



SWANA BEAVER CHAPTER

Winter 2011

Bulletin SWANA

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WASTE AND
MORE RECOVERY

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TOUR OF THE WEST VAN MATERIALS RECOVERY CENTER

By Amy Roth & Kelly Panciera

On Sept. 29, SWANA Oregon members toured the West Van Materials Recovery Center in Vancouver, Washington. The facility, operated by Waste Connections, Inc., recently updated its sorting equipment to accommodate Clark County and City of Vancouver's transition to commingled recycling.

A Move to Commingled Recycling

In 2008, Clark County and Waste Connections partnered to conduct a series of evaluations – including surveys, focus groups, and feasibility studies – to assess the value of moving from a

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TOUR ... *continued from page 1*

three bin system to commingled rollcarts with glass on the side.

As part of this evaluation, they also lead a pilot project in six cities. The new collection method resulted in an increase in recycling tonnages by an average of 29% for weekly routes and 16% for every-other-week routes.

Based on the positive results of their research, Clark County moved forward with the switch. The new collection system was launched in 2009 in most municipalities, and new areas are still being added.

The 95-gallon rollcarts are for collecting plastic and metal containers as well as papers and boxes. In addition, the list of accepted items expanded to include yogurt and butter tubs, nursery pots, and plastic buckets up to five gallons. Glass bottles are also recycled curbside, collected separately outside the cart.

New Equipment

The West Van Materials Recovery Center opened in 1992 and accepts mostly residential materials, although it does accept some targeted commercial materials such as corrugated cardboard. It also has a household hazardous waste receiving area that is open two days per week.

Since the facility was originally designed to sort separate recycling streams, the new rollcart collection system required that adjustments be made in order to efficiently sort commingled materials. Waste Connections invested \$4 million in new equipment and structures, resulting in the ability to process 25 tons of mixed material per hour.

Amazingly, installation of the new equipment had minimal impacts on West Van's operations. No material was diverted from the facility during the upgrade

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TOUR ... continued from page 2

and the whole process was completed in ten weeks.

The new dual-stream sort line was built around the existing equipment. By integrating the old with the new, the facility was able to install only the technology it needed rather than replacing the entire line. Flexibility was also designed into the system to accommodate potential future modifications.

Waste Connections also added a new glass plant. The glass crusher can process 10 tons of material per hour, amounting to 6,000 tons a year. The final product is smooth, clean, and uniform in size.

The resulting mixed cullet is marketed as a reusable product. For example, the cullet is suitable for use as aggregate around drainage areas or pipes. Clark County has committed to using the cullet for current and future projects. Right now, the Salmon Creek Interchange Project is using the cullet in road construction.

How Material is Processed

After material arrives at the West Van facility, it goes into a metering bin to deliver it into the sort line. Trash and bulky plastic is sorted out manually. Then, the recyclables pass through a cardboard screen where the cardboard is removed and delivered to a storage area. The cardboard is baled later on in the process.



During the next stage, the material passes through a series of three disc screens that separate out smaller fractions of newspaper, flat fibers, and chip board. This material is sorted into various grades for sale to local mills. The material that passes through the screens is mainly rigid containers. This material is manually sorted into various grades of plastics, aluminum, and ferrous metal.

A machine monitors the flow of material and makes adjustments as necessary to ensure that the system sees a steady flow. Electronic controls also refine the process by allowing the speed and height of the line to be altered and to take weather conditions (i.e. humidity or soggy materials) into consideration.

The West Van Material Recovery Center processes about 200-225 tons of material per day. Material remains on the floor for just a few days, and the residual rate is an impressive 5%.

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TOUR ... *continued from page 3*

Education a Key Component

A key component to the success of the new collection and processing system is education and outreach. Waste Connections and Clark County Solid Waste offer a waste recovery tour to classrooms in the Clark County area.

Tours are given Tuesday through Thursday between 10 am and 2pm. They are about an hour long and include a short presentation. The Clark County Solid Waste Education Team offers pre- and/or post-fieldtrip classroom lessons, including a school waste audit and recycling evaluation.

What's Next

In August 2010, Waste Connections and Clark County inspected the rollcarts of about 2,000 curbside recycling customers to evaluate how well the new commingled collection system is working. Overall residents are properly using their rollcarts, but almost 40% of rollcarts sampled included plastic bags. Plastic bags cause major problems for MRFs, jamming equipment and slowing down the sort line.

Waste Connections and Clark County are examining ways to reduce plastic bags in rollcarts as well as further analyze other contamination issues and evaluate the system as a whole. Although it's too early to tell just yet, it's hoped the move to commingled recycling will enable Clark County to reach its goal of recycling 50% of the county's waste stream.

For More Information

For more information about the West Van Materials Recovery Center, contact Wes Gavett at Waste Connections at wesg@WasteConnections.com.

For more information about Clark County's recycling program, contact Mike Davis at Clark County Solid Waste at mike.davis@clark.wa.gov.



DEQ REPORTS OREGON GENERATED LESS WASTE AND RECOVERED MORE MATERIALS IN 2009

The Oregon Department of Environmental Quality (DEQ) released its 2009 Oregon Material Recovery and Waste Generation Rates Report in September. The report breaks down the handling of materials for disposal or for recovery through recycling, composting, and burning for energy.

Oregon neared its 2009 recovery rate goal of 50% with a rate of 48.4%, a slight increase from 48.3% in 2008. DEQ calculates the state's material recovery rate by taking the total amount of material recovered and dividing it by the total postconsumer material generated.

In 2009, the state recovered 2,088,265 tons and disposed of 2,583,579 tons. That amount added with total material recovered equals 4.67 million tons generated in 2009. This represents a 10.5% decrease in waste generation from 2008.

"We're not sure if the decline in total waste generation is mainly a reflection of the down economy, or if it's due to more awareness of sustainability issues such as waste prevention and material recovery," said Mary Lou Perry, DEQ solid waste specialist and report coordinator.

Other significant findings from the report include:

- Oregonians' per-capita waste generation (the sum of all discards, both recovered and disposed) in 2009 was 2,444 pounds, down from 2,753 pounds in 2008.
- While 25 of 35 wastesheds met their 2009 recovery rate goals, 24 of the 35 actually showed a slight decrease in the recovery rate from 2008 to 2009. Perry said that this can largely be attributed to the recycling market crash in early 2009.
- Of materials recovered in 2009, paper represented the largest segment (30%), followed by yard debris (23%), metals (18%), wood waste (15%), glass (5%), plastics (2%), electronics (1%), and "other" (6%).

The DEQ report shows that recycling and recovering materials translates into significant energy savings and greenhouse gas reductions. Recycling efforts in 2009 saved the equivalent of about 216 million gallons of gasoline, or roughly 2.4 % of total energy used by all sectors of Oregon's economy. Recycling, composting, and energy recovery also saved the equivalent greenhouse gas emissions of taking 570,000 passenger cars off the road, or nearly 4% of emissions statewide in 2009.

To download the full report, visit: www.deq.state.or.us/lq/pubs/docs/sw/2009MRWGRatesReport.pdf.

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PRESIDENT'S CORNER

A FEW WORDS FROM YOUR CHAPTER PRESIDENT, BRIAN MAY

Many of us are working feverously at home and at work trying to wrap things up for the Holidays. I wanted to take a moment to highlight some activities that "your" SWANA Oregon Chapter Board is working on for the coming new year.

One of our newest board members, Tom Manton, is chairing the Winter Forum Committee. We have a fantastic program set for January 20th – "Organics Diversion: Finding Solutions for Business, Energy and the Environment." A new venue has been chosen with a fabulous menu. I hope we see you all there.

Dan Hurley will be chairing the Road-E-O Committee. This year's Road-E-O will be May 14th at the Lane County Fairgrounds. Our 2010 event was a huge success and we are looking forward to an even larger turnout in 2011. Please feel free to contact Dan or me if you want to get involved. We are still in the planning stages and need volunteers to help make it a great event.

Have Safe and Happy Holidays,

Brian



Brian May

Landfill Manager

Republic Services,

Corvallis, Oregon

Oregon Beaver Chapter President



SWANA OREGON WINTER FORUM – ORGANICS DIVERSION

Finding Solutions for Business, Energy and the Environment



Center for Meeting and Learning - Eugene

January 20, 2011

This year's forum will be held on January 20, 2011 at Lane Community College and will tackle the issue of organics diversion. More than 79% of the municipal waste currently sent to Oregon landfills are "organics" such as wood debris, paper, and food waste. In Oregon and around the country, solid waste managers are looking at ways to divert organics toward composting or energy production facilities. SWANA explores the challenges and benefits of diverting these waste streams and the potential impacts of organics recovery programs on existing waste systems and infrastructure.

The forum will kick off with an 8:30 am check-in complete with coffee, tea, and assorted breakfast breads. Then from noon till 2:00 pm, do your part to divert food waste from the landfills by enjoying an amazing gourmet plated lunch prepared by Lane Community College's culinary students. The menu includes: Oregon Pinot Gris braised chicken, soup or salad, root vegetables, caramelized shallot mashed potatoes, dark chocolate cheesecake with Chambord macerated berries, iced tea, or lemonade. There will also be options for vegetarians, vegans, and others with special dietary requirements.

So mark your calendars and save the date! Refer to our website, www.SWANAOregon.org to register and get details on speakers.

WHAT

Organics Diversion: Finding Solutions for Business, Energy and the Environment

WHEN

January 20, 2011 8:30am – 1:30pm

WHERE

Lane Community College, Center for Meeting and Learning, 4000 E 30th Ave, Eugene, OR

HOW MUCH

\$50 for members and \$60 for nonmembers.



OREGON NEWS SNIPPETS



WESTERN OREGON WASTE JOINS WITH RECOLOGY OREGON INC.

In mid-August, Western Oregon Waste (WOW) announced its intention to follow through with selling its remaining shares to Recology Oregon Inc. by the end of this year. WOW initially announced the partnership with Recology in January.

From a customer's standpoint, there won't be many changes. WOW will be a subsidiary company of Recology and the name will remain unchanged. Company executives will travel to all the cities in its service area to discuss the planned changes with city councils and get approval from those municipalities where they have franchise agreements. The company estimates the transfer in ownership will occur by Jan 1, but approval from all franchises is needed for the process to move forward.

Recology Oregon Inc. is a subsidiary of San Francisco-based Recology Inc. In the last two years, Recology has branched into Oregon, including gaining management of Metro Central Transfer Station, four material recovery facilities, one composting facility, and a hauling company in the Portland Metro area. The company has a second composting facility in the Salem area and a residential collection and recycling service for Ashland, Talent, and Jackson County.

The company received the 2009 Corporate Environmental Award as the top environmental company by Waste & Recycling News. Recology is one of the 15 largest employee-owned companies in the United States, and is the largest in the industry.



COLUMBIA BIOGAS APPLIES FOR PERMIT FOR FACILITY IN PORTLAND

Columbia Biogas has applied for a permit to build and operate an anaerobic digesting facility in Northeast Portland.

The company plans to take in food waste from sources such as grocery stores, restaurants, and food processors and turn it into baseline power through the use of an oxygen-free process that produces a methane-rich biogas.

The Columbia Boulevard plant will generate 4-5 MW of power, and be directly connected to a PacifiCorp distribution line. The facility will employ 10 workers, and the plant is expected to open in 2012 if the permits come through and construction goes according to plan.

For more information, visit www.deq.state.or.us/news/prDisplay.asp?docID=3470.

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SNIPPETS . . . CONTINUED



PORT OF ASTORIA JOINS FISHING TO ENERGY INITIATIVE

The Oregon Port of Astoria has recently joined the Fishing for Energy initiative.

Fishing for Energy is a partnership consisting of the Covanta Energy Corporation, the National Fish and Wildlife Foundation, the National Oceanic and Atmospheric Administration, and Schnitzer Steel Industries, Inc.

The program provides fishermen a no-cost way to dispose of old, derelict, or unusable fishing gear and works to reduce the amount of derelict fishing gear in and around coastal waterways. Over 445 tons, or 890,000 pounds, of gear has been collected to-date.

Gear collected at the port will be stripped of metals for recycling with the help of Schnitzer Steel in Portland and disposed of at the Covanta Marion facility in Brooks, Oregon.

For more info, visit www.nfwf.org/fishingforenergy.



WASTE MANAGEMENT ACQUIRES GLACIER RECYCLE

Waste Management of the Pacific Northwest announced in November that it has entered into an agreement to acquire Glacier Recycle in Washington, which provides comprehensive recycling services for the construction industry.

Glacier recycles construction materials and processes recovered wood to make recycled wood products and biomass fuel. The company has a wood processing facility in Auburn and rents containers for construction sites, serving the entire Puget Sound area.

Dean Kattler, Waste Management's vice president-Pacific Northwest, said the integration of Glacier's processing facilities will allow Waste Management to significantly increase its construction recycling in the Puget Sound region. He said it will also position WM to provide services to support the continued growth of green building and LEED certification across the region.

"This is good news for everyone who wants to see less waste going to landfills," Kattler said. "It is part of Waste Management's increasing focus on reducing waste, recovering materials from the waste stream and putting waste to its highest and best use."

For more info about Waste Management of the Pacific Northwest, visit www.wmnorthwest.com.

For more info about Glacier Recycle, visit www.glacierrecycle.com.

BEYOND OREGON



LANDFILL TIPPING FEES REACH NEW RECORD, DESPITE SLOW TIMES

The Waste Business Journal recently reported that the average price to bury a ton of municipal solid waste in U.S. landfills has reached a record high of \$43.99, up over 6% since last year, even amid the economic downturn.

Meanwhile, landfill volumes, while down 4.8% since last year, are starting to come back. Last year's volumes were down over 12% year over year from the same period in 2008. The strongest gains were in the Northeast (up 8%), the West (up 10%), and the Pacific states (up 7%).

The data show that landfill owners continue to exert pricing discipline, even in tough times. According to James Thompson, publisher of Waste Business Journal, "increased consolidation of waste management firms is giving them more pricing power, especially with their enhanced ability to control the flow of wastes into their own landfills versus having to take waste collected to a competitor's facility. Company managers, goaded by rising operating costs, and mindful of painful lessons of the past when pricing was sacrificed for market share, are now focused more intensely on return on invested capital and appropriately pricing their ever more valuable landfill capacity."

To learn more, visit: www.wastebusinessjournal.com/wbjpriceindex.htm.



QUÉBEC IMPLEMENTS NEW RECYCLING PROCESS FOR JUICE BOXES AND CARTONS

Group RCM's Québec recycling facility launched a new recycling line in October, featuring a groundbreaking process for consumer packaging waste diversion. The new recycling line breaks down cartons, plastic bags, and films into a thermoplastic resin.

A thermokinetic process uses high-speed knives to homogenize disparate waste materials into plastic granules that can be used to make a wide variety of plastic products including flower pots, railway ties, guard rail posts, pallets, and plastic lumber. The process is the first of its kind in the world and is waste-free, converting all plastic attachments such as straws and caps into plastic granules.

The launch is the end result of a three-year development, and represents a \$3.5 million investment, spearheaded by Tetra Pak as part of its larger, aggressive national recycling plan. Tetra Pak and its corporate partners A. Lassonde Inc. and Natrel, along with Québec government corporation Recyc-Québec, collectively provided Groupe RCM with \$1 million in seed capital.

Over the next three years, Groupe RCM expects to reach a total yearly processing volume of 12,000 metric tonnes of waste, which is enough waste to fill more than 2,000 dump trucks. The technology was developed by the Centre de recherche industrielle du Québec (CRIQ) in collaboration with Groupe RCM and Tetra Pak.

For more info about Groupe RCM, visit www.groupercm.com/indexz.htm. For more info about Tetra Pak, visit www.tetrapak.ca.



GLOBAL WARMING COMMISSION'S "ROADMAP TO 2020" ADDRESSES MATERIALS MANAGEMENT

Makes Recommendation for Recycling and Composting

In 2007, House Bill 3543 created the Oregon Global Warming Commission whose purpose is to recommend ways to coordinate state and local efforts to reduce Oregon's greenhouse gas emissions and to recommend efforts to help the state, local governments, businesses, and residents prepare for the effects of global warming.

In 2010 the Oregon Global Warming Commission began developing a "Roadmap to 2020" – a project that will offer recommendations for how Oregon can meet its 2020 greenhouse gas reduction goal (10% below 1990 levels), get a head start toward its 2050 goal (at least 75% below 1990 levels), and build a prosperous, clean energy-based 21st century state economy. Commission recommendations will be addressed to the next Governor, the Legislature, our Congressional delegation, local governments, businesses, and Oregonians generally.

The initial work of describing scenarios, sifting through possible recommendations, and evaluating them was done by six technical subcommittees drawn from business, academia, non-governmental organizations, local government, and state agency staff that met over this past summer. One of those committees, Materials and Waste Management, examined how Oregon manages material resources as they flow through the economy from extraction to harvest of materials and food, production and transport of goods, reuse of materials, and recycling, composting, and disposal.

The Materials Management Subcommittee was chaired by Angus Duncan (Chair of the Commission and President and CEO of the Bonneville Environmental Foundation), and was staffed by DEQ and Therese Hampton along with 19 other participants. The group convened five times over two months and developed 38 recommendations for the Commission to consider. Nearly half of those recommendations were related to recycling, waste reduction and prevention, composting, and product stewardship.

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ROADMAP ... *continued*

Below are the nine “Key Actions” for Materials Management developed from the subcommittee recommendations that were presented to the Commission and adopted unanimously in October.

- Advocate for carbon price signal across life cycle of products and materials (either by an emissions cap and/or a carbon tax), including imports (border adjustment mechanism/carbon tariff if necessary).
- Research and integrate a consumption-based GHG inventory methodology with the State’s conventional inventory, and identify high-carbon product categories.
- Develop and disseminate information: easy-to-use life cycle metrics for different food types.
- Establish standards, incentives, and/or mandates for carbon footprinting, labeling of products.
- Focus product stewardship on upstream emissions and design for appropriate durability, repairability, reusability, efficiency, and recovery.
- Establish higher standards for new buildings: “net zero” plus offset of materials.
- Provide consumer education, information, outreach on consumption, materials use, and prevention/reuse, including low-GHG food and diet choices.
- Reduce (prevent) waste of food at the retail and consumer level by 5-50%.
- Conduct research on highest/best use for organic wastes and the carbon impact of different conversion technologies.

The Commission expects to invite broad public review of all recommendations in January 2011, and take comments into consideration in a 2011 revision of the Roadmap.

For more information about the Oregon Global Warming Commission’s Roadmap to 2020, visit: <http://www.keeporegoncool.org>.

To read the full report, visit: http://www.keeporegoncool.org/sites/default/files/Integrated_OGWC_Interim_Roadmap_to_2020_Oct29_11-19Additions.pdf.

CALENDAR OF EVENTS

JANUARY 20

SWANA Winter Forum: "Organics Diversion: Finding Solutions for Business, Energy and the Environment"

Eugene

More than 79% of the municipal waste currently sent to Oregon landfills are organics such as wood debris, paper, and food waste. Solid waste managers are looking at ways to divert organics toward composting or energy production facilities. SWANA explores the challenges and benefits of diverting these waste streams and the potential impacts on existing waste systems and infrastructure. www.swanaoregon.org

JANUARY 22

ORRA Forum Seminar

Portland

ORRA's 2011 Forum, entitled "LEED Basics," will be held at the Red Lion Hotel Portland Convention Center. The forum will provide attendees an overview of LEED certification, how the solid waste industry participates in the process, and a tour of a LEED-certified facility. www.orra.net

JANUARY 26

AOR Winter Forum: "Film Plastics – Looking at Solutions"

Oregon City

Film plastics are a serious problem for MRFs. On January 26th speakers and attendees will work together to identify solutions for film plastics clogging up sort screens in MRFs and causing otherwise properly prepared recyclables to end up in landfills. www.aorr.org

FEBRUARY 16-19

SWANA Recycling Conference and Winter Training Center

Los Angeles, California

Whether you want to become SWANA Certified, or need to earn SWANA CEUs towards your recertification, SWANA Training Centers are the place to be. thinkingoutsidethebluebox.org

MARCH 4-5

ORRA's Spring Conference

Eugene

Join ORRA for its annual Spring Conference, which will be held at the Hilton Eugene Hotel & Conference Center, for educational sessions, roundtable discussions, group activities, tours, and more. www.orra.net.

MARCH 21-24

SWANA Landfill Gas Symposium

Dallas, Texas

The Landfill Gas Symposium is the leading authority on innovative landfill gas control, management, and utilization practices. <http://lfg.swana.org>.

APRIL 13-15

SWANA 2011 Northwest Symposium

Everett, Washington

Each year the Washington, Oregon, and British Columbia chapters hold a joint Northwest Symposium, where members come to exchange information, socialize, and learn from each other and technical experts. The symposium offers a lineup of technical sessions for one or more days, classes in topics of interest to solid waste managers, and often tours of nearby solid waste management facilities. www.swananw.org/nwsymposium.html

MAY 14, 2011

SWANA Oregon ROAD-E-O

Eugene

The second annual SWANA Oregon Road-E-O will be held at the Lane County Fairground. Once again, front-line employees in the solid waste management field will be given the chance to demonstrate their skills in a friendly, competitive event. The competition includes a behind-the-wheel test that requires each driver to maneuver industry-standard roll-off, front-end loading, and automated side-loading vehicles through a preset course. www.swanaoregon.org

