



The Newsletter of
Reiterate
the Recycling Council of British Columbia

Fall 2001

FROM GROUND ZERO, TAKING AIM AT ELECTRONIC WASTES

By Karen Asp, Recycling Council of BC

The image of the World Trade Center towers collapsing September 11th in a fury of glass and concrete, ash and steel will be, as many have said, burned forever into the minds of the current generation, an image of senseless destruction and loss of life. For those of us in the business of solid waste reduction and recycling, other images and thoughts from that day may also linger. I was particularly struck by the flurries of office paper that fell from the sky, blown hither by the force of the explosions and coming to rest in ash-strewn drifts throughout Lower Manhattan. Office paper is one of the more valuable commodities on secondary materials markets. How many tonnes, I wondered, were disgorged from those giant towers?

Along the same line of thought, I imagined tens of thousands of computers, monitors, printers, scanners, etc., etc., all cascading earthward as the buildings collapsed, merging with steel and concrete in a conflagration that would have reduced the entire electronic infrastructure to an elemental lava of lead, copper, cadmium, mercury and aluminum, among other ingredients. How many computers were wasted, thirty, perhaps forty thousand? This number may not be far off, considering that the working capacity of the office towers was upward of 50,000 people, and that the World Trade Center was located, after all, in New York's heartland of high tech business. Computer systems, among other electronic devices, would have been pervasive there, having become as integral to modern business strategy as spreadsheets and breakfast meetings.

The image of cascading computers, and the heaps of rubble at Ground Zero, brings into view the underside of the high tech revolution: burgeoning flows of post-consumer information technology wastes and pollution. All of those wasted computers were likely to become obsolete soon

anyway, having, at best, a lifespan of 3-5 years in the possession of the original purchaser. Rapid technological change affecting both hardware and software has created this situation, compressing the useful life of information technology (IT) from the perspective of the initial owner and speeding up consumption of new products. The end result is an accelerated outflow of IT wastes from businesses, institutions and households, waste streams that are both increasingly voluminous and potentially hazardous due to the complex physical and chemical make-up of these indispensable tools of modern life (see Page 4-5 for details). In this story, we'll take a look at the question of what to do with all of this electronic rubble, focusing specifically on two contrasting approaches to extended producer responsibility (EPR) taking shape in Europe and Canada.

Recycling Infrastructure Not Sufficient

As we reported in *Reiterate* two years ago, a scrap recovery infrastructure is quietly emerging across the country to deal with IT waste. But in Canada, as elsewhere, this immature industry, said to capture about 14 per cent of discards (3 per cent is reused, 11 per cent is recycled), is increasingly viewed as inadequate, on its own, to deal with the problems of IT waste. The industry consists of a variety of businesses involved in all aspects of computer reuse, recycling and disposal, as well as non-profit and government programs such as Re-Boot and Computers for Schools, which redistribute used equipment. In all, however, there isn't enough capacity to deal with the backlog of old stuff, there isn't sufficient financing or coordination of consumer education, and there are simply too few places to return e-scrap—none in many communities. What's more, deep down, the answers to many of the problems of IT waste concern things like reducing toxicity, increasing durability and product life, and developing products that are easy to disassemble and made with

Continued on page 4



PHOTO BY K.E. ASP

INSIDE THIS ISSUE

- LETTER FROM OUR PRESIDENT – page 2
- WELCOME NEW MEMBERS – page 2
- A SPECIAL THANK YOU – page 2
- FOCUS ON MEMBERS – page 3
- HEALTH AND DENTAL PLANS FOR RCBC MEMBERS – page 3
- FROM GROUND ZERO continued – page 4
- REDUCING WASTE IN FIRST NATIONS COMMUNITIES – page 6
- RICHARD BERGAN – A PASSION FOR THE INDUSTRY – page 6
- CHATEAU WHISTLER WASTE AUDIT SHOWS IMPROVEMENTS – page 7
- A PERSPECTIVE ON WHY RETURN-TO-DEPOT WORKS – page 7
- IT WASTE RESOURCES – page 7
- MEMBERSHIP FORM – page 8



RECYCLING COUNCIL OF
BRITISH COLUMBIA
Suite 10
119 West Pender Street,
Vancouver, BC, V6B 1S5
tel: (604) 683-6009
fax: (604) 683-7255
email rcbc@rcbc.bc.ca
www.rcbc.bc.ca

RCBC's 28th Annual Conference

Waste Prevention,
Recycling and
Sustainability
PUSHING THE LIMITS

MAY 29–31, 2002
VICTORIA
CONFERENCE CENTRE
Victoria, BC

Updates will be posted
on www.rcbc.bc.ca



Recycling Council of British Columbia

2001/02 BOARD OF DIRECTORS

PRESIDENT

Craig Foster, Wastech Services Ltd.

VICE PRESIDENT

Maura Walker, Gartner Lee Ltd.

PAST PRESIDENT

Mary Jean O'Donnell

TREASURER

David Wilkinson, ETL Recycling Services Ltd.

SECRETARY

Jeff Collins

DIRECTORS AT LARGE

Sally Emory, Northern Environmental Action Team
David Duckworth, Okanagan Similkameen Regional District

Byron Harker, New West Gypsum Recycling Inc.

Malcolm Harvey, Encorp Pacific (Canada)

Hannah King

Bob McDonald, Cowichan Valley Regional District

Reinhard Trautmann, Regional District of Central

Kootenay

Alan Stanley, Nanaimo Regional District

RCBC STAFF

Executive Director: Natalie Zigarlick

Karen Asp, Corrie Buchkowski, Duane Gyuriscka,
Michelle Lee, Tina Neale, Nermine Tawfik, Eileen
Tepsa, Laura Ward

EDITOR

Karen Asp

email: k_asp@rcbc.bc.ca tel: 683-6009 ext. 305

Reiterate, RCBC's flagship newsletter, is published three times a year. Reiterate accepts short articles and photos for the "From the Trenches" section of the newsletter. The opinions expressed by individual authors do not necessarily represent the views of the Recycling Council of BC.

DESIGN/PUBLISHING:

Olive Design Inc.

email: olive@axionet.com

RCBC is located at
#10-119 West Pender Street,
Vancouver, BC, V6B 1S5
tel: (604) 683-6009 fax: (604) 683-7255
email: rcbc@rcbc.bc.ca
website: <http://www.rcbc.bc.ca>



This newsletter is printed on Domtar Sandpiper paper, a high quality product made in Canada from 100% post-consumer waste paper.

LETTER FROM OUR PRESIDENT



Dear Members and Stakeholders:

Welcome to the Fall 2001 edition of RCBC's flagship publication, *Reiterate*. I'd like to take this opportunity to talk a little about the big picture for waste reduction in this province and highlight some of RCBC's recent and upcoming activities.

We need to keep British Columbia moving forward in the development of waste avoidance, recycling and organics management initiatives in both the municipal and ICI sectors. Why? Because we face huge challenges as we work to deal with the impacts of waste on our environment. While we've enjoyed considerable success over the past decade at diverting wastes, particularly with the development of municipal recycling programs and industry product stewardship initiatives, the waste burden continues to grow. As a result, we need to intensify, not decrease, our efforts at waste avoidance and diversion strategies.

These strategies are the principle means by which a wide range of pollutants are kept out of landfills and valuable material resources are diverted back into production processes, facilitating the development of an environmentally sustainable economy. What's more, these strategies

provide a critical means for reducing greenhouse gases associated with climate change. As we reported in the Spring/Summer 2001 edition of *Reiterate*, waste avoidance and diversion activities offer enormous potential in the fight against climate change, and should spur us to strive for more and better programs and policies. This is the road to sustainability.

Let me tell you a little about what RCBC's been doing lately.

In September, the Board of Directors set RCBC's policy priorities for the year, identifying the issues of climate change (as it relates to waste minimization), electronics recovery and industry product stewardship initiatives currently under consideration at the provincial level, as key areas. RCBC's Policy Committee met recently to discuss these issues, as well as others such as rigid plastic containers and Ontario's proposed Waste Diversion Act. A number of Working Groups have been established to focus on particular issues or activities and we look forward to the fruits of their efforts in the near future.

RCBC's Communications/Events Committee is gearing up for next year's conference, May 29 to 31, in Victoria, BC. As always, RCBC's conference is planned to maximize the exchange of information on waste prevention, diversion and residuals management. We're pleased to welcome representatives from the Capital Regional District's Waste Management Department to the committee to help make this conference a winner. And speaking of winners, our 3rd annual *Breakfast with the Minister* was one. It was very well attended, as those of you who were there will know, and someone even suggested that we hold a breakfast function twice each year to take advantage of the great opportunity both for networking and socializing.

The Board of Directors and staff of RCBC will continue to work towards our demonstrated commitment to the goals of waste avoidance and the broader goal of sustainability. We look forward to the support and consultation of members and stakeholders.

Sincerely,

Craig Foster

President

WELCOME NEW AND RENEWING MEMBERS

BC Bottle Depot Association
Cadillac Fairview Corp.
Canadian Petroleum Products Institute
Canadian Standards Association
Contech PCB
David Dungate
Eco Rangers
Erin Systems Ltd.
Fairmont Hotels and Resorts
Garbage to Gold Recycling Society
Hanson Research and Communications
Jim Lau
Murray - Latta Machine Co.
North Star Metal Salvage
Open Secret Environmental
Vancouver City Credit Union

A SPECIAL THANK YOU

RCBC has a grand new display thanks to a generous financial contribution from recycling industry leader Alcan, and a generous donation of volunteer time from graphic artist Kate Flood, of Ruby Dice Communications. Our new information booth display consists of a set of three panels showing an image of a mountain reflected in a lake and the words "working together towards waste avoidance". It's a simple yet evocative image of who we are. RCBC wishes to express its gratitude to Alcan and Kate Flood for making it possible.

RCBC CONFERENCE SPONSORSHIP

Take advantage of the benefits:

- Recognition in conference program, newsletters and RCBC web site
- Verbal recognition at opening ceremonies
- Discounts up to 100 per cent on conference admission
- Advertising opportunities
- Tax receipt for charitable donation

For more information on sponsoring RCBC's 28th annual conference in May 2002, call Natalie Zigarlick at 604-683-6009 ext. 307.

Ruby Dice
design on a roll...it's my turn.

corporate identity packages
posters/advertising
newsletters/bulletins
tickets/ad covers
websites

rubbydice@hotmail.com

FOCUS ON MEMBERS

At RCBC we count on the voice and perspective of members to help us address the very serious issues we face in our work towards sustainability. As our mission statement says, we support waste management solutions by conducting research, facilitating the exchange of ideas and providing information services. We cannot put a price on your value in helping us to do these things on your behalf.

But, we want to make sure that we are also providing value in return. To do this, we have embarked on a quest to broaden membership benefits, especially in the area of member services.

Health Plans

First up, we have JUST signed on to offer health benefit plans to RCBC members. For many small businesses like bottle depots, or individuals like consultants, accessing health plans for either the owner or staff members is not a possibility. By taking advantage of the RCBC group plan, that can change. Your savings over individual plans can easily cover your membership costs. And being able to offer such a benefit to staff members may be realization of a perk you never thought was possible. For larger firms, the plans offer flexibility that will allow you to tailor your benefit package to individual employees if you choose.

RCBC investigated several options and is pleased to present Liberty Health's Health and Dental Plans (see advertisement). You can sign on, or get all your questions answered, by contacting James Burron (at 1-800-313-6610).

Office Space

Next, RCBC is pleased to announce that our office can now be yours. As a member, you are welcome to book space to use a desk or a meeting room in the Vancouver office of RCBC. For out-of-lower-mainland folks this could mean a place to do business, when you are away from your place of business.

We have reconfigured part of our office to facilitate larger, semi-private meetings of up to twelve; private meetings of up to 6; and semi-private workspace with access to the internet, a printer, and a phone. Booking is on a first-come first-served basis, and is subject to availability.

What's Next?

You tell us. We are investigating car rental, telephone and accommodation packages. We have heard suggestions about affinity cards – where every purchase garners discounts for you and points, or dollars, for RCBC. We are talking to various publishers about discounted rates on industry magazines and considering discount programs through particular producers of recycled products. How about members offering discounts to members? Can your service be made available to other members at a savings? And what do you need to set that up? We are looking at certificates, stickers, member numbers, and other markers to indicate membership.

We have been busy – because our members deserve it!

MEMBERSHIP RENEWALS

Membership renewals will be coming out to all members in early December. Along with yours you will receive the new member information kit which details all of the many benefits that come to RCBC members. We want to thank Encorp Pacific (Canada), and Board member Malcolm Harvey, for their support in the development and printing of the new member kits. You're gonna love them!

Your membership dollars help us to continue to deliver these wonderful services so we are counting on a quick response to the invoices.

Introducing: Liberty Health's Health and Dental Plans For RCBC Members

Liberty Health is pleased to offer Health and Dental Plans to all Recycling Council of British Columbia members, employees and their families. We all deserve peace of mind when it comes to our health. *Liberty Health, a major health provider in Canada, has specially designed plans for those of us who work for ourselves or may not have gold-plated group dental and health plans.* Since premiums are treated as medical expenses under the Income Tax Act, there's the potential for a tax credit to self-employed, unincorporated individuals. Business owners can get a corporate tax deduction as well.

How affordable is it?

A single adult, under age 45 can receive comprehensive health care coverage for as little as \$32.80* per month. (Excellent Dental and Health coverage starts at about \$50 or \$60 per person, \$15 to \$40 per child). RCBC's Association Health and Dental Plans from Liberty Health includes coverage for:

- Prescription Drugs
- Dental Care (may include root canals, crowns, bridge, dentures and braces)
- Vision Care (Bonus Benefits also)
- Registered Specialists and Therapists
- Home Care and Nursing
- Medical Equipment and Supplies
- Ambulance (ground and air)
- Accidental Death and Dismemberment
- \$1,000,000 Travel Health Insurance
- Hearing Aids...and much more.

Ask about customized flexCARE and Dental Only plans.

To get more information on the many plans available and get a price quote, just call:

James Burron
1-866-313-6610

* Monthly premium based on the Base Plan in British Columbia.

™ Trademark held by Liberty Mutual Insurance Company. Liberty Health is a division of Liberty Health Insurance Company.
©Liberty Mutual Group. All Rights reserved.

NEWS AND CHANGES

Some Board changes for you to be aware of. Ruth Yole, who was representing UBC, has moved to Barrie, Ontario – vacating her seat on the Board. We are sorry for her departure, but really pleased for her because the move came as a result of a very positive career change. Board member Jeff Collins, who is serving as Secretary this term, has left his position with SCRAPS. He is staying on with RCBC as an independent consultant.

And a few staff changes as well. Many of you know that Sari Sikstrom has left the RCBC offices to move into Hycroft House, as an events organizer. Our loss and their gain. Duane Guyircksa, one of the Hotline Information Officers, has been accepted into the Biomedical Engineering Technology program at BCIT. He starts school in January and will be leaving RCBC as of mid-December. We wish him all the best. Finally, we have a new admin. assistant, Luz Vierendeza, starting November 26th. You will probably be talking to Luz over the next months with regard to membership issues, so be sure to say 'welcome'.

RCBC ACTIVITIES

RCBC is looking forward to participating, for the second time, as part of Alcan's booth at the Globe tradeshow. Globe 2002 is an exciting tradeshow where we can showcase AI, The Recycling Computer, built especially for the Alcan Dragon's Den last June. We're not sure whether to refer to AI as he or it, but whichever is appropriate, AI provides interactive information on a variety of recycling and waste reduction issues. Think, Hal from 2001, A Space Odyssey. Only nicer. Whether the questions are general or specific the disembodied voice of AI will draw on the RCBC database to provide the answer. Come on out and see us.

Committees continue to be the backbone of RCBC – providing viewpoints and research that helps to set our direction and policies, not to mention our activities.

The Communication/Conference Committee, headed up by Bob McDonald, is busy planning for the 2002 Conference in Victoria. Your suggestions and help are always welcome.

Al Stanley is chairing the Policy Committee and is busy facilitating working group activities. Look for the results in the coming months.

Chair Byron Harker, who is leading the very busy Membership Committee, has taken on the huge task of membership recruitment. You can help by ensuring that colleagues who should be members of RCBC, actually are. Pass on your member information kit after you have reviewed it – remember the REUSE in the 3Rs hierarchy.

Our Governance Committee, under the direction of Hannah King, is looking at improvements to our Bylaws that will make us function even better and completion of the Personnel Policy that is nearly, but not quite, done. We really appreciate her lawyerly input into our operations.

The last standing committee is Finance. Treasurer David Wilkinson chairs this one and he is working to ensure that the inputs equal the outputs. Preparation of the 2002–2003 budget begins in January. Keep up the good work David.

Finally, President Craig Foster is working very hard on fundraising and financial health for RCBC. He will be looking to you for help in developing new and better funding plans including events and services. Start by sending your ideas to president@rcbc.bc.ca.

FROM GROUND ZERO, TAKING AIM AT ELECTRONIC WASTES (continued from page 1)

materials and substances easy to reuse or recycle. Not the sorts of things normally undertaken by scrap dealers, let alone governments.

It should come as no surprise then, that there's considerable interest in the idea of 'extended producer responsibility'. Who better to deal with the product redesign issues, the toxicity problems and even the set-up of province or country-wide collection and recovery programs than the folks who make and sell computers and related equipment? But this is controversial stuff. As writer Melissa Goodrich recently put it, "Producer responsibility is a phrase that can make electronics [manufacturers] cringe. It can mean different things to different people, including manufacturers, government and consumers." To legislators in the European Union, however, there doesn't appear to be much doubt about what EPR means and who's ultimately responsible for IT wastes, much to the chagrin of the industry.

European Union's Tough New Requirements

The European Union is a complicated affair, a transnational government with legislative authority over certain matters that its fifteen member states have delegated to it. This includes authority to legislate on environmental issues where there is need for a harmonized approach. One such issue is waste electrical and electronic equipment (WEEE), a vast waste stream including everything from IT and telecommunications equipment to medical devices, toys and household appliances. The European Commission, responsible for developing legislation for

household-like equipment, such as old computers. This responsibility includes the costs of recovering "historical" wastes for which there is no longer an identifiable brand owner or manufacturer.

As well, producers will be responsible, at least in part, for the physical collection of WEEE. Collection systems, set up 30 months after the Directive comes into force, will be free of charge to consumers. The collection system envisioned has two components. Product distributors will be required to make arrangements to take back old equipment similar to what they market when they sell something new to a consumer. As well, member states "must ensure" that collection systems are established and that discards are transported to recovery facilities. This requirement is very generally stated because the European Union is limited in what it can tell member states to do. But it is interesting to note that the latest decision from the Council suggests that direct government involvement in collection will be transitional. Council stated that: "...Member States may, for a period not exceeding 5 years after the entry into force of the Directive, set-up or facilitate alternative free take-back systems."

Legislators also appear to agree that rates and dates for collection should be set, as recommended in the proposal, although there is disagreement on specifics. The latest statement from the Council sets the recovery target at a minimum of 4 kilograms on average per inhabitant per year, to be reached in 36 months.

Beyond collection, WEEE makes producers responsible for the treatment (e.g., disassembly), recycling, and final disposal of discards. A key component of the directive is that mandatory reuse and recycling rates are set and timelines prescribed in order to prevent extensive diversion of discards to energy recovery facilities. The main issue here is the intensity of these rates and dates, with the Council opting for lower rates and longer timelines. For information technology wastes except those containing cathode ray tubes (i.e., monitors), the Council's position is that producers will recover 75 per cent of each appliance, by weight, and ensure that at least 60 per cent, by weight of the appliance, of materials and substances recovered are reused or recycled. Electronic discards containing cathode ray tubes would have a slightly higher recycling rate. What's more, these standards would be achieved in 46 months.

On top of the tough new requirements of WEEE, the ROHS directive proposes timelines for the phase out of certain heavy metals (lead, mercury, cadmium, hexavalent chromium) and brominated flame retardants. The general rationale for these restrictions is that the listed substances are highly detrimental to human health and the environment, and that they will continue to pose such risks even when they are recovered for reuse and recycling. The safest route, then, is to reduce the risks by eliminating those substances for which there are substitutes available. The latest date on the table for the elimination of these substances is January 1st, 2007.

Needless to say, these proposed directives have been the subject of, as writer Linda Harrison put it, "fierce lobbying from European retailers and manufacturers".

The IT industry's position includes, among other things:

- Local authorities should assume financial and physical responsibility for collection
- Producers should not be required to take back historical wastes
- Hazardous substances should not be restricted unless there is scientific certainty of the harmful effects

The United States Trade Representative has also become involved, concerned that the WEEE requirements will apply to foreign companies doing business in the European Union. In essence, North American-based IT companies may be forced to set-up and finance take-back programs in Europe, and redevelop products using higher environmental standards specifically for the European market.

Which raises a compelling question: if North America's IT industry can be made to take responsibility for post-



PHOTO BY K.E. ASP

45% - 50% of obsolete computers end up in storage.

consumer wastes in Europe, why not here at home? Anticipating just this sort of question, IT industry associations and individual brandowners in North America are getting involved in the waste issue like never before, trying to prevent the proliferation of European-style mandatory take-back programs, rates and dates for waste recovery, hazardous substance restrictions, and approaches that extend full financial responsibility to producers. The Information Technology Association of Canada (ITAC) provides one example of the industry's new found interest in IT waste, and their preference for less onerous producer responsibilities.

National, Voluntary Program Proposed for Canada

ITAC is an advocacy organization representing around 70 per cent of the IT and telecommunications industries in Canada, including computer hardware, software and e-commerce sectors, and big name companies such as HP, IBM and Telus. Last fall, ITAC decided that its members needed to develop a "proactive industry response" both to the trend in Europe and to the growing interest, particularly among provincial governments, in the problem of IT waste. Among the industry's worst fears is that a "patchwork" of legislation and programs would emerge across the country as the provinces, the senior level of government responsible for solid waste management in Canada, get on the IT waste bandwagon.

EUROPEAN UNION APPROACH

- Producers pay all financial costs
- Producers pay for historic wastes
- Mandatory industry take-back programs
- Mandatory rates and dates for recovery
- Restrictions on use of hazardous substances

the Union, started drafting a WEEE directive in the late 1990s. The directive has since been split into two controversial proposals, one on WEEE and one called a Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (ROHS).

These directives are now being debated in the Union's legislative process, in which the European Parliament, a democratically elected body representing the people of the Union, and the Council, which represents the governments of the member states, reach a "co-decision". In the latest round, the April 2001 drafts passed first reading, with amendments, in the Parliament (May 2001), and then went on to Council in June. Council reached a unanimous agreement on the proposals, though it didn't adopt all of the Parliament's positions. While the final co-decision is still pending, there appears to be solid support for extending full financial, and, to a degree physical, responsibility for WEEE to producers, including distributors.

As the authors of WEEE explained in a memo, the rationale for extended producer responsibility, the principle underlying both proposals, is simple:

"Producers of electrical and electronic equipment design the product, determine its specifications and select its materials. Only producers can develop the approaches to the design and manufacture of their products to ensure the longest possible product life and, in the event that it is scrapped, the best methods of recovery and disposal."

For the WEEE directive, legislators appear to agree that 30 months after the Directive comes into force, producers will have to pay for the collection, recycling, and disposal of discards from private households, and from commercial, industrial and institutional sources that generate

Projected Trend in Estimated Quantities of Information Technology and Telecom Equipment Disposed (in tonnes)

Disposed Equipment	1999	2005
PCs and Servers	10,833	23,349
Computer Monitors	10,688	24,472
Laptop Computers	977	2,107
Peripherals	11,474	17,396
<i>IT Equipment</i>	<i>33,972</i>	<i>67,324</i>
Telephones	1,119	1,505
Mobile Phones	129	189
Fax Machines	1,713	2,634
<i>Telecom Equipment</i>	<i>2,961</i>	<i>4,328</i>
<i>Total IT and Telecom Equip. Disposed</i>	<i>36,933</i>	<i>71,652</i>

Source: Environment Canada, *Information Technology (IT) and Telecommunication (Telecom) Waste in Canada*. October 2000.

FROM GROUND ZERO, TAKING AIM AT ELECTRONIC WASTES (continued)

This is, in fact, what's happening in Manitoba, where the proposed Household Hazardous Waste Stewardship Regulation will require producers of "consumer electric and electronic equipment", among other products, to submit stewardship plans to government by December 2002. It has also come up with respect to the proposed Ontario Waste Diversion Act, which creates a "Waste Diversion Organization" authorized to develop stewardship programs for various categories of wastes.

"We decided that rather than wait for legislation, we as an industry needed to do something across the country. A number of provinces already have some sort of legislation in place; it's certainly likely that BC and Quebec will do so as well. For an industry organized globally, we just don't want to see a patchwork of 13 different programs in place across the country. So we thought we should do something," said Bill Munson, ITAC's Director of Policy.

Similar to the European Union approach, ITAC wants consistency across jurisdictions—a national stewardship program. But Canada's federal government doesn't have jurisdiction over solid waste, a fact that limits the range of options available for a national program. That, plus the familiar concern that regulations are intrusive and costly for industry lies behind their emphasis on establishing a national, voluntary ("self-managed") approach.

On the government side, Environment Canada has assumed a leadership role in the advancement of the idea of a national stewardship program. Environment Canada has an interest in the issue due to its responsibilities under the Canadian Environmental Protection Act for hazardous substances found in IT waste such as lead, mercury and cadmium. Related to this responsibility is Environment Canada's ongoing involvement in the development of EPR programs. Environment Canada has taken the lead in establishing an ad hoc national/provincial government committee on EPR. Duncan Bury, Head of Product Policy for Environment Canada said that the committee was initiated in response to the lack of progress by the Canadian Council of Ministers of the Environment on EPR issues, including electronics and rigid plastic containers (see *Reiterate* Fall 2000). The ad hoc committee serves as an interjurisdictional forum for discussion of the concept of a national IT waste program.

"The federal government will help fund the development of a national program," Bury said, but they won't put any money down until ITAC comes forward with a detailed plan for how it would work. ITAC recently submitted a proposal to Environment Canada, "but it did not constitute a plan. It needed to be much more rigorous," Bury said. He is "hopeful" that ITAC will have a sufficient proposal ready by the end of November 2001. But this won't happen until ITAC achieves consensus among its stakeholders on the most suitable options.

ITAC has narrowed its options down to two of six that were originally presented in a report called *Options for*

Recovery of End of Life IT Equipment Waste in Canada. We can get a sense of what they're considering by taking a look at the Options Report.

Industry Prefers Sharing Responsibility

The Options Report, written by Toronto-based consultancy EnviroRIS, analyses six policy options for the recovery of IT (computers, monitors, printers, scanners, etc) and telecommunications equipment (telephones and fax machines). The spectrum of options is broad, ranging from doing nothing to setting up a European-style mandatory, full industry responsibility program. However, the consultants narrowed the field down to three possibilities, all of which would provide, to varying degrees, a national, voluntary program for which stewardship responsibilities, including costs, are shared between industry, consumers and local governments. Of the three options on the consultant's short list, industry negotiations are now focused on Options 2 and 4.

CANADIAN PROPOSAL

- National in scope
- Voluntary—not regulated by government
- Responsibilities shared between all players
- Local governments pay costs of collection
- Industry/consumers pay costs of transport and recovery

With Option 2, the industry would set-up a national communication and education program that would promote the recovery of used equipment and provide a web site listing information on local recovery programs. This is an approach taken by the Electronic Industries Alliance in the United States, and is seen as the bare minimum of industry involvement in end-of-life management.

Option 4 involves developing an industry managed take-back program available to consumers and schools. Local governments would operate and fund e-scrap collection programs, while industry and new consumers would pay for transportation and recovery of old equipment. Funding for the program would come from an industry-wide levy or a visible levy on new consumer products. A producer responsibility organization would be established to manage the program on behalf of all companies.

According to the analysts, one of the advantages of Option 4 is that it would be more politically acceptable to

governments across the country because industry and consumers would be assuming a greater share of the costs, and it would result in significant diversion rates. The consultants estimated that in five years, this program would recover between 29 and 50 per cent of designated equipment, up from 10 per cent in 2001. But reaching consensus among all the players on the best option will be an uphill battle.

Bill Munson says that one of the key challenges is simply getting all of the industry players to the table, and keeping them there. "They're not used to sitting around a table for a consultation process that might take a year. Two months is a long time. What we're doing is explaining that this is a lengthy process and that we need all the players at the table."

What's more, Option 4 might require legislation to create a level playing field across the country, particularly if some brand owners feel the costs of the program are prohibitive. As the federal government does not have jurisdiction on matters concerning solid waste management, this task would fall to the provinces and territories. Achieving harmonized provincial legislation without also ending up with the patchwork situation so dreaded by the industry would be a significant undertaking.

And then, of course, there's the issue of sharing financial costs with local government. While some local jurisdictions may be willing to assume such costs, others may be reluctant. Take the Greater Vancouver Regional District (GVRD) for example. Assistant Project Engineer Bantu Minhas, who is investigating the IT waste issue on behalf of the GVRD's Solid Waste Department, said that the GVRD "would not accept any monetary costs for industry stewardship programs."

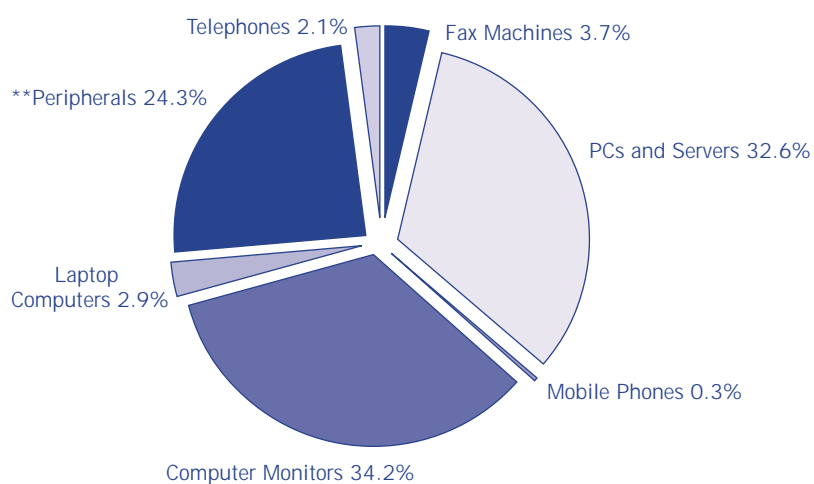
Clearly, there's a lot of work ahead for the proponents of a national, voluntary and shared stewardship program. Dave Douglas, Head of Industry Stewardship Programs with BC's Ministry of Water, Land and Air Protection says the Ministry believes that IT waste should be dealt with at the national level, but the problem with the big picture approach is "it's very slow" to take shape.

But 'slow' is just fine with Bill Munson, who said that what the industry needs most from government is time. "Time is one thing. We've got companies working across the country on this issue. Most don't have dedicated environmental policy people, so we need time to figure out how it will work."

Time is a curious thing. From the perspective of Ground Zero, where electronic rubble keeps on cascading out of a high tech economy that measures change in nanoseconds, time is in short supply. Needless to say, we look forward to a Canada-wide public dialogue on extended producer responsibility for IT wastes, in the near future.

For IT Waste Resources, see page 7.

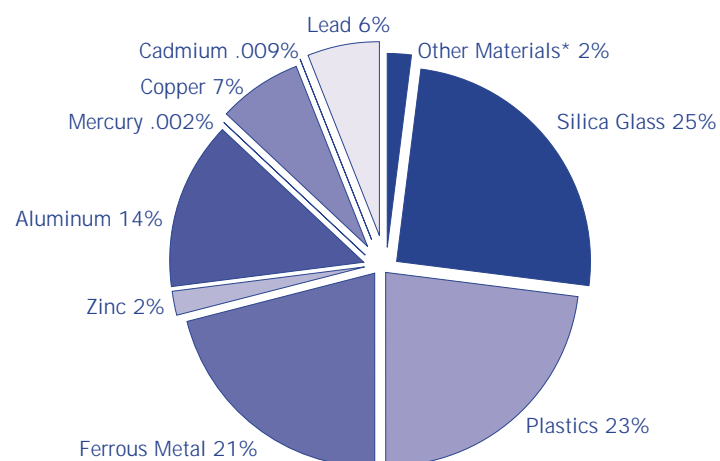
Estimated Quantities of IT and Telecom Equipment Disposed in 2005*



*Estimated quantities for disposal in 2005 = 71,652 tonnes
**Scanners, printers, modems, etc.

Source: Environment Canada, *Information Technology (IT) and Telecommunication (Telecom) Waste in Canada*. October 2000.

Composition of Personal Computers and Monitors



* Other materials include nickel, manganese, cobalt, tantalum, barium, tin, silver, beryllium, antimony, chromium, selenium, gold and arsenic

Source: Environment Canada, *Information Technology (IT) and Telecommunication (Telecom) Waste in Canada*. October 2000.

From the Trenches is dedicated to the stories of waste management stakeholders. The purpose of this forum is to provide our members, and others, with opportunities to share the strategies and struggles of day-to-day operations, or to highlight new initiatives or programs. If you are interested in writing a short piece, or having us write a piece about a current initiative or business undertaking, call Karen @ (604) 683-6009 ext.305.

REDUCING WASTE IN FIRST NATIONS COMMUNITIES

By Robyn Farmer, First Nations' Emergency Services Society

The First Nations' Emergency Services Society of BC (FNESS) is a non-profit organization run by a First Nations' Board of Directors and funded by the federal government through the Department of Indian Affairs and Northern Development (DIAND). FNESS is dedicated to increasing the safety, security and well being of First Nations people in British Columbia. Originally known as the Society of Native Indian Firefighters of BC (established in 1986), our initial objectives were to help reduce the number of fire-related deaths on First Nations reserves. In 1994, the Society's name changed to FNESS to reflect a wider range of services, which now include:

- fire & emergency services;
- community development services;
- technical & environmental services;
- flood & erosion mitigation services and;
- solid waste management.

Starting in the summer of 1999, DIAND (Lands and Trust Services) and FNESS jointly initiated a number of programs that focus on increasing solid waste management knowledge within First Nation communities. These programs help communities identify solid waste issues, assist the implementation of appropriate solutions, and provide follow-up workshops on waste reduction. Once a community identifies its preferred solution, assistance in funding applications is also provided if necessary.

Our Landfill Assistance Program helps Bands assess long-term options for solid waste management and to improve the operation and/or closure of landfills and incinerators on reserves. Many communities are realising that the transfer of solid waste to suitable off-reserve regional facilities is a preferred long-term waste disposal option, as it helps preserve limited and valuable land for other more productive and healthier uses. Assistance to Bands in implementing their preferred options and in



Brenda Maguire, FNESS' Environmental Co-ordinator, prepares a willow cutting for a compost demonstration garden built in a remote coastal community.

addressing other related landfill issues such as illegal dumping, bears, landfill fires and potential landfill leachate impacts is provided through this Program.

Our youth program is offered to grades K-7 at Band-run schools throughout the province. The program aims to teach students about waste reduction alternatives so that they will integrate the ideas into their daily lives. Grades K-3 learn about worm composting while grades 4-7 learn more about the 3R's and use their classroom garbage to conduct a waste audit. We also offer educational workshops on composting and recycling to adult members of the communities. This provides an opportunity to receive informed answers to their composting and recycling questions.

Finally, FNESS worked with two different First Nation communities last year to develop compost demonstration

gardens. These gardens were intended to demonstrate the viability of composting in two very different bio-climatic regions of this province, as an effective means of reducing waste that is landfilled or incinerated and to encourage communal cultivation of traditional food, medicinal plants and organic produce.

FNESS assists First Nations in achieving healthier communities by helping them find local and sustainable solutions to their waste concerns. As FNESS continues to grow, we look forward to providing more programs for First Nations throughout British Columbia, through ongoing partnerships with our First Nation communities, DIAND and other government and non-government organisations.

HOTLINE PREPARING FOR HOLIDAY RUSH

Things are heating up on the RCBC Hotline in preparation for the upcoming holiday season. Hotline agents are updating holiday season fact sheets and other reference materials on waste avoidance and reduced energy consumption to help callers enjoy a green Christmas.

The amount of waste generated in the average household over the Holidays prompts many calls to the Hotline. Agents are happy to help by providing tips on alternatives to wrapping paper, ideas for waste-free gifts and recycling program details.

If you have some tips you'd like to pass on to the Hotline, please send them our way! Email your waste saving holiday ideas to hotline@rcbc.bc.ca or phone 604-RECYCLE (732-9253) in the Lower Mainland or 1-800-667-4321 from elsewhere in BC.

RICHARD BERGAN - A PASSION FOR THE INDUSTRY



Richard Bergman, 1945-2001

By the staff of International Paper Industries Ltd.

Richard played a pivotal role in the field of BC recycling for over 27 years. He was a strong advocate of everyone working together for a common goal, improving the environment and trying to leave this earth a better place than we inherited.

After obtaining his degree from The Royal Canadian School of Military Engineering, Richard commenced his employment with Macmillan Bloedel, in pulp, paper, and packaging. Although engineering was his background, his interest turned to the recycling industry, and he went on to Community Paper before joining Emmie Leung at International Paper Industries Ltd. (IPI) in 1982.

Richard was a man of sharp intelligence, strong character and quick wit. These traits, coupled with his hard work ethic, propelled him to the position of Vice President of Operations for IPI where he formed a close working relationship with Emmie Leung. They shared core values, honesty and integrity, and they worked together with mutual respect to resolve differences, knowing the goal was the same. As time went by, Emmie came to look on him more and more as a brother. His concern for people was strong – not only collectively but also as individuals. Often he would diffuse a situation with a “story” or “joke”, and with close friends, he would often quote from the Bible. In his role at IPI, he was able not only to help the industry but also to help others to develop. He encouraged everyone to do their best and would gladly

give ‘fatherly’ advise if sought, making him popular with his workers and industry peers.

Richard oversaw the expansion in operations and the building of various plants; he built the Surrey Plant into a major recycling center as well as a “one stop shopping facility”, handling the diversity of various fibres as well as glass, plastic and metal containers.

Richard's passion for the industry, and his common sense approach, had him join with others in the field as they strived to promote and improve recycling. Richard formed many good friendships with others who had the same strong desire to improve recycling in BC.

Richard was a Past President of the Bottle Depot Association and worked closely with the provincial government on deposit refund regulation. He also was actively involved with the GVRD's recycling forum and solid waste management planning process. In addition, he was a member of the Container Management Board and the Plastics Advisory Task Force, to name a few.

Richard passed away August 14, 2001 at the age of 56, a sudden shock to all. He is sadly missed at International Paper Industries Ltd., and by those who were fortunate enough to get to know him in the industry. His roles in IPI and the industry are hard to fill. He would want us all to continue the works he, along with others, started in the recycling movement, to look for simple positive ways of making use of our resources.

CHATEAU WHISTLER WASTE AUDIT SHOWS IMPROVEMENTS

By Andrew Mitchell, *Pique Magazine*

Fairmont Chateau Whistler guests and employees should give themselves a well-deserved pat on the back. According to the most recent waste audit, done Sept. 8-9, there was a marked improvement from both guests and hotel employees in the separation of recyclable and compostable garbage from the waste stream. The figures were released on Sept. 26.

A group of 15 volunteers intercepted all of the solid waste collected in the hotel between noon on Sept. 8 and noon the following day, and went through it bag by bag. Some 372 kilograms (827 pounds) of waste was processed, not all of it pretty. Among the uglier items discovered were a used condom and a hunk of raw meat. Overall, however, the audit was something for hotel employees to celebrate.

"The biggest story is, on a per guest basis, we dropped the amount of waste going to landfill per guest by 33 per cent compared to the previous two audits," says Dan Wilson, the environmental co-ordinator for the Fairmont Chateau. "We accomplished that in a couple of ways. We established a composting program with International Bio Recovery, which we're doing well with at our food and beverage outlets. We also improved our diversion of recyclables out of the waste stream, starting with the guests in the room, and up through all of our departments." The guest directory explains the Fairmont Chateau's recycling program for guests, and bins are provided that allow them to separate paper, plastics, glass and metal.

It was estimated in past audits that the hotel produces about 0.45 kilograms (one pound) of garbage per guest, per day. According to this most recent audit, that was reduced to 0.3 kg (0.67 pounds). "We didn't have as many groups staying in the hotel during this time period, and



RECYCLED TREASURES: (Left to right) Tanyin MacKenzie, Dan Wilson and Genevieve Theault show some of the more presentable things found during a recent recycling audit: a Teletubby, an American flag and Elmo driving a dumptruck.

usually large groups and conferences produce more waste, but we're looking at it as a significant improvement," says Wilson.

The amount of food waste diverted to International Bio Recovery, a North Vancouver company that can process any food waste into fertilizer in about 72 hours—and which is represented locally by Resort Recycling Initiatives—was also significant. "We collected all the food waste that was headed to IBR because we wanted to find out how much we were composting, what was being diverted. We found that we were composting 85 per cent of all the food waste generated by the hotel, which is even as we speak being turned into fertilizer for things like golf courses and lawns," says Wilson. The pastry department was especially helpful, recycling 100 per cent of all food waste during the one-day audit period.

Wilson says these kinds of audits have been crucial in measuring the effectiveness of the various recycling and composting projects underway at the Fairmont Chateau.

"Just by doing the audit we have some baseline measurements that we can hopefully improve on. We'll be doing another audit in about six months and hopefully we'll see more improvement at that point."

Carney's Waste Systems is now accepting plastics, including plastic bags and saran wrap, and Wilson says systems will be adopted to divert these items from the waste stream. He will also meet with the different food and beverage outlets within the hotel to learn specific ways that the hotel can make it easier for employees to recycle and compost. The audit itself has a positive effect in educating the hotel's employees. "A lot of people may not see what is going into the garbage and what we are throwing out. It makes you think. In turn they talk to other people and educate them. If they're sorting garbage, they take more care to make sure their waste doesn't end up in the garbage," says Wilson. "Judging by the improvements we've made, people are paying attention."

15% INCREASE IN CHEMICAL MATCHES

The Chemicals and Hazardous Materials Exchange, a division of RCBC's MEX program, has achieved a 15% increase in tonnage diverted from disposal between September 1, 2000 and August 31 2001, over the previous year. Over 252,000 tonnes of chemical and hazardous waste found new homes through the Chemicals Exchange thanks to financial support from the VanCity EnviroFund and the hard work of Chemicals Coordinator, Michelle Lee. Examples of chemicals exchanged during this period include lithium hydroxide, mercury, sodium hydroxide, sulphuric acid and ferrous sulphate.

A PERSPECTIVE ON WHY RETURN-TO-DEPOT WORKS

By Brenda Southam, *BC Bottle Depot Association*

The return-to-depot collection system works for many reasons. Depots are able to take all beverage containers and there are no limits on the number of containers that consumers can return. Eighty per cent of non-alcoholic beverage containers recovered by Encorp Pacific (Canada) are collected through the depot system. This means that in the year 2000, 473 million non-alcoholic beverage containers were directly handled by depots, with full refund being paid to consumers.

Prior to October 1st, depots also handled about 50 per cent of empty wine bottles, spirits, imported beer and coolers recovered by the Liquor Distribution Branch. With Encorp's recent success in winning the Liquor Distribution Branch contract to manage recovery of these containers, depots expect to see a considerable increase in the number of such containers. Depots also receive about 40 per cent of domestic beer cans and refillable bottles. Depots pay less than full deposit on these containers as they are managed under a stewardship plan that does not utilize the full depot system.

As depots are in the business of handling empty containers, they are an important source of information to the public and can more efficiently deal with the returns coming in. It is their business to receive containers, thus making it easier for consumers to return their recyclables. Depot operators are knowledgeable as to what happens to containers once they are returned and what containers may be recycled into.

Depots are quickly becoming your one-stop recycling shop. Many depots handle cardboard, newspaper, paint and pesticides in addition to beverage containers, thus making recycling much more convenient for consumers. So the return-to-depot system works because it is convenient and efficient.

INFORMATION TECHNOLOGY WASTE RESOURCES (continued from page 5)

Environment Canada, *Information Technology (IT) and Telecommunication (Telecom) Waste in Canada*. Prepared by EnviroRIS. October 2000.

Environment Canada, *Toxic and Hazardous Materials in Electronics*. Prepared by Five Winds International, LP. May 2001.

Information Technology Association of Canada, *Options for Recovery of End of Life IT Equipment Waste in Canada*. Prepared by EnviroRIS. March 2001

Industry Canada, *Computer Recycling Infrastructure in Canada*. Prepared by Canadian Environment Industry Association. March 2001.

BC Ministry of Water, Land and Air Protection, *End-of-Life for Information Technology Equipment in British Columbia*. Prepared by North Shore Team One Consulting. August 2001.

European Environmental Bureau, *Towards Waste-Free Electrical and Electronic Equipment*. Prepared by Elena Lymberidi. March 2001.

Web Sites

WEEE directives: http://europa.eu.int/comm/environment/docum/00347_en.htm

European Environmental Bureau (environmentalists): www.eeb.org

ITAC: www.itac.ca

Environment Canada: www.ec.gc.ca/epr/en/index.cfm

Computers for Schools: www.schoolnet.ca/home/e/services.asp

Manitoba HHW proposal: www.gov.mb.ca/conservation/hhw

Electronic Industries Alliance: www.eia.org

Grass Roots Recycling Network: www.grn.org/e-scrap/index.html

National Recycling Coalition: www.nrc-recycle.org/programs/electronics

National Electronics Stewardship Initiative: eerc.ra.utk.edu/clean/nepsi

Did you know that gypsum is a recyclable resource?

With 1.5 million tons of experience, Let us help the recycling effort in your community

Gypsum wallboard is a recyclable resource. B.C. born New West Gypsum Recycling has led the way in providing the complete recycling service for gypsum wallboard continent-wide.

We have facilities throughout British Columbia, Ontario and Washington State. We make sure your drywall and drywall-related waste is quickly, cleanly and efficiently moved to one of our recycling plants. Chances are you'll save money in tipping fees, too. Most of our customers are pleasantly surprised to find out how economically we can help recycle gypsum wallboard waste in their communities.

To find out where our nearest recycling facility is to you, call us at (604) 534-9925.

www.nwgs.com

 **New West Gypsum Recycling Inc.**
5620 - 198th Street, Langley, B.C.

BECOME A MEMBER OF RCBC TODAY!

Company/Organization: _____

Contact person: _____

Address: _____

City: _____

Province: _____ Postal Code: _____

Phone: _____ Fax: _____

Email: _____

PAYMENT

Please make cheques payable to the Recycling Council of BC

Payment enclosed Payment mailed separately Please invoice Charge to my VISA or M/C

Name _____

Card # _____ Expiry _____

Please renew my membership

Please sign me up as a new member

MEMBER CATEGORY CRITERIA

RATES

Federal/Provincial Government	\$ 400
Businesses: 20+ employees	\$ 400
Local Governments	\$ 275
Industry Associations	\$ 275
Businesses: 5-19 employees	\$ 225
Institutions: (Hospitals, Universities)	\$ 225
Non-profit organizations: 5+ employees	\$ 150
Non-profit organizations, Businesses: 4- employees	\$ 100
Individuals & Students	\$ 60



#10-119 West Pender Street
 Vancouver, BC, V6B 1S5
 tel: (604) 683-6009
 fax: (604) 683-7255
 email rcbc@rcbc.bc.ca



Merlin Plastics' goal is to provide environmental services for the plastics packaging industry in an environmentally sound, economically efficient and socially responsible fashion.

Today, Merlin Plastics processes PE film scrap - printed and non-printed, industrial injection moulding plastics pails, post-consumer blow-moulding, high density polyethylene, PET (pop) bottles as well as some industrial scrap from commodity resin to engineering grade.

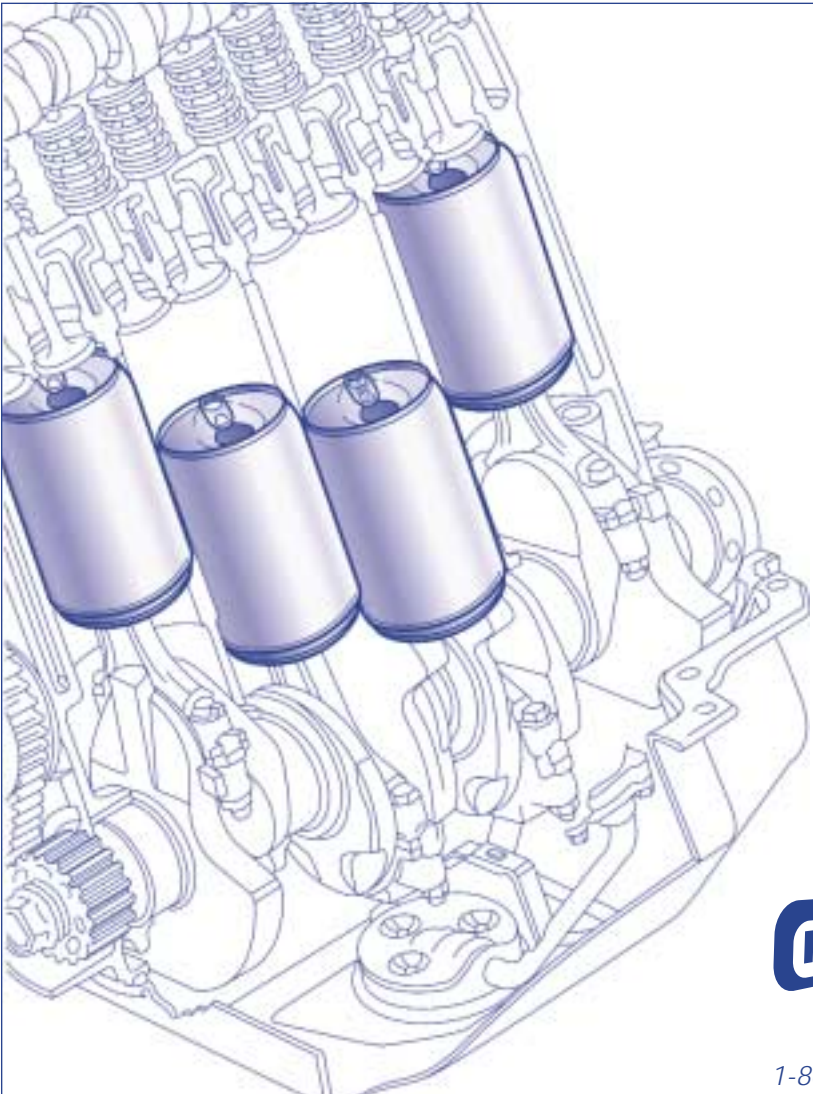


Visit our website
www.ec.gc.ca/epr Canada





International Paper Industries Ltd
Welcomes
Paul Perrault and Ross McGowan
 to our management team

IPI has just completed a major expansion in our Surrey Plant to handle our expanding plastic waste and liquor and wine bottles. We continue to strive to meet the growing demands in recycling.



Returning empty containers powers the economy.

Recycling isn't just good for the environment. It also provides numerous jobs in processing plants, collection sites and transport companies for hard-working British Columbians. So return 'em and keep the economy going strong.

It's worth it.

1-800-330-9767 www.encorpinc.com



Processors • Brokers • Exporters
 We purchase industrial scrap, tin cans and landfill metals
 604-522-9727 www.abcrecycling.com



Practice Safe Fueling

- Gasoline is hazardous, give fuelling your full attention
- No smoking, open flames or electronic equipment near gas pumps
- Avoid overfilling and spills

Advertise in Reiterate, it's worth it!

For information call Karen Asp at 604-683-6009 ext. 305