



RECYCLING ADVOCATES

October 2004

Involving people in creating a sustainable future through local efforts to reduce, reuse, and recycle

Recycling Newspapers in a Commingled World

RA Tours Blue Heron Paper

The commingled materials that each of us puts out for curbside recycling pick-up are delivered by the garbage hauler to a material recovery facility or MRF, where a combination of automated equipment and human sorters separate it into material-specific streams. Some of the paper eventually ends up at Blue Heron Paper in Oregon City, which RA members had the opportunity to tour in early August.

Blue Heron, founded in May 2000, has a de-ink facility to create fiber from recycled paper and a facility that manufactures fiber from virgin wood chips. Fiber from these two processes is combined to make standard newsprint and specialty paper grades such as extra bright newsprint and a heavier paper used for bags. They buy recycled paper from a large area that includes the Pacific Northwest, the Southeast, upper Mid-West and Canada, and sell their final products generally into the same areas.

A MRF is not able to separate materials into pure commodities, and the newspaper stream includes other types of paper as well as some plastic bottles, pieces of glass and various other contaminants. In order to decontaminate the paper it receives, Blue

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Political Conventions and Solid Waste Reduction

Boston group strives for sustainable conventions

For those who watched the political conventions this summer, many may have wondered what happens to all the solid waste that is generated. This year, a Boston-based group took on the challenge to make both conventions more sustainable. The Coalition for Environmentally Responsible Conventions (CERC) organized hundreds of volunteers, mainly environmental professionals, to promote more sustainable practices at the conventions in Boston and New York. The group's vision was "to demonstrate the kinds of practices that [...] are necessary to address global warming and other pressing environmental issues of our time."

Diverting solid waste

According to CERC and the *Boston Globe*, the environmental coalition helped to keep tons of materials out of landfills during the Democratic Party convention.

Construction Material Reuse and Recycling: Of the 116 tons of material used for the Fleet Center construction project, 81 tons were recycled, 21 tons were salvaged (or "reused"), and 14 tons were discarded. Thus, 88% of the materials were kept out of the waste stream and placed back in the market. The reused or recycled materials were gypsum wallboard (38.5 tons), homosote (13.5 tons), plywood (17.5 tons), masonite (7.5 tons), fiberoptic cable (5.1 tons), carpet (1.9 tons), and light iron (17.8 tons). Salvaged materials (homosote, plywood, masonite) were used for construction by Boston area non-profits: Women in the Building Trades, Artists for Humanity, Jamaica Plain Neighborhood Development Corporation, Wheelock Family Theatre, and Congregation Leon de Juda.

Food Waste Diversion: CERC received a Massachusetts Department of Environmental Protection contract to influence hotels and other venues to divert their food waste for

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Product Alert: Aluminum Beer Bottles

They may look cool, but they're bad for the environment

Aluminum bottles have been around since the early nineties when some Japanese brewers began marketing their products in these sleek containers. Consumers can expect to see North American beers in aluminum bottles. Pittsburgh Brewing Co. introduced the new aluminum bottle for its Iron City beer in August, and Anheuser-Busch is considering the use of aluminum bottles for some of its labels such as Michelob.

For conservation minded citizens interested in waste reduction, increased marketing of aluminum bottles is a step backward. An article in *Waste News* recently quoted Pat Franklin of the Container Recycling Institute (CRI) as saying the bottle is "bad news for the environment." According to the article, 12 ounce aluminum bottles weigh 1.72 ounces. Today's aluminum can typically weighs less than 0.5 ounces.

Aluminum production and recycling is an energy intensive process that produces green house gases. (See RA Newsletter from March 2004) Increased use aluminum bottle reverses a trend of reducing the weight of aluminum beverage containers. Aluminum bottles will require more energy to produce and to recycle than today's cans which are more than three times lighter.

Although glass bottles are heavier than aluminum cans, they require less energy to produce and recycle. According to Franklin of CRI, Americans recycle aluminum cans at twice the rate of glass bottles, but the environmental impact of aluminum recycling may be more severe than with glass manufacturing.

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Blue Heron, continued

Heron runs the paper through a process that plant manager Les Joel compares to washing clothes. Through a combination of water, chemicals, and agitation, the incoming paper material is decontaminated, de-inked, and made into useable pulp fiber.

The recycling process at Blue Heron starts with one of two pulpers, in which water, heat, mechanical energy and chemicals are added to the recycled paper to separate the fibers. The pulper only supplies enough energy to break down the target material, and newspaper needs only gentle agitation. The pulper also can pull out larger contaminants such as plastic milk jugs and milk cartons. Other papers that come with the newspaper and also break down with gentle agitation are generally acceptable in the mix, and in fact Blue Heron buys other types of paper. Some papers, such as milk cartons and beverage containers, are created to have greater wet strength and would need more agitation than a newsprint mill uses before they break down, hence they are contaminants in the newsprint process.

Contaminants can damage the processing equipment as well as the final product so optimally they are removed as early as possible. A variety of techniques are used in order to remove different kinds of contaminants at points throughout the process. These include dimensional barriers such as in the pulper and various meshes of screen, as well as separators based on specific gravity and centrifugal force.

A washing process removes the inks from the fiber by injecting air to which

the oil-based ink attaches. After yet another centrifugal process of removing grit, the pulp is bleached using a non-chlorine process.

The virgin pulp is made from sawmill residuals to the extent possible and includes spruce, hemlock or cottonwood chips. This is an energy intensive process, while the recycled fiber process is chemical intensive. According to Joel, virgin pulp paper manufacturing uses fifty times more electricity than the recycled fiber process. To some extent the final ratio of recycled to virgin fiber is determined to optimize costs, based on current power and chemical costs.

The pulp is mixed with some clay filler, which evens out the surface of the paper for improved printability, and some dyes, then pumped into the headbox of a paper machine. These machines form, press, dry and finish the paper along an impressively long system of rollers, resulting in a roll of paper which is between 10 and 18 feet wide.

Mills continue to improve their capability of removing the increased level of contaminants they are receiving since commingled collection began, but they incur the cost of landfilling this material. Paper mill "contaminants" would be a recyclable commodity if sent to the correct facility. MRFs are constantly improving their ability to separate commingled materials, and the material mixes they can market are always changing. It's a dynamic, global system that strives for continuous improvement in a highly competitive market.

For more information about Blue Heron Paper visit www.blueheronpaper.com. Many thanks to Les Joel for providing the highly informative tour of Blue Heron.

Bottles, continued

The Associated Press notes the introduction of the aluminum bottle by North American brewers is important to Alcoa, the bottle's manufacturer. The multinational producer of aluminum seeks to regain market share that it has recently lost to both glass and plastic bottles. The cost of the aluminum bottle is more than twice that of glass, but Alcoa is gambling that it can reduce costs if other breweries jump on the bandwagon.

Lunch Box It!

Save a thousand dollars a year while reducing waste

Americans often eat on the go. Quick runs to the deli add up. Five to seven dollars for a lunch can be more than twice the cost of packing a lunch. The *Seattle Post-Intelligencer* recently reported on a web-based "Lunch Savings Calculator. Users can type in what they spend on lunch each day and compare it to how much they could save annually. By packing a lunch, one can save \$5,000 over five years. To try out the calculator for yourself, go to www.dinkytown.net/java/LunchSaver.html.

Wastefreelunches.org provides information on reducing waste when packing lunch. The web site includes a cost comparison of the typical American packed school lunch and it's suggested "waste free" lunch. The savings come to nearly \$7.00 per week (or just under \$250 per year). To find out more, go to www.wastefreelunches.org.

Those who "lunch box it" can produce less garbage, because they don't need to use disposable plastic containers and utensils. Using a lunchbox also keeps paper and plastic bags out of the waste stream.

Building a better lunch box?

We can take lunch to work or school, but what do we take and how do we store it? Take a look at what kids bring to school, and you'll see a variety of pre-packaged and often not so nutritious foods. By using reusable containers we can include foods that we prepare at home and avoid the wastefulness of pre-packaged foods.

The *Santa Cruz Sentinel* recently ran a story about two mothers who decided to build a less wasteful lunch box that includes reusable containers for carrying homemade foods. "Laptop Lunches" is a flat plastic lunch box with inner containers and utensils. The company offers a companion brochure on environmental issues, waste prevention, nutrition, and obesity. For more information www.laptoplunches.com.

Of course one need not buy a kit to reduce waste and costs of lunch. Thrift stores offer lunch boxes, and one can buy reusable food containers in various sizes.

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Conventions, continued

composting. Although none of them started this practice by the week of the convention, ten institutions, including the Boston Convention and Exhibition Center and Hynes Convention Center are evaluating this process; and CERC continues to work with them. Also, CERC persuaded a hauler, Save That Stuff, to start picking up food waste in the Boston area. This achievement is significant because until now there had been only one organic waste hauler serving the Boston hospitality industry.

According to the *Boston Globe*, composting at the convention was disappointing due to refuse contamination in the food waste containers.

Food Rescue: The DNCC and Boston 2004 partnered with The Greater Boston Food Bank's Second Helping program to "rescue" unused food from the convention and convention-related venues and provide it to hunger-relief agencies in our community. As one example, Lundy's of Boston, which provided catering for the media, donated all of its unused food at the end of the convention week to The Greater Boston Food Bank.

Recycling and Use of Recycled Products during the Convention: CERC advised the DNCC on the recycling system design for the Fleet Center. Cardboard, mixed paper, cans and bottles were recycled.

CERC, the DNCC and Scanlon Associates designed a project in which wastepaper and cardboard generated during the first day of the convention were transformed into the commemorative posters that were given to convention-goers on the last day of the convention. The wastepaper was shipped to the Haverhill Paperboard Mill in Haverhill, Massachusetts where it was made into paperboard and cut into sheets. The sheets were transported to Journeyman Press in Newburyport, Massachusetts where they were printed and cut to size. The posters note that they were made from 100% recycled materials generated during the convention.

Biodegradable balloons and confetti made from recycled paper were used during the convention celebrations at the Fleet Center.

Paper Use Reduction and Use of Recycled Paper: The DNCC and Boston 2004 reduced paper use by employing Passkey, an online hotel reservation system. Passkey allowed convention-goers to make and change reservations on the Internet, involving some 109,000 hotel rooms at 63 hotels and 3 universities. This system previously required the use of more than 100,000 individual sheets of paper. The DNCC also saved paper by using a sophisticated Intranet that allowed staff to communicate electronically rather than through paper-based systems.

CERC, the DNCC, and Boston 2004 used recycled white paper throughout all of their office operations and in all media workstations.

Supply and Equipment Reuse: The DNCC and Boston 2004 donated their computers and unused office supplies to the Boston Public Schools after the convention.

The coalition reported similar activity at the RNC convention in New York that was held in September. For more information on CERC's activity, visit www.cerc04.org.

Sources: *CERC and the Boston Globe.*

Help Wanted: Volunteer Your Graphic Design Skills

RA seeks a volunteer for doing layout for the new "State of Recycling Report." For more information, call (503) 777-0909 or e-mail us at info@recyclingadvocates.org.

Recycling Advocates is proud to be



a member of Earth Share
OF OREGON

Question of the Month

Taking lunch to work can save money and cut down on waste. Even if you buy your lunch, you might have opportunities to avoid wasteful packaging.

What steps are you taking with your lunch to reduce packaging waste?

E-mail your responses to info@recyclingadvocates.org or call us at (503) 777-0909 and leave a message by October 20.



RECYCLING ADVOCATES
Membership Application

\$25 Advocate \$50 Friend \$100 Sustainer \$10-24 Living Lightly

*I'm giving a gift membership to the recipient below.**

Sign me up for Action Alerts *Contact me about volunteering for RA*

Please enclose a check and mail to: PO Box 6736, Portland, OR 97228-6736

Name _____

Address _____

Phone Day _____ Evening _____

E-mail _____ Send my newsletter by e-mail

*Your name, if this is a gift membership: _____

Your membership contribution to RA is tax-deductible to the full extent of the law.

It's never too early to give someone an RA membership!

Upcoming Events and Workshops

**Lewis & Clark College
Environmental Studies Department**

Symposium on Environmental Affairs

Dates: October 11-15.

Times vary

Location: Portland, Lewis & Clark College.

The Seventh Annual Symposium on Environmental Affairs features Terry Tempest Williams, Derrick Jensen and John Passacantando. The symposium brings together over thirty speakers representing diverse environmental issues and viewpoints. The event is free to the public. For more information, go to www.lclark.edu/dept/esm/symposium.html or call (503) 768-7626.

University of Oregon

Strategies for Zero Waste

Date: October 15, 2004.

Time: 8:30 a.m. - 4: 30 p.m.

Location: Eugene, Baker Downtown Center, 975 High St.

For complete details on this and other

Sustainability Professional Development workshops go to <http://center.uoregon.edu/sustain> or call the Registration Office at (800) 824-2714 or (541) 346-4231.

**Education for Sustainability
Western Network**

Sustainability and Higher Education Conference

Dates: October 21-23, 2004

Time: See schedule at www.efswest.org/conference/agenda.php

Location: Portland, University of Portland campus.

The three-day event is filled with general and concurrent sessions. Tours will include green building sites and sustainability programs at local higher education institutions. For more information, go to www.efswest.org or call (503) 943-7760.

Recycling Advocates Board Meeting

Date: October 25, 2004.

Time: 7:30 p.m.

For location and information, call (503) 777-0909.

Association of Oregon Recyclers

Wood Waste Forum

Date: October 28, 2004.

Time: All day.

Location: Salem, Micah Building.

The issue of wood waste recovery is a big one for the recycling industry. The options are becoming more limited as paper mills and other energy generators move away from wood waste as a fuel. New markets have not been growing, and those that have taken a step toward creating markets have met with difficulty.

The event is co-sponsored by Oregon Recycling Markets Development Corporation and ORRA. Registration is \$35. For information, go to www.aorr.org or contact Charlotte Becker at (503) 661-4475.

Have an event to promote?

Send your recycling or waste prevention event information to info@recyclingadvocates.org.
Deadline is the 10th of each month.

Copied on 100% post-consumer content recycled paper.

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