



**WASTECAP NEBRASKA
E-NEWSLETTER
NOVEMBER 2005**

Waste Reduction at WasteCap... In an effort to reduce office paper waste at your office and ours, WasteCap utilizes an electronic newsletter. Past e-newsletters can be found on our website under the "Archives" tab. Check out our website at www.wastecapne.org for the latest events, publications, and new member listings for WasteCap Nebraska.

WHAT'S NEW FOR NOVEMBER 2005:

- ◆ New Member Profile-Right of Way Management
- ◆ Retrofit Recycling Pick-Up Days
- ◆ Carrie's Summary of Two National Conferences

Welcome Right of Way Management

Right of Way Management (ROWM), a division of Barcel Landscape Products, is a wood waste management company located in Bellwood, Nebraska (near Columbus), owned and operated by Barton Barcel. Barcel Mill and Lumber is also owned by Barton and has been in business for 58 years.

Right of Way Management can handle all wood waste from commercial and municipal producers. Utilizing a complete line of mobile grinding and wood handling equipment, ROWM can process trees, pallets and crating material as well as other wood waste on-site, at the point of generation. ROWM can also do volume reduction or reduction and removal if necessary. Within the business, ROWM makes landscape mulch, color-enhanced mulch including [Big Red Mulch](#) and soil-less potting soil. In addition, they manufacture [Play Mat](#), a fall-protection barrier for playgrounds. Barcel Mill also makes pallets and other commercial lumber. Other items manufactured by the companies include biofilter media and compost agents.

For more information, contact Barton Barcel at (402) 538-3895 or bj@barcelmill.com.

RETROFIT RECYCLING PICK-UP DATES

WasteCap Nebraska members receive discounted fluorescent lamp, ballast, electronic and battery recycling services through Retrofit Recycling (800-274-1309) and Environmental Compliance Enterprises (466-2268). Please let us know if you need an updated price sheet. Pick up dates are subject to change, please call 7-10 business days ahead of time if you wish to schedule additional pick ups.

Week of the 28th in November

Week of the 19th in December

Notes from the Executive Director

For this month's newsletter, I am trying something a little different. Rather than several articles that I have found in various publications, I will attempt to recap some of the education that I have recently received. In late October, I attended two national conferences and brought home some very valuable information for businesses. I've tried to summarize all that I learned in five days to share this information with you. I hope that you will find useful information and as always, feel free to contact me with questions.

Carrie Hakenkamp

Electronics

Electronics are more and more a necessary part of our lives. Unfortunately, there is no simple answer to how to manage the electronics once they have reached the end of their useful lives (for you or your company). There are the traditional options: 1) donate it to a non-profit, school, church or others for reuse and 2) send it to a recycler. Within these two seemingly simple options, there is another array of options and items to consider. Confidentiality, environmental liability, domestic versus overseas demanufacturing, glass-to-glass versus smelting and the list goes on and on. So how does a business make the choice that is right for them? All too often, this choice is decided upon by the cost of properly handling the equipment. We have found time and again that the cheaper the option, the less protection from liability for your company. The old adage "You get what you pay for" has never been truer than it is for electronics management.

With all of this in mind, I attended the national E-Scrap Conference in October in the hopes of making the options clearer for Nebraska businesses. One of the concerns that WasteCap has pondered over the last couple of years is the possibility of offering an audit package of e-scrap recyclers to our members. Audits and Certification were the main themes throughout this conference. I attended several sessions during the conference and can break those sessions into a few main categories: 1) European Directives/Global Initiatives and how these will affect domestic e-scrap and electronics in general, 2) E-waste legislation, 3) Certification and audits and 4) Liability.

European Directives/Global Initiatives

You are probably wondering why we should worry about what is happening in Europe. The answer is simple, first, they are far more advanced in environmental legislation particularly pertaining to electronics and secondly, this is what the U.S. will be seeing soon. Finally, because all OEMs (Original Equipment Manufacturers) are required to meet these directives, this is what their businesses have focused on for the past couple of years. The results of their process and design changes will trickle down to the U.S. in the form of less chemicals and heavy metals being used in the manufacturing of electronics. The other benefit to us is that their collection systems and infrastructure development will be tested in all of Europe for the U.S. to benefit from their learning process. Two of the main European Directives are very closely related and are listed below.

WEEE- Waste Electrical and Electronic Equipment -

http://www.dti.gov.uk/sustainability/weee/WEEEGuidance_draft.pdf

DIRECTIVE 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

WEEE is primarily tasked with reducing the amount of electrical and electronic equipment (often referred to as EEE) from entering landfill at the end of its useful life by encouraging reuse, recycling and separate collection. However, it is obvious from this statement that the Commission recognises that the WEEE Directive cannot eradicate all EEE from entering landfill. Thus, RoHS was created as a directive to Original Equipment Manufacturers (OEMs).

Through WEEE, collection sites and OEM Producer responsibility have played a part in developing recycling infrastructure throughout Europe.

RoHS - <http://www.rohs.gov.uk/>

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive will ban the placing on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants from 1 July 2006.

These are very simple definitions of very complex programs that have been developed in Europe. Basically, these directives require recycling infrastructure development including both advanced recycling fees and Extended Producer Responsibility (EPR). Also, through RoHS, manufacturers are required to reduce the hazards contained in their equipment. For more information, refer to the websites listed next to each Directive.

E-Waste Legislation

In 2005, there were five (5) dozen e-waste bills introduced in more than two (2) dozen states (including 2 in Nebraska) plus one in New York City. Of these bills, 9 included landfill bans, 19 imposed producer responsibility take-back programs, 11 imposed Point of Sale (POS) Advanced Recycling Fees (ARF), and 10 of the bills included ARF and additional retailer responsibility including some form of mandatory take-back. Of those bills introduced, 5 were enacted in California, Illinois, Louisiana, Maryland and Arkansas. In addition to state legislation, three National bills were introduced: S510 - E-Waste Recycling Promotion and Consumer Protection Act, HR425 - the National Consumer Recycling Act and HR320 - TIER - Tax Incentives for Electronic Recycling.

With all of this legislation, it becomes increasingly difficult for OEMs and retailers to learn, understand and comply with standards. The general consensus among OEMs is that if there needs to be legislation, it needs to be imposed on a national level. One example of the problems created by state-specific legislation was that Best Buy needed to spend several million dollars to update all of their SKUs in California to ensure that equipment that is taken in CA recycling programs was initially purchased in CA, thereby ensuring that the Advanced Recycling Fee had been collected. The problems with a nationwide program are that we just can't agree on what is the best approach, so the NEPSI process which went through several years of meetings and discussions, came to the conclusion that the U.S. should wait and see how the European efforts worked. The problem with this approach is that States can't wait and see. We have electronics that need to be managed now.

The next step was a GAO Report to Congress. In this report, the GAO had the following conclusions:

- 1) E-waste only has a recycling rate of about 10%
- 2) By not recycling e-waste, there is a tremendous loss of natural resources, including 80% energy conservation by recycling versus making products from virgin, mined materials.
- 3) There is uncertainty about the (environmental and health) effects of landfilling e-waste and the toxic substances found in the waste.
- 4) E-waste recycling can not be economically viable unless consumers are willing to pay.

- 5) There is currently little incentive under regulatory requirements to recycle since households and CESQGs are exempt from the regulations.
- 6) A national disposal ban is needed to address the issue.

According to other speakers, the only current way to address the issue (without regulation) is to encourage the use of EPA's voluntary programs (see below), other recycling programs such as E-Bay's Rethink Initiative (www.rethink.ebay.com) and increase education about purchasing greener electronics for future management ease. While rather frustrating to see that our government can't figure out what to do and come to a consensus, the issue still remains that businesses in Nebraska need a safe management option and a set of BMPs to go by when properly managing their e-scrap.

Certification and Audits

We all worry about sending our electronics to a recycler that will manage them in the best manner possible, considering both environmental management and Intellectual Property (the confidential information found on your computers). Although at first glance, it seems that a certification program or some sort of audit process would make the issue clearer, it is not always the case. For instance, where does the liability fall when there is a third party and who will ensure that the certification is viable?

One common theme that resonated throughout the conference is that of EPA certification. Just for the record: **There is NO SUCH THING AS AN EPA CERTIFIED RECYCLER.** There are no current certification programs anywhere in the U.S. or for the most part, throughout the world. If a recycler offers you their "EPA Certification Number", it is simply a waste generator number and does not in any way constitute a certification. They are flat out lying if they tell you it is a certification and you should seek a different market for your materials. It is your responsibility of Due Diligence to follow through with this research.

Several options in lieu of certification were looked at including the programs currently utilized by CHWMEG (www.chwmeg.org) and RIOS (www.isri.org). CHWMEG, Inc. is a non-profit trade association comprised of manufacturing and other "industrial" companies interested in efficiently managing the waste management aspects of their environmental stewardship programs. One aspect of CHWMEG, Inc. includes conducting comprehensive, independent reviews of commercial facilities that treat, store, dispose, recycle, or transport waste. The cost of the facility review reports are shared by the member companies. This process is not an evaluation, approval or certification, but rather increases the efficiencies of its members when they do their own environmental audits of their recyclers.

RIOS is a set of Recycling Industry Operating Standards designed through a non-profit corporation of ISRI (Institute of Scrap Recycling Industries). Through RIOS, ISRI has designed an integrated management system for the scrap recycling industry. This program looks at quality and safety as well as providing an a-la-carte program including checklists, forms, spreadsheets, BMPs and standards. Utilizing this format, e-scrap recyclers could create the same type of system. On the federal level, EPA is looking for a non-profit organization to carry this torch and develop some sort of certification process for e-waste recyclers. Locally, WasteCap will continue to work on developing BMPs and setting guidelines for what to look for in a recycler.

Liability

Finally, the issue of liability in managing electronic scrap is more and more important to businesses. First, there is the concern of environmental liability but there is also a great concern over confidentiality. Asset management and compliance issues are growing exponentially with increased patient rights under HIPAA <http://www.hipaa.org/> and identity protections under FACTA <http://www.ftc.gov/opa/2004/11/facta.htm>. These issues go back to the need for some sort of certification and audit program for recyclers.

During the conference, the Basel Action Network (BAN) released its newest documentary, Digital Dump: Exporting High-Tech Re-Use and Abuse to Africa. According to BAN, the film documents findings in Lagos, Nigeria where an estimated 500 shipping containers per month of electronics are arriving at their port from countries all over the world. While most of the equipment has been sent as "working," intending to "bridge the digital divide," the reality is that up to 75% is unrepairable. In addition, BAN did a forensic study of hard drives they purchase in Lagos, revealing highly sensitive data from government institutions and others. Because of the lack of recycling infrastructure and volume of materials imported into this country, equipment is thrown into dumps, frequently near water resources or residential areas or the equipment is burned to reduce volume.

Until it is clear what the best management practices for e-scrap recycling should be, it is important for businesses to do Due Diligence and really research how your recycler is handling materials. Some questions you may want to ask include: (taken from Onyx Electronics, MA - SWANA E-Session)

- 1) Service Capabilities and Resources - Personnel, equipment, safety, flexibility, capacity, processing technology, track record, references
- 2) Risk management
 - a. all required insurance (automotive, workers comp, pollution liability) and financial health of the business (revenue growth, profitability)
 - b. Environmental record - permits, compliance history, operating procedures, facility audits, facility closure plans

- 3) Market research - check all of their markets to see where your materials will find their final destination. Know how the materials are management. If sent overseas, know how the materials are handled.
- 4) How does the recycler handle Intellectual property destruction?

WasteWise

The other conference that I attended was the US EPA's WasteWise annual conference in Arlington, Virginia. Recently, US EPA Region VII solicited WasteCap Nebraska to become a WasteWise Endorser and create a partnership with the Nebraska Department of Environmental Quality to develop a WasteWise program for Nebraska. Endorsers are state and local government agencies, trade associations, nonprofit organizations, and businesses that help their members and constituents realize that reducing solid waste makes good business sense.

According the WasteWise website, www.epa.gov/wastewise, "WasteWise is a free, voluntary, EPA program through which organizations eliminate costly municipal solid waste and select industrial wastes, benefiting their bottom line and the environment. WasteWise is a flexible program that allows partners to design their own waste reduction programs tailored to their needs." WasteWise provides free technical assistance to help you develop, implement, and measure your waste reduction activities. WasteWise offers publicity to organizations that are successful in reducing waste through EPA [publications](#), case studies, and national and regional events. Since WasteCap Nebraska also offers many of these services (in a non-regulatory, non-governmental format), it seems a perfect fit. We are just in the beginning stages of determining the benefits for WasteCap Nebraska members as well as other Nebraska businesses.

The Resource Conservation Challenge (RCC)

One main theme of the WasteWise Conference was the Resource Conservation Challenge. <http://www.epa.gov/epaoswer/osw/consERVE/index.htm> According to EPA, "**The Resource Conservation Challenge (RCC)** is a national effort to find more flexible, yet protective ways to conserve natural resources and energy. It relies on volunteers coming together to accomplish a greater goal. Using existing economic incentives, our partners are moving the nation toward the next generation of pollution prevention." We preserve and protect our environment by committing ourselves to:

- Reduce more waste;
- Reuse and recycle more products;
- Buy more recycled and recyclable products; and

- Reduce toxic chemicals in waste.

In an effort to better focus their resources and make progress towards our goals, the EPA has identified four national focus areas or priorities for the Resource Conservation Challenge (RCC):

- [Municipal Solid Waste Recycling](#);
- [Beneficial Use of Secondary Materials](#);
- [Priority and Toxic Chemical Reductions](#); and
- [Green Initiatives - Electronics](#)

<http://www.epa.gov/rcc/priorities.htm>

Some of the voluntary partnership programs that were developed by EPA with WasteWise to meet the RCC are listed below.

EPEAT - <http://www.epeat.net/>

The Electronic Product Environmental Assessment Tool (EPEAT) is a purchasing tool for evaluating the environmental performance of electronic products throughout their life cycle. The tool was developed to meet the growing demand by large institutional purchasers to buy greener electronic products. It is expected to gain wide acceptance in IT (information technology) purchasing by federal and state government. EPEAT consists of both a set of criteria for assessing products and a management system for their application and maintenance.

The project will develop environmental performance metrics and quantitative tools that translate attributes and activities into environmental benefits, including:

- ◆ Reduction in energy use;
- ◆ Reduction in CO₂/Greenhouse gas emissions;
- ◆ Reduction in persistent, bio-accumulative toxins (PBT);
- ◆ Reduction in virgin material use (increase in recycled materials);
- ◆ Reduction in municipal solid waste generation;
- ◆ Reduction in hazardous waste generation;
- ◆ Reduction in air and water emissions; and
- ◆ Reduction in cost, where feasible.

Federal Electronics Challenge - <http://www.epa.gov/rcc/2005news/01-fec.htm>

In an effort to lead by example, 11 federal agencies signed a Memorandum of Understanding (MOU) on November 15, 2004 to advance the government's goals and practices for electronics stewardship. In signing the MOU, the Executive Office of the President, Departments of Agriculture, Defense, Energy, Health and Human Services, Homeland Security, Interior, Justice, Transportation, and Veterans Affairs, the Environmental Protection Agency, and the General Services Administration, commit to use environmentally friendly electronics, or products that have a low impact on the environment both in use and in disposal.

The MOU's five key objectives are to:

1. Increase demand of environmentally sensible and cost-effective electronic equipment;
2. Implement best life cycle management practices for electronic equipment;
3. Reduce the impact, both financially and environmentally, of the electronic equipment;
4. Promote the reuse, demanufacturing and recycling of the obsolete equipment; and
5. Promote and coordinate the four goals into the public and private sector to achieve similar results.

Plug in to e-Cycling - <http://www.epa.gov/rcc/plugin/>

Plug-In To eCycling is a consumer electronics campaign working to increase the number of electronic devices collected and safely recycled in the United States.

Plug-In To eCycling focuses on three major areas:

- Providing the public with information about electronics recycling and increasing opportunities to safely recycle old electronics.
- Facilitating partnerships with communities, electronics manufacturers, and retailers to promote shared responsibility for safe electronics recycling.
- Establishing pilot projects to test innovative approaches to safe electronics recycling.

