

January 2006

Madison Adopts The Natural Step

Sherrie Gruder

The city of Madison took a giant step to demonstrate leadership and commitment to sustainability in its own operations by adopting The Natural Step (TNS) as its guiding sustainability framework and by funding TNS training for city staff and officials. This approach was chosen to improve the efficiency, effectiveness and overall sustainability of city programs, finances and operations. The city council unanimously approved this as a core building-block of the city initiative: Building a Green Capital City: A Blueprint for Madison's Sustainable Design & Energy Future

http://webapp.cityofmadison.com/sustainable_design/index.html

The first action recommended in the Blueprint to establish a Madison sustainable city program was to adopt a guiding principle on sustainability. The Natural Step (TNS) fits this need; it is a science-based approach to develop ecologically, economically and socially healthy communities for the long-term (<http://www.naturalstep.org/>). It has been well demonstrated to be effective through the experience of more than 75 municipalities in Europe and Canada, as well as many multi-national and local businesses. And it has been adopted by the American Planning Association as its official objectives for planning for sustainability (<http://www.planning.org/policyguides/sustainability.htm>).

The city of Madison as well as Washburn and Bayfield, WI, will be among the first six communities in the US to use this overarching framework as a compass to guide and catalyze its decisions and actions toward a sustainable future.

The TNS framework promotes a shared understanding of city goals and objectives, and facilitates development of strategic pathways for how to operate and implement sustainability based initiatives, strategic planning, operations, investments and actions.

Training city staff and elected officials in TNS helps staff at all levels and across departments to work together using a common language and an approach that improves effectiveness at a time when local governments are challenged by financial burdens, environmental and community equity issues. TNS helps balance all aspects and address these issues jointly and in a comprehensive way. TNS doesn't require the city to go back and redo what they've already done but is used as a guide as they inventory existing programs; evaluate them regarding sustainability, and build on the plans and programs already established.

Madison already has a familiarity with, and interest in, TNS. One hundred citizens have been trained in "TNS for Communities" study courses run by Sustain Dane www.SustainDane.org, a nonprofit organization; last year 300 community members attended a presentation on TNS last year that had 40 organizational sponsors; twenty City staff attended a brown bag presentation on TNS ecomunicipalities in Sweden; and a number of city and county organizations have been studying examples of how other municipalities around the world have used TNS to achieve greater sustainability and how those lessons can be applied in Madison.

What it means for the City to adopt TNS is that:

- Staff, administration and officials will be trained in TNS
- TNS will be used as the context for decision makers to determine the most sustainable actions or policies on any issue.

Whistler: An Award-Winning Example of Sustainable Community Planning

The City of Whistler in British Columbia, Canada, was awarded first place at the International Awards for Liveable Communities in November. It was recognized for its comprehensive sustainability plan, *Whistler 2020*, which is a leading example of the application of the Natural Step framework in the community planning context.

The City of Whistler won two other top awards earlier in 2005 as well. The first was the Federation of Canadian Municipalities-CH2M Hill Sustainable Community Award recognizing the municipality for its leadership in sustainable community planning and citizen engagement. The second award was from the Canadian Association of Municipal Administrators (CAMA), which chose Whistler as the municipality demonstrating exceptional innovation and meritorious initiative for 2005.

For more information about Whistler and the sustainable communities framework, visit The Natural Step Canada web site at <http://www.naturalstep.ca/>.

Dry Cleaners Will Be Required to Further Reduce Perchloroethylene Use

Jack Annis

The EPA announced December 9 that is proposing a new rule to further reduce emissions of perchloroethylene (perc) from dry cleaners across the United States. Wisconsin has been a national leader in reducing perc usage through the Drycleaning Partnership activities started in the mid-90's. The action taken by companies in the partnership have significantly reduced or eliminated perc usage in Wisconsin.

However, according to EPA, more than 28,000 dry cleaners in the United States continue to use perc in the dry cleaning process. Perc is a hazardous air pollutant that has been specifically regulated in this industry since the implementation of air toxic standards in 1993. Dry cleaners have reduced perc emissions by about 15,000 tons a year through increased use of alternative solvents, replacement of older dry-cleaning machines, and state and industry programs like Wisconsin's.

The proposal would amend EPA's 1993 air toxics standards to further reduce perc emissions from large industrial and commercial dry cleaners, freestanding small dry cleaners, and small dry cleaners located in apartment buildings.

There are only 15 large dry cleaners in the United States according to EPA. These dry cleaners are covered by EPA's 1993 maximum achievable control technology standards. The proposed amendments would require large industrial and commercial drycleaners to meet additional new equipment standards and conduct enhanced leak detection and repair.

There are 27,000 small dry cleaners, which will have to meet equipment standards and conduct enhanced leak detection and repair. In addition, all existing small dry cleaners would have to eliminate machines that require clothing to be transferred from one machine to another for drying.

The proposed rule would not affect dry cleaners that do not use perc, or those that send clothes off-site to be cleaned.

EPA will accept public comments on this proposal for 60 days after it is published in the Federal Register. For more information on the proposed rule and for instructions on submitting comments at

<http://www.epa.gov/air/drycleaningrule>

Small Communities Will Need Storm Water Permits

David S. Liebl

Over 200 municipalities in Wisconsin have, or will need to get, a municipal storm water permit in 2006. New EPA regulations being administered by the Department of Natural Resources will affect nineteen county governments:

Brown	Douglas	LaCrosse	Ozaukee	Washington
Calumet	Eau Claire	Marathon	Racine	Waukesha
Chippewa	Fond du Lac	Milwaukee	Rock	Winnebago
Dane	Kenosha	Outagamie	Sheboygan	

and many of the municipalities within them. Another 14 counties have communities that have been designated separately for a permit:

Baraboo	Manitowoc	Merrill	River Falls	Waupun
Beaver Dam	Marinette	Monroe	Stevens	Whitewater
Fort Atkinson	Marshfield	Plover	Point	West Bend
Hartford	Menominee	Port Washington	Two Rivers	Wisconsin Rapids
			Watertown	

UW-Extension and the DNR will hold educational programs targeted specifically to municipalities and related agencies after they receive permit notification later in February. These programs are tentatively scheduled for Tuesday, Feb 28, 1-3pm; Wednesday, March 1, 8-10am; Tuesday, March 21, 1-3pm and Wednesday, March 22, 8-10am. The UW-Extension distance education network will be used to reach communities throughout the State.

To receive notification of the program dates and locations, contact David Liebl, [<liebl@epd.engr.wisc.edu>](mailto:liebl@epd.engr.wisc.edu)

If you have questions regarding the new Phase II storm water regulations see the DNR storm water website <http://dnr.wi.gov/org/water/wm/nps/stormwater/muni.htm>

Master Composter Training Sites Set for 2006

Joe Van Rossum

Locations for the Master Composter Program initial training workshops have been set for 2006. Workshops will be held in four locations this year. The Master Composter program is a "train the trainer" program that aims to build the capacity of composters to share their knowledge and enthusiasm for composting with others. In order to become certified Master Composters, trainees must attend a one day workshop; participate in a Wisline program, and complete three outreach activities.

Composters who participate in the program gain a more thorough understanding of the composting process as well as common uses for compost. The program also provides an introduction to vermicomposting (using worms to compost food waste) and techniques to reduce the amount of waste generated. Most importantly, Master Composter trainees learn strategies that enables them to share their knowledge and interest in composting with others.

One day workshops are scheduled to be held in the following communities:

- Milwaukee County - Saturday, February 25
- City of LaCrosse - Saturday, March 11
- Marathon County - Saturday, April 1
- Florence County - Tuesday, April 11

For additional information about the Master Composter Program or the scheduled workshops please contact Joe Van Rossum, SHWEC Recycling Specialist: vanrossum@epd.engr.wisc.edu, or 608-262-0936.

Recycling Partners Begin Discussions

Steve Brachman

Seven key recycling leaders met recently in Waukesha to discuss ways to improve organizational partnerships. Under the leadership of Associated Recyclers of Wisconsin (AROW) president Joe Van Rossum, these leaders were tasked with answering "how can we better coordinate our efforts to achieve better statewide recycling and improve our organizational efficiency?"

The result was consensus that further activities could lead to greater partnerships. These included the following tasks:

- Connect Recycling Connections Corporation to the Wisconsin branch of the Solid Waste Association of North America (SWANA), which is seeking administrative assistance.
- Establish an electronic clearinghouse
- Explore joint funding opportunities
- Promote each other's activities
- Develop a joint mercury education effort by providing a briefing workshop regarding the community mercury reduction manual
- Develop an organizational flow chart/inventory of key organizations and
- Conduct stakeholder analysis using the joint AROW/SWANA/Wisconsin County Solid Waste Managers Assoc. (WCSWMA) conference in Stevens Point.

Next meeting of the partners is slated for Tuesday, February 28 at the Stevens Point Holiday Inn.

Midwest E-Waste Legislation Discussed

Steve Brachman

Representatives from Midwestern state environmental agencies met in Chicago in November to discuss proposed end-of-life electronics legislation with industry experts, electronic waste recyclers, and non-profit organizations. Lack of a national policy and growing e-waste disposal problems has prompted state officials to develop model legislation for introduction in Spring, 2006. This stakeholder analysis was facilitated by SHWEC and provided state governmental officials with unique perspectives regarding implementation of a comprehensive e-waste recycling program. Central concerns focused upon how to fund such a system - the current proposal recommends manufacturers' responsibility based on a percentage of products sold. In addition, stakeholders expressed some concerns regarding "orphaned" e-waste, e.g., televisions that are no longer manufactured.

However, there was consensus that something needs to be done to solve this growing problem, in the absence of any federal legislation, and that a regional model is preferred. In addition, there was also agreement that an adequate recycling infrastructure exists in the Midwest to solve this problem. Currently, only Wisconsin has legislation in the pipeline that addresses the growing e-waste problem with a bill re-introduced this fall by Senator Miller (http://folio.legis.state.wi.us/cgi-bin/om_isapi.dll?clientID=30723239&infobase=indxauth.nfo&jump=s16&softpage=Browse_Frame_Pg).

Soy Bio-Diesel Powers Farm Technologies Days 2006

Sherrie Gruder

Wisconsin Farm Technology Days is the state's largest outdoor agricultural show. Sheboygan County will be the site of the annual three-day event from July 11 -13. It showcases the latest improvements in production agriculture, including practical applications of recent research findings and technological developments. The 2006 show will be powered by bio-diesel and the field demo equipment will be run on soy bio-diesel as well. The Wisconsin Soybean Marketing Board is a Charter sponsor and will be purchasing the soy bio-diesel for the show.

The show's organizing structure, Wisconsin Farm Technology Days, Inc., is a non profit, educational organization. At the host county level, the University of Wisconsin-Extension coordinates the events with the cooperation of the host county and many volunteers. For More information go to:

<http://www.wifarmtechnologydays.com>

Air Quality and Health: You Can Make a Difference

Sherrie Gruder

An air quality health advisory for approximately one-half of Wisconsin was issued by the Wisconsin Department of Natural Resources Friday, December 23 through Saturday, December 24, 2005. This advisory affected people living in the area south of a line from Rice Lake through Wausau and Green Bay to Kewaunee, and north of a line from La Crosse through Madison to Milwaukee.

The advisory, one of many throughout the year, was issued because of persistent elevated levels of fine particles in the air. These fine particles come primarily from combustion sources, such as power plants, factories and other industrial sources, vehicle exhaust, and outdoor fires.

When the Air Quality Index is in the orange level, it is considered unhealthy for people in sensitive groups and others, including people who are not in sensitive groups but who are engaged in strenuous activities or exposed for prolonged periods of time. People in those sensitive groups include those with heart or lung disease, asthma, older adults and children. When an air quality health advisory is issued, people in those groups are advised to reschedule or cut back on strenuous activities.

People with lung diseases such as asthma and bronchitis and heart disease should pay attention to cardiac symptoms like chest pain and shortness of breath or respiratory symptoms like coughing, wheezing and discomfort when taking a breath, and consult with their physician if they have concerns or are experiencing symptoms.

There are several actions the public can take to reduce their contributions to regional air quality problems.

- Reduce driving when possible and don't leave vehicle engines idling.
- Postpone activities that use small gasoline and diesel engines.
- Avoid burning leaves, brush, grass or wood. Composting is preferred, but if you must burn and your community allows it, do not burn on an air quality health advisory day.
- Never burn household garbage, plastic, rubber, painted wood or other materials that must be recycled or landfilled and cannot be legally burned.
- Practice electrical energy conservation.

To receive air quality health advisories by e-mail, visit

<http://dnr.wi.gov/org/aw/air/health/listserv.html>.

There are several sources for more information on air quality and monitoring results:

- Federal interagency air quality web site, for information on the Air Quality Index and nationwide air quality forecasts and air quality conditions, <http://airnow.gov>
- DNR's statewide air quality monitoring web page, <http://maps.dnr.state.wi.us/wisards>
- For local DNR air management program contacts, <http://dnr.wi.gov/org/aw/air/staff/regions.htm>

This article was derived from a public notice by Larry Bruss, DNR, (608) 267-7543 and Henry Anderson, DHFS, (608) 266-1253

US-EPA Develops Guidebook for Control of Urban Non-Point Water Pollution

Jack Annis

The Environmental Protection Agency recently released a guidebook on managing runoff pollution caused by urban activities. The publications should be helpful to municipalities throughout Wisconsin. Although non-point and storm water management has been implemented for a long time in the larger cities of Wisconsin, it continues to be an important emerging issue in many areas of the state.

Non-point source pollution, unlike pollution from industrial and sewage treatment plants, comes from many sources. They include contaminated runoff from paved surfaces, malfunctioning septic systems, pet wastes, over-applied fertilizers and pesticides, improperly disposed household chemicals, and motor-vehicle fluids.

Twelve management measures are included in the guidebook. Such measures can help establish performance goals for storm water control programs. They are also useful in determining what to do to minimize other negative factors associated with urban runoff. Also included are subjects such as:

- Watershed and site protection
- New development
- On-site wastewater treatment (septic) systems
- Transportation
- Construction, bridges and highways
- Construction site erosion, sediment, and chemical control
- Existing urban areas
- Pollution prevention
- Operations and maintenance
- Program evaluation

The guidebook is free and available at the following web site (be advised the full manual is a very large pdf document and may require a high speed connection to download). It is also available by ordering.

<http://www.epa.gov/nps/urbanmm/>

More information about non-point source pollution and urban runoff is at: <http://www.epa.gov/nps>

Recycling Business Survey Results

Joe Van Rossum

The Wisconsin Department of Natural Resources maintains a market directory of businesses that recycle, broker or collect waste materials in Wisconsin. SHWEC conducted a survey of the 210 private businesses listed in the Wisconsin Recycling Markets Directory (WRMD) to gain a better understanding of the number of workers employed by Wisconsin's recycling industry and the value of the wages these workers are being paid. Of the 210 surveys sent out 87 were completed and returned; 10 were undeliverable, and 1 was returned blank.

While the WRMD is only a partial listing of recycling related businesses in Wisconsin, it does provide a sampling of a range of enterprises engaged in recycling related activities. Resources available for this

survey limited the scope of the investigation. Business directories and Manufacturing directories certainly could have been used to expand the survey list; however the WRMD provided an accessible cross-section of recycling businesses in Wisconsin.

Survey design

The survey collected information regarding the number of workers employed at each company in total as well as the number of employees related to recycled materials. Respondents were also asked to categorize the workers into four categories; collection, processing, brokering, or manufacturing/end-use. Companies were also given six categories of wages in two dollar increments to select as the average hourly wage paid at their facility. Finally the survey collected information regarding the types of materials that are handled by the business and what products are produced if a company is a manufacturer. The survey did not collect information that could attribute a specific survey response with a specific company. This was done so as to minimize concerns regarding publication of company-specific data.

Survey Results

Survey respondents reported 1,893 employees work at their facilities. Of these employees 1,394 or 72% of them were related to recycled materials. These values equate to an average of 16 recycling related employees per facility. Responses to the wages are listed in the table below. The bold number indicates the tally of companies which reported pay in that range.

1	\$5.70 - \$7.00	21	\$11.01 – \$13.00
9	\$7.01 - \$9.00	17	\$13.01 - \$15.00
18	\$9.01 – \$11.00	13	\$15.01 and above

The median response was the \$11.01-\$13.00 range. If a \$12/hour wage were applied to the reported 1,394 recycling employees the annual wages paid to these workers would total an estimated \$35 million.

Assuming the survey responses were representative of the remaining 113 business in the WRMD an attempt can be made to estimate the total number of jobs at these facilities. A total of 3,204 recycling jobs are related to recycling with estimated annual wages paid of nearly \$80 million when the average response is applied to the 200 private facilities in the WRMD.

Fifty-nine percent of survey respondents stated their facilities existence depended solely upon recycling. This combined with the 72% of reported jobs related to recycling highlights the important role recycling plays for the businesses listed in the WRMD. The materials and products of the companies responding to the survey varied widely. Most facilities handled multiple materials. The most common materials were metals and paper products.

This survey provides a sampling of Wisconsin's recycling industry. Many businesses rely on recovered materials as a part of the operations; be it collecting, processing, brokering or the manufacture of products. A comprehensive survey, combined with other data sources, would provide a better understanding of recycling's impact on Wisconsin's economy.

For further information about the survey please contact Joe Van Rossum, SHWEC Recycling Specialist, vanrossum@epd.engr.wisc.edu, or 608-262-0936.

State BioGrants Now Available

From a [press release](#) posted on the Web site of the Wisconsin Department of Agriculture, Trade, and Consumer Protection: Dec 13

Governor Jim Doyle today launched the state's first-ever grant program to help develop Wisconsin's bio-based economy. In his 2005 state budget, Governor Doyle committed \$1 million to help businesses and

individuals develop ways to use plant and animal resources for renewable energy, fuels, or products. Today's announcement calls for project proposals for the new grant program....

Examples of projects include the development of:

- New ways to generate usable forms of energy or fuels;
- New biobased products, including new fibers and other biobased materials;
- New technologies that enhance commercial viability of biobased business; or
- New systems that transform waste streams into energy or biobased products.

The 2005 proposal guidelines are available at the Department of Agriculture, Trade and Consumer Protection Web site, [BioGrants](#). Proposals must be received in the Division of Agricultural Development by 5:00 p.m. on March 1, 2006.

Great Lakes Regional Collaboration Strategy Announced in Chicago

EPA News Release

EPA Administrator Stephen L. Johnson joined other federal, state, local and tribal officials in Chicago on December 12 to unveil the Great Lakes Regional Collaboration Strategy that will serve as a blueprint for prioritizing actions to restore and enhance the lakes. The administrator also committed to specific actions among federal agencies to accelerate cleanup of contaminated sediment; return another 200,000 acres of wetlands to ecological health in equal partnership with the states; reduce the spread of invasive species, and make beaches cleaner.

The complete strategy documents are available at: <http://www.glrc.us>

Regulatory Updates.....

Five Small-Business Sectors Exempted from Title V Reporting Rules

EPA announced it will no longer require five types of small businesses to obtain federal operating, or Title V, Air Permits. Officials said the agency was taking the action to avoid unnecessary costs and burden for small businesses. The EPA plans to exempt neighborhood perchloroethylene dry cleaners; small ethylene oxide sterilizers that clean laboratory equipment and other items; chromium electroplaters that make items such as chrome parts for cars and plumbing fixtures; secondary aluminum production sources such as car salvage yards; and halogenated solvent cleaners that clean metal parts, electronics and other objects. The action does not change requirements governing the control of emissions of toxic air pollutants applicable to these facilities. They are still required to limit their emissions of air toxics. Additional information is available online at www.epa.gov/ttn/oarpg/t5/fact_sheets/asourceexempt.html

EPA Amends Oil Spill Rule and Deadline

On December 2, the Environmental Protection Agency proposed modifications and compliance extensions for the oil Spill Prevention, Control and Countermeasure (SPCC) rule. EPA is proposing to streamline requirements for qualified facilities, qualified oil-filled operational equipment, and airport mobile refueling. The proposal also offers a separate extension of the compliance date for farms and removes certain SPCC requirements for animal fats and vegetable oils. EPA is also proposing to extend the compliance deadline when all facilities must prepare (or amend) and implement their SPCC Plan to Oct. 31, 2007. For more information on Spill Prevention, Control and Countermeasure Plans, go to:

<http://www.epa.gov/oilspill/index.htm>

In a directly related development, EPA has made its new "SPCC Guidance for Regional Inspectors" available on the web. You can download it at: <http://www.epa.gov/oilspill/>

Proposed Wet Weather Policy to Improve Wastewater Treatment

EPA also has proposed a policy for addressing peak wet weather discharges at wastewater treatment plants. Across the country, many municipal wastewater treatment systems experience problems during heavy rain downpours (peak wet weather), when flows to the wastewater treatment plants exceed the plant's biological treatment capacity. The new policy reflects the joint recommendations of the Natural Resources Defense Council (NRDC) and the National Association of Clean Water Agencies (NACWA). The policy encourages public participation via the National Pollutant Discharge Elimination System (NPDES) permit process, and provides for public notification in the event that a diversion does take place. EPA will accept written comment for 30 days after the policy is published in the Federal Register. To learn more, visit: <http://www.epa.gov/npdes/wetweather>

Stronger Standards for Air Particulates Proposed

In another action EPA is proposing revisions to its national air quality standards for fine particle pollution (also called fine particulate matter) and from some coarse particles. EPA bases its proposal on an extensive review of thousands of scientific studies on the risks associated with exposure to particle pollution. The agency will also conduct an assessment of significant new studies before this rule is finalized. EPA is seeking comments on a number of alternative levels for the PM standards, including retaining current standards. The agency will take public comment for 90 days following publication of the proposal in the Federal Register and will hold three public hearings.

For additional information on these actions, <http://www.epa.gov/air/particulates/actions.html>

For information on particle pollution, visit: <http://www.epa.gov/air/particulates>

Training, Workshop and Tour Opportunities.....

January 12 -13, 2006 **NASECA (North American Stormwater & Erosion Control Association) 3rd Annual Conference - Storm Water Management and Erosion Control: Improving Design and Implementation** at Lussier Family Heritage Center 3101 Lake Farm Road, Madison. For more information: <http://www.naseca.org/Wisconsin>

January 30-31, 2006 **Better Buildings, Better Business, 4th Annual Conference** in Wisconsin Dells sponsored by ECW and many others. For more information, to register for the conference and the training program, visit <https://programs.regweb.com/ECW/b42006/generalaudience/index.cfm?page=introduction>

March 1-3, 2006 **AROW/SWANA/WCSWMA Recycling and Solid Waste Conference** in Stevens Point at the new Holiday Inn contact Myrna Diemert at 608-339-9178 or email her at Diemertm@mags.net to register or more information.

March 6-8, 2006 **Environment 06 Conference and Exhibition** in Milwaukee and sponsored by FET, visit <http://www.fetinc.org/> for information and registration.

April 20-21 **GLOBAL WARMING CONFERENCE - CFP** in Miami, Florida.

Topics for the 17th Global Warming International Conference and Expo include; Sustainable Environment And Health For The 21st Century; Water Resources Management; Global Warming And The Oceans; Human Health In A Changing Climate; Education: Global Change & Sustainable Development. See website for details <http://www.globalwarming.net/>

June 26-30 the **4th International Conference on Environmental Management for Sustainable Universities** in Stevens Point. See web link for details:

<http://www.uwsp.edu/cnr/GEM/EMSU/Home.htm>