

2

SOURCE SEPARATED ORGANICS LONG-TERM CAPACITY STRATEGY

The Solid Waste Management Committee recommends the adoption of the recommendations contained in the following report, March 7, 2007, from the Commissioner of Transportation and Works and the additional following recommendation:

- 3. Staff provide a report to the Committee in May with additional details relating to the process for carrying out the strategy in regard to recommendations 1 and 2.**

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council direct staff to identify suitable parcels of land within York Region to purchase for the construction of one or more composting facilities and report back to Committee and Council.
2. Council direct staff to explore partnership opportunities with other municipalities to site and build composting facilities for joint use and report back to Committee and Council.

2. PURPOSE

This report will provide an update on the Region's yard waste and source separated organics diversion programs, identify potential areas of concern and provide recommendations to ensure long-term program stability.

3. BACKGROUND

On April 21st, 2001 Council adopted Clause 5 of Report No. 4 of the Transportation and Works Committee recommending implementation of a three-stream waste management system. Since that time, the Region has struggled to establish reliable, cost-effective processing capacity for collected Source Separated Organics and yard waste. In the past eighteen months, for example, the Region has already had to divert its Source Separated Organics and yard waste to two different facilities due to unanticipated problems at its contractor's processing facilities.

4. ANALYSIS AND OPTIONS

When fully implemented the Region's Source Separated Organics diversion program is expected to divert over 60,000 tonnes of food and household organic waste annually. The Region currently has contracted long-term processing capacity for approximately half this total. A long-term solution for the management of the remaining volume of Source Separated Organics remains outstanding. The Region also has a 10 year contract with Miller Waste Systems to manage up to 76% of the approximate 29,000 tonnes of yard waste generated last year. A long-term strategy to manage the growing quantity of yard waste generated in the Region is also required.

4.1 Projected Source Separated Organics and Yard Waste Requirements

To date, the Town of Markham and City of Vaughan have implemented their Source Separated Organics collection programs. The Town of Richmond Hill is scheduled to launch their program in April of 2007, followed by the remaining six municipalities in September. Combined, the nine local municipalities are expected to collect over 60,000 tonnes of Source Separated Organics annually. The Region's population is also growing at a rate of approximately 30,000 new residents per year. By 2017 therefore, the Region will need processing capacity for an estimated 80,000 tonnes of Source Separated Organics.

Last year, a total of 29,000 tonnes of yard waste was also diverted. As local municipalities move to bi-weekly yard waste collection and tree plantings in residential developments reach maturity, the quantity of yard waste collected will increase. An estimated 39,000 tonnes of yard waste processing capacity will, therefore, be required by 2017.

4.2 Existing Regional Contract Processing Capacity

The Region's contract with Orgaworld B.V. and Conestoga Rovers & Associates (Orgaworld) provides up to 30,000 tonnes of Source Separated Organics processing capacity for a period of 10 years. An option to extend the contract for an additional five years at the Region's discretion is included. The contract also allows the Region to divert an additional 30,000 tonnes of waste to the facility on a contingency basis for a period of 10 years. The facility, located in London, Ontario is expected to become operational some time in April of 2007.

The Region also currently has a three year Source Separated Organics processing contract in place with GSI Environnement Inc.. The contract, which ends in March of 2009, has no contractual upper limit on the quantity of waste that can be shipped to their Quebec facilities. However, permitting problems with their new facility in St-Henri, Quebec and odour problems at their Lachute facility has forced GSI Environnement Inc. to temporarily redirect the Region's Source Separated Organics to the City of Hamilton's municipally owned facility. Permitting of the St-Henri facility is anticipated by the end of March when shipments to Quebec are expected to resume.

In principle, these two contracts provide sufficient capacity to manage all the Source Separated Organics generated in the Region on a short-term basis. Moreover, should the Region wish to direct all its Source Separated Organics to one facility, the Orgaworld contract could provide capacity to meet the majority of the Region's needs for up to 15 years. This assumes, however, that the Orgaworld facility will be commissioned successfully and GSI Environnement Inc. can overcome its regulatory issues.

4.3 Capacity Developing Alternatives

Source Separated Organics processing is still in its infancy in North America. Many of the existing facilities have encountered serious start up and/or ongoing operational challenges. Regional staff has, to date, attempted to mitigate the risk of a service interruption by splitting the total tonnage received from the local municipalities over two contractors. Maintaining this strategy is recommended for the immediate future. This approach, in turn, necessitates securing additional processing capacity from an alternate source. Options include:

- Contracting with an existing private sector facility.
- Contracting with an existing municipal facility.
- Partnering with another municipality to build a new facility.
- Soliciting private sector proposals to build a privately owned facility.

4.3.1 Feasibility of Contracting with an Existing Facility

Source Separated Organics processing capacity remains at a premium in both Ontario and Quebec. While there has been limited expansion of existing private facility operations, this additional capacity has been quickly absorbed by municipalities already contracting with these suppliers. As other municipalities in the Province launch their "green bin" programs, demand will continue to outstrip processing capacity in the near future. Sourcing long-term processing capacity from these facilities at this time is not a viable solution.

Three new facilities have been developed in Ontario in the past year as a result of municipal intervention. These include municipally owned facilities constructed by the City of Hamilton and Region of Peel and a privately built facility in Pickering under contract to Durham Region. Establishment of a long-term contract with any of these facilities is improbable as they either do not or cannot accept Source Separated Organics in plastic bags or Source Separated Organics containing unprocessed diapers and/or animal feces. Moreover, the Pickering facility is already at capacity, Hamilton's facility reaches capacity seasonally (with the influx of co-processed yard waste) and Peel Region is already providing assistance to the City of Toronto with its excess material.

4.3.2 Partnering with Other Municipalities to Construct a New Facility

In September of 2004, Council authorized Regional staff "to work with other GTA municipalities to explore the feasibility of constructing a municipally-owned SSO processing facility and/or providing municipally-owned lands to a private sector

proponent upon which to site and operate a facility and report back to Committee and Council”. Staff has had ongoing discussions with other GTA municipalities but, to date, has not identified any opportunities for a joint venture due to differences in program design, timing, capacity requirements and the resultant cost implications.

Staff still believes there is merit in pursuing a joint project with other jurisdictions. Recently, promising discussions have, for example, taken place at a staff level with the County of Dufferin to consider construction of a joint Source Separated Organics and yard waste composting facility in the County. Staff is, therefore, seeking authorization to pursue this and other opportunities to develop new capacity to meet the Region’s long-term needs.

4.3.3 Private vs. Public Sector Facility Ownership

During the past three years, the Region has gone out to the market with two separate Request for Proposal processes to secure private sector proposals to develop new infrastructure. Staff has also had numerous informal discussions with prospective proponents. It is clear that new private sector capacity will only be developed in response to award of long-term municipal contracts to permit amortization of development costs and in most instances the proponents wanted the Region to provide municipal lands for the facility.

To date, municipalities that have developed and contracted out the operation of their own composting facilities have secured better pricing than the Region has been able to achieve by contracting out its services. Moreover, composting facilities are potentially odorous and many of the private sector facilities have had serious start up and operating challenges. Establishment of long-term contracts with a privately owned facility, which typically includes “put or pay tonnage commitments”, puts the Region in the undesirable position of being perceived as contributing to the problem with no recourse to terminate the contract or rectify the problem.

Municipal ownership ensures the Region will have control of the mitigation of any odour problems and provides the added flexibility to make program and operational changes to accommodate future demands. Ownership of the Region’s material recycling facility is a prime example of this benefit. To date, the Region has been able to add new materials, provide free service to local school boards, provide processing assistance to other municipalities and host community events on site with minimal difficulty.

Staff also believes that by developing and operating several smaller, well run sites the potential for odour problems can be avoided. Moreover, collection and Regional transfer costs could potentially be reduced if these sites can be located strategically within the Region. Therefore, staff is recommending that a site search be conducted to identify suitable local lands for development as yard waste and/or Source Separated Organics processing facilities.

4.3.4 Private vs. Public Sector Facility Development

Staff is recommending that the Region procure lands and develop its own facilities to ensure better stability of its waste processing activities. Staff still believes, however, that there is an important and continuing role for the private sector in the design, construction and/or operations of these facilities. Options for the involvement of private sector contractors in the various elements of facility development and operation will be brought forward where appropriate.

5. FINANCIAL IMPLICATIONS

The Waste Management Branch currently has \$20.5 million allocated for the development of a yard waste and/or Source Separated Organics composting facility in its 10 year capital budget. Siting one or more facilities locally also creates the opportunity to reduce annual operating costs associated with transfer of materials and hauling to Quebec.

6. LOCAL MUNICIPAL IMPACT

The nine local municipalities have committed to the introduction of Source Separated Organics collection programs throughout the Region. Ensuring adequate, long-term processing capacity is in place to meet the needs of residents is a vital part of maintaining an effective partnership with the local municipalities. Development of smaller, strategically placed composting facilities also offers the potential to reduce local municipal collection costs.

7. CONCLUSION

The Region requires additional, long-term processing capacity to support its source separated organics and yard waste composting programs. It is recommended that the Region pursue development of one or more Regionally owned facilities, potentially in partnership with other jurisdictions, to ensure reliable composting capacity is available and to reduce program operating costs. Securing land for a site is proposed as a priority initiative for the Branch. Private sector involvement in the development and/or operation of these facilities will be subsequently brought forward for consideration by Committee and Council.

For more information on this report contact Michael J. Birett, Manager, Waste Diversion of the Solid Waste Management Branch at extension 5738 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.