MERCURY DIVERSION STANDARD

For mercury diversion under the Air Quality Regulations

Approval Date: September 18, 2018

Approved By: original signed by the Honourable Margaret Miller, Minister of Environment

Version Control: Updated Standard

Scope: Standard under the *Environment Act*

PART ONE – INTRODUCTION

1.0 Preamble

1.1. Purpose

The Mercury Diversion Standard provides the basis for calculating the appropriate number of credits to be claimed, subject to Ministerial approval, for mercury diversion under the *Air Quality Regulations* made under the *Environment Act*.

The Mercury Diversion Standard outlines the qualifying product types and acceptable calculation methods. The standard provides calculation methods for fully or partially funded mercury diversion activities undertaken in Nova Scotia.

1.2. **Authority**

Section 7E of the *Air Quality Regulations* requires any mercury diversion claimed for credit to be calculated and claimed in accordance with the Mercury Diversion Standard.

1.3. **Terminology**

Terms used in this standard and defined in the *Air Quality Regulations* made under the *Environment Act* have the same meaning as defined in those regulations, except as otherwise defined in this standard.

1.4. **Definitions**

1.4.1 In this standard,

- (a) "diverted mercury" means mercury that has been collected through diversion activities under section 2 of this standard and that has been verified in a report, as required under Section 7(F) of the Air Quality Regulations, to have been recycled or sequestered in a manner of treatment that prevents that mercury from entering the environment;
- (b) "diverter" means a person who diverts mercury for credit pursuant to clause 7C(2)(b) or subsection 7E(3) of the *Air Quality Regulations*.

Scope: Standard under the Environment Act

Nova Scotia Environment

PART TWO - GENERAL CONDITIONS

2.0 Fully Funded Programs

2.1 Light bulbs

- 2.1.1 The acceptability for credit of any mercury-containing light bulb is subject to the approval of the Minister.
- 2.1.2 (a) A diverter may claim credit for diverted mercury if the diverter, at its sole cost, prevents mercury-containing light bulbs from entering the environment.
 - (b) A diverter may claim credit for diverted mercury if the diverter replaces or solely funds the replacement of a mercury-containing light bulb with a light bulb that contains less mercury.
 - (c) Credit for light bulb diversion under clause (a) is calculated in accordance with Table 1 by multiplying the associated amount of mercury for each type of light bulb by the percentage of associated mercury amount given as credit.
 - (d) Credit for light bulb diversion under clause (b) is calculated by subtracting the amount of mercury in the replacement light bulb from the solution derived by multiplying the associated amount of mercury for each type of light bulb replaced by the percentage of the associated amount of mercury to be credited as shown in Table 1, which may also be expressed by the formula (associated amount of mercury in light bulb replaced x %credit) (amount of mercury in replacement light bulb).
 - (e) Subject to the approval of the Minister, a diverter may claim credits and may be eligible to receive full or partial credits for mercury-containing light bulbs that are not listed in the column "Product type" of Table 1, if the diverter provides evidence of a verifiable method for determining the amount of associated mercury and percentage of associated mercury claimed.

Scope: Standard under the Environment Act

Nova Scotia Environment

Table 1: Light bulbs containing mercury available for credit

| Product type | Associated amount of mercury | Percentage of associated mercury amount given as credit |
|-------------------------------------|------------------------------|---|
| CFL | 3.5 mg | 80% |
| Fluorescent tubes - T8 | 10 mg | 80% |
| Fluorescent tubes - T12 | 21 mg | 80% |
| Fluorescent U-tubes | 8 mg | 80% |
| Fluomeric lamp | 2 mg | 80% |
| Mercury vapour lamps ≤ 40 watt | 10 mg | 80% |
| Mercury vapour lamps 41 – 400 watt | 50 mg | 80% |
| Mercury vapour lamps 401 – 750 watt | 100 mg | 80% |
| Mercury vapour lamps > 750 watt | 225 mg | 80% |
| Metal halide lamps ≤ 50 watt | 10 mg | 80% |
| Metal halide lamps 51 – 400 watt | 25 mg | 80% |
| Metal halide lamps 401 – 750 watt | 50 mg | 80% |
| Metal halide lamps 751 – 1500 watt | 100 mg | 80% |
| Metal halide lamps > 1500_watt | 225 mg | 80% |
| Sodium vapour lamps ≤ 35 watt | 10 mg | 80% |
| Sodium vapour lamps 36 – 250 watt | 50 mg | 80% |
| Sodium vapour lamps 251 – 400 watt | 75 mg | 80% |
| Sodium vapour lamps > 400 watt | 145 mg | 80% |

2.2 Products containing elemental mercury

2.2.1 A diverter may claim credit for the capture and diversion of elemental mercury from product types listed in Table 2 based on the weight of the elemental mercury in the product.

Scope: Standard under the *Environment Act*

Table 2: Products containing elemental mercury available for credit

| Product type | Elemental mercury amount | Percentage of elemental mercury amount available for credit |
|---|--------------------------------|---|
| Switches | by weight | 100% |
| Relays | by weight | 100% |
| Barometer and vacuum gauges | by weight | 100% |
| Flame sensor (e.g. gas range) | by weight | 100% |
| Hygrometers/psychrometers | by weight | 100% |
| Manometers | by weight | 100% |
| Hydrometer | by weight | 100% |
| Thermostat probe | by weight | 100% |
| Thermometers | by weight | 100% |
| Other products containing elemental mercury | by weight | 100% |

3.0 Partially Funded Programs

- 3.1 (a) A diverter may claim credit for providing funds to a third party to carry out diversion activities under section 2 of this standard.
 - (b) Credits claimed by a diverter under clause (a) will be determined by deriving the appropriate diversion credit in accordance with section 2 of this standard and multiplying it by the percentage of the third party's total spending for mercury diversion in Nova Scotia that is funded by the diverter, and in accordance with Section 7E(2) of the *Air Quality Regulations*.

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