

March 31, 2024

Ministry of the Environment, Conservation and Parks
1094 London Road
Sarnia, Ontario
N7S 1P1

Attn: Mike Close

RE: O.Reg 88 – Section 35 Annual Report – 2023

Good day Mr. Close,

This annual report, which covers the January - December 2023 reporting period for the Suncor Sarnia Refinery was prepared in accordance with section 35 of O. Reg 88/22.

1. s35(1) The average, maximum and minimum hourly mass emission rate of,
 - i. sulphur dioxide discharged into the air from the sources of contaminant mentioned in paragraphs 1 and 5 of subsection 22 (1) during the calendar year

Subsection 22(1) identifies continuous measurement requirements that begin on and after July 1, 2024. The continuous monitoring required of SO₂ mass emission rates discharged into the air from the sources mentioned in paragraph's 1 and 5 of subsection 22(1) during the calendar year was not required to be operational in 2023.

2. s35(2) The total amount, in kilograms, of,
 - i. sulphur dioxide discharged into the air from the sources of contaminant mentioned in paragraphs 1 and 5 of subsection 22 (1) during the calendar year,

Subsection 22(1) identifies continuous measurement requirements that begin on and after July 1, 2024. The continuous monitoring required to determine the total amount, in kilograms, of SO₂ discharged into the air from the sources mentioned in paragraph's 1 and 5 of subsection 22(1) during the calendar year was not required to be operational in 2023.

3. s35(3) The total amount of sulphur dioxide, in tonnes, discharged from the facility during the calendar year as required to be calculated under clause 26 (2) (b) in respect of the fourth quarter of the calendar year, if applicable.

The annual sulphur dioxide calculation requirements in section 26 (2)(b) do not apply until the first quarter of 2025.

4. s35(4) A summary of the information in any reports submitted under section 32 during the calendar year.

There were no “Root Cause Analysis and Corrective/Preventative Action Reports” required under section 32 in the reporting period.

5. s36(5) An assessment of the effectiveness of any measures identified under subparagraph 6 iii of section 32 that were implemented during the calendar year.

There were no “Root Cause Analysis and Corrective/Preventative Action Reports” required under section 32 in the reporting period.

6. s36(6) Any actions taken during the calendar year to minimize, prevent or reduce the discharge of sulphur dioxide from the facility, including any actions identified in the plan required under section 36.

(2) In this section, a reference to a measure with respect to minimizing, preventing or reducing discharges of sulphur dioxide includes a reference to,

- (a) the implementation of operational procedures;
- (b) the use of pollution control technology; and
- (c) changes to equipment, processes or materials..

To reduce the emissions of SO₂ from the Sarnia refinery, a site visit from Sulphur Experts combined with an on-site dedicated team conducted a data review of our Sulphur Plant which led to identifying and fixing control and relief valves resulting in a reduction of SO₂ discharge from our Flare systems.

The section 36 plan was not required in 2023.