

**Approval for Site-specific Standards Issued
Pursuant to s.35(1) of O. Reg. 419/05**

Approval Number:

Reference Number: 3575-CD2NGP

Issue Date:

Expiry Date: July 1, 2028

Site-specific
Standard Issued
to: Glencore Canada Corporation

Site Location: Kidd Concentrator Site, 10050 Highway 101 East, Hoyle Township, Timmins,
Ontario, P4N 7K1

DEFINITIONS - TERMS

For the purpose of this site-specific standard approval for Sulphur Dioxide, the following definitions apply:

- (1) "Action Plan" means the document entitled "Action Plan Report", dated March 30, 2022 submitted by the Company as part of its Request.
- (2) "Approval" means this site-specific standard approval (Approval Numberxxxxx-xxxxxx), reference number 3575-CD2NGP issued XXXXXXXXXXXX, 2023.
- (3) "Company" means Glencore Canada Corporation (Glencore) and includes any successors and assigns in accordance with section 19 of the EPA.
- (4) "Director" means a public servant who works in the Ministry and is appointed pursuant to section 5 of the EPA for the purpose of section 35 of the Regulation.
- (5) "District Manager" means the District Manager, Timmins District Office, Northern Region of the Ministry.
- (6) "EPA" means the Environmental Protection Act, R.S.O. 1990, c. E.19, as amended from time to time.
- (7) "Facility" means the Company facility referred to as Kidd Concentrator Site and located at 10050 Hwy 101 E., Hoyle Township, P4N 7K1 Ontario.
- (8) "Ministry" means the Ontario Ministry of the Environment, Conservation and Parks.
- (9) "Ministry Review Report" means the report, dated February 17, 2023 that provides a written review by Ministry staff of the Request by the Company for a site-specific standard for Sulphur Dioxide for a 1-hour averaging period.

- (10) "POI" means point of impingement and has the same definition as section 2 of the Regulation.
- (11) "Regulation" means Ontario Regulation 419/05: Air Pollution – Local Air Quality made under the EPA.
- (12) "Request" means the request made under section 32 of the Regulation dated March 30, 2022, and submitted by the Company with respect to the Sulphur Dioxide 1-hour averaging period standard listed in an amendment to Schedule 3 of the Regulation that comes into force on July 1, 2023 and includes,
- i. the request document signed by Leah Fedat, Superintendent Environment;
 - ii. an Emission Summary and Dispersion Modelling Report; a Technology Benchmarking Report;
 - iii. a Public Consultation Summary Report summarizing the public meeting; and,
 - iv. the Action Plan Report.
- (13) "SO₂ Analyzers" means the existing analyzers that measure the concentration of Sulphur Dioxide at the Facility and are described in Appendix I of the Emission Summary and Dispersion Modelling Report submitted with the Request.
- (14) "Sulphur Dioxide" or "SO₂" means the contaminant identified by the Chemical Abstract Number 7446-09-5.

GROUNDINGS FOR APPROVAL

In accordance with section 35 of the Regulation,

A. I, the Director, am satisfied that:

1. The Request is consistent with subsection 32(1), paragraph 5 of the Regulation.
2. The requirements of section 32 of the Regulation have been met.
3. The Request satisfies the requirements of section 33 and other relevant portions of the Regulation.
4. The notification and holding of a public meeting and follow-up to the public meeting by the Company met the requirements under Section 34 of the Regulation.

B. Based on the above conclusions and the information that I have reviewed, including the Request, the Ministry Review Report, the Facility description in the Request and various interactions with the Company, I am of the opinion that:

1. The Company cannot comply with section 20 with respect to the standard of 100 micrograms per cubic metre for Sulphur Dioxide over a 1- hour averaging period that will be coming into force and set out in Schedule 3 on July 1, 2023, because it is neither technically nor economically feasible for the Company to comply.

2. The site-specific standard for Sulphur Dioxide, set out in Table 1 below, is the minimum difference necessary to enable the Company to comply with section 20 of the Regulation.
3. The conditions imposed and the end date for the Approval are appropriate having considered the following:
 - a. The nature of Sulphur Dioxide;
 - b. The frequency with which the inability to comply with section 20 referred to in subclause 35 (1)(b)(i) of the Regulation would occur; and,
 - c. Whether there are any acute effects associated with Sulphur Dioxide.
4. There is no public interest reason sufficient to require denial of the Request.
5. The site-specific Sulphur Dioxide standard is not likely to permit discharges of the contaminant that too frequently result in the concentration of the contaminant at a POI located on a place referred to in subsection 30(8) of the Regulation exceeding the other time period upper risk threshold set out for the contaminant in Schedule 6 of the Regulation.
6. Compliance with this Approval will result in improvements to reduce discharges to air.

C. The Company was provided a draft copy of the Approval on February 24, 2023 and was provided an opportunity to make written submissions to the Director during the period that ended 30 days after the draft was given.

SITE-SPECIFIC STANDARD APPROVED

Pursuant to s.35 (1), (4), (4.1), (5), and (9.1) of the Regulation, beginning on July 1, 2023, with respect to discharges from the Facility, references in the Regulation to a standard set out in Schedule 3 for Sulphur Dioxide shall be deemed to be references to the site-specific standard set out in Table 1 for the averaging period set out in Table 1.

The standard with a 24-hour averaging period for Sulphur Dioxide set out in Schedule 3 of the Regulation remains applicable to the discharges from the Facility. On and after July 1, 2023, the standard with an annual averaging period for Sulphur Dioxide set out in Schedule 3 of the Regulation will remain applicable to the discharges from the Facility.

Table 1: Site-Specific Standard for the Facility

Contaminant	Contaminant Chemical Abstracts Service No.	Applicable Time Period	Site-specific Standard (µg/m³)	Site-specific Standard Averaging Period
Sulphur Dioxide	7446-09-5	From July 1, 2023 to July 1, 2028	690	1-hour

CONDITIONS

You are hereby notified that this Approval is issued to you subject to the conditions

outlined below pursuant to subsection 35 (6) of the Regulation. Please note that subsection 35 (7) of the Regulation states that the approved site-specific standard for Sulphur Dioxide for the 1-hour averaging period applies only if the following conditions are complied with.

Condition 1: Continuous Emissions Monitoring

1.1 The Company shall continue to use, maintain, and calibrate the SO₂ Analyzers and the existing meteorological station and calculate Sulphur Dioxide emissions.

1.2 The Company shall record and submit electronically, on a quarterly basis, to the District Manager the Sulphur Dioxide measurements and calculated emissions.

Condition 2: Written Summary Report of Action Plan Implementation and any other actions taken to minimize Sulphur Dioxide levels in the vicinity of the Facility

2.1 The Company shall prepare a written summary report of the measures taken each calendar year to implement the Action Plan, including a description of each measure taken, the date of implementation of each measure taken, and proposed dates for the implementation of measures yet to be taken.

2.2 The Company shall submit an electronic copy of the written summary report to the District Manager no later than the later of:

1. March 31 of the year following the calendar year that is being summarized, or
2. A date later than March 31 as set out in writing by the District Manager for the purpose of this condition, if any.

2.3 The Company shall make the annual written summary report available to the public by posting it on the Company's website.

2.4 The Company shall continue to investigate and include in the written summary report described by Condition 2.1 any other measures taken to minimize Sulphur Dioxide levels in the vicinity of the Facility.

REASONS FOR CONDITIONS

Condition 1, and Condition 2 are included in accordance with the subsection 35(12) of the Regulation to assist in minimizing the frequency of exceedances of the Sulphur Dioxide standard in Schedule 3 of the Regulation.

EXPIRY

In accordance with subsection 35 (9) of the Regulation, this Approval shall expire on July 1, 2028 after which the standard set out in Schedule 3 of the Regulation for the 1-hour averaging period will apply to discharges of Sulphur Dioxide from the Facility.

The above noted Request is approved under Section 35 of the Regulation.

This Approval is issued this xx day of xxxxxxxx 2023.

XXXXXXXXXX

Director, Section 35, O. Reg. 419/05
 Environmental Policy and Programs Branch

Appendix 1: Summary of Action Plan Items

Item	Actions	Proposed completion date
1	Replacing Dryers with Filter Press Under a Mine Extension (Mine 5) Scenario. Otherwise, the facility will begin to implement the closure planning process. <ul style="list-style-type: none"> • Feasibility engineering, constructability review • Detailed engineering and construction plan if Mine 5 extension goes ahead • Installation and commissioning of filter press 	Before July 1, 2028
2	Address adverse conditions that result in loss of feed and current controls <ul style="list-style-type: none"> • Filter boot alarm to be implemented when filter boot drops below 85% indicating loss of feed. • Install weightometer on dryer feed conveyors; • Trial camera installation on disk filters for continuous monitoring and if proven successful implement monitoring 	July 1, 2023 Ongoing, up to the dryers' replacement with filter press.
3	Update SO ₂ Monitoring Alarm	July 1, 2023 Ongoing
4	Implement Filter Boot Level Alarming	July 1, 2023 ongoing
5	Modify Standard Operating Procedures (SOP's) related to dryer operation	July 1, 2023 ongoing
6	Standardize response to losses of feed and mitigating actions to be taken by operator to prevent elevated SO ₂ emissions	July 1, 2023 ongoing

7	Modify Start-up Procedure and Verify Dryer Moistures during Start-up	July 1, 2023 ongoing
8	Calibrate and record/document the maintenance routine for the SO ₂ Analyzers	July 1, 2023 ongoing
9	Maintain the meteorological station on site	July 1, 2023 ongoing