

Chapter 16 Environment—Regulating Landfills

1.0 MAIN POINTS

By January 2020, the Ministry of Environment had implemented one of the three remaining recommendations and made progress on the remaining two recommendations relating to the Ministry's regulation of landfills.

By January 2020, the Ministry had not approved guidance documents on composting or landfills and waste management. In January 2020, the Ministry finalized, approved and publicly released its strategy for landfill design and operation. The Ministry's *Solid Waste Management Strategy* set out long-term goals for waste reduction in the province, assists in addressing the challenges of waste management and identifies potential economic opportunities for the waste industry.¹

The Ministry revised landfill permits to include requirements for groundwater monitoring. As landfill permits expire, the renewed permits include this new requirement.

The Ministry still needs to conduct inspections on landfills as planned. Timely inspections determine whether the landfills operate in compliance with the permit. Permit requirements exist to enhance the environment and public safety.

2.0 INTRODUCTION

The Ministry of Environment regulates waste management and enforces landfill and transfer station compliance through province-wide legislation under *The Environmental Management and Protection Act, 2010*.² Municipalities and private companies own and operate landfills throughout the province.

Saskatchewan has the second-highest amount of waste per capita in Canada. As of 2019, there are 186 landfills and 207 transfer stations within Saskatchewan. From 2015 to 2019, the number of municipal landfills has significantly decreased (i.e., 500 in 2015 to 186 in 2019).³

2.1 Focus of Follow-Up Audit

This chapter describes our follow-up of management's actions on three recommendations we first made in 2013 about the Ministry of Environment's processes to regulate landfills.⁴ By December 2017, the Ministry had implemented six of the nine recommendations, and made progress on the three others.⁵

¹ Ministry of Environment, *Saskatchewan's Solid Waste Management Strategy*, (2020), p. 1.

² A transfer station is a site where waste is collected in preparation for transport to a nearby landfill.

³ Ministry of Environment, *Saskatchewan's Solid Waste Management Strategy*, (2019), pp. 2-3.

⁴ The original report regarding these recommendations can be found at auditor.sk.ca/publications/public-reports. We reported the original audit work in our *2013 Report – Volume 2* (Chapter 29, pp. 205-217).

⁵ We reported this work in our *2018 Report – Volume 1* (Chapter 18, pp. 233-239).



To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Ministry's progress towards meeting our recommendations, we used the relevant criteria from the original audit. The Ministry agreed with the criteria in the original audit.

To perform our follow-up of the recommendations, we discussed actions taken with management and reviewed the relevant documents (e.g., Ministry's planning records, guidelines, groundwater monitoring reports).

3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at January 31, 2020, and the Ministry's actions up to that date.

3.1 Published Guidance Documents Needed

We recommended the Ministry of Environment adopt guidance on landfills from the proposed Environmental Code as operating practice.

(2013 Report – Volume 2, p. 210, Recommendation 1; Public Accounts Committee agreement April 30, 2014)

Status – Partially Implemented

In January 2020, the Ministry released its approved *Saskatchewan's Solid Waste Management Strategy* to the public. In this Strategy, the Ministry indicated its plan to release a new composting guidance document and update the landfill and waste management guidance documents to ensure the availability of compliance requirements and expectations. The Ministry has drafted, but not yet finalized or approved either of these guidance documents. It aims to approve them in 2020.

The Strategy outlines the provincial challenges associated with waste management, and includes goals and targets to reduce the amount of waste generated by 2030 and 2040. Its six goals are to:

- Enhance education, awareness and technical understanding of waste management best practices and risks of improper practices across Saskatchewan
- Encourage regional collaboration to enhance the cost effectiveness of waste management infrastructure
- Foster innovative and sustainable solutions to waste management
- Demonstrate government leadership in waste management
- Provide modern, efficient and effective regulatory system for waste disposal and management

- Enhance waste diversion across Saskatchewan.⁶

Without consistent guidance for landfills, landfills may not be built and operated to the same required environmental standard.

3.2 Groundwater Monitoring Added to Permit Requirements

We recommended the Ministry of Environment amend operating permits for all high-risk landfills to ensure they require appropriate groundwater monitoring. (2013 Report – Volume 2, p. 214, Recommendation 4; Public Accounts Committee agreement April 30, 2014)

Status – Implemented

The Ministry has a well-defined process to amend operating permits for high-risk landfills to ensure they require groundwater monitoring.

At January 2020, the Ministry includes groundwater monitoring conditions in 132 of the 182 operating landfill permits. Only two of the 50 landfills without this permit condition are high-risk landfills.⁷

In 2016, the Ministry began issuing permits to require operators of new or existing landfills to conduct groundwater monitoring (unless an environmental site assessment determined such monitoring is not necessary). For existing permits, the Ministry includes this revised condition as permits expire and landfill operators apply for renewal. The Ministry gives existing landfills five years to implement groundwater monitoring.

The Ministry expects to complete renewing permits for existing operating landfills by 2021, when the last of the old permits become due for renewal.

3.3 Landfills Not Inspected Within Expected Timeframes

We recommended the Ministry of Environment perform landfill inspections in accordance with its established frequency requirements.

(2013 Report – Volume 2, p. 212, Recommendation 3; Public Accounts Committee agreement April 30, 2014)

Status – Partially Implemented

The Ministry is behind schedule on inspecting landfills due to the large number of landfills requiring inspections and its staff size. It is not inspecting landfills consistent with its priority-based inspection strategy.

The Ministry expects its four environmental protection officers to complete 10 to 15 site inspections per year. At January 2020, the Ministry had a junior environmental protection officer assigned to the Landfill Section to complete an additional 15 inspections per year. Summer students assist with inspecting transfer stations and landfill closure confirmations.

⁶ www.saskatchewan.ca/government/news-and-media/2020/january/23/solid-waste-management-strategy. (24 January 2020).

⁷ The Ministry uses the National Classification System for Contaminated Sites method for evaluating (i.e., assigning risk ranking) contaminated sites according to their current or potential adverse impact on human health and the environment.



While the Ministry met its target of scheduled inspections for 2019, staff did not complete all annual high-risk landfill inspections and overdue inspections. At January 2020, it had not inspected 8 of 16 high-risk landfills, and had 23 overdue inspections (for moderate and high-risk landfills).

Beginning in 2020-21, the Ministry plans to change which sites it inspects and when. It plans to continue to inspect all high-risk sites annually unless the site is in compliance, at which point, inspection will be completed every second year. In conjunction with those inspections, it plans to inspect medium risk landfill sites in the area surrounding the high-risk sites.

For landfill sites that it has not inspected in the past two years, it plans to survey the landfill operator, and use the survey results to help determine if it should inspect the landfill (e.g., when results suggest poor landfill management). Going forward summer students will assist with inspecting low risk landfills and completing landfill closure confirmations.

Timely inspections determine whether landfills operate in compliance with permit requirements and the law. Permit requirements and laws exist to enhance environment and public safety. The use of inspections is key enforcement tool to assist the Ministry in fulfilling its regulatory role and fostering compliance.