD);
- North Rock Dump (Source ID WNRCKDMP);
- East Rock Dump (Source ID HERDHLD);
- Ore Stockpile South of Crusher (Source ID HSOREPLE);
- Ore Stockpile East of Pit (Source ID HEOREPLE); and,
- Ore Stockpile Across from Stacker (Source ID HOREPLE).

Schedule A continued

Fugitive Sources – Wind Erosion and Site Roadways

- Paste Fill Sand Pile (885 m

^{2})(Source ID WPFSP);

- Active Landfill Cover Material (17 m^2) (Source ID WALCM);
- Landfill Cover Pile (7,600 m^2) (Source ID WLCMS);
- Lafarge 3/8” Stone Pile (128 m^2) (Source ID WL8SP);
- Lafarge 3/4” Stone Pile (52 m^2) (Source ID WL4SP);
- Lafarge Concrete Sand Pile (153 m^2) (Source ID WLCSP);
- Lafarge Stone Pile (113 m^2) (Source ID WLSP);
- Slime Dump Material Handling (9,035 m^2) (Source ID WSLIME);
- South Rock Dump – Fines Without Clay Pile (30,350 m^2) (Source ID WSRDF);
- Stacker Outdoor Ore Pile (1,008 m^2) (Source ID WSTCKR);
- Crusher Outdoor Ore Pile (971 m^2) (Source ID WCRSHR);
- Paste Fill Tailings Area (2,405 m^2) (Source ID WTAILNGS);
- Ore Stockpile South of Crusher (2,500 m2) (Source ID WSOREPLE);
- Ore Stockpile East of Pit (155,000 m2) (Source ID WEOREPLE);
- Ore Stockpile Across Road from Stacker (600 m2) (Source ID WOREPLE);
- North Rock Dump (20,000 m2) (Source ID WSOREPLE);
- East Rock Dump (78,500 m2) (Source ID WERCKDUMP);
- Northwest Rock Dump (87,200 m2) (Source ID WNWRCKDMP);
- West Rock Dump (31,600 m2) (Source ID WWRCKDMP); and
- Paved and Unpaved Roads at the Facility.

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

1. Condition Nos. 1 and 5.1 are included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the Regulations and this Approval.
2. Condition Nos. 2 and 5.2 are included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, the Regulations and this Approval can be verified.
3. Condition No. 3 is included to require the Company to notify staff of the Ministry so as to assist the Ministry with the review of the site's compliance.
4. Condition No. 4 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of

the Facility.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8660-AEQJPS issued on December 30, 2016

In accordance with Section 139 of the *Environmental Protection Act,* you may by written notice served upon me, the Ontario Land 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 ("the Notice") 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:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

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

and

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

*** Further information on the Ontario Land Tribunal's requirements for an appeal can be**

obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.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 29th day of November, 2021

Neryed Ragbar, P.Eng.
Director
appointed for the purposes of Part II.1 of the *Environmental Protection Act*

NB/
c: District Manager, MECP Timmins
Monika Greenfield, RWDI