

3

WASTE DIVERSION ONTARIO FUNDING DESIGNATION OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT

The Solid Waste Management Committee recommends the adoption of the recommendations contained in the following report, October 24, 2007, from the Director, Solid Waste and Administration:

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council endorse the designation of waste electronics and electrical equipment under the *Waste Diversion Act, 2002*; an Act that requires Waste Diversion Ontario to develop a waste diversion program.
2. Regional Council request that Waste Diversion Ontario ensure the following issues be included in the Waste Electronic and Electrical Equipment program:
 - a) Product stewards pay 100% of the costs of collecting, storing, transporting, processing, marketing and/or disposing of all waste electronic and electrical equipment.
 - b) Product stewards fund all capital upgrades to York Region's existing household hazardous waste facilities and proposed community environmental centres to accommodate the anticipated increase in participation from residential and industrial, commercial and institutional customers as well as anticipated increase in volumes of materials collected.
3. The Regional Clerk forward a copy of this report to the Association of Municipalities of Ontario, the Ministry of Environment and local municipalities.

2. PURPOSE

The purpose of this report is to:

- Provide details of York Region's current waste electronics program.
- Provide an overview of the process to designate Waste Electrical and Electronic Equipment under the *Waste Diversion Act, 2002*.
- Review the implications of Waste Electrical and Electronic Equipment designation on York Region's current programs.

3. BACKGROUND

In 2003, Canadians sent approximately 157,000 tonnes of electronic waste to landfill. This amount is expected to increase to about 206,000 tonnes by 2010. Today, the average life span of both computers and monitors is less than two years. Electronic devices can be dangerous to the environment and harmful to our health if discarded improperly because they contain toxic materials such as lead, mercury and cadmium, in addition to potentially harmful plastics.

On June 11, 2007, the Provincial Minister of the Environment issued a final Program Request Letter to Waste Diversion Ontario effectively designating Waste Electrical and Electronic Equipment for diversion from landfill under the *Waste Diversion Act, 2002* (see Attachment 1). When the Minister designates a waste under the Act, an Industry Funding Organization is created. The Industry Funding Organization is comprised of brand owners and first importers of products or “product stewards” who are required to prepare a waste diversion program for the designated waste. The scope of the program will typically cover diversion targets, fee collection from the stewards to pay for the program, possible payments to municipalities to deliver the program and other operational and environmental aspects relevant to diversion of the designated material.

Blue box recyclables were the first materials designated by the Minister of Environment in 2002. Waste Diversion Ontario developed a diversion program for blue box waste in co-operation with Stewardship Ontario.

In 2003, used oil and scrap tires were designated. The Minister of Environment requested the Waste Diversion Ontario develop waste diversion programs for each material. The scrap tire program was approved in 2004 and has been forwarded to the Minister for public comment. The Waste Diversion Ontario is developing a diversion program for used oil material.

Household hazardous wastes were subsequently designated by the Minister in 2007.

To date, the Blue Box program plan is the only diversion program to receive final approval by the Minister and has resulted in over \$270 million in funding to municipalities over the last three years.

4. ANALYSIS AND OPTIONS

Municipalities in Ontario have, to date, borne the full cost of operating electronics recycling programs. Through the Association of Municipal Recycling Coordinators and other organizations, they have been actively advocating for the provincial government to make product manufacturers responsible for the costs of managing these materials.

4.1 York Region's Electronic Equipment Recycling Program to Date

In 2001, Council approved a pilot project titled, Electronic Equipment Recycling Program, to accept and process electronic equipment at existing household hazardous waste Depots. Currently, the Region operates four household hazardous waste depots where residents can take electronic wastes for recycling. The program permits receipt of household products such as computers including modems, cables and software (e.g. disks, CDs, DVDs), monitors, printers, scanners, electronic games, telephones, pagers, fax machines, VCRs, DVD players, radios, stereos and digital cameras (*see Attachment 2 for depot locations and hours of service*).

Since the program's inception, the volume of materials collected has increased significantly. An estimated 954,158 kilograms of electronic waste was diverted in the past three years (see Table 1 below).

Table 1
Electronic Waste Collected at York Region's HHW Depots Since 2004
(Kilograms)

		East Gwillimbury	Georgina	Markham	Vaughan	Total for Region
2004	Monitors	15,567	14,120	46,752	No depot	76,439
	Electronics	35,290	33,600	71,220	No depot	140,110
2005	Monitors	21,530	20,420	65,051	No depot	107,001
	Electronics	43,530	31,650	119,820	No depot	195,000
2006	Monitors	26,819	23,775	85,994	21,530	158,118
	Electronics	50,000	36,940	156,910	33,640	277,490
Grand Total						954,158

The Region is investigating the implementation of an energy from waste facility, in partnership with Durham Region, to manage a portion of its residual waste and diversion of waste electrical and electronic equipment materials is key to minimizing emissions from such a facility.

4.2 Designation of Waste Electrical and Electronic Equipment by Waste Diversion Ontario

4.2.1 Program Details

Ontario Regulation 393/04 prescribed seven categories of Waste Electrical and Electronic Equipment materials as designated wastes under the *Waste Diversion Act, 2002*. The program will be implemented in two phases. Phase 1 will commence with the diversion of desktop and portable computers, monitors, printers and peripherals, and audio-visual equipment such as televisions. Phase 2 will include all items in Phase 1 along with copiers, handheld computers, computer flat bed scanners, typewriters, pagers, modems, radios, turntables etc. A complete list of Phase 1 and Phase 2 items appears in attachment 1.

Designated stewards will be responsible for payment of program costs including collection, storage, transportation, processing, marketing and/or disposal of all waste electrical and electronic equipment. Stewards will also be responsible for research and development activities to support and increase the effectiveness and efficiency of collection and diversion of waste electrical and electronic equipment and promotion to support the program. The affected stewards have until February 1, 2008 to develop the details of the diversion plan for Phase 1 and must have the Phase 2 program proposal completed within one year after approval of Phase 1 by the Minister.

4.2.2 Funding Rules for Program

The Minister of the Environment has directed that the waste electrical and electronic equipment program comply with a number of conditions:

- Brand owners, first importers and/or assemblers of non-branded products for sale and use in Ontario that result in waste electrical and electronic equipment will be designated as stewards.
- Potential fees payable in respect of electrical and electronic equipment under the Program shall be applicable to such equipment produced in Ontario or arriving into the Province for sale and use by the consumer in Ontario.
- Potential fees collected during Phase 1 shall be used to pay for Program activities.
- Potential fees shall be used to maximize the management of waste electrical and electronic equipment through reduction, reuse and recycling and not to fund the burning, landfilling or land application of waste electrical and electronic equipment unless the 3R options are not available or technically feasible.
- The program shall provide for waste electrical and electronic equipment generated by residential and industrial, commercial and institutional sources.

4.2.3 Impact on York Region's Electronic Equipment Recycling Program

There is a potential for significant cost savings to the Region if product stewards begin paying the costs of the Region's current electronic waste diversion program. The budgeted cost to deliver the program in 2007 for all four depots is \$90,700. The new Waste Electrical and Electronic Equipment program as defined by the Minister will, however, require that electronic waste be collected from residential and industrial, commercial and institutional sources. York Region's current program does not accept waste electrical and electronic equipment from industrial, commercial and institutional generators. The new program also requires the inclusion of additional materials currently not collected by the Region such as television sets. Compliance with the new program may, therefore, require expansion of current facilities, development of additional facilities, increased operating hours to accommodate increased volumes and participation and provisions to collect fees.

York Region staff was actively involved in the designation of waste electrical and electronic equipment through the Association of Municipal Recycling Coordinators and Association of Municipalities of Ontario. Staff intend to continue to monitor the development of the steward's plan to ensure the interests of the Region and local municipalities are protected.

5. FINANCIAL IMPLICATIONS

The Region budgeted \$90,700 to operate the Electronic Equipment Recycling program in 2007. These costs include payment to the contractor, insurance, utilities, supplies, rental fees, promotion and education and Solid Waste staff. The new program is expected to cover up to 100% of the costs associated with operating the Region's electronic waste diversion program. Funding provided in Phase 1 of the new program is expected to cover the majority of our current program costs.

Staff recommend that the stewards cover 100% of the capital costs required to upgrade existing household hazardous waste depots and to cover the additional infrastructure costs of community environmental centres. Existing facilities will need to be upgraded to accommodate the increase in volume of materials collected as a result of adding additional materials to the program, in addition to increased participation from industrial, commercial and institutional customers.

The Region is currently establishing a network of community environmental centres which will provide members of the public with conveniently located points of access to solid waste management services including the collection of waste electrical and electronic equipment. Should these centres be set up to accept wastes from industrial, commercial and institutional sources, there will be additional infrastructure costs.

Financial implications associated with meeting the new program's requirements to service industrial, commercial and institutional generators will only become apparent once the designated stewards have finalized their proposed diversion plan for waste electrical and electronic equipment.

6. LOCAL MUNICIPAL IMPACT

The designation of waste electrical and electronic equipment will increase opportunities for local residents and businesses to divert additional electronic waste from landfill and reduce program operating costs. The program may require new facilities to be constructed or include take-back programs at local retailers. Should this occur, the involvement of local municipalities will be required to assist the Region and/or stewards in finding suitable locations. Promotion of the new program will also need to be coordinated with the local municipalities.

7. CONCLUSION

The Region currently has four household hazardous waste depots operating in the Towns of East Gwillimbury, Georgina, Markham and the City of Vaughan at which electronic waste is received from residents for diversion from landfill. A Waste Electrical and Electronic Equipment Program has been designated for diversion by the Minister of the Environment and is awaiting the development of a program plan by affected product stewards.

The designation of waste electrical and electronic equipment could have numerous benefits to the Region including increased accessibility with new facilities and program cost savings. Regional staff will report back to Solid Waste Management Committee and Regional Council once the plan and funding model is approved by the Minister.

For more information on this report contact Nikki Vecchiola, Project Coordinator of the Solid Waste and Administration Branch at extension 5702 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

(Attachment 1 referred to in this clause is attached to this report. Attachment 2 referred to in this clause was distributed with the agenda for the Solid Waste Management Committee meeting of November 7, 2007.)