



2008
Governor's Awards
for Waste and Pollution Prevention

From the Governor

For 17 years, the Governor's Awards have publicly recognized exceptional environmental programs and projects throughout the great state of Minnesota. The organizations we honor today have discovered unique ways to prevent waste and pollution through creativity, innovation and resourcefulness while often increasing efficiencies at the same time.

We thank them for their commitment to environmental excellence. My administration appreciates organizations like these that take responsibility for reducing waste and improving our environment. Their efforts set a shining example for others to follow.

While great strides are being made in this area, much work remains. We must continuously work to educate and inspire more Minnesota businesses and communities to reduce waste and pollution. Together, I know we can succeed.

On behalf of the state of Minnesota, I congratulate today's winners and thank them for their innovative work that not only benefits their organizations and Minnesota's environment, but all of our citizens and future generations.



Governor Tim Pawlenty

About the Governor's Awards

Each year, outstanding environmental projects and programs throughout the state are honored through the Governor's Award Program. This year, we will recognize three categories.

- ▶ **Business and nonprofit** – This category recognizes businesses, private organizations, and nonprofits. Winning organizations have developed and implemented innovative approaches to reduce the use and release of hazardous and toxic materials at the source or have shown excellence in solid waste reduction.
- ▶ **Government or MnGREAT (Minnesota Government Reaching Environmental Achievements Together)** – This category recognizes government programs or projects. Winning organizations have shown achievements and leadership in the areas of pollution prevention, toxicity reduction, conservation of energy and water, recycling, and composting.

- ▶ **Partnerships** – This category honors superior environmental achievement by collaborations between Minnesota nonprofit organizations, businesses, public agencies, and institutions for programs or projects that benefit the environment by reducing or eliminating waste and pollution at the source.

This year's winners have demonstrated that pollution and waste prevention programs can be both environmentally and economically beneficial. They also demonstrate that improving our environment and increasing resource efficiency is a good strategy for all Minnesotans.

Award nominees are evaluated by three independent panels of judges with varied backgrounds and environmental expertise. The judges select winners based on environmental benefits, innovative approaches, level of commitment and leadership, ability to serve as a model for others, and economic efficiency.



Hallberg Engineering, Inc.

Schools for Energy Efficiency

Schools for Energy Efficiency (SEE), a division of Hallberg Engineering, works with school districts to save energy by changing behavior. SEE helps school staff identify ways the school that can potentially save energy, then engages everyone from administration to students in conserving energy. Achieving Energy Star status is one of the goals of Schools for Energy Efficiency.

Only 32 school districts in the entire nation have achieved this level of energy efficiency, 13 of which participate in the SEE program here in Minnesota. In Minnesota, 15 school districts currently participate in this program: Austin, Bloomington, Buffalo, Burnsville, Cambridge, Columbia Heights, Mahtomedi, North St. Paul, South Washington, St. Louis Park, St. Cloud, St. Paul, Stillwater, West St. Paul, and Willmar.



The Schools for Energy Efficiency Program focuses on raising awareness and educating students about energy efficiency through posters, interactive activities, and tracking progress. The elementary schools invite the Energy Hog mascot to help educate students about wasting energy, and they also form SEE Squads comprised of students that do audits of the school to make sure that lights are off in empty rooms, and that computers are shut off when not in use. High school students ride on the energy bike in science class and shut off the monitors when they are done with computer classes.

Continued costs savings from optimized energy use now exceed \$9 million. The environmental benefits include a decrease of over 422,000 tons of carbon dioxide emissions and over 245 million gallons of water. These savings will continue to grow as the school districts continue to conserve energy.





Northwest Airlines *Conserving Resources— Doing Our Part*

Northwest Airlines (NWA) established their program of fuel conservation and resource management in 2000. The primary focus of this program is their proactive



fleet modernization effort, which has resulted in a savings of more than 250 million gallons of jet fuel per year. This reduction is the equivalent of removing 500,000 cars from the road. In addition to fleet renewal, NWA has replaced fuel trucks with fuel carts at the Minneapolis-St. Paul

International Airport. These carts are stationed at each gate and connect to a system of fuel hydrants. This change reduces the need for fueling the trucks on the ground and also resulted in fewer departure delays.

NWA also focuses on recycling and reuse, reclaiming all used airplane parts and reusing as many as possible. The airline has a system for recycling all scrap metal, aircraft parts, tires, wood, chemicals, oil, paper, and cardboard generated as a result of normal operations.

The environmental benefits include an annual reduction of over 250 million gallons of jet fuel, and 2.5 million tons of CO₂. Also, in 2005 and 2006 a total of 2.6 million pounds of solid waste was recycled. Northwest Airlines has realized over \$500 million in cost savings each year since enacting these measures in 2000.





Medtronic, Inc.

Medtronic Waste Reduction Initiative

Medtronic is a medical device manufacturing business that is headquartered in Minnesota. Medtronic policy requires integration of an Environmental Evaluation Plan into all product design. This evaluation plan includes an assessment on waste generation, air emissions, wastewater, packaging, and product disposition.

Medtronic's Cardiac Rhythm Disease Management Division set goals to reduce packaging size and weight, reduce packaging toxicity, replace paper manuals with electronic manuals or compact disks, reduce packaging waste in landfills, and promote recycling. They lobbied the United States Congress and the European Commission to allow the use of electronic product manuals for medical devices. Minnesota design teams developed packaging that no longer contains PVC and uses much less material, while still meeting



Photos: Medtronic



all international codes for sterile medical equipment. Although Minnesota has not enacted legislation to regulate packaging waste and paper product literature, Medtronic believes that reducing the amount and toxicity of packaging waste, as well as product literature, is a corporate responsibility.

The environmental benefits include an annual reduction of over 500,000 pounds of packaging waste and paper and another potential 190,000 pounds if packages are reused. Medtronic has realized over \$2.3 million in cost savings over the past two years.



Medtronic



Latuff Brothers

Waterborne finishes and curing equipment in auto body repair

Latuff Brothers is a family-owned auto body shop located in St. Paul. It is the first auto body repair shop in Minnesota to transition from solvent-based paints to water-based paints.



Latuff started the process by purchasing a computer mixing program to reduce paint waste. The company next replaced the metal cups on its paint spray guns with 3M's Paint Preparation

System (PPS) cup with a plastic liner. The new system allows all of the paint in the cup to be sprayed, which reduces the amount of paint that needs to be mixed. The new cups detach from the gun, so less cleanup is required

between paint jobs, which has drastically reduced the amount of thinner used at the facility.

The switch to water-based paint required special drying equipment, so Latuff Brothers invested in the Jun-Air Qad system with variable frequency drive controllers. With the water-based paint and the new dryer system in place, paint booth cycle time was reduced by 30 minutes. These changes allowed the shop to remove their third paint booth. They now service more cars annually with one less paint booth.

Latuff Brothers now finishes 11% more cars, using 33% less energy—a savings of 1.25 million kWh of electricity. The company has also reduced hazardous waste by 38% (over 1,000 pounds of hazardous waste per year) and VOC emissions by 43% (3,000 pounds per year). By reducing waste and preventing pollution, Latuff Brothers saves approximately \$17,000 annually.





Duluth Entertainment Convention Center

Environmental Stewardship through Sustainable Practices

The Duluth Entertainment Convention Center (DECC) serves as a venue for a wide range of special events, hosting thousands of guests annually. As part of its



commitment to environmental stewardship, staff and management created an environmental mission statement (www.decc.org). Over the last three years, the DECC has worked to reduce waste, recover food when possible, increase energy conservation,

improve recycling and reuse opportunities, and change purchasing practices.

Energy conservation. To save energy, the DECC converted to fluorescent lighting, established a lights-out policy, converted to steam heating which uses excess steam from the Duluth Steam Plant, and modified its grounds-keeping practices to reduce mowing and watering.

Environmentally preferable purchasing. The DECC has changed its maintenance and purchasing area. All new products and practices are now evaluated for environmental impact. Products that reduce or eliminate toxic chemicals, can be recycled or reused, or purchased in bulk are favored over conventional items.

Waste reduction. Even leftover material from events is being captured and reused. The DECC staff have made the extra effort to create an internal materials exchange, which allows employees to post and exchange items that have been abandoned from events. One

example of staff embracing the reduce/reuse/recycle mantra is that over 275 boxboard beer containers were saved from one event. Catering staff reused these boxes as compostable utensil dispensers to feed thousands of people at the spaghetti dinner catered and hosted by the DECC each year before Grandma's Marathon. The boxes were saved and will be used again this year.

Green building. The DECC will be adding on a new hockey arena, and plans on making the arena the first LEED certified hockey rink in the nation.

By diverting close to 242,000 pounds of food from the landfill, DECC's efforts have saved over \$17,500 and 635 cubic yards of landfill space.



DECC
Duluth Entertainment Convention Center



City of Minneapolis

Minneapolis Sustainability Initiative

In 2003, leadership from the City of Minneapolis created the Minneapolis Sustainability Initiative and adopted a formal resolution to incorporate sustainability work into every department. Using this strong environmental policy as a guide, the city launched a focused campaign to create a more environmentally friendly Minneapolis. The initiative has involved thousands of people in an effort to make sustainability a part of people's daily lives citywide and a part of every city function. By creating specific indicators and numerical targets and reporting them annually in the Sustainability Report, the city is able to measure its progress and make modifications. The city has already met some of its ambitious goals.

Minneapolis leads the way in improving and protecting air and water quality: implementing an innovative stormwater management program, greening the city's vehicles, implementing a LEED policy for



new city buildings, banning mercury products ahead of state mandates, developing an innovative low-impact environmental cleaning policy, and reducing the city's global warming footprint. By linking health and the environment, and targeting key areas, links between departments have been created and creative approaches to problem solving have emerged, enabling the city to cost-effectively and proactively address current and potential issues. This is an evolving process with accountability by the city and transparency to the general public on progress integral to the program. The city's process and model for implementing the Sustainability Initiative is extremely cost effective and in many cases will allow the city to save money. As a result of this program, Sustainlane.com and others have ranked Minneapolis among the top in the nation for its sustainability efforts.





Rice Creek Watershed District

Blue Thumb–Planting for Clean Water

Blue Thumb is an innovative collaborative program originally developed by Rice Creek Watershed District as an outreach program to assist municipalities in meeting individual water quality goals. Stormwater runoff, according to the Environmental Protection Agency, is listed as the number one cause for water pollution. The Blue Thumb–Planting for Clean Water program raises awareness about polluted runoff and encourages homeowners to do their part to protect water quality by planting native gardens, rain gardens, and stabilizing shorelines using native plants. By educating citizens, Blue Thumb works to reduce excess nutrients, suspended sediment and bacteria levels, loss of fisheries and buffer areas, erosion, and the need for pesticides.



Blue Thumb does not replace existing programs but brings partners together who agree to use standardized native plant terminology and

present unified public education messages. There are currently 25 Blue Thumb partners, including professionals from local governmental units (watershed and conservation districts, cities, counties); nonprofit and community organizations; the University of Minnesota Extension; and nursery and landscape professionals.



The Bluethumb.org website contains information to help residents find out how to reduce runoff, including planting blueprints, a plant selector tool, local retailers and landscapers, grant information, how-to guides, presentations, program materials, and more.

The Blue Thumb program combines resources and helps partners minimize duplication, save time and money, and increase outreach to residents.





Honorable Mention

The City of Elk River – Elk River Public Library

The Elk River Library is a LEED Gold registered project. From the early stages, the project aimed to embody a high level of sustainable design and support the city's commitment to energy efficiency.

- More than 25% of the building materials contains recycled content.
- At least 10% of the building materials are from local sources.
- Water-saving technologies, including landscape design, reduce on-site irrigation by 50%.
- Low-flow fixtures inside the building provide a potable water savings of 30%.
- Energy efficiency designs are 60% more efficient than standard building code.
- 100% of the metal, concrete, cardboard, and wood waste from the construction project was recycled, resulting in a 58% diversion from area landfills.

The City of Farmington – Green Team

The City of Farmington's Green Team is a volunteer committee of city employees assembled to create and implement initiatives that will promote environmental awareness and responsibility.

The Green Team is evaluating existing policies and developing new policies and procedures to include environmentally responsible practices to reduce waste and conserve natural resources. The team has already worked on new standards for park equipment, enhancing internal and external recycling and waste reduction efforts, and installing energy-efficient lighting. Staff have also worked on environmental landscaping to minimize mowing and improve water quality. The team was instrumental in establishing sustainable building design standards, which to date have saved over \$33,250 per year.

Minnesota Army Reserve National Guard – Antifreeze Recycling Program

The Minnesota Army National Guard (MNARNG) Combined Support and Maintenance Shop (CSMS) located on Camp Ripley provides vehicle maintenance support for a wide variety of wheeled and track equipment.

As with any type of vehicle maintenance facility working on cooling systems, replacing dirty antifreeze with clean antifreeze is an expensive process. An antifreeze distillation unit was purchased to address this issue. The unit would clean dirty antifreeze so that MNARNG would not need to purchase as much new antifreeze in the future. For every 55 gallons of dirty antifreeze collected, approximately 20 gallons of antifreeze can be recovered. CSMS distills their own antifreeze as well as antifreeze from all other MNARNG repair facilities.

This process helps the environment because less ethylene glycol needs to be produced and fewer air and water pollutants will be released. Direct cost savings will start to accrue in less than four years.

Minnesota Army Reserve National Guard – Mattress Recycling Program

Camp Ripley needed to replace several thousand mattresses that were stored in over 400 different buildings. In prior years, small numbers of mattresses had been sent to the Morrison County landfill. However, with the large amount of mattresses requiring disposal, Camp Ripley choose to recycle the mattresses through a recycling program run by Goodwill Industries out of Duluth, Minnesota.

Approximately 40,000 pounds of metal was recycled and 100,000 pounds of cotton fill was recovered. Recycling the mattresses saved Camp Ripley nearly \$32,000.

Olmsted County – Surplus Copier Partnership Program

Olmsted County initiated a partnership contract with the local United Way agency and copier contractor, E.O. Johnson, to provide out-of-date copiers at no cost to nonprofit agencies when the county replaced its old copiers, which may have an additional 2 to 5 years of service.

The contractor agreed to refurbish and store the copiers until needed, and to provide a reasonable copier maintenance program.

Other agencies in Minnesota donate copiers as well, but Olmsted created a contract that expedites the process, resulting in the nonprofit receiving the copier much quicker. This contract serves as a great alternative to sending the copiers to a landfill and helps nonprofit organizations use their money for alternative needs.

Sherburne County Solid Waste Department – Landfill Abatement Legacy Grant

As a part of its policy to reduce Sherburne County's dependence on landfilling, the county's Board of Commissioners adopted the Landfill Abatement Legacy Grant Program, which will award grants to local units of government for using at least 25% post-consumer recycled content materials in construction of city- or township-owned buildings.

The grant program is believed to be the first of its kind in Minnesota, and offers residents an opportunity to learn more about recycled-content materials. It also increases the marketability of recycled material and will encourage more manufacturers to create products from recycled materials. Over 100 companies in Minnesota incorporate post-consumer recycled material in their manufacturing, and Sherburne County helps these companies by providing them an opportunity to showcase their products in municipal building construction. So far, three Landfill Abatement Legacy Grants have been awarded.



Saint Paul Public Schools
ISD #625
and Ramsey/
Washington
County

*Recycling cafeteria
food waste through
livestock feeding*

Saint Paul Public Schools and the Ramsey/Washington County Resource Recovery Project have collaborated to develop and implement

a large-scale food waste recycling program. Beginning with a pilot program at five sites in 2005, Saint Paul Public Schools now has an ongoing food waste recycling program at 52 sites, including all elementary schools. Over 22,500 students and 3,500 school staff have been trained in food waste recycling and will help continue the program.



Cafeteria food waste is separated by students and then is taken to a farm where it is cooked and fed to pigs. As a result, food waste

has been diverted from the trash, and also from the sanitary sewer, which diverts phosphorus from surface waters. The combined effort between Saint Paul Public Schools and the Ramsey/Washington County Resource Recovery Project has helped increase environmental awareness among students and staff, while also yielding side benefits, such as increased cleanliness and worker safety. In



addition, this partnership has resulted in a modified resource management approach for integrating food waste, trash, and recycling management that has helped slow the rising costs of managing trash.

For the 2006-2007 school year, 475 tons of food waste was diverted from the trash and 55,000 gallons of milk and juice waste was diverted from the sanitary sewer. An estimated 960 tons of food waste will be diverted from the trash and 113,000 gallons from the sewer in the 2007-2008 school year. Over the entire school year, food waste from over five million meals will be diverted from the trash and sanitary sewer. This initiative has resulted in approximately a 40% reduction in trash volume and a 15% reduction in the weight of trash, resulting in significant savings to the school district in trash hauling and disposal costs. This project truly demonstrates how a partnership can be an outstanding model for other schools to recycle food waste.



Institute for a Sustainable Future *and* St. Luke's *Healthy Food in Healthcare*

The partnership between St. Luke's Hospital and the Institute for a Sustainable Future (ISF) was established to build a preventative health model to promote and provide food, which is equally healthy from a nutritional, environmental, and community health perspective. The Healthy Food in Health Care Project is the first local, sustainable healthcare food pilot in Minnesota. This project uses education, food procurement, and a food waste program to build a model of preventative health for Minnesota and the nation.



The Institute for a Sustainable Future provides national coordination of the program, and healthy food work is one component of its ecological approach to healthcare sustainability, which includes the Green Guide for Health Care (the healthcare sector's

first quantifiable sustainable design toolkit integrating environmental and health principles and practices into the planning, design, construction, operations, and maintenance of their facilities).

St. Luke's has also begun to work with partners in the community to provide fresh local food sources. Fresh water herring and whitefish caught in local waters, including Lake Superior, are brought to the hospital by licensed fishers. Fresh bison, local produce, and milk without added hormones are also served at the hospital and sourced locally whenever possible. Cookies are now purchased from a local bakery located only four



blocks away. For the past two years, St. Luke's annual holiday dinner has provided local, sustainable food while educating its patients.

Additionally, St. Luke's is participating in a food waste diversion program with Second Harvest. Food that can no longer be served but is still edible is set aside for Second Harvest Food Bank pick up by certified "Serve Safe" drivers. These drivers pick up twice a week, and throughout the year over 10,000 meals are saved. Leftover food from the kitchen that cannot be reused is composted at the local facility.

St. Luke's Hospital has provided national leadership by becoming the first hospital in the country to sign a Healthy Food in Healthcare Pledge. The hospital provides a large display in its cafeteria educating patients, staff, and visitors about the connection between food production, distribution, and health. As a result of its efforts, St. Luke's Food Service staff have been featured in *Time Magazine*, Minnesota Public Radio, and a variety of trade press.

The hospital has also seen a 15% savings in solid waste pick-up fees.

Institute for a
Sustainable
Future

THE PATIENT.
ABOVE ALL ELSE.





LHB, Inc. and Minnesota School District # 381

Green building design of new Two Harbors High School

Lake Superior School District-ISD 381 and LHB partnered to define the program and priorities of the new grade 6-12 high school building. The facility is 181,000 square feet and is designed into a 70 acre site at the city limits of Two Harbors. An advisory committee was created for the design process, and the whole community was involved. The result of school and community input is a

cohesive facility allowing flexibility, growth, separation of grade levels, and secure after-hours access for community lifelong learning and general public use.

High-performance features were used throughout the building and site to improve water quality, energy



Photo: John Gregor, Coldsnap Photography

efficiency, and waste reduction for both construction and future use. All aspects of the building process were examined to optimize cost savings, make the building as efficient and environmentally friendly as possible. The building has proper solar orientation to control heat gain and reduce glare and was also located to optimize views of Lake Superior and handicap accessibility while minimizing wetland disturbance and promote storm water collection.

The building does not tie into the stormwater system, instead stormwater is dealt with entirely on site—giving the site a lower release rate than predevelopment.

The facility is operating more than 40% better than building code. LHB assisted the school district in documentation of the Energy Star rating system. The school building was able to

receive a rating of 85, which is well above standard limit. The design firm, LHB, is able to feature the facility as a premier energy performer that was built cost effectively and carries an aesthetic look that the client desired. The school and community benefit from a beautiful quality facility that allows more dollars to be spent on curriculum and class size instead of future repair, energy bills, and maintenance. This project saves approximately 1,800 gallons of water per year, 6.7 million Kbtu per year, and reduces 2.2 million pounds of CO₂ emissions. These reductions save the school district approximately \$85,700 per year, all while keeping the cost to build the school lower than the state and national averages.



Quality Bicycle Products and LHB, Inc.

Quality Bicycle Products expansion

Quality Bicycle Products (QBP) and LHB, Inc. collaborated to design a 100,000-square-foot warehouse and a 35,000-square-foot office space. The office, located on the south edge of Highland Park, is the highest rated LEED certified building in Minnesota.

In addition to being housed in a state-of-the-art building, Quality Bicycle Products also participates in many waste reduction activities. Employees are strongly encouraged to use reusable dishes and silverware. Food-soiled paper and food scraps are fed to composting worms. The company has also identified innovative ways to recycle tires, tubes, plastic straps, shrink wrap, and pallets. QBP has a commuter program where employees are financially rewarded for taking alternative transportation to work.



Education is a part of the Quality Bicycle Products' mission. New employees receive training about their responsibilities within the company's commitment to waste and energy reduction. It offers environmental walking tours of its facility to educators, school children, college students, architects, and anyone else who might be curious about ways to achieve environmental sustainability.

The environmental benefits include a savings of over 2.4 million KBTU, over 45,000 gallons of water per year, and a reduction of 4,600 pounds of solid waste. Energy cost savings total \$12,000 per year, resulting in an 11-year payback to the company for its initial investment.





Advanced Granulating Solution, Inc. and Minnesota Nursery & Landscape Association

Horticultural and agricultural plastic recycling program

Advanced Granulation Solution (AGSI) is a Minnesota-based plastics recycling firm. AGSI recycles all grades of PVC, PS, PET, HDPE, and LDPE plastics. Their goal is to minimize demand and dependence on petroleum by recycling all horticultural and agricultural plastic in the five-state region in a way that is responsible, sustainable, and replicable.

Minnesota Nursery and Landscape Association (MNLA) is the region's largest green industry trade association



with more than 1,500 member businesses including garden centers, landscape contractors, designers, irrigation contractors, and lawn, tree, and garden services. MNLA's mission is to help these organizations operate their businesses more successfully.



AGSI and MNLA partnered to create a recycling program for horticultural plastics. MNLA members ship their waste plastic to 10 different industry suppliers on their empty trucks to utilize the transportation system that already exists. AGSI travels to these central supply locations to grind the plastic on-site, and the product is shipped back to the AGSI warehouse where it is sold to various regional end markets. One of the common end markets is the plastic lumber that is becoming very popular for residential decks.

The environmental benefits include diverting 883,000 pounds of plastic from landfills (610,000 pounds of plastic pots and 240,000 pounds of clear greenhouse film). The savings are estimated to be more than \$34,500 in waste disposal costs.



A special thanks to our judges, who generously donated their time and expertise.

Governor's Awards–Business and Nonprofit

Kent Roberson, Sappi Cloquet
Caleb Werth, Resource Recovery Technologies
Mary Morse, Neighborhood Energy Connection
Doug Shoemaker, MN Renewable Energy Society
John Bilotta, U of MN Extension
Dawn Westin, Unisys
Cindy McComas, MnTAP

Governor's Awards–Partnerships

Mike Reznicek, Tennant Company
Margie Vigoren, City of Plymouth
Erin Bowley, Community POWER
Mark Blaiser, Waste Wise
Mike Nevala, Met Council
Mary Overlee Olson, Steele County
Jeff Ledermann, MPCA
Mike Vennewitz, RETAP

Governor's Awards–MnGREAT

Angie Hong, East Metro Water Resource
Education Program
Steve Bragg, J.M. Waller Contractor for the
U.S. Army Reserve
Amy Ulbricht, Anoka County
Jack Stansfield, Olmsted County
Jeanne Giernet, MPCA
Anita Mujumdar, Minnesota State Colleges
and Universities
Colleen Sinclair, City of Coon Rapids
Dale Bowman, RETAP
Mary McReynolds, St. Louis County

Photos (except as noted): Paul Andre, MPCA



**Minnesota Pollution
Control Agency**