

**Report PW 2024-33
Attachment 1**



Oxford County Submission
ECCC Proposed Regulation on
Reducing Landfill Methane Emissions

Environment and Climate Change Canada
Canada Gazette, Part I, Volume 158, Number 26: Regulations Respecting the Reduction in the
Release of Methane (Waste Sector)

Overview

Oxford County is a regional municipality in Ontario with a population of approximately 122,000 and is responsible for delivering municipal solid waste management services to eight (8) Area Municipalities. Waste management services include curbside garbage and recycling collection services, as well as the processing of municipal solid waste at the Oxford County Waste Management Facility (OCWMF).

The County owns and operates one active municipal non-hazardous solid waste landfill site and eight (8) closed municipal landfill sites. The eight (8) closed landfills have been closed since the 1980s and therefore will not be impacted by the proposed regulation. As a form of diligence, the County undertakes annual environmental monitoring for surface water, groundwater and methane emissions. This is a five-year program which will end in 2027.

The OCWMF was commissioned in 1986 and in 2023 received approximately 83,300 tonnes of mixed solid waste of which approximately 48,900 tonnes was landfilled. Due to the rated landfill capacity at the OCWMF, the installation of a landfill gas collection and flaring system (LGCFS) was required under provincial regulatory requirements. The LGCFS system has been in operation since mid-2010 and consists of 18 vertical extraction wells and a mechanical pumping system that draws gas to the flare for combustion. The estimated total methane gas generated annually at the OCWMF is in the order of 3,900 tonnes and as a result, a methane generation assessment will be required under the proposed federal regulatory framework.

Currently, the County is proposing to expand the existing landfill gas collection system to reduce methane emissions to the atmosphere. The scope of the proposed landfill gas system expansion work includes the installation of approximately 21 new vertical landfill gas extraction wells and the installation of a conveyance pipe network with the waste, including sub-headers and sub-laterals to connect the new infrastructure to existing gas collection piping.

Oxford County has also been very successful in diverting biodegradable material from landfill over the last 15 years, including, but not limited to, actively promoting backyard composting to reduce residential yard and food waste, yard waste collection and the diversion of construction and demolition material. Oxford County has committed to Zero Waste with the goal of diverting 90% of waste to extend landfill capacity to 2100.

In support of its Zero Waste goal, the County recently completed a review of organic waste resource recovery technologies to identify a preferred alternative for the processing of organic waste collected from a potential source-separated collection program to meet Provincial diversion targets by 2027.

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Comments

Oxford County fully supports the initiative by ECCC to regulate and control methane emissions from Canadian landfills that contribute to greenhouse gas emissions. This approach will promote consistency, and transparency, and introduce a defined framework for landfill methane measurement. We are pleased to offer the following inputs to be considered in the final proposal.

Phased-In Implementation Timelines

The phased-in implementation timeline is appreciated and appears to be appropriate, particularly for those sites without a landfill gas system in place.

Waste Disposal Thresholds and Methane Generation Assessment

Regulatory clarity on whether a landfill site is regulated under this regulation is appreciated. Oxford County has eight closed landfill sites which all closed on or before 1985 and therefore they will not be regulated under ECCC's proposed regulation on reducing landfill methane emissions.

The County's open landfill site will be regulated under the proposed regulation as it landfills approximately 50,000 tonnes of waste annually, requiring a methane generation assessment in 2025 to evaluate 2024 annual methane generation.

Surface Methane Concentrations – Monitoring Events

The County appreciates that surface monitoring can be collected using either a hand-held methane detector or a drone-mounted detector. Use of drones for this type of survey is still new to the industry and such data still needs to be validated by using a hand-held methane detector.

The County questions whether the requirement to conduct three surface monitoring events per year with a minimum of 90 days between the monitoring events is practical. ECCC acknowledges that surveying during times of snow cover will not yield valid results. Performing surveys in the summer and fall can be equally problematic if there is dense vegetation to contend with. Surveying in the spring is most desirable however, in areas where there is intermediate cover, drone survey data cannot be validated using a hand-held methane detector due to not being able to access the area until the land becomes dry.

The County asks that ECCC revisit the survey requirement of three times per year with a minimum of 90 days between events.

Prepared for:

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