
Industrial, Commercial, and Institutional (ICI) Waste Diversion Opportunities

Recommendation

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That \$156,000 be transferred from the Waste Minimization Reserve to Capital Project #2184 - Waste Characterization for the development of the Industrial, Commercial, and Institutional Waste Diversion Strategy.
2. That this report be forwarded to SEAC for information.

Topic and Purpose

The purpose of this report is to provide a preliminary overview of waste diversion opportunities for the ICI sector.

Report Highlights

1. 66% of waste generated in Saskatoon comes from Industrial, Commercial and Institutional (ICI) or construction & demolition (C&D) activities making it a critical component to increasing Saskatoon's waste diversion rate.
2. Initial discussions with a limited number of ICI stakeholders in Saskatoon have shown that there may be interest in expanding waste diversion efforts and capacities to this sector.
3. To achieve 70% diversion of waste in Saskatoon by 2023, substantive policy and program changes are needed. Further investigation into design considerations is required to identify specific options.
4. Engagement with the ICI sector to discuss options will play a central role in helping shape a strategy.
5. Waste diversion in the residential sector is being prioritized ahead of the ICI sector because of the ability for the City to move forward more quickly with solutions.

Strategic Goal

The information in this report supports the four-year priorities to promote and facilitate city-wide composting and recycling and implement energy-efficient practices in City operations, along with the long-term strategy to eliminate the need for a new landfill under the Strategic Goal of Environmental Leadership.

Background

Standing Policy Committee on Finance, at its meeting held on March 6, 2017, received the Preliminary Year-End Financial Results – December 31, 2016 indicating that the Multi-Unit Residential Recycling Program had a surplus of \$156,000 largely due to the additional revenue received from the Provincial Multi-Material Recycling Program (MMRP). This surplus was transferred to the Waste Minimization Reserve and that

Reserve is now beyond the cap of \$100,000 outlined in Council Policy C03-003, Reserves for Future Expenditures.

City Council, at its meeting held on May 23, 2017 received the Waste Diversion Opportunities report identifying various tools and approaches to improving waste diversion in Saskatoon. In that report, Administration indicated a future report on the current role of the City in ICI waste management and specific opportunities for future programs that target this sector would be prepared.

Report

Waste being disposed of in Saskatoon area landfills comes from two main sources – residential and non-residential. Waste coming from non-residential sources is generated primarily through ICI and C&D activities.

It is estimated that 66% of waste generated in Saskatoon is derived from the ICI sector. The development of a comprehensive strategy for waste from this sector is a critical component in continued progress towards a waste diversion target of 70% diversion by 2023.

Waste Characterization

The composition of ICI waste was approximated as part of the 2016 Waste Characterization Study. The top six estimated waste generator types by North American Industry Classification System (NAICS) codes were audited. These included manufacturing, retail trade, health care and social assistance, accommodation and food services, other services and public administration.

It is estimated, based on the audit and other data sources, that the majority of ICI waste (56%) can be diverted. Further information is available in Attachment 1, Current State of ICI Waste Management.

Current State of Waste Management for ICI Sector

Saskatoon currently has three area landfills that receive most of the waste generated in Saskatoon. Attachment 2 shows the location of these landfills.

The 2016 Waste Characterization determined that most ICI waste is managed by the private sector and is assumed to be disposed of in private landfills in the region. To date, the City has influenced ICI waste diversion directly and indirectly through several avenues including:

- Increasing landfill tipping fees for waste materials (effectively making diversion programs more attractive);
- Providing processing capacity for yard waste at two Compost Depots;
- Supporting provincial stewardship programs for recycling items such as electronics, paint, oil, and tires through education; and
- Increasing local recycling capacity (offered by the private sector) through the introduction of residential recycling programs.

More details on the state of ICI waste management in Saskatoon are available in Attachment 1.

ICI Waste Diversion Opportunities

Through the Waste Diversion Opportunities report, Dillon Consulting provided an overview of best practices that have worked in other municipalities and a summary of their recommendations is provided below.

Disposal bans and measures Implement disposal bans and measures to increase diversion from all sectors on a material by material basis (with timing coinciding with having processing capacity in place)
Mandatory Recycling for businesses and organizations Mandate on-site separation of designated materials once processing capacity is in place (i.e. recycling, organics) and/or require recycling contracts to be in place
Mandatory source separation of C&D waste Mandate source separation of C&D waste and have timing coincide with opening of Recovery Park
Additional requirements and enforcement City to influence and/ or enforce diversion of ICI and C&D waste at the front end (e.g. through building permits)

Table 1: Waste Diversion regulatory and economic tools for ICI and C&D activities

Research contained in the Waste Diversion Opportunities report (available at Saskatoon.ca/wastediversion) illustrates that most ICI customers will choose the lowest cost, legal option available. Often this is disposal at a landfill. Some businesses and institutions are committed to environmental goals and have voluntary diversion programs. According to the City’s 2017 Waste and Recycling survey, approximately 75% of businesses in Saskatoon indicated they already have on-site recycling in place.

Disposal Bans and Mandatory Recycling

Disposal bans are defined as a range of measures to prevent or restrict the disposal of specific types of waste in landfills. In the case of Saskatoon, implementing a bylaw that attempts control where waste goes is challenging to enforce as there is a high potential for the material to be taken to landfills not under the direct control of the City. For this reason, disposal bans are often implemented at the provincial or regional level.

In 2015, Administration identified that an initial step for ICI waste diversion could be a bylaw that requires all ICI sector businesses (including hospitals, schools, offices, shopping centres, restaurants, hotels, manufacturers, warehouses and other businesses) to provide on-site recycling. City Council, at its meeting held on November 30 & December 1, 2015, considered the Landfill Ban Implementation Considerations report. City Council supported this approach and resolved:

“That a phased landfill ban for paper and cardboard begin in 2016 as outlined in the report of the General Manager, Corporate Performance Department dated November 9, 2015.”

Administration has not yet implemented this resolution. Stakeholder engagement and education was identified as a significant aspect of the design and implementation of the program and when it became clear that additional resources would be required, the initiative was delayed. The delay has allowed for this initiative to fit within the broader context of the ICI sector as a component of the Waste Diversion Plan. Attachment 3, Disposal Bans and Mandatory Recycling, provides further background on disposal bans, considerations associated with implementing mandatory recycling for the ICI sector, and a resource plan for moving forward with this approach.

Mandatory source separation of C&D waste

Waste generated from C&D activities currently disposed at private landfills have significant opportunities for diversion. Through the work of developing and designing Recovery Park, Administration started to collect information on existing markets for recyclable materials and the potential development of new markets. Market prices for recyclable materials are dependent on a number of considerations such as material quality, volumes and contractual arrangements.

One significant incentive to the diversion of C&D materials is the establishment of lower disposal fees for material that is separated by type, making it more readily recyclable at better market prices.

There is an opportunity to explore source separation programs for construction and demolition projects through research and engagement. There are also opportunities to facilitate diversion through the building and/or demolition permit process. It may also be possible to work with private developers to set up diversion opportunities, and to require diversion, in new neighbourhoods.

Creating a Waste Diversion Strategy for the ICI Sector

As part of the Waste Diversion Plan, a strategy for ICI waste diversion can focus on the most common materials in that waste stream (i.e. paper and cardboard, organics, and C&D) and the largest generators of waste to maximize the impact on community waste diversion.

Resources are not currently available to complete an ICI waste diversion strategy. Administration also recommends giving priority to residential programs for the following reasons:

- Residential waste management is considered an essential service that the City delivers; this is not the case for the ICI sector.
- Historically, municipalities have not implemented large-scale programs or targeted policies for the ICI sector because they do not control or regulate the ICI waste stream.
- Waste diversion can cost less than garbage disposal as well as deliver other public image benefits; therefore, a large portion of businesses in Saskatoon already recycle without any specific legal requirements or City-run programs in

place. It is likely the ICI sector would also implement organics if appropriate facilities were in place.

In the meantime, ICI waste diversion is expected to improve based on the following anticipated changes:

- Establishment of Recovery Park to offer opportunities and potentially price incentives for the diversion of ICI waste.
- Development of a processing facility for organics that can also provide organics processing capacity for the ICI sector.

Similarities between Multi-Unit Residential Properties and the ICI Sector

Most multi-unit residential properties use communal waste containers and receive collections service similar to businesses in the ICI sector. However, there are a variety of unique considerations for these residential properties. Administration will prepare a separate report outlining these unique considerations.

Public and/or Stakeholder Engagement

Engagement will play an important role in the development of an ICI Waste Diversion Strategy. Research has shown that ICI programs with the highest success rates include robust education and advisory supports to help organizations overcome barriers to waste diversion. Administration recommends proceeding with extensive consultations with businesses and institutions, along with more in-depth meetings with waste haulers and facility operators to develop a Strategy and to implementation the mandatory recycling program.

Communication Plan

A communication plan utilizing the themes and many of the key messages outlined in the October report on Engagement Approach will be developed as part of the ICI Waste Diversion Strategy.

Environmental Implications

Greenhouse gas (GHG) emissions implications and other environmental protection measures will be estimated and reported on as the ICI Waste Diversion Strategy is developed.

Financial Implications

Approximately \$150,000 is needed to begin development and implementation of an ICI strategy as described in this report; this includes 0.5 of an Environmental Coordinator, an Environmental Protection Officer (EPO), and \$25,000 for communications and education. The Waste Minimization Reserve has a balance of \$156,000 which could be transferred to Capital Project #2184 - Waste Characterization to be used for these initiatives and provide a very small contingency to avoid further delay in the design and implementation of the phased landfill ban for paper and cardboard already approved by City Council.

Policy Implications

The recommendations in this report align with Council Policy C03-003, Reserves for Future Expenditures.

Other Considerations/Implications

There are no policy, privacy or CPTED implications or considerations.

Due Date for Follow-up and/or Project Completion

Administration will provide a report to the Standing Policy Committee on Environment, Utilities and Corporate Services on the unique considerations for waste diversion at multi-unit residential properties in January, 2018. If funding for the ICI Waste Diversion Strategy is approved, engagement with businesses and institutions will begin in May 2018 and a report summarizing the results of this engagement will be prepared by September 2018.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Current State of ICI Waste Management
2. Location of Saskatoon Area Landfills
3. Disposal Bans and Mandatory Recycling

Report Approval

Written by: Daniel Mireault, Environmental and Corporate Initiatives
Amber Weckworth, Education and Environmental Performance
Manager

Reviewed by: Brenda Wallace, Director of Environmental and Corporate Initiatives

Approved by: Jeff Jorgenson, A/General Manager, Corporate Performance
Department

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