

**Interagency Pollution Prevention Advisory Team (IPPAT)**  
**Thursday, October 28, 2004**  
**Meeting Summary**

**MnGREAT Awards – Mike Nevala, MnGREAT Judge**

Mike Nevala announced the MnGREAT! Award winners, who received their awards and MnGREAT! mugs at an awards ceremony at the Eagan Community Center on October 13, 2004. The winners are:

1. **The City of Albert Lea** for the distributed generation project at its wastewater treatment plant. The project uses methane generated by bacteria during the wastewater treatment process to power four micro turbines that generate electricity. The exhaust heat in turn heats the water that is used in the biogas generation. By using biogas as a fuel, the project avoids using 6 therms of natural gas per hour or 52,560 therms per year, and the payback is expected to be 3.4 years.
2. **The Crow Wing County Solid Waste Office** for its used oil collection program, which provides user-friendly and convenient used oil drop-off locations to residents and tourists alike, so that residents and visitors can continue to enjoy all that the popular recreation area has to offer. Extensive education and advertising help ensure the effectiveness and success of the program.
3. **Dakota County** for its vision, leadership, and commitment to design and construct high-performance, sustainable building projects, as exemplified by the Dakota County Lebanon Hills Regional Park Visitor Center. The visitor center demonstrates how adequate and sustainable spaces can be constructed with the smallest ecological footprint upon the site and surrounding areas, while also providing a highly energy-efficient and long-lasting facility with minimal impact upon future operating costs.
4. **Dakota Valley Recycling** serving the cities of Burnsville, Eagan, and Apple Valley with a joint recycling program that provides economies of scale, reduces duplicate efforts, and promotes a uniform message to residents of all three cities. The program has initiated a pilot curbside organics collection program, strengthened environmental partnerships with businesses and residents, and conducted extensive outreach and education to many different audiences within the county.
5. **The Metropolitan Council Environmental Services Division** for its partnership with the Minnesota Dental Association to develop and implement a voluntary dental clinic amalgam recovery program. The project staff completed two research studies showing that dental clinics are a significant source of mercury to wastewater treatment plants and that cost-effective amalgam separators are available to dentists. The goal is to have all general practice dentists who place or remove amalgam install and operate a separator, significantly improving water quality in the state.
6. **The Rice Creek Watershed District** for its comprehensive wetland management plan, covering approximately 1,200 acres of land in the growth corridor of Blaine, that consolidates and preserves large tracts of high-quality wetlands while still allowing for development. The plan promotes smart growth and natural resource-based planning, improves wetland and ecological integrity, meets stormwater needs, satisfies landowner issues, and solves a 15-year legal impasse.
7. **The Solid Waste Management Coordinating Board for Community POWER** (Partners on Waste Education and Reduction), a program that reaches people with waste reduction messages through organizations or institutions they are already part of, such as churches, senior groups, youth groups, schools, arts organizations, neighborhood associations, social service agencies, and civic groups. In its first two years, Community POWER involved over 3,100 people in waste reduction activities and reached 150,000 other people with waste reduction messages through newsletters, e-mail, direct mail, presentations, and community newsletters.
8. **The Steele County Sheriff's Office** for the Steele County Detention Center for incorporating many design features that benefit the environment into its newly constructed center. A geothermal heating and cooling system reduces the need for natural gas, and daylighting reduces the need for artificial lighting

and improves the general atmosphere. The building's architects carefully selected materials with recycled content that can also be recycled later, along with products that have fewer emissions of volatile organic compounds.

9. **The Iron Range Resources Mineland Reclamation Division** for conserving a significant amount of energy with its lighting upgrade in the growth chambers of the Mineland Reclamation headquarters in Chisholm. New 1,000 watt metal halide bulbs and reflectors distribute light to 150,000 seedlings, with excess heat from the bulbs going to heat 1,000 gallons of water that is circulated throughout the remaining office space. No extra heating fuel is required when the growth chamber is operating, cutting energy use by 67 percent.
10. **Linda Schaumburg and** staff at the Minnesota State Operated Community Services–Northern Region for developing and marketing Northern Sparks Firestarters. Lena designed and developed the manufacturing for the firestarters, which consist of 100 percent recycled materials assembled into a waterproof firestarter that burns for 20 minutes or more, replacing liquid firestarters and kindling that is sometimes harvested illegally in parks.
11. **The Metro WaterShed Partners**, a collaboration of water resource educators in the Twin Cities, for their “Minnesota Water – Let’s Keep It Clean” stormwater education program that provided consistent clean-water messages in mass media across the Twin Cities metro area. The Metro WaterShed Partners also made ready-to-adapt stormwater educational materials available to cities and neighborhood organizations.
12. **The Metropolitan Council Environmental Services Division** for sustainable design in the expansion of the Eagles Point Wastewater Treatment Plant in Cottage Grove. The plant was tripled in capacity while in continuous operation on a limited-area site in a sensitive environmental location on the bluffs above the Mississippi River. Sustainable design features include building orientation, insulation, lighting and daylighting, office furnishings, recycling of demolition debris, and stormwater control and landscaping. Two remarkable features are elimination of specific toxic chemicals and heating and cooling. Chlorine gas and liquid sodium bisulfite were replaced by ultraviolet lamps for disinfection of the 3,000,000 gallon daily flow of effluent. Heating and cooling of the plant administration building is supplemented by a thermal heat pump exchange with the relatively year-round consistent temperature of that same effluent.

### **Clean Air Minnesota overview –**

*Bill Droessler, Clean Air Minnesota 612-334-3388 ext. 103*

Clean Air Minnesota is a partnership of businesses, non-profits, and government agencies that is voluntary and consensus driven, with an emphasis on collaboration and benefits for all involved. The overall goal is to address Minnesota air quality now, before ozone levels become so high that they violate national air quality standards. Preventing air pollution before that happens is much more cost-effective than responding to violations after they occur.

An important element of the work of Clean Air Minnesota partners is measuring the results of their efforts to prevent air pollution. The partners use multiple approaches and focus on their common interests, not on any position that might otherwise separate them.

Clean Air Minnesota is a program of the Minnesota Environmental Initiative. Its founding partners include the Minnesota Chamber of Commerce, the Minnesota Center for Environmental Advocacy, 3M, American Lung Association of Minnesota, Andersen Corporation, Barr Engineering, the Bush Foundation, the City of Minneapolis, Flint Hills Resources, Ford Motor Company, Hennepin County, the Izaak Walton League Midwest Office, the Metropolitan Council, the Minnesota Department of Health, Pollution Control Agency, and Office of Environmental Assistance, the Minnesota Environmental Initiative, Minnesota Power, Minnesota Technical Assistance Program (MnTAP), Target Corporation, U.S. EPA Region V, Rock-Tenn (Waldorf Corporation), and Xcel Energy.

The Clean Air Minnesota program has increased community partners from 23 initial partners to 51 in a targeted on-going formal partnership recruiting effort. Partners have set ambitious emission-reduction goals for volatile organic compounds and nitrogen oxides, the precursors of ground-level ozone, or smog. The program has implemented several small-scale projects to reduce emissions and has begun work on three emission-reduction demonstration projects with partners.

## **Governor's Executive Order 04-08 –**

*Ned Brooks, Pollution Control Agency 651-296-7242*

Ned Brooks described the elements of the executive order and the implementation guide to help agencies implement the order. All the documents relating to the executive order are posted on the OEA website at <http://www.moea.state.mn.us/lc/jppat.cfm#air>.

The executive order requires agencies to do three types of things: outreach and public education related to air quality and actual emission reductions through modifications in the operations. It helps get air alert information out to fifty to sixty thousand people using existing resources. Each department designates a staff person to receive air alert information from the Pollution Control Agency and then relay the information on to the rest of the staff.

The responsibilities listed in the executive order are good models for air quality in general, not just ozone levels. Departments choose at least two activities from a list of eight to work on. They report their progress annually in their pollution prevention summary report, submitted each year on August 15. The list includes the following activities:

- a. Purchase or lease the most fuel-efficient and least polluting vehicles that meet the operational needs of the state department;
- b. Refuel state-operated vehicles with the cleanest fuel available;
- c. Encourage employees to consider alternatives to single-occupancy vehicle commuting;
- d. Reduce state energy use through purchasing energy-efficient office equipment and appliances;
- e. Employ energy-conserving strategies in state-owned or leased buildings;
- f. Procure and use products with the lowest potential to contribute to air pollution, such as cleaning products with low amounts of volatile organic compounds;
- g. Employ landscaping that reduces the need for gasoline-powered maintenance equipment; and
- h. Purchase electricity generated from renewable sources.

The rest of the meeting was devoted to introducing elements of the executive order.

## **Pollution Control Agency (PCA) air alert information – Becky Helgesen, PCA**

The Pollution Control Agency maintains air-monitoring stations across Minnesota. Six locations collect air quality data used in developing an Air Quality Index (AQI). When the AQI at any of those stations reaches 90, Becky issues an air pollution advisory for sensitive individuals - those with lung problems, heart problems, older adults, children, and active athletes (if the AQI reaches 100, a full-blown air pollution alert is issued). Children and active athletes fall into the sensitive category because they breathe in more air per pound of person than less active adults. The alert cautions people to postpone or reduce routine exercise, and to take it easy, so that their activity is less intense and they breathe in less pollution. It also encourages people to avoid activities that contribute to the air pollution levels, such as reducing driving and postponing the use of lawnmowers and other small engines.

Air pollution alerts can happen any time of year. Fine particle pollution is a year-round problem; in summer months, ground-level ozone (the major component of smog) is also a potential problem. Research indicates that fine particles cause more admissions to the hospital and more death from heart attacks than other types of air pollution.

## **Smart Fleet and Clean Fuels –**

*Mike Taylor, Dep't of Commerce (651-296-6830), and Tim Morse, Dep't of Administration 651-296-9998*

Mike Taylor informed the group about Executive Order 04-10, issued subsequently to Executive Order 04-08. Following the requirements of 04-10 will help agencies comply with 04-08. Requirements are:

Using 2005 as a baseline, the State of Minnesota shall reduce the use of gasoline by on-road vehicles owned by state departments by 25 percent by 2010 and by 50 percent by 2015, and the use of petroleum-based diesel fuel by those vehicles 10 percent by 2010 and 25 percent by 2015.

To meet the goals established above, each state department will, whenever legally, technically and economically feasible, subject to the specific needs of the department and responsible management of agency finances:

a. Ensure that at least 75 percent of purchases of new on-road vehicles, excluding emergency and law enforcement vehicles:

(1) use "cleaner fuels" as that term is defined in Minnesota Statutes Section 16C.135, clauses 1, 3 and 4; or

(2) have fuel efficiency ratings that exceed 30 miles per gallon for city usage or 35 miles per gallon for highway usage, including but not limited to hybrid electric cars and hydrogen-powered vehicles.

b. Increase its use of renewable transportation fuels, including ethanol, biodiesel and hydrogen from agricultural products.

Tim Morse discussed the opportunities related to purchasing fuel efficient and clean fuel vehicles that meet the operational needs of the department. Tim also talked about refueling state-operated vehicles with the cleanest fuel available. The Department of Administration has established contracts for many flex fuel (E85) vehicles. The federal Energy Policy Act (EPAAct) currently requires that 75% of light duty vehicle acquisitions be capable of using alternative fuel. Contracts in place for the acquisition of alternative fuel vehicles can be made available for political subdivisions including counties and cities.

Executive Order 04-08 (reduced air pollution) fits nicely together with Executive Order 04-10 (improved fleet management). 04-10 calls for a SmartFleet Committee to be formed to help the state move toward reduced dependence on petroleum. SmartFleet will consist of Admin, Pollution Control Agency, Agriculture, and Commerce, along with other agencies that wish to participate. SmartFleet will be putting together a "toolbox" of ideas for state agencies to use including alternative fuel (ethanol, biodiesel, others as they become available), hybrid technology, increased use of e-government technology, and reduced travel.

Jeff Buss was not able to attend, but did send some information along to the meeting with Tim. Jeff has been working with state agencies and petroleum refineries to promote the use of ultra-low sulfur diesel fuel. Jeff has been involved in retrofitting diesel-powered vehicles with exhaust equipment that provides significant diesel emission reductions, especially when used in conjunction with ultra-low sulfur diesel fuel.

#### **Employee Commuting – Michelle Hansen, St. Paul Transportation Management Organization 651-265-2776**

A few of the many benefits of employee commuting programs, such as taking public transit, biking, or carpooling to work are that it reduces congestion, increases available parking spaces, reduces overall impacts from vehicle emissions, conserves resources, saves money, saves time, and reduces tardiness. A lot of employers are offering transit passes or carpool discounts as a part of their overall benefits packages. Many also offer in-house car pool matching services. The Travel Management Organizations and Commuter Services

The biggest barrier to using the program is people knowing about it. The TMOs and Commuter Services hold commuter fairs at individual where employees can get one-on-one route planning or get general information about carpooling and other topics. These fairs always increase participation, because people talk about it. Employers and employees can get a lot of information by contacting the St. Paul Travel Management Organization, the Minneapolis Travel Management Organization, the Midway Travel Management Organization, Metro Commuter Services, or 494 Commuter Services. See <http://www.saintpaulparking.com>, <http://www.metrocommuterservices.org/index.asp>, <http://www.universityunited.com/midwaytmo/>, or <http://www.mplstmo.org/> for more information.

#### **Landscaping and Green Energy - Jeff Ledermann, Office of Environmental Assistance (OEA) 651-215-0236**

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Jeff pointed out that appropriate landscaping can fairly significantly reduce air emissions related to the operation of equipment for turf management. It is estimated that lawnmowers and other small engines contribute as much as 5% of the emissions to the region's air pollution. Jeff provided a list of recommended clean air landscaping practices and a list of website resources.

Purchasing green energy is another option for agencies to meet the requirements of Executive Order 04-08. Jeff noted that all customers can purchase green energy by notifying their electricity provider of their interest. He encouraged agencies that have leases to consider buying green power when negotiating lease agreements. If asked, Department of Administration real estate staff will negotiate green power purchases into agency leases.

#### **Green Building Design and Energy Efficiency –**

Laura Millberg (651-215-0219) Erin Barnes-Driscoll (651-215-0211) OEA; Laurie Stream, (651-282-6145) PCA

Laura and Erin are contacts at the Office of Environmental Assistance for issues related to green building, and Laurie has experience working with building owners to put sustainable building practices in leased buildings. Laura gave a brief “tour” of the OEA website green building pages and encouraged agency contacts to check the website to learn about energy savings using green building strategies. See <http://www.moea.state.mn.us/greenbuilding/financing.cfm> for more information.

### **Energy-efficient Office Equipment/Supplies –**

*Bernie Kopischke, Department of Administration (651-296-3778) and Emily Moore, OEA (651-215-0201)*

Bernie and Emily identified themselves as contacts for agencies exploring the reductions possible using strategies associated with energy-efficient office equipment and supplies.

### **Agency Reporting Requirements – Ned Brooks and Bill Droessler**

One of the challenges associated with Executive Order 04-08 will be to quantify the reductions. The Pollution Control Agency will do the collecting and archiving of measures, and the federal Environmental Protection Agency will be quantifying, to maintain consistency among states. We decided to use the already existing metrics committee to establish the baselines for agencies and prepare the format for measuring our progress. The current committee consists of Gene Christenson, Ken Auer, Mike Taylor, Mark Koetke, John Thompson, Erin Barnes-Driscoll, Laura Millberg, Tom Miller, and Gordy Specht. Anyone interested in the task is welcome to join the committee. Contact Emily Moore if you are interested in serving on the committee.

### **Meeting Attendees**

Dana Albers, Transportation Solutions	763-551-0872
Scott Albers, Military Affairs	320-632-7566
Phil Allmon, Department of Education	651-582-8748
Ken Auer, Military Affairs	320-616-2016
Kyle Bartholomew, Minnesota Technical Assistance Program	612-624-4633
Don Beckering, Minnesota State Colleges & Universities	651-649-5411
Sara Bertelson, Environmental Quality Board	651-296-7939
Joan Breisler, Department of Administration	651-296-9071
Gene H. Christenson, University of Minnesota	612-626-1590
Todd A. Christenson, Department of Employee Relations	651-297-3055
Ed Chromey, Department of Agriculture	651-297-8052
Larry Collette, Department of Revenue	651-556-4000
Colleen Coyne, Clean Air Minnesota	612-334-3388 x 109
Dale F. Dorschner, Department of Health	651-215-0887
Bill Droessler, Clean Air Minnesota	612-334-3388 x 103
Jackie Finger, Department of Administration	651-296-3773
Captain George Fischer, 133rd Air Wing Minneapolis	612-713-2194
John Gilkeson, Office of Environmental Assistance	651-215-0199
Michelle Hansen, St Paul Transportation Management Organization	651-265-2776
Colleen Hetzel, Office of Environmental Assistance	651-215-0203
Bruce Itkonen, Mineland Reclamation Division IRR	218-254-7967
Duane Johnson, Metropolitan Mosquito Control District	
Mick Jost, Minnesota Technical Assistance Program (MnTAP)	612-624-4694
Rick Kantorowicz, Department of Health	651-296-3875
Bernadette Kopischke, Department of Administration	651-296-3778
Roxanne LaPlante, Department of Finance	651-297-4553
Jeff Ledermann, Office of Environmental Assistance	651-215-0236
Stan Linnell, Department of Natural Resources	651-297-4901
T. A. Logan, Department of Veterans Affairs	651-296-6728
Lee Markell, Department of Natural Resources	651-297-2357
Cindy McComas, Minnesota Technical Assistance Program	612-624-4678
Laura Millberg, Office of Environmental Assistance	651-215-0219
Emily Moore, Office of Environmental Assistance	651-215-0201
Tim Morse, Department of Administration	651-296-9998
Mike Nevala, Metropolitan Council Environmental Services	651-6-2-1065
Glenn Olson, Department of Human Services	651-297-8742
John Oughton, Century College	
DeEon Phillippi, Century College	
Andy Phelan, University of Minnesota	612-626-7744
Dave Schiller, Department of Natural Resources	651-297-3742

Bill Sierks, Office of Environmental Assistance	651-215-0290
Gloria Sonnen, Department of Administration	651-297-2954
Mike Taylor, Department of Commerce	651-296-6830
John Thompson , Metropolitan Mosquito Control District	651-643-8364
Rajan Thomas, Department of Administration	651-297-2867
Jim Tjossem, Century College	651-773-1723
Al Tupy, Department of Health	612-676-5680
Mark Vogel, Department of Transportation	651-284-3790
Mark Wacek, Metropolitan Airports Commission	612-725-6428
Jim Weiler Department of Corrections	651-779-1449
Jim Williams, St. Cloud State University	320-308-2266
Roger Wirkkunen, Department of Revenue	651-556-4000