

June 2007

Discarded Medicines Update

Mary Kohrell and Steve Brachman, UWEX

Interest continues to grow around the state regarding what to do to prevent old or unwanted medicines from being disposed of in the wastewater or garbage. For example, a new Pharmaceutical Waste working group has been formed to assess current issues while formulating a long term strategy for Wisconsin. This group has focused on 3 main areas, including outreach and education, pilot program development, and data collection. The working group meets on a quarterly basis – contact Steve Brachman at SHWEC for more information.



A number of communities have conducted medicine collections this year, either as standalone programs or part of household hazardous waste collections. Recently, Jefferson County held its first collection programs in Jefferson and Watertown in conjunction with Clean Sweep. Three hundred eight households participated in these events and 296 pounds of old medicines were collected. Similarly, Waupaca, Outagamie, Winnebago, and Calumet counties coordinated collection events in 5 communities in May. There were 590 households that participated at the program sites and 1,229 pounds of prescription medications and over-the-counter products were delivered and disposed through Veolia Environmental Services. Law enforcement personnel took possession of controlled substances, including 23,940 pills and additional liquids. To support these collection efforts, the UW-Extension Solid and Hazardous Waste Education program developed a listing of 2007 Medicine Collection days on its website. If you are planning to host an event or need to find one in your area, please check out the website at www.shwec.uwm.edu for more information.

States and communities are looking at product stewardship, which the Solid Waste Assoc. of North America describes as " a product-centered approach to environmental protections that calls on all those in the product life cycle – designers, manufacturers, retailers, users, and waste managers – to share responsibility and costs for reducing the adverse environmental impacts of products." State and local government pollution prevention experts recommended the formation of a Midwest Product Stewardship Council at a February meeting in Chicago. Patterned on the Northwest PSC, one of the top items on this emerging group's agenda will be pharmaceutical waste. The next meeting of this group will be held in Madison in conjunction with the Multistate Working Group conference. The meeting will be on June 18, 6-9 pm. Please see: <http://www.desertroseenv.com/MSWG2007.htm> or contact Garth Hinkle at 651-215-0224 if you are interested in attending.

Survey results from one-day collection events support a product stewardship effort for pharmaceutical wastes. For example, the Fox River counties found that nearly three-fourths of participants had stored the medications for over 2 years. Nearly half the medications (46%) were brought in because they had expired. Thirty eight percent of participants had flushed their medications prior to the collection event, while another 27% put them in the trash. With old medicines potentially creating problems in water pollution; long term exposure for aquatic life and possibly humans; poisoning; identity theft; and diversion to other users, product stewardship is integral to overall program design. Not only do manufacturers best understand the characteristics of medicine wastes, but program costs can be more easily absorbed as a customer service by industry, rather than by local governments or consumers. Additionally, manufacturers are in the best position to address ways to prevent waste by providing centralized data collection and identification of problem materials.

Strong partnerships are required in order to successfully implement a pharmaceutical waste collection program. Typically, these collaborations include public, nonprofit, and private organizations, including local and county solid waste, water conservation, public health, human services, sheriff, police, and UW Extension offices, as well as pharmacists, Aging and Disability Resource Centers, Senior Centers, and groundwater organizations. In the Fox River communities, each program was staffed primarily by volunteers at an average of 50 volunteer staff hours per site. A preliminary staffing estimate indicates the five events required a total 250 hours of on-site staff time, and another 500 hours to plan and promote the events.

Finally, the Department of Agriculture Trade and Consumer Protection, which administers the state's pesticide and household hazardous waste programs, is slated to assume responsibility for helping to fund pharmaceutical waste collection programs, pending final approval of the State budget. An emergency rule will need to be developed in order to get a program up and running, so stay tuned to learn more about used medication collection programs in Wisconsin and beyond.

Orange Barrels, Orange Barrels, Brown County Recycles Orange Barrels

Joe Van Rossum



In addition to tulips and daffodils, Springtime in Wisconsin is heralded by the start up of road construction season. Just as tulips line flower beds, High Density Channelizer Drums, also known as orange construction barrels, are sure to pop up along our highways. When all these orange barrels reach the end of their useful life can they be recycled? In cooperation with Brown County Highway Department, the Brown County Solid Waste Department was able to find a recycler willing to process these unwanted barrels, preventing them from being landfilled.

Wess Damro, Brown County Recycling Manager, was able to work with an end market for recovered HDPE (milk jugs, laundry detergent bottles, etc.) to recycle 160 orange barrels. For additional information contact Mr. Damro via phone (920) 492-4950 or email Damro_WW@co.brown.wi.us.

Carpet Retailer Begins Carpet Recycling Program

Joe Van Rossum

Sergenian's Floor Coverings of Madison began a comprehensive carpet reclamation project in February this year to recover carpet they remove from residential and commercial properties. Jim Sergenian, President, shared the success of the program at a May 23 meeting held in Madison. In addition to providing information about Sergenian's recycling program, Dr. Robert Peoples, Executive Director of Carpet America Recovery Effort (CARE) provided a view of nationwide efforts to recycle post consumer carpeting. Sergenian's Floor Coverings is the first carpet retailer in Wisconsin to guarantee that no carpet they remove ends up in the landfill. Additionally Sergenian's currently does not charge for this service. They estimate that waste from their operations has been reduced by two-thirds. Sergenian's finds markets for recovered materials through STARNET, the commercial flooring cooperative to which they belong. CARE serves as a resource for carpet recovery efforts.

CARE is an industry-government effort to reduce the volume of waste carpet being landfilled by promoting recycling and reuse. CARE was established as a result of a Memorandum of Understanding (MOU) for Carpet Stewardship signed in January, 2002 by members of the carpet industry; government agencies at the federal, state and local levels, and non-governmental organizations. The MOU calls for carpet manufacturers to voluntarily meet established recycling goals, most notably a landfill diversion rate of 40%, by 2012. In its role, CARE monitors recovery efforts and provides assistance in developing markets for recovered carpet.

Dr. Peoples reported on current waste carpet generation of 5 billion pounds per year of which 261 million pounds were diverted from landfill disposal. Based upon surveys conducted earlier this year, CARE expects diversion to increase by 32% during 2007. For additional information, visit the CARE website at: www.carpetrecovery.org The 2006 Annual report provides data on the recycling, reuse and other diversion efforts taking place. www.carpetrecovery.org/pdf/annual_report/06_CARE-annual-rpt.pdf

EPA Announces Wisconsin Brownfields Grant Awards

David S. Liebl

Six Wisconsin cities and one Indian reservation have been awarded a total of \$3.2 million in federal Brownfields grants, according to U.S. Environmental Protection Agency Region 5. Brownfields are lands that are abandoned, idle or under-utilized due to real or perceived environmental contamination. The largest grant awarded in Wisconsin was a \$1 million award to the Milwaukee Redevelopment Authority. The cities of Baraboo, Green Bay and West Allis, as well as Wisconsin Department of Natural Resources, will receive grants totaling \$400,000. Kenosha, Ripon and the St. Croix Chippewa Indians of Wisconsin-St. Croix Reservation each will receive a \$200,000 grant.

Milwaukee's Redevelopment Authority will use its grant to create a revolving loan fund to provide loans and subgrants for the cleanup of sites contaminated by hazardous substances. The focus will be on the Menomonee River Valley and the 30th Street Industrial Corridor, which have the highest population densities and lowest incomes in the state.

A cleanup grant was awarded to the St. Croix Chippewa Indians of Wisconsin. The funds will be used to clean up hazardous substances in the area known as Site 18, also called the Round Lake Dump.

Baraboo will receive two separate grants for the assessment of up to 12 sites, primarily in downtown residential neighborhoods that surround the waterfront area. The city plans to leverage private redevelopment resources to revitalize the waterfront area with mixed-used developments, and tourist-related retail and recreational opportunities.

In Green Bay, the federal funds will be used to create a brownfield site inventory. As many as 32 site assessments will also be done. Green Bay's brownfield redevelopment plans are focused on creating affordable housing in three areas: downtown Green Bay, and the Velp and Webster Avenue corridors.

Kenosha's grant will be used to develop a community-wide brownfield inventory and prioritize sites for assessment. Brownfield redevelopment will help Kenosha move from a manufacturing-based economy to a technology- and service-based economy.

Ripon will use its grant to assess up to 22 sites in the Silver Creek downtown area. Assessments will help the city leverage funding for cleanup and redevelopment, which is expected to include a downtown commercial area and restoring wildlife and aquatic life habitat along the creek.

At least 372 brownfield sites have been identified in West Allis. The city's Brownfields grants will pay for up to 30 site assessments in five redevelopment areas within industrial corridors, residential neighborhoods and commercial districts.

Wisconsin Department of Natural Resources plans to use its grants for site assessments in Milwaukee's 30th Street Industrial Corridor, which has 200 known brownfield sites.

More Information on EPA brownfield grant recipients is at www.epa.gov/brownfields. To learn about Wisconsin's brownfield program see: <http://dnr.wi.gov/org/aw/rr>

Household Hazardous Waste Collection Surveys

University of Wisconsin Extension Environmental Resource Center (ERC) continues to seek data from Clean Sweep programs collecting hazardous waste from households and businesses who qualify as very small quantity generators. Hard copies of the survey were mailed the week of May 25, 2007. Contributors are asked to complete and return the survey by July 15. If you do not receive a copy of the survey, but have data to contribute please contact Elaine Andrews via email (elaine.andrews@ces.uwex.edu) or phone 608-262-0142. Results from past surveys can be found on the ERC website at: www.uwex.edu/erc/hazwste.html

High School in Eagle River Earns LEED Gold Green Building Rating at Bargain Price

Sherrie Gruder

The first LEED Gold certified high school in the US is Northland Pines High School in Eagle River, WI. Northland Pines is a \$28.8 million, 253,000-square-foot high school, serving up to 600 students. Green buildings have a reduced impact on the environment and community infrastructure while promoting occupant health and well-being - a winning combination for schools. Studies have shown that students perform up to 21% better on standardized tests in daylit schools (Daylighting in Schools: Reanalysis Report, CA Energy Commission and Heschong Mahone Group, Oct 2003)

LEED (Leadership in Energy and Environmental Design) is the nationally recognized Green Building Rating System administered by the US Green Building Council (www.usgbc.org). It is a third party certification program that ensures that buildings are designed and built to conserve site, energy, resource and water use, and provide good indoor environmental quality. Projects can earn a certified, silver, gold or platinum rating based on the how many green features they incorporate. It is quite an accomplishment that this high school achieved a gold rating.

The school's green features include naturally lit classrooms, 40% better than code energy efficiency, use of nontoxic finishes and products, clean air monitoring, water-saving dual flush toilets and waterless urinals, on-site stormwater management and native plant species, recycled content and local materials and products, and recycling of 83% of construction waste. Even the cleaning products were selected based on low fume emissions and non-hazardous chemicals.

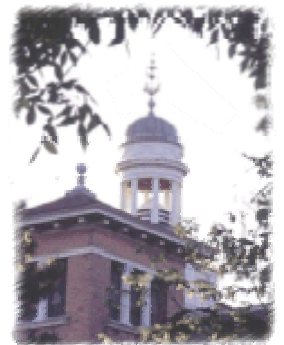
Northland Pines was built at a cost of \$116 per square foot, according to Hoffman, the Appleton-based firm that designed and built the school. They report that this is 23% below the national median cost of \$150 per square foot for high schools built in 2006, according to School Planning and Management magazine's 2006 Construction Report. For more information go to Hoffman's web site at www.hoffman.net.

UWSP becomes largest purchaser of renewable energy in UW System

Representatives from the University of Wisconsin-Stevens Point (UWSP) and Wisconsin Public Service signed a NatureWise® agreement on May 7. UWSP will purchase an additional \$8,000 of renewable energy per year for the main campus.

The renewable energy purchase through UWSP administration is in addition to previous purchases made by the UWSP Student Government Association, Resident Hall Association and the Residential Living Office. Overall main campus usage will increase to 16.4 percent renewable electrical energy, making UWSP the largest purchaser of renewable energy of all UW campuses.

Last September, UWSP was one of four state universities selected by Governor Jim Doyle to take part in a pilot project to make the campuses energy independent within five years through renewable energy sources and aggressive conservation efforts. In addition, UWSP Chancellor Linda Bunnell recently signed the American College and University Presidents Climate Commitment, pledging UWSP to the pursuit of climate neutrality to avert the impacts of global warming.



A leader in energy conservation and sustainability, UWSP efforts include use of photovoltaic windows and low energy lighting in the Noel Fine Arts Center; energy conservation elements in the Dreyfus University Center remodeling project; several rain gardens across campus; green roofs on the Albertson Learning Resource Center, and solar water heating systems for three residence halls and the pool inside the Health Enhancement Center.



The NatureWise program was established in 2002. It supports electricity generation from a blend of wind and biomass (gases produced naturally from landfills and farm animal waste). Customers purchase 100-kilowatt-hour blocks of renewable energy each month for an additional one-dollar per block. More information may be found at www.wisconsinpublicservice.com/news/naturewise.aspx.

Contact: Greg Diemer, 715-346-2641 or Larry Beck, 715-346-3059

May 7, 2007 <http://www.uwsp.edu/news/pr/chNatureWise5-07.htm>

Environmental News Briefs of Interest.....

The following abbreviated news capsules come from the US-EPA News Room at <http://www.epa.gov/newsroom/newsreleases.htm> Articles are shortened to conserve space but a link is provided to each story.

New Report Summarizes Ozone Layer Protection

After nearly 20 years of international treaty protection, the six-mile-high ozone layer that shields the earth from harmful solar rays is on the road to recovery, but challenges remain, EPA reports. Achievements in Stratospheric Ozone Protection: Progress Report highlights U.S. contributions toward healing the ozone layer. The report recognizes the substantial and successful investments of the many collaborators who have worked towards protecting and restoring the ozone layer. The ozone layer has not grown thinner over most of the world since 1998, according to the report, and the Antarctic ozone level is projected to return to pre-1980 levels between 2060 and 2075. This September 2007 will mark the 20th anniversary of the landmark Protocol to protect the ozone layer. The Montreal Protocol on Substances that Deplete the Ozone Layer was adopted in 1987 and has been ratified by 191 countries.

The "Achievements in Stratospheric Ozone Protection" report:

<http://www.epa.gov/ozone/2007stratozoneprogressreport.html>

Information about SunWise and sun safety: <http://www.epa.gov/sunwise/>

Air Pollution Down, Air Quality Up According to 2006 EPA Data

An early look at air quality and emissions data for 2006 shows continued improvement in the nation's air quality over the long term, EPA reports. Emissions of six key pollutants have dropped by more than half since 1970 and the national average concentration for each criteria pollutant is below the level of its air quality standard. While emissions of six key "criteria" pollutants and the compounds that form them continue to decline, the United States has continued to grow and prosper. Total emissions of the six key pollutants dropped 54 percent between 1970 and 2006. During the same time period: the U.S. gross domestic product increased 203 percent, vehicle miles traveled increased 177 percent, energy consumption increased 49 percent, and U.S. population grew by 46 percent. In addition, emissions of air toxics in 2002 were 35 percent lower than 1990 levels. Review the national air quality and emissions trends showing the nation's progress towards clean air: <http://www.epa.gov/airtrends/econ-emissions.html>

New EPA Tool Helps Answer Air Quality Questions

AirCompare is a new EPA-developed air quality tool, provides local air quality information to help people make informed decisions about moving, vacationing or living in different areas of the country. AirCompare uses EPA's Air Quality Index (AQI) to explain air quality from a health perspective. A person with asthma, for example, can use AirCompare to select up to 10 counties across the country -- and with the click of a button, find out how many days the air was unhealthy for asthmatics last year. Or someone planning a trip can find out the best time of year to visit a particular area, based on concerns about asthma, heart disease, outdoor activity, or just general interest. View AirCompare at <http://www.epa.gov/aircompare/>

EPA Encourages New Owners of Companies to Disclose Violations

EPA is seeking comments on how a policy that offers reduced penalties to companies for self-disclosing environmental violations should apply to the new owners of recently acquired facilities. The audit policy offers reduced penalties to companies that self-police their programs, promptly disclose and correct any violations discovered, and take steps to prevent future violations. Companies with newly acquired facilities can use the audit policy to examine their performance and work with EPA to come into compliance with environmental laws. Since 1995, more than 3,000 companies have disclosed and resolved violations at over 9,000 facilities under this policy. EPA is seeking input from the public on how best to encourage new owners to use the audit policy. EPA will accept written comments until July 13, 2007, and also invites the public to offer comment at two public meetings to be held on June 12 in Washington, D.C. and June 20 in San Francisco, Calif. Information on the EPA Audit Policy:

<http://www.epa.gov/compliance/incentives/auditing/auditpolicy.html>

Information on new owner disclosure incentives:

<http://www.epa.gov/compliance/incentives/auditing/newowners-incentives.html>

EPA Extends SPCC Compliance Dates

EPA has issued a final rule to extend the compliance dates for facilities affected by the Oil Spill Prevention, Control, and Countermeasure (SPCC) regulations. EPA has extended the compliance dates in order to provide the time necessary for the regulated community to comply with the revised requirements that EPA expects to propose in 2007. For facilities (other than a farm) that started operations on or before Aug. 16, 2002, the facility must maintain its existing SPCC plan and amend and implement the plan no later than July 1, 2009. If the facility began operations after Aug. 16, 2002 through July 1, 2009, it must prepare and implement an SPCC plan no later than July 1, 2009. If the facility starts operations after July 1, 2009, it must prepare and implement an SPCC plan before beginning operations. If a farm started operations on or before Aug. 16, 2002, it must maintain its existing SPCC plan and amend and implement the plan when EPA promulgates a rule specific for farms. If a farm began operations after Aug. 16, 2002, then it must prepare and implement an SPCC plan when EPA promulgates a rule specific for farms. Information about the EPA Oil Program and the SPCC regulations: <http://epa.gov/oilspill>

\$2.9 Million in Small Business Contracts for New Environmental Technologies

EPA recently announced the award of nearly \$3 million to 13 companies to support their work in seven key environmental areas: nanotechnology, monitoring of air emissions, pollution prevention, hazardous waste management, water treatment, homeland security, and innovation in manufacturing. The companies received "proof of concept" awards from EPA last year and will use these additional funds to move their technology towards commercialization. EPA is one of 11 federal agencies that participate in the SBIR program, enacted in 1982 to strengthen the role of small businesses in federal Research and Development, create jobs, and promote U.S. technical innovation. To participate in SBIR, a small business must have fewer than 500 employees, and at least 51 percent of the business must be owned by U.S. citizens. The program has two phases. In the first phase, a company receives seed money to prove that its new idea can work. In the second phase, the company receives further funds to move the technology to the marketplace. For more information about these research projects:

<http://www.epa.gov/ncer/sbir/07phase2> and learn more about EPA's SBIR program:

<http://www.epa.gov/ncer/sbir>

Events, Training, Workshop and Tour Opportunities

Learn How to Live More Sustainably

Sherrie Gruder

The Renewable Energy & Sustainable Living Fair is the world's largest renewable energy, energy efficiency, and sustainable living educational event of its kind and it's right here in central Wisconsin. The Fair features hundreds of [workshops](#), [speakers](#) and [exhibits](#) all emphasizing clean energy & sustainable living. There are tours to area green homes as well.

The renewable energy fair is Friday, Saturday or Sunday June 15-17 just outside of Stevens Point at 7558 Deer Road in Custer, Wisconsin. It is on the grounds of the ReNew the Earth Institute which has working renewable energy systems, hands-on educational displays, demonstration gardens, and a resource library.

All activities and parking are FREE with a nominal paid admission. Long distance and/or [rideshare](#) to the Fair is available. Special sets of workshops for children, educators, renters, and women are offered as well as a Clean Energy Car Show, where you can learn how to reduce your reliance on foreign fuel.

For a detailed list of workshops, exhibitors, and events go to www.the-mrea.org .

Small Wind Power Conference

Sherrie Gruder

A Small Wind Power Conference will be held in advance of the Renewable Energy and Sustainable Living Fair, Tuesday and Wednesday June 12-13. Hosted and organized by the Midwest Renewable Energy Association and sponsored by Focus on Energy, this conference will address issues relevant to the installation of small wind systems (100 kW and smaller). This is the third year of this conference for businesses and government officials involved in the specification, siting, installation, maintenance, funding and permitting of small wind systems.

The Small Wind Power Conference will be held at the Holiday Inn and Convention Center, Stevens Point, WI. For more information and to register go to <http://www.the-mrea.org/workshops.php?id=1147203287>

June 15-17, 2007; **MREA 18th annual Renewable Energy and Sustainable Living Fair**, Custer, WI. For more information or to register go to http://www.the-mrea.org/energy_fair.php or contact the Midwest Renewable Energy Association at 715-592-6595 Fx: 715-592-6596 info@the-mrea.org

September 12-14, 2007; **Greening the Heartland/SE2 Conference and Trade Show**, Monona Terrace, Madison. For more information contact the Wisconsin Green Building Alliance at <http://www.wgba.org>