Electronic Waste – Background February 9, 2005

Nova Scotia - Too Good to Waste

Nova Scotia is a world leader in recycling and recognizes the importance of managing waste for the benefit of both the environment and the economy. Its solid waste-resource management strategy has already made a significant positive impact. Nova Scotia sends less waste to landfills than any other province and employs more than 3,000 people in the solid waste-resource field.

The province is now proposing new regulations to keep electronics out of landfills to avoid the associated health and environmental hazards and provide jobs for Nova Scotians.

Proposed Electronic Products Stewardship Regulations

Modelled after Nova Scotia's successful paint recycling initiative, the proposed electronic products stewardship regulations will require industry to take responsibility for its products when they reach the end of their useful lives.

The draft regulations establish the responsibilities of brand owners/manufacturers of electronic products (initially televisions, computers and a number of other products). Recognizing that businesses are innovative, brand owners/manufacturers will have flexibility to develop their own programs to meet their obligations. They must each submit a proposal for approval by the Minster of Environment and Labour showing how they will meet the following terms:

- cover all of the costs of the program;
- provide collection, with no charge to consumers when they return products for recycling;
- reduce, reuse, and recycle in that order;
- design environmentally responsible products; and
- run an education and awareness program.

Costs

Brand owners/manufacturers must pay for the collection, refurbishing and recycling of electronics. Some may choose to absorb the cost. Others may increase the price of their products. Industry estimates it may cost about \$30 per computer system (computer, monitor, printer and accessories). They must not charge a fee when consumers return electronics for recycling.

Collection

Brand owners/manufacturers must provide universal access to all Nova Scotians. They must not charge consumers when they return e-waste for recycling. Many have indicated that they prefer a separate collection method. Some have looked at the possibility of collection through retail businesses. A feasibility study on collection methods currently being done for the Atlantic provinces will help owners/manufacturers make these decisions.

Reduce, Reuse, Recycle

Brand owners/manufacturers must follow the hierarchy of the 3Rs – first reduce the amount of waste, then reuse it wherever possible, and then recycle it.

Nova Scotia will explore potential opportunities to reuse old computers through the Computers for Schools program. It was established in Nova Scotia in 1994 to restore used computers from government and private businesses for use in schools.

Design for the Environment

Brand owners/manufacturers must take a 'design for the environment' approach and report on progress. This approach includes:

- eliminating toxic materials (such as mercury and lead);
- designing products for reuse;
- designing products for easier disassembly and recycling; and,
- developing new technology for recycling more materials (such as plastics).

Education and Awareness

As with the paint recycling program, brand owners/manufacturers must implement an advertising and education campaign to inform consumers on how to participate and why they need to do so.

Solving a Global Problem

Rapid advancements in electronic technology have led to an increase in the amount of electronic waste in landfills. In 2003, it is estimated that Nova Scotians disposed of more than 4,500 tonnes of electronic waste. By 2010, this number will increase to 5,000 tonnes.

Throwing out such large quantities of electronic waste increases the risk of environmental hazards. For example, computers contain materials like mercury, lead and various flame retardants which can threaten environmental and human health.

Nova Scotia has already reduced its waste significantly by banning beverage containers, tires and paint from landfills. Diverting electronic waste from landfills will further protect Nova Scotians and their environment. It also contributes to solving a global problem.

Significant amounts of North American electronic waste are exported to China. In rural areas, mountains of computers are disassembled by men, women and children in very rudimentary ways. Often, plastics are burned without care for the environment or human health. Metals and chemicals seep into rivers from which people drink and fish.

Japan and the European Union have undertaken some of the most comprehensive electronic waste programs. They require manufacturers to collect and recycle the waste, reduce dangerous materials used in their products, and design them for recycling. The states of Maine and California, and the provinces of Alberta and Ontario have passed regulations which require the collection and recycling of certain electronic waste, and reduction of some toxic materials in computers.

The Canadian Council of Ministers of the Environment recognized that electronic waste is a growing problem and must be addressed. The council endorsed principles for electronic product stewardship in July 2004 and encouraged provinces and territories to follow them. The Nova Scotia approach is consistent with these principles.