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| TO: | CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON DECEMBER 16, 2014 |
| FROM: | JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE |
| SUBJECT | UPDATE - KEY SOLID WASTE MANAGEMENT INITIATIVES |

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| RECOMMENDATION |
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That on the recommendation of the Director, Environment, Fleet & Solid Waste this report **BE RECEIVED** for information.

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| PREVIOUS REPORTS PERTINENT TO THIS MATTER |
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Some relevant reports that can be found at www.london.ca under City Hall (Meetings) include:

- Proposed Process For Land Leases For City Owned Land in the Vicinity of the W12A Landfill and Resource Recovery Area (September 23, 2014 meeting of the Corporate Services Committee (CSC), Item #2)
- Interim Waste Diversion Plan (July 21, 2014 meeting of the Civic Works Committee (CWC), Item #18)
- Timeline for Major Environmental & Engineering Reports (February 25, 2013 meeting of the CWC, Item #3)
- Updates – Proposed Waste Reduction Act and Related Matters for Financing the Blue Box Program (February 3, 2014 meeting of the CWC, Item #8)
- Waste Diversion and Garbage Collection Updates (November 25, 2013 meeting of the CWC, Item #7)
- Status Report: Update of Road Map to Maximize Waste Diversion 2.0 (July 22, 2013 meeting of the CWC, Item #14)
- Status – Green Bin and Modified Garbage Collection Pilot Project (October 1, 2012 meeting of the CWC, Item #4)
- Solid Waste Management Updates (April 23, 2012 meeting of the CWC, Item #17)
- Interim Business Plan for the Green Bin Program and Zero Waste Strategies (January 11, 2010 meeting of the Environment & Transportation Committee (ETC), Item #11)

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| BACKGROUND |
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PURPOSE & CONTEXT:

This report provides a brief summary of 10 key issues and initiatives facing the City of London with respect to waste management:

1. Blue Box Arbitration Decision
2. Potential New Provincial Legislation
3. Road Map 2.0: The Road to Increased Resource Recovery and Zero Waste
4. Interim Waste Diversion Plan
5. Status of Green Bin and New, Emerging & Next Generation Technologies
6. Environmental Assessment (EA) Requirements for Long Term Resource Recovery, Waste Conversion and Waste Disposal
7. Waste Management & Resource Recovery Area
8. Buffer Lands Around the W12A Landfill
9. EnviroDepots
10. Regional Material Recovery Facility (MRF)

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DISCUSSION

1. Blue Box Arbitration Decision

Background

The current *Waste Diversion Act, 2002* identifies that industry stewards (product manufacturers) should pay 50% of the Blue Box Program costs. In reality they pay 50% of a negotiated, theoretical cost based on “best practices” and other assumptions which results in a payment less than 50% of the actual cost.

Growing concerns from municipalities over a widening gap between the negotiated costs that are funded and the actual reported municipal costs to operate the Blue Box Program resulted in the municipalities and stewards going to arbitration to determine funding for the Blue Box Program for 2014. Jay Stanford was one of several municipal staff involved in the arbitration process providing evidence on behalf of the Association of Municipalities of Ontario (AMO).

The Blue Box Arbitration decision was announced on November 25, 2014 and concluded that the 2014 Steward Obligation is \$115.2 million which is close to 50% of the actual cost and much higher than the 2014 interim payments of \$99.5 million proposed by the industry stewards. How this decision will affect funding of individual programs had not been finalized at the time of preparing this report; therefore we do not know how much additional funding may be received for 2014.

Further negotiations with the industry stewards will be required to determine funding in 2015 and future years.

Summary

Funding for the Blue Box program from industry stewards will increase for 2014 based on the arbitrator’s decision and will result in additional funds for the City of London. The level of funding for future years has not been determined by the arbitrator. It will be subject to the existing negotiated process coupled with the learnings from the arbitration process. More information can be found at:

www.amo.on.ca/AMO-PDFs/Waste-Management/Blue-Box/Blue-Box-Arbitration-Award-Decision-2014-Nov-25.aspx.

2. Potential New Provincial Legislation

Background

Bill 91 (*Waste Reduction Act, 2013*) would have shifted existing Industry Funding Programs for tires, electronics, household special waste and the Blue Box program to individual producer programs. Under this proposed legislation, most of the Blue Box recycling system costs would have been shifted to the producers. Bill 91 died in the legislative process when the 2014 Provincial Election was called in the spring of 2014.

On November 19, 2014, the Honourable Glen Murray, Minister of Environment and Climate Change, said that new waste management legislation is expected in 2015 and has signalled that they are looking to the producers and municipalities to develop workable solutions themselves as input to the legislation. City of London staff are engaged in three somewhat related processes regarding these matters.

Summary

New provincial legislation has the potential to significantly change how waste diversion will work and be financed in Ontario. Funding to the City could increase as much as \$2 million to \$2.5 million if the new legislation results in full Industry Funding Programs/Producer Responsibility. The implications of these changes for municipalities would be part of future draft legislation and regulations.

Council Directions

Over the last 10 years, Council has submitted comments on a number of occasions to the Provincial Government via the Environmental Bill of Rights (EBR) Registry regarding proposed changes to waste diversion policy and draft legislation.

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3. Road Map 2.0: The Road to Increased Resource Recovery and Zero Waste & 4. Interim Waste Diversion Plan

Background

In December 2013 the document *Road Map 2.0 – The Road to Increased Resource Recovery and Zero Waste* (Road Map 2.0) was released and looked at potential program changes, initiatives and new measures that would increase waste diversion in London. This study was started because the majority of the initiatives in *A Road Map to Maximize Waste Diversion in London* (Road Map 1.0, 2007) were implemented. Road Map 2.0 had over 25 new initiatives proposed over a 5 to 10 year period. It was released for a 4 month community engagement process.

New provincial legislation (see above #2), if approved, would alter the financing arrangements and implementation logistics of many of the initiatives in London's Road Map report. For this primary reason, local community input was used to develop an Interim Waste Diversion Plan that only covers the next 18 months (remainder of 2014 and 2015) and includes initiatives and programs that potential changes to waste management funding and legislation are unlikely to have an impact on. The Interim Waste Diversion Plan contains nine initiatives.

Summary

Work is proceeding on the nine initiatives in the Interim Waste Diversion Plan with three initiatives already implemented. Decisions on the remaining initiatives contained in Road Map 2.0 will be delayed until a better understanding of the impact of the potential new waste management legislation from the Province is known.

Council Directions

The Council Resolution on this matter is contained in Appendix A.

5. Status of Green Bin and New, Emerging & Next Generation Technologies

Background

One of the key components of the Road Map 1.0 and the follow up report *Interim Business Plan for the Green Bin Program and Zero Waste Initiatives* (2010) was to undertake a one year pilot project in London to obtain local knowledge and determine the feasibility of implementing a city-wide Green Bin program. The pilot study found participation and capture rates were similar to programs in other Ontario cities. Overall, the Green Bin program has many benefits and is a proven way to divert waste but comes with significant capital and operating costs and, on average, a 50% to 65% participation rate (compared to the recycling program at participation rates above 90%).

Staff continue to review developments with respect to aerobic composting, anaerobic digestion, mechanical biological treatment processes, advanced thermal treatment and other technologies (including new, next generation and emerging technologies) that could assist in optimizing materials recovery and moving from the City's current diversion rate of approximately 44% towards the Provincial goal of 60%.

Summary

Considering the above, City staff recommended in Road Map 2.0 that any decision on the Green Bin program be delayed until the review of alternative technologies is completed.

Council Directions

There is no decision from Council with respect to the Green Bin program.

6. Environmental Assessment Requirements for Long Term Resource Recovery, Waste Conversion and Waste Disposal

Background

The W12A Landfill Site which opened in 1977 (37 years ago) is one of the most important assets owned by the City as it ensures that garbage from residents and businesses of London can be managed within our boundaries and at an affordable cost. The key to protecting this asset is the need to meet or exceed all environmental requirements and maintaining an open

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and positive relationship with the neighbourhood around the W12A Landfill area and Material Recovery Facility (MRF).

Waste quantity projections suggest that the W12A Landfill has between 8 and 15 years of capacity remaining depending on how residential and business waste is managed in the future. Under existing conditions, it is estimated that the W12A Landfill has approximately 9 to 10 years of capacity remaining.

The Environmental Assessment (EA) process, as prescribed by the Provincial Government, to develop new waste disposal/resource recovery capacity often takes several years to complete and obtain approval. The EA process will require public input throughout the process and examine resource recovery, waste conversion and waste disposal alternatives to determine the most appropriate option(s) for managing the City’s waste for the next forty to fifty years.

The first step in the process will be the development of a Terms of Reference which set the parameters for the EA including which resource recovery, waste conversion and waste disposal alternatives will be studied in detail.

Summary

The City will begin work on a long term resource recovery, waste conversion and waste disposal EA and parallel plans in early 2015.

Council Directions

Staff will be seeking direction from Council on the Terms of Reference for the EA in 2015.

7. Waste Management & Resource Recovery Area

Background

In 2009 the City established a Waste Management & Resource Recovery Area which includes the W12A Landfill (142 hectares) and 144 hectares of nearby land that can be used for a landfill expansion and/or resource recovery facilities. The purpose of the Waste Management & Resource Recovery Area is to plan for the continued evolution of the W12A Landfill and area as an integrated waste management centre that uses environmentally responsible and sustainable operations and practices to transfer waste to resource materials while maintaining a high standard of compatibility and minimal impacts with its environs and neighbours. The first facility into the Resource Recovery area was the Manning Drive Regional Material Recovery (MRF).

The draft London Plan proposes to increase the size of the Waste Management & Resource Recovery Area by a further 91 hectares and allow for development of a specialized eco-industrial park. The eco-industrial park would include companies that would use by-products from the resource recovery area (e.g., tire crumbs) to make products (e.g., floor mats).

City staff have recently been approached by a London based waste conversion technology (WCT) company about the possibility of constructing a pilot/research facility within the Waste Management & Resource Recovery Area. Concepts, requirements and opportunities are currently being discussed at a high level. Initial conversations have identified that the waste conversion technology (gas phase reduction) is a proven technology with respect to a number of different feedstocks. Post recycling, solid waste (garbage) represents an important evolution in the processing capabilities of this technology which would be a key part of the demonstration project. Typical end products from WCT include syngas as a vehicle fuel, electric power, ethanol, diesel, and jet A fuel.

Summary

Further planning for development of the resource recovery and eco-industrial park areas will occur in 2015 and an update report prepared for CWC and Council. Additional reporting on potential next steps with the London based waste conversion technology company will be provided in the first quarter of 2015.

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8. Buffer Lands Around the W12A Landfill

Background

The City owns approximately 128 hectares of land surrounding the Waste Management & Resource Recovery Area. Nearby City-owned lands serve as buffer for potential nuisance impacts such as noise, dust, odour and litter from the landfill and any future resource recovery facilities. These lands also serve to protect against encroachment of the landfill and resource recovery area.

Over the years, City staff have received a number of enquiries regarding the use of City-owned lands, including the buffer lands around the landfill, for a variety of projects. Recently City staff received an unsolicited business concept dealing with a greenhouse complex that could possibly be situated on these lands. This concept is currently being examined by City staff in consultation with the proponent based on direction from Council.

Summary

Staff will be looking at how best to maximize the economic development opportunities for City-owned lands nearby but outside the lands identified for Waste Management (W12A Landfill) and Resource Recovery area. A report on these matters will be provided to CWC and Council in mid to late 2015. An update report on the greenhouse proponent will be provided to the Corporate Services Committee on December 16, 2014.

Council Directions

The Council Resolution on this matter is contained in Appendix A.

9. EnviroDepots

Background

The importance of EnviroDepots in the City’s waste diversion system continues to grow. Since 2007, the number of visits to the EnviroDepots has doubled and the following materials were added to those managed at the depots; tires, appliances, used clothing and small household items, batteries, fluorescent tubes and bulbs, empty oil containers and vegetable oil (HSW Depot only).

The north area of the City is currently serviced by the depots on Clarke Road and Oxford Street and growth in the north of the City is causing these depots to become overcrowded during busy periods. The distance in the north end is a disincentive for residents to make use of the Depot services. A depot is required closer to these residents to provide an adequate level of service and encourage the proper handling of solid waste. The existing City depot at Try Recycling on Clarke Road currently only handles yard materials. It is being expanded to accept most of the materials accepted at the other depots including household garbage (for a fee), Blue Box recyclables, electronics, tires, batteries, compact fluorescent light bulbs, empty oil & antifreeze containers and propane tanks. This change is important from a customer service perspective as increased convenience encourages positive outcomes.

Summary

The existing EnviroDepots are popular destinations which provide a convenient “one stop drop” location for residents to dispose of a variety of materials.

Council Directions

The Council Resolution on this matter is contained in Appendix A.

10. Regional Material Recovery Facility (MRF)

Background

The Manning Drive Regional Material Recovery Facility (MRF) opened in August 2011 and started receiving recyclables from London’s recycling collection program. The operating agreement with the City’s contractor (Miller Waste Systems) allows for the processing fee to decrease, at specified intervals, as the quantity of delivered Blue Box material increases. This provides an opportunity for the City to save money by having other municipalities/organizations use the facility.

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Since opening, nine other municipalities and organizations have started bringing recyclables to the MRF. These municipalities and organizations are listed in Table 1. The MRF has also been able generate higher prices in the commodity markets compared to pricing previously received due to the quality of material being produced. Additional materials from other municipalities have helped lower overall operating costs for all MRF users including London.

Table 1 - MRF Customers

| Year | Municipalities/ Organizations using Facility | | Quantity Processed (tonnes) | Comments |
|------|--|-------|-----------------------------|----------------------------------|
| | New | Total | | |
| 2011 | London | 1 | 12,000 | Open August, 2011 |
| 2012 | Aylmer, Bayham, Central Elgin, Dutton-Dunwich, Malahide, Thames Centre | 6 | 29,000 | |
| 2013 | | 6 | 32,000 | |
| 2014 | St. Thomas, Western, Waste Management | 9 | 34,000 | Estimated based on eleven months |

In 2014, the City of London received the AMO Gas Tax Award which celebrates excellence in the use of the federal Gas Tax Fund. Winning projects improve local quality of life and contribute to a cleaner environment. The London MRF has also been featured on three occasions in national magazines dealing with recycling and waste management.

Summary

The new Manning Drive MRF has allowed the City to add new materials to Blue Box program while containing program costs.

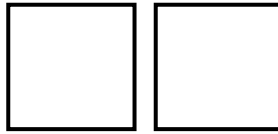
Council Directions

Over the last 7 years, Council has provided numerous directions to staff regarding the procurement, design, construction, contract management and operating agreements with respect to the MRF.

ACKNOWLEDGEMENTS

This report was prepared with assistance from Mike Losee, Manager - Solid Waste Engineering & Planning and Anne Boyd, Manager – Solid Waste Diversion.

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Appendix A Pertinent Council Resolutions

Resolution from Municipal Council, at its session held July 29, 2014.
(2014-E07) (18/12/CWC)

18. That, on the recommendation of the Director, Environment, Fleet & Solid Waste the following actions be taken with respect to the Interim Waste Diversion Plan 2014-2015:

- a) the Interim Waste Diversion Plan 2014-2015 BE RECEIVED;
- b) the establishment of a northend EnviroDepot at the Adelaide Works Yard be delayed for a minimum of two years to allow for the completion of the City Works Yard Operational and Capital Needs Assessment BE APPROVED;
- c) the increase in space of the Try Recycling North EnviroDepot to accommodate more yard materials and fall leaves for September 1, 2014 (Phase 1) and the expansion to accept household garbage (for a fee), Blue Box recyclables, electronics, tires, batteries, compact fluorescent light bulbs, empty oil & antifreeze containers and propane tanks on or before April 1, 2015 (Phase 2) BE APPROVED; it being noted that the operating costs have already been budgeted for;
- d) an increase of \$60,000 per year in the contract with Try Recycling Inc. dated September 28, 2009 BE APPROVED to cover the increased operating costs of the Try Recycling North EnviroDepot until December 30, 2016; in accordance with Procurement of Goods and Services Policy, Section 20.3 (Contract Amendments), sub-section (e) (ii);
- e) the provision of two Blue Boxes (instead of one) at no cost to newly constructed homes beginning August 1, 2014 BE APPROVED; it being noted that the additional cost of \$5,000.00 per year for the second Blue Box can be accommodated within the existing operating budget by reallocating funds from broader community outreach to focused initiatives;
- f) the selling of recycling carts to multi-residential buildings at cost as of January 1, 2015 BE APPROVED;
- g) the addition of mixed polycoat (e.g., hot/cold beverage cups, ice cream tubs) and blister packaging to the Blue Box program beginning October 1, 2014 BE APPROVED subject to approval of the extension of the Blue Box collection contract with Miller Waste Systems Inc.; it being noted that these items are being added to the recycling program at no additional cost;
- h) the Civic Administration BE DIRECTED to prepare and submit to Civic Works Committee in the Fall 2014:
 - i) a report examining the advantages and disadvantages of reduced container limits for garbage;
 - ii) a business plan for a community composting pilot project;
 - iii) a business plan for a food waste reduction pilot project, and,
 - iv) a report examining the implementation of incentives programs that encourage recycling including the Gold Box program; and,
- i) the hiring of students (total of 26 weeks per year) in Solid Waste Management at a cost of \$14,300.00 per year to assist with implementation of the Interim Waste Diversion Plan 2014-2015 BE APPROVED; it being noted that the cost of the students can be accommodated within the existing operating budget by reallocating funds from broader community outreach to focused initiatives;

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Resolution from Municipal Council, at its session held September 30, 2014.
(2014-E07) (18/12/CWC)

That the following actions be taken with respect to land leases for City-owned land in the vicinity of the W12A Landfill and Resource Recovery Area:

- a) the staff report dated September 23, 2014, with respect to the proposed process for land leases for City-owned land in the vicinity of the W12A Landfill and Resource Recovery Area BE RECEIVED for information; and
- b) the Civic Administration BE INSTRUCTED to seek additional information from the proponent and report back in 30 to 60 days in order to determine appropriate next steps based upon any additional information that the proponent is able to provide; it being understood that if sufficient information is not provided during this time, staff will report back on a potential RFP process. (2/23/CSC)