

***Diverting E-Waste:  
Alberta, Ontario, and Nova Scotia Initiate Electronics Recycling Programs***

*Jennifer Marston  
Blake, Cassels & Graydon LLP*

Consumption of personal computers and other consumer electronics has increased in recent years with rapid advances in technology that mandate shorter product life spans, resulting in the accumulation of waste electronics products (or “e-waste”) in Canadian landfills. Computers and other electronic products contain hazardous heavy metals such as lead, mercury, and cadmium, which have the capacity to leach into soil and contaminate ground water systems, posing a health hazard to humans and the environment.

Over the past months, the provinces have begun taking steps to deal with the problem of e-waste. Alberta and Ontario have already enacted regulations targeting e-waste, while Nova Scotia recently released draft regulations and launched a 30-day public consultation process.

The goal may be the same, but the provinces have adopted divergent approaches to keeping e-waste out of landfills. Alberta, which boasts of its swift action and its abstention from reliance on tax dollars, has imposed environmental surcharges on consumers purchasing electronics products. Although manufacturers, suppliers and retailers play an administrative role in collecting and remitting end-user fees, they are not mandated to change the manner in which they produce and sell products, and no incentive is provided for reuse or refurbishment by manufacturers. By contrast, Ontario and Nova Scotia have taken a forward-looking approach and focussed on industry stewardship.

The latter approach is consistent with the principles enunciated by the Canadian Council of Ministers of the Environment (CCME), which met in June 2004 to establish a set of principles to guide the provinces in developing much-needed e-waste programs. The principles set out by the CCME emphasized industry stewardship, and the need to manage electronics products throughout their life cycle, from design to end-of-life.

***Alberta***

Alberta was the first province to enact e-waste recycling laws, and has taken a unique approach. The Alberta e-waste recycling program is funded by end-users of electronic products, who pay a one-time fee upon purchase. That fee is then remitted to the Alberta Recycling Management Authority (ARMA), a non-profit body established to administer the program. The responsibility for collecting and remitting the fee falls on members of the retail and manufacture supply chain, who are required to register with ARMA and to file regular remittance reports.

The fees paid by end-users range from \$5 for a notebook computer to \$45 for a 46-inch television, and are intended to cover the cost of collection, transportation, and recycling of electronic materials, public information and awareness programs, and electronics-related research. Although ARMA intends to expand the products covered by the program in the future, consumers currently pay fees only on televisions and computers. Since the regulations were enacted in October 2004, Alberta has established over 75 disposal sites for unwanted electronics

products. Products collected at the various drop points are transported to one of three central processing facilities, where they are dismantled and sorted into components. These components are then sold to companies that remanufacture them into consumer products.

Although consumers pay the environmental surcharge, it is the retailers, suppliers, and manufacturers that bear the administrative burden of remitting the fees to ARMA. All suppliers of products into Alberta are required to register with ARMA and file annual reports. The term “supplier” is defined to include manufacturers, distributors, wholesalers, and retailers. The result is that all members of the electronics supply chain must be registered with ARMA, beginning with the party who either imports to product into Alberta or manufactures it in Alberta. Suppliers in a chain must establish among themselves who will be responsible for remitting the surcharge to ARMA on a monthly basis.

Although this program offers administrative inconvenience to suppliers in and into Alberta, it does little to affect their practice of manufacturing and distributing products. The program does not impose obligations on the industry that are likely to result in reduced production of hazardous e-waste in the future.

### ***Ontario***

The situation is different in Ontario. On Dec. 14, 2004, after a period of public consultation, the Ontario Ministry of the Environment enacted Ontario Regulation 393/04, naming electronic waste as a “designated waste” for the purposes of the *Waste Diversion Act, 2002*. Environment Minister Leona Dombrowsky then ordered the development a diversion program for the e-waste specified in the regulation.

The content of the regulation itself is minimal. It prescribes “waste electronic and electrical equipment” as a designated waste for the purposes of the *Waste Diversion Act, 2002*, and sets out a schedule listing over 200 captured by the regulation. The schedule, which is not exhaustive, includes household appliances, televisions, telephones, computer equipment, tools, toys, and audio-visual equipment.

The regulation itself does not mandate an e-waste recycling program, but simply permits the minister to request that a program be developed and implemented by Waste Diversion Ontario (WDO), a non-share, non-government corporation responsible for the province’s blue box program. WDO is run by a board of directors that includes industry, municipal and non-governmental representatives, and currently administers its programs jointly with Stewardship Ontario, an industry funding organisation created for that purpose.

Details of the proposed e-waste recycling program are not yet available. The minister has requested that WDO submit a consultation plan by May 1, 2005, and a study on the current treatment of electronic waste by June 1, 2005. After consultations take place, the WDO will develop and submit its diversion plan to the minister, who will post it on the Environmental Registry for 30 days for public comment. The plan will then be subject to approval by the Minister. This process is expected to be complete no earlier than the summer 2006.

It is likely that the program will be administered in a similar fashion to the province's blue box program. Under the blue box program, brand owners and first importers into Ontario of products that result in blue box wastes are defined as "stewards," and must fulfil certain obligations associated with the recycling of blue-box wastes. Stewards can satisfy their obligations either by becoming members of Stewardship Ontario, or by developing and submitting their own Industry Stewardship Plans to WDO for approval. Stewards who become members of Stewardship Ontario pay fees based on the amount of blue box packaging they have released into the Ontario market. They are also responsible for implementing measures to reduce the amount of packaging they produce.

This industry stewardship approach, in sharp contrast to the Alberta waste diversion program, places the emphasis on industry to develop sustainable methods of manufacture and supply, mandating responsibility and ensuring that e-waste is not only recycled, but also reduced.

### ***Nova Scotia***

Like Ontario, Nova Scotia has adopted a product stewardship approach to e-waste recycling. On Feb. 9, 2005, Nova Scotia Environment and Labour released draft e-waste regulations and launched a 30-day public consultation process ending March 10, 2005. Unlike the Ontario regulations, the draft Nova Scotia regulations provide a detailed description of the program to be implemented.

The proposed regulation would amend Nova Scotia's Solid Waste-Resource Management Regulations, made under the Nova Scotia *Environment Act*, which currently govern industry stewardship programs for beverage containers, tires, and paint.

The proposed amendments to the Regulations set out detailed responsibilities for "brand owners" of electronics products. Brand owners include owners or licensees of the intellectual property rights of electronics products distributed in Nova Scotia, and manufacturers or distributors of the product. Brand owners would be prohibited from selling or distributing their products into Nova Scotia without first registering with the Resource Recovery Fund Board and implementing stewardships program approved by the Board or enlisting the Board to operate a stewardship programs on their behalf. The obligations of registered brand owners would include providing collection facilities for used products, implementing education programs for consumers, and ensuring that 80 per cent of the reusable and recyclable portion of the collected e-waste is recycled or re-used.

Brand owners would also be responsible for implementing a "design for the environment" program for each of their products. The "design for the environment" element, like Ontario's waste diversion programs, mandates that manufacturers and suppliers set scheduled goals with respect to the elimination of harmful materials from their products, the redesign of products for reuse, disassembly and recycling, and the identification and development of recycling methods and markets, thus putting due emphasis on the need to approach the problem of e-waste at source.

All three programs will have a notable impact on industry, though in different respects. The Alberta program impacts all manufacturers, importers, and retailers of electronics products, but

only to the extent that it imposes administrative burdens upon them. The Ontario and Nova Scotia programs, with their emphasis on stewardship, are likely to have wider-ranging effects on the electronics industry. Companies will be called upon to use their ingenuity and resources not only to respond to the waste we have already created, but also to engineer less and better waste for the future.