

BY EMAIL

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June 2, 2023

Local Air Quality Section
Ministry of the Environment, Conservation and Parks
40 St Clair Ave West, 7th & 9th Floor
Toronto, ON M4V 1M2

**RE: APPLICATION FOR SITE-SPECIFIC AIR STANDARD APPROVAL
GLENCORE CANADA CORPORATION
ENVIRONMENTAL REGISTRY NUMBER 019-6916**

Canadian Environmental Law Association (“CELA”) opposes Glencore Canada Corporation’s (“Glencore”) application for a Site-Specific Air Standard (ERO number 019-6916) for Sulphur Dioxide (SO₂) emissions at the Kidd Concentrator Site (“the Site”).

The Director should deny Glencore’s application based on public interest considerations, pursuant to s.35(1)(b)(iii) of O. Reg 419/05.

On March 20, 2018, the Ministry of the Environment, Conservation and Parks (“the Ministry”) lowered its provincial air standard for SO₂ “to better protect human health and the environment.”¹ In Glencore’s request to avoid meeting this new standard, it did not provide its rationale nor explain the harmful effects of SO₂ in its public consultation. It did not use the 5-year transition period to bring itself into compliance with the new standard. Public consultation records revealed health concerns from the public about the site-specific standard.

Glencore identified replacing the copper and zinc dryers with pressure filters as the preferred technically feasible option that will enable its compliance with the new air standard.² Although Glencore indicates its reluctance to implement this solution, it failed to provide an economic feasibility analysis to justify its inaction.

The application should also be denied because Glencore did not demonstrate that the proposed elevated levels of SO₂ for the Kidd Concentrator Site for 2023-2028 are the “minimum

¹ Environmental Registry of Ontario, “Ministry of the Environment and Climate Change ERO number 013-0903”, online at <<https://ero.ontario.ca/notice/013-0903>>.

² Glencore Canada Corporation, “Technology Benchmarking Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 16.

difference necessary” as compared to the province-wide standard, pursuant to *O. Reg. 419/05*, s.35(b)(ii).³

A. CANADIAN ENVIRONMENTAL LAW ASSOCIATION

CELA is a public interest law clinic dedicated to environmental equity, justice, and health. Founded in 1970, CELA operates the oldest environmental legal aid clinic in Canada. CELA provides free legal services to qualifying low-income and vulnerable or disadvantaged communities in Ontario. CELA works towards protecting human health and the environment by actively engaging in policy planning and seeking justice for those harmed by pollution or poor environmental decision-making.

B. OVERVIEW OF APPLICATION

Glencore has requested a site-specific air standard for SO₂ for a 5-year period from July 1, 2023 to July 1, 2028. The Kidd Concentrator Site is in Hoyle Township, Ontario at 10050 Highway 101 East. The facility operates using concentrate dryers, namely copper dryers and zinc dryers, which are significant contributors to the facility’s overall SO₂ emissions.⁴

SO₂ is known to cause negative impacts to human health and to the environment, especially to people who live in the area surrounding facilities that emit the chemical.⁵

The SO₂ provincial air emissions standard was lowered from a 1-hour standard of 690 ug/m³ to 100 ug/m³, which will come into force on July 1, 2023 after a five year phase-in period.⁶ Glencore made this application because its current air dispersion modelling report indicates that emissions from the facility will exceed Ontario’s updated SO₂ air standard. The impetus for this request is concerning because the Ministry standard is being lowered to account for impacts from SO₂ emissions on human health, including respiratory problems, and because it purposefully gave industry five years to comply with the new standard.⁷

³ *Air Pollution - Local Air Quality: O. Reg., 419/05*, s. 35(b)(ii), <<https://www.canlii.org/en/on/laws/regu/o-reg-419-05/latest/o-reg-419-05.html#sec35subsec1>>.

⁴ Glencore Canada Corporation, “Technology Benchmarking Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 7-8.

⁵ Government of Canada, “Sulfur Dioxide” (2 February 2021), online: *Canadian Centre for Occupational Health and Safety* https://www.ccohs.ca/oshanswers/chemicals/chem_profiles/sulfurdi.html.

⁶ Environmental Registry of Ontario, “Ministry of the Environment and Climate Change ERO number 013-0903”, online at <<https://ero.ontario.ca/notice/013-0903>>.

⁷ Ontario’s Regulatory Registry, “Reducing sulphur dioxide emissions from Ontario’s petroleum facilities”, online at <<https://www.ontariocanada.com/registry/view.do?postingId=39727>>; Environmental Registry of Ontario, “Ministry of the Environment and Climate Change ERO number 013-0903”, online at <<https://ero.ontario.ca/notice/013-0903>>.

C. ANALYSIS

The Ministry should deny Glencore’s request for a site-specific standard because (1) there are public interest reasons sufficient to deny the request, (2) Glencore did not demonstrate compliance with the provincial standard is not feasible, and (3) the difference between the provincial standard and the requested standard is not the “minimum difference necessary.”

1- There are “public interest reasons” to deny the request

There are several public interest reasons to deny Glencore’s request, pursuant to *O. Reg. 419/05*, s.35(1)(b)(iii), namely:

- a. The requested standards are well above provincial standards;
- b. Sulphur dioxide emissions are harmful to human health; and
- c. Community members expressed serious concerns about the proposal during the public consultation.

a. The Requested Standards are Well Above the Provincial Standards

The provincial air pollution limits are set based on analyses of the impacts of pollutants on human health. Glencore’s request for site-specific standards is well above the provincial limits for SO₂. Specifically, the requested standard is 6.9 times higher than the provincial standard.⁸

Contaminant	Averaging Period	Current Air Standard (µg/m³)	Air Standard on July 1, 2023 (µg/m³)	Requested Site-Specific Standard (µg/m³)
Sulphur dioxide (SO₂)	1-hour	690	100	690

b. Sulphur Dioxide Emissions Are Harmful to Human Health

The Ministry’s rationale for strengthening the SO₂ standard from 690 ug/m³ over a one-hour averaging period to 100 ug/m³ over a one-hour averaging period was to better protect human health.⁹ Glencore, however, has not addressed the human health implications of its request to emit well above the new provincial standard.

Both the governments of Ontario and Canada have outlined the health effects caused by exposure to SO₂, particularly with respect to its inhalation.¹⁰ For instance, when inhaled, SO₂ is extremely

⁸ Environmental Registry of Ontario, “Glencore Canada Corporation. ERO number 019-6916”, online at <<https://ero.ontario.ca/notice/019-6916>>; Environmental Registry of Ontario.

⁹ Environmental Registry of Ontario, “Ministry of the Environment and Climate Change ERO number 013-0903”, online at <<https://ero.ontario.ca/notice/013-0903>>.

¹⁰ Government of Canada, “Sulfur Dioxide” (2 February 2021), online: *Canadian Centre for Occupational Health and Safety* <https://www.ccohs.ca/oshanswers/chemicals/chem_profiles/sulfurdi.html>; Ontario’s Regulatory Registry, “Reducing sulphur dioxide emissions from Ontario’s petroleum facilities”, online at <<https://www.ontariocanada.com/registry/view.do?postingId=39727>>.

toxic, can cause severe irritation of the nose and throat, and in high enough concentrations can cause pulmonary edema, a life-threatening condition caused by the accumulation of fluid in the lungs. Elevated concentrations of SO₂ are known to cause respiratory distress, particularly in vulnerable populations including children, seniors, and people with asthma. Exposures for as little as ten minutes can cause coughing, wheezing and shortness of breath. These risks become of greater concern as COVID-19 has demonstrated the destructiveness of respiratory illness.¹¹

Another public interest reason to deny the request is that Glencore did not make efforts to comply with the new provincial standard during a five-year transition period. The new provincial standards for SO₂ were announced in 2018. There is a serious precedential concern if industrial emitters who do nothing to comply with the new standards are rewarded with a Ministry site-specific standard that allows them to continue to emit at previous levels.

Glencore described the new provincial air standards as “one of the most stringent in Canada (compared with other provinces) and in the world” in its Plain Language Summary provided to participants during public consultation.¹² Glencore repeatedly stated that the new standards are highly stringent throughout its informational package. However, stringency is not a justification for Glencore to not meet the provincial air standard that applies to all facilities in Ontario, pursuant to *O. Reg. 419/05* s. 20 (1).¹³

Glencore failed to consider the impacts of its emissions on human health. There has been no human health impact study or indication of how the site-specific standard would protect human health. While the SO₂ standard is being strengthened to better protect human health, the proposed site-specific standard is 6.9 times the new air standard.

c. Community members expressed concerns during the public consultation

In its Public Consultation Report, Glencore improperly stated that “there was no opposition or significant concerns regarding Glencore’s application for a site-specific standard for SO₂.”¹⁴ This conclusion is not supported by the evidence enclosed in the Report’s appendices and should be disregarded.

Community members inquired about health concerns

Members of the public repeatedly raised health concerns during the public consultation. These concerns were raised despite Glencore not providing any information to the public about the health concerns associated with SO₂ emissions.

¹¹ Government of Canada, “Sulfur Dioxide” (2 February 2021), online: *Canadian Centre for Occupational Health and Safety* <https://www.ccohs.ca/oshanswers/chemicals/chem_profiles/sulfurdi.html>.

¹² Glencore Canada Corporation, “Appendix D. Plain Language Summary - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 23.

¹³ *Air Pollution - Local Air Quality: O. Reg., 419/05*, s. 20(1), <<https://www.canlii.org/en/on/laws/regu/o-reg-419-05/latest/o-reg-419-05.html#sec35subsec1>>.

¹⁴ Glencore Canada Corporation, “Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 9.

The community affected by the site-specific standard request raised concerns in several instances, as demonstrated by the Public Consultation Report. In Glencore’s consultation with the Métis community, the stakeholder made a “suggestion to include in the report health effects of SO₂ for the public’s better understanding.”¹⁵

Several other residents raised concerns about air quality and long-term health effects of SO₂ emissions, as documented in the Question and Answer Log.¹⁶ At page 68 of the Public Consultation Report, the record shows that one resident raised concerns about health effects, particularly people dying of throat cancer.¹⁷ The resident stated that “a lot of people are getting sick and the company has not provided for the people.”¹⁸ At page 70, the record shows that another resident near the site inquired about how the proposed site-specific standard will impact the natural environment and her grandchildren’s health.¹⁹ Other residents also asked Glencore to explicitly explain how this proposal will impact their health according to the Question and Answer Log in Appendix I.

Glencore failed to explain harmful health effects of SO₂

Glencore wrote in its Plain Language Summary that “the requested site-specific standard for SO₂ is the same as the current standard” and that “no increase in SO₂ emissions are planned.”²⁰ In the materials that Glencore created for the public, including its Notice of Public Meeting and Plain Language Summary, “public health” was never mentioned. On the Information Session Poster Boards, Glencore included a single paragraph about SO₂.²¹ Glencore stated that “too much SO₂ is dangerous to human health,” while it failed to mention the harmful effects of SO₂ emissions above 100 ug/m³.²²

¹⁵ Glencore Canada Corporation, “Appendix K1. Site-Specific Air Standard Meeting with the Metis - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 80.

¹⁶ Glencore Canada Corporation, “Appendix I. Question and Answers Log - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 60-73.

¹⁷ Glencore Canada Corporation, “Appendix I. Question and Answers Log - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 68.

¹⁸ Glencore Canada Corporation, “Appendix I. Question and Answers Log - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 68.

¹⁹ Glencore Canada Corporation, “Appendix I. Question and Answers Log - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 60-73.

²⁰ Glencore Canada Corporation, “Appendix D. Plain Language Summary - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 24.

²¹ Glencore Canada Corporation, “Appendix F. Information Session Poster Boards - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 36.

²² Glencore Canada Corporation, “Appendix F. Information Session Poster Boards - Public Consultation Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 36.

Glencore's public presentation does not reflect up to date, accurate information about the health impacts of SO₂ emissions, reflected in the new provincial standard. Based on these questions raised by the community, and the lack of accurate and transparent information on the issue of public health impacts by Glencore's proposed emissions, the Director should deny this request for public interest reasons.

2- Glencore failed to demonstrate that it is not technically or economically feasible to meet the new standard

Glencore presented a technically feasible method to achieve compliance with the new air standard

Glencore's request is for a site-specific standard until 2028. Glencore stated that its current operations will cease by the end of 2023, unless the Mine 5 project is approved.²³ Either its request for a site-specific standard should cover only the period until the end of 2023, or it should comply with the technologically feasible option identified in its materials. Glencore had five years to implement these technologies and was well aware of the looming deadline for compliance.

Glencore listed a number of technically feasible options that would reduce the site's emissions in its Technology Benchmarking Report.²⁴ The report identified the method of replacing the zinc and copper dryers with pressure filters which would most effectively eliminate SO₂ emissions.²⁵ In its Action Plan, Glencore also stated that this method would "reduce energy and natural gas consumption and hence associated greenhouse gas emissions."²⁶ In summary, Glencore acknowledged that implementing the pressure filters is indeed technically feasible.

However, Glencore indicated its reluctance to adopt this approach. On Page 4 of its Action Plan, Glencore indicated that the company will only implement the technology upon the approval of the Mine 5 Project, stating: "the process to install the pressure filtration unit(s) can start when the Mine 5 Project is approved."²⁷ This rationale does not accord with the regulatory requirements in O. Reg 419/05 and is not supported by evidence.

Further, Glencore estimated that "the engineering, procurement, installation and commissioning of the pressure filtration unit(s) is expected to take 24 to 36 months from approval, estimated to

²³ Glencore Canada Corporation, "Action Plan Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide", dated March 2022, at p 5.

²⁴ Glencore Canada Corporation, "Technology Benchmarking Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide", dated March 2022, at p 15.

²⁵ Glencore Canada Corporation, "Technology Benchmarking Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide", dated March 2022, at p 16.

²⁶ Glencore Canada Corporation, "Action Plan Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide", dated March 2022, at p 6.

²⁷ Glencore Canada Corporation, "Action Plan Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide", dated March 2022, at p 5.

be completed by the end of 2026.”²⁸ These efforts should have been started during the five year phase-in period.

Glencore did not address economic feasibility

Glencore’s rationale for non-compliance with the provincial standard is economically driven. In its Action Plan, Glencore stated that the expected investment of filter press process would be \$12 million, which necessitates the approval of the Mine 5 Project for the technology to be implemented.²⁹ On Page 6 of the Action Plan, it stated that “Glencore Kidd Concentrator Site has previously completed several studies to evaluate the replacement of the current Herreschoff multi-hearth dryers with pressure filters, but the economics did not support justification of the project based on the life of mine at the time of these studies.”³⁰

The Ministry anticipated that certain facilities may claim cost-ineffectiveness in their preferred technically feasible pollution control option, as Glencore did in its application.³¹ According to the Guideline for the Implementation of Air Standards in Ontario, the Ministry suggests the facility to “bring forward an economic feasibility analysis” to justify its rationale.³²

Glencore did not provide an economic feasibility analysis to substantiate its claims that the preferred technically feasible option is economically infeasible without the approval of the Mine 5 Project. While an economic feasibility report is optional for site-specific standard applications in general³³, a report with detailed economic analysis is essential in this case, where the economic feasibility claim is the basis for the applicant’s request. Therefore, the Director should deny Glencore’s request based on the inadequate economic feasibility analysis.

3 The requested standard is not the minimum difference necessary between the provincial standard and the requested standard

O. Reg. 419/05, s.35(1)(b)(ii) requires an applicant to demonstrate that it is requesting the smallest deviation necessary from the provincial standard. Glencore’s application does not meet this requirement. The Ministry should deny the application on this basis.

²⁸ Glencore Canada Corporation, “Action Plan Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 5.

²⁹ Glencore Canada Corporation, “Action Plan Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 6-7.

³⁰ Glencore Canada Corporation, “Action Plan Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide”, dated March 2022, at p 6.

³¹ Ontario Ministry of the Environment and Climate Change, “2.5 Economic Considerations - Guideline A-12: Guideline for the Implementation of Air Standards in Ontario” (February 2017), online at <<https://www.ontario.ca/page/guideline-12-guideline-implementation-air-standards-ontario#section-2>>.

³² Ontario Ministry of the Environment and Climate Change, “2.5 Economic Considerations - Guideline A-12: Guideline for the Implementation of Air Standards in Ontario” (February 2017), online at <<https://www.ontario.ca/page/guideline-12-guideline-implementation-air-standards-ontario#section-2>>

³³ *Air Pollution - Local Air Quality: O. Reg., 419/05*, s. 32(4), <<https://www.canlii.org/en/on/laws/regu/o-reg-419-05/latest/o-reg-419-05.html#sec35subsec1>>.

In its Technology Benchmarking Report, Table 1-1: ESDM Emissions Summary Table (EST) shows in red that the 1-hour Maximum POI Concentration from the Site is $658 \mu\text{g}/\text{m}^3$.³⁴ This model does not include any steps to lower emissions.

The purpose of s.35(1)(b)(ii) is to ensure that facilities are taking steps to lower their emissions and emit as close to the provincial standard as possible. Instead, Glencore has modelled its current emissions and taken no steps to lower emissions. It has requested the same standard as the soon-to-be-outdated provincial air standard for SO₂. There is no suggestion that Glencore has made efforts to seek a site-specific standard as close to the provincial standard as possible.

D. CONCLUSION

The Director should not approve Glencore's request for a site-specific air approval for its Kidd Concentrator Facility because it does not meet the requirements of section 35 of *O. Reg 419/05*.

First, there are serious public interest reasons to deny this application. A much more transparent and informative public consultation, and a human health risk assessment, are required to ensure that pollution from this facility will not contribute to harm to human health for people living near the facility. Glencore's claim that health concerns were not raised during the consultation is inaccurate.

Second, Glencore identified a technically feasible solution that would eliminate SO₂ emissions but chose not to make the required technology changes. Glencore took no steps to comply with the new standard during a five-year phase period. It is now claiming that it cannot comply for economic reasons, but has not provided any economic analysis to support its claim.

Lastly, the difference between the new provincial air standard and the site-specific standard that Glencore has requested is not the smallest deviation necessary, as required by *O. Reg 419/05*.

If you have any questions or wish to discuss CELA's submission, please contact Jacqueline Wilson at jacqueline@cela.ca or 416-960-2284 ext. 7213.

³⁴ Glencore Canada Corporation, "Technology Benchmarking Report - Glencore Kidd Concentrator Site - Application for Site-specific Standard for Sulphur Dioxide", dated March 2022, at p 5.



Yours truly,

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