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Submitted via e-mail: ges-dechets-ghg-waste@ec.gc.ca

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**REF: Regulations Respecting the Reduction in the Release of Methane (Waste Sector): Canada Gazette, Part I, Volume 158, Number 26, June 29, 2024**

The Solid Waste Association of North America (SWANA) appreciates the opportunity to submit comments on the proposed Regulations Respecting the Reduction in the Release of Methane (Waste Sector), published in Canada Gazette, Part 1, Volume 158.

SWANA is an organization of 10,000 public and private sector professionals committed to advancing from solid waste management to resource management through a shared emphasis on education, advocacy, and research. For more than 60 years, SWANA has been the leading association in the solid waste management field. SWANA serves industry professionals through technical conferences, certifications, publications, and a large offering of technical training courses.

Members of SWANA include the owners and operators of the landfills and landfill gas systems impacted by the proposed regulations, as well as the haulers that utilize these landfills. SWANA's Technical Division on Landfill Gas is made up of national subject matter experts in this field.

The comments submitted by SWANA cover several areas of concern and are organized by each section of the proposed regulations.

### **General Comments**

Most active and closed landfills in Canada are owned by municipal governments, and new requirements for environmental controls would impact municipal government budgets and rate payers. Unfunded mandates will have cost impacts on already stressed budgets.

Federal funding for both municipal and private landfills would help support the ability to implement necessary measures for managing emissions and meeting compliance with the proposed regulations. The financial impact on landfills, particularly for smaller landfills, will be significant. SWANA recommends a federal funding source available to support the capital and operating costs related to streamlining and improving management, monitoring, measuring and reporting. The funding should also support research and innovation for reducing landfill emissions.

### **Applicability**

As written, the proposed regulations refer to applicability to landfills that accept certain quantities “of municipal solid waste for disposal.”

SWANA requests that applicability be specific to a Municipal Solid Waste (MSW) Landfill rather than a landfill that accepts MSW. The MSW landfill should be defined as a landfill that is permitted by an authorizing agency to accept MSW and has MSW in-place. A Construction and Demolition (C&D) or industrial landfill that is not permitted to accept MSW is not an MSW Landfill.

We suggest revising the definition of MSW and aligning it with permitted operations, and to avoid including a list of waste material.

### **Methane Emission Controls**

SWANA appreciates that the proposed regulations recognize that there may be instances when venting of landfill gas may need to occur.

Under the section ***Monitoring - methane destruction 8(4)***, SWANA recommends reducing the frequency of methane concentration of landfill gas that is conveyed to each control device from every 15 minutes to monthly. Methane concentrations do not typically vary significantly within minutes. The requirement for a methane reading every 15 minutes will only provide for a voluminous amount of data with minimal benefit. In addition, collecting a methane reading every 15 minutes would require the use of very expensive and specialized equipment, where a monthly reading could reasonably be done with handheld meters.

### **Alternative timelines for corrective actions**

The proposed follow-up corrective timeline requirements for positive pressure (120 days), surface emission monitoring (90 days) and surface methane concentration limits (30 days) should allow for an alternative timeline if the landfill cannot correct the exceedance within the specified timeline. The requirement to take action and correct issues within the timelines identified in the draft regulations may be difficult if additional equipment, consultant support, and capital and operating budget changes are required to remedy the situation.

Extension requests could be accomplished by having the landfill develop an implementation schedule to complete, as soon as practicable, any corrective actions that cannot be fully implemented within 120 days for positive pressure and 90 days for SEM and surface methane concentrations. The implementation schedule along with a description of the corrective actions implemented can be

provided in the annual report.

### **Surface methane concentration limits**

SWANA has concerns with the proposed surface methane monitoring methods. The proposed regulations indicate that surface measurements must be recorded at 7.5-metre intervals. This is extremely tight spacing compared to other regulations, and from a practical implementation standpoint. The US NSPS method requires a 30-metre spacing.

It takes approximately three days to complete a walking sweep over a 100-hectare landfill, using a 30-metre spacing. The completion of a walking sweep over a landfill of this size using a 7.5-metre spacing could be equivalent to walking a total distance of 140 to 150 km, which would be very time-consuming, increasing safety concerns for the team conducting the sweep.

Given the significant costs and time associated with a tighter traverse and no measurable emissions reductions to justify the added expense, SWANA recommends that the spacing requirement be modified to 30 metres, and could require monitoring at all penetrations.

SWANA also requests guidance for how the requirements for surface emission sweeps would apply to older closed areas of landfills. Some landfills have many decades of capacity and will have older sections of the site with low landfill gas production. SWANA requests a mechanism to exempt sections of a landfill that have not accepted waste for a certain time period and that have generation below a certain limit.

In section 5 “Restrictions,” the proposed regulations state that “Measurements are not to be taken within 72 hours after precipitation.” Some regions experience frequent and ongoing mist, drizzle, light rain, and other forms of light precipitation. SWANA requests that “precipitation” be defined as weather event with measurable precipitation or under a certain negligible amount, as opposed to a steady or intermittent light precipitation which can be common in coastal provinces and certain regions at certain times of the year. In addition, it is suggested that a 36-hour period to wait for measurements after a rainfall event may be more reasonable for scheduling personnel to take measurements.

### **Definition of EPA OTM 51**

SWANA supports the use of OTM-51 and requests the flexibility for additional emerging technologies be incorporated into the rule. With respect to OTN-51, we recommend excluding the list of regulations, additional caveats and additional information listed in the broadly applicable approval letter outlined in the December 15, 2022, signed on behalf of Steffan Johnson – EPA Group Leader Measurement Technology Group. The approval letter is not applicable to ECCC and limits the use of OTM-51 to one specific vendor and US EPA regulations and therefore is not relevant. SWANA recommends that the regulations should not be specific to specific vendors. SWANA requests flexibility in this section to alternate between methods and technologies.

## **Methane Control: Methane destruction**

SWANA supports the allowance of the option for landfills to comply with the proposed emission guidelines by using open flares, which play an important part in landfill management since they are relatively simple to operate and maintain and can operate properly even as landfill gas flow and quality vary over the life of the landfill. Open flares play an important role in landfill gas to energy projects, providing critical backup control of landfill gas during periods when the primary combustion units (engines/turbines) are offline.

SWANA suggests including a definition of open flare in the regulation. It is assumed that an open flare and candlestick flare are considered to be synonymous.

This section states that “Within 30 days of any measurements of positive pressure, the landfill owner or operator would be required to take action to return the wellhead to negative pressure.” Some SWANA members have systems designed to work very close to neutral pressure and may swing to slight positive pressures for short time periods. This method maintains quality for landfill gas recovery for beneficial re-use applications, and prevents overdrawing gas fields, which can create oxygen intrusion and rebounds in quality and recovery. Some landfills run gas collection systems for high gas quality to facilitate gas utilization (often RNG). This often requires maintaining wells at close to zero pressure, which means some, or even most, wells will fluctuate between slightly positive and slightly negative pressure. This fluctuation can happen in as little as a few hours as weather and atmospheric pressure changes. Forcing landfills to maintain all wells at permanent negative pressure would disrupt this balance and cause issues such as poor gas quality or more serious problems such as aerobic subsurface conditions.

In addition, landfill gas wells may occasionally have high temperatures or poor gas quality, which can be caused by several conditions including poor localized gas quality, subsurface chemical reactions, and subsurface aerobic conditions/oxygen intrusion, among others. Wells exhibiting characteristics of a subsurface issue should, in most cases, be shut off to avoid exacerbating the adverse reactions and allow the landfill to recover. Failure to do so may cause serious issues up to and including subsurface fires.

Landfills need to have the ability to manage their wellfields using practices that allow for the long-term health of the landfill and maintain necessary LFG quality. Forcing landfills to maintain negative pressure allows for neither.

SWANA recommends allowing a minimal amount of positive pressure to account for these variations in pressure.

It is common for landfill owners to have agreements for beneficial re-use of landfill gas. Section 8.2 requires that the owner or operator of a treatment system “shall convey to an enclosed or open flare (a) treatment process emissions that contain methane, and (b) any processed landfill gas that is not sold or used.” SWANA recommends clarifying whether this regulation would apply to end processors that have purchased the landfill gas, and who owns the liability and regulatory compliance once the gas has been purchased. In addition, many landfill gas to energy facilities utilize alternative technologies to treat their process gas that are not flares, such as thermal oxidizers. SWANA recommends amending this section to allow flexibility in destruction technology and adding the use of a thermal oxidizer.

### **Offset Credits**

SWANA suggests expanding options for sites to qualify for offset credits, such as increasing the methane generation threshold (currently 664 to 1000 tCH<sub>4</sub>) for 2033 compliance.

We also recommend allowing sites that have taken early action to be exempt from regulation for a period of five years if early action was taken more than one year prior to the regulatory action date, and the sites were able to demonstrate an equivalent performance standard to the regulation. This would allow sites to participate in the offset credit market if early action was taken, would achieve the emission reduction ambitions of the regulation, and would achieve those reductions on an expedited timeline while allowing sites to recognize some revenue through credit sales and reduce financial burden. Should additional funding or financial support outside of offset credit mechanisms not be available, it is recommended that a 10-year exemption be considered to allow for a longer offset crediting period.

### **Concluding Comments**

SWANA appreciates the opportunity to comment. As the ECCC moves forward with finalizing and implementing the regulations, SWANA requests to be part of the conversation on behalf of our 10,000 members. Should you have any questions about this letter, please contact the undersigned at [koldendorf@swana.org](mailto:koldendorf@swana.org).

Sincerely,

A handwritten signature in cursive script that reads "Kristyn Oldendorf".

Kristyn Oldendorf  
Director of Public Policy