

July 19, 2023

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

Delivered via E-mail & Regular Mail

Dear Sir/Madam:

Re: Carbon Black Industry Standard (Environmental Registry No.: 019-6492)

Canadian Environmental Law Association ("CELA") submits the following comments regarding the Ministry of the Environment, Conservation and Parks' ("the Ministry") proposal for a technical standard for the carbon black sector (ERO number 019-6492).

#### A. BACKGROUND AND OVERVIEW OF THE PROPOSAL

CELA is a legal aid clinic representing low-income, vulnerable, and disadvantaged communities before courts and administrative tribunals. CELA also works on law reform and policy initiatives surrounding various environmental public interest matters.

The Ministry is proposing a new technical standard for the carbon black sector's sulphur dioxide (SO<sub>2</sub>) emissions. The proposal would apply to two carbon black facilities in Ontario - Cabot Canada Ltd. in Sarnia, and Birla Carbon in Hamilton.

The proposed technical standard would exempt two carbon black facilities from complying with the updated SO<sub>2</sub> provincial air standards that took effect on July 1, 2023.

Instead of complying with the provincial air quality standard of 100 ug/m3 as the max 1-hr average, facilities would have the choice between two options to reduce their emissions gradually. Under Option A, facilities would have five additional years to implement air pollution control technologies to reduce their emissions. Under Option B, facilities would have five additional years to meet interim in-stack limits, and two more years to meet a lower set of limits.

### **B. ANALYSIS**

# 1. The effect of this technical standard undermines the updated provincial air standard.

The Ministry updated the SO<sub>2</sub> standard from 690 micrograms per cubic metre of air (ug/m<sup>3</sup>) to 100 ug/m<sup>3</sup> over a one-hour averaging period. The purpose of this update was to better protect human health<sup>1</sup>. As noted above, the new standard came into effect on July 1, 2023.

Under the proposed technical standards, however, carbon black facilities could continue to emit SO<sub>2</sub> at higher concentrations than the provincial air standards until 2028. According to an air monitoring report in Aamjiwnaang First Nation (AFN) in Sarnia, where the Cabot Canada facility is located, SO<sub>2</sub> levels in AFN currently exceed the World Health Organization (WHO) Guidelines for SO<sub>2</sub>. We are concerned that the proposed technical standard would permit the carbon black facilities to emit SO<sub>2</sub> at a level that exceeds the WHO guidelines for another five years.

Both the governments of Ontario and Canada have published information outlining the health effects caused by exposure to  $SO_2$ . For instance, when inhaled,  $SO_2$  is highly toxic as it can cause severe nose and throat irritation. In high concentrations, it can cause pulmonary edema, a life-threatening condition caused by fluid accumulation in the lungs. Elevated concentrations of  $SO_2$  are known to cause respiratory distress, particularly in vulnerable populations, including children, seniors, and people with asthma. Exposure to  $SO_2$  for as brief as ten minutes can cause coughing, wheezing and shortness of breath.

Given these serious health impacts, we are concerned about the Ministry's proposal to allow carbon black facilities to exceed the provincial air standard for SO<sub>2</sub> for at least five more years. There is no valid justification for permitting this extension of time to bring these facilities into compliance, given that the Ministry announced in 2018 that the new provincial air standard for SO<sub>2</sub> would come into effect by July 1, 2023. Consequently, carbon black industry facilities have had at least five years to develop and implement a plan to comply with the new standard. The Ministry's proposal does not explain why these facilities have still not taken measures to meet the new SO<sub>2</sub> standard.

We recommend that the proposed technical standard require facilities to meet their in-stack SO<sub>2</sub> air emission concentration limits, equivalent to a 95% reduction in SO<sub>2</sub> emissions by January 1, 2026. Further, the technical standard should require the installation of SO<sub>2</sub> continuous emission monitors for all stacks that emit SO<sub>2</sub> by January 1, 2024. Until the necessary air pollution control equipment can be installed and operational, the Ministry should require the facilities to

<sup>&</sup>lt;sup>2</sup> AFN Monthly Ambient Air Monitoring Report – June 2023, online at <a href="https://www.aamjiwnaang.ca/wp-content/uploads/2023/07/AFN">https://www.aamjiwnaang.ca/wp-content/uploads/2023/07/AFN</a> monthly-ambient-air-monitoring-report for-Jun-2023.pdf>.

<sup>&</sup>lt;sup>3</sup> Government of Canada, "Sulfur Dioxide" (2 February 2021), online: *Canadian Centre for Occupational Health and Safety* <a href="https://www.ccohs.ca/oshanswers/chemicals/chem\_profiles/sulfurdi.html">https://www.ccohs.ca/oshanswers/chemicals/chem\_profiles/sulfurdi.html</a>; Ontario's Regulatory Registry, "Reducing sulphur dioxide emissions from Ontario's petroleum facilities", online at <a href="https://www.ontariocanada.com/registry/view.do?postingId=39727">https://www.ontariocanada.com/registry/view.do?postingId=39727</a>.

implement a 50% reduction of SO<sub>2</sub> air emissions (relative to current ESDMRs) by January 1, 2024.

#### 2. Benchmarking against SO<sub>2</sub> emissions from carbon black facilities in the United States.

Air emission data shows that SO<sub>2</sub> emissions from facilities in Ontario are higher than their U.S. counterparts.

According to a report on air quality, facilities in Canada emit at a higher level than facilities in the United States.<sup>4</sup> A Phillips 66 carbon black chemical plant in the San Francisco Bay Area Air Quality Management District (BAAQMD) near Rodeo, California, for example, reported 1,328 tonnes of SO<sub>2</sub> emissions to the US National Emission Inventory in 2017. In contrast, the Cabot Carbon plant in Sarnia reported 4,479 tonnes of SO<sub>2</sub> air emissions in 2017, according to the National Pollutant Release Inventory. The facility in Sarnia emits a significantly higher amount of SO<sub>2</sub> than the U.S. facility.

## 3. Cumulative effects should be studied.

CELA also recommends that a cumulative effect study to assess the cumulative and synergistic impacts of air pollutants be undertaken in Hamilton and Sarnia. This study would examine the additive or interrelated effects of pollution within their respective local airsheds.

The failure to consider cumulative effects means that the combined emissions from facilities could exceed the standard, even if each facility individually complies with the provincial standard, thereby causing harm to human health and the environment. A cumulative effects study would provide valuable information about whether additional measures beyond those recommended in the Ministry's proposal are warranted.

#### 4. Request for additional time, notice and public engagement for this proposal.

CELA further requests that the Ministry provides additional time, notice and public engagement for consultation of the proposal. In this regard, we sent a letter to Minister David Piccini requesting enhanced public participation rights under Ontario's *Environmental Bill of Rights* for all Ministry proposals dealing with site-specific standards. We recommend that similar measures be undertaken in relation to the Ministry's proposal for a technical standard for carbon black facilities.

CELA therefore requests the Minister to exercise his authority under section 24 of the *Environmental Bill of Rights (EBR)* to enhance public participation by organizing public community meetings and opportunities for oral submissions regarding the Ministry's proposal for a carbon black industry technical standard. Pursuant to section 23 of the *EBR*, CELA requests that the Minister provide the public with additional time beyond the minimum thirty-day period

<sup>&</sup>lt;sup>4</sup> Air Quality Data Comparison Report for Aamjiwnaang First Nation, Aamjiwnaang First Nation, December 2022, online at <a href="https://www.aamjiwnaang.ca/wp-content/uploads/2023/05/AFN-Air-Quality-Summary-Report Dec-2022-Ver3.pdf">https://www.aamjiwnaang.ca/wp-content/uploads/2023/05/AFN-Air-Quality-Summary-Report Dec-2022-Ver3.pdf</a>>.

to comment on the Ministry's proposal. In addition, pursuant to section 25 of the *EBR*, CELA requests that the Minister provide additional public notice on this new proposal through news media as well as actual notice to political representatives, community organizations and environmental organizations in the local community.

## C. CONCLUSION

CELA makes the following recommendations regarding the Ministry's proposal to develop a technical standard for the carbon black sector:

- 1) Shorten the timeline for the carbon black facilities to implement pollution control technologies.
- 2) Undertake a cumulative impacts analysis to assess whether further measures are required to address the impacts of SO<sub>2</sub> in Sarnia and Hamilton.
- 3) Provide enhanced public participation rights under the *EBR* to allow for greater public engagement regarding the Ministry's proposal.

If you have any questions or wish to discuss CELA's submission, please do not hesitate to contact Ramani Nadarajah at (416) 960-2284 ext. 7217 or via email at ramani@cela.ca

Yours truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

Ramani Nadarajah Counsel Coco Wang Intern

c: Tyler Schulz, Assistant Auditor General Commissioner of the Environment