

MNSCU Combined State Pollution Prevention Summary Report for Fiscal Year 2006

Part 1: College/university Descriptions

Alexandria Technical College, Alexandria, MN

Alexandria Technical College (ATC) employs approximately 250 faculty and staff members at two locations; the Main Campus and also the Interior Design facility, which is located off campus. The campus consists of seven staffed buildings, including the off campus Interior Design facility. For purposes of this report, all buildings shall be considered. Members of the ATC staff receive yearly training on hazardous communications and waste management.

Minneapolis Community & Technical College (MCTC)

800 employees work at the four Minneapolis Community & Technical College (MCTC) sites including our Main Campus (Minneapolis), Aviation Center (Eden Prairie), Transportation Center (Minneapolis) and the Center for Criminal Justice and Law Enforcement (St. Paul). Affected staff and faculty have received Hazardous Waste Training and Laboratory Safety Training.

Northwest Technical College, Bemidji, MN

Northwest Technical College has approx. 70 Staff and Faculty that work at two location sites with over 1000 learners. In 2004 NTC became an independent college and is part of an alliance with Bemidji State University. NTC began as a Vocational Technical Institute in 1965 with 2 programs offerings that have expanded to 45 programs in business, health, industrial arts, and technology. The NTC main campus of is located on 26 acres with a one story main building of approx. 90,000 s.f. and two annex buildings, at 905 Grant Ave. S.E. in Bemidji. Ground breaking for a new 12,507 s.f. Allied Health Addition on the N.E. end is slated for the summer of 2005 with completion in 2006, followed by a remodel of 10,500 s.f. of vacated space. Project plans are in place for a new 27,500 square feet, two stories, Technology Center on the N.W. end of the main building in 2007. The second site is a satellite location on the Red Lake Indian Reservation located at the New Beginnings building in Redby, MN. Northwest Technical College does not operate the facility in Redby so I am only reporting for the Main Campus location. We have not received P2 training in the past year.

St. Cloud Technical College, St. Cloud, MN

St. Cloud Technical College is located at 1540 Northway Dr., St. Cloud, MN and has a staff of approximately 206. This report is for St. Cloud Technical College only.

Minnesota State University, Moorhead

Minnesota State University Moorhead (MSUM) currently employs approximately 325 full time faculty, 150 part time faculty, and 325 staff members. These employees serve an enrollment of over 7,600 students. MSUM has two facility locations, a 120-acre main campus with 36 buildings, and the Regional Science Center, a 300 acre-nature research center located adjacent to Buffalo River State Park. This report reflects both locations and includes all departments within the campus community. Education is ongoing throughout the year for faculty, staff and students with respect to pollution prevention, waste reduction and recycling.

Anoka Ramsey Community College, Coon Rapids and Cambridge, MN

Anoka Ramsey is a Community College with campuses in Coon Rapids and Cambridge. Our staff consists of an average of approximately 550 personnel. Anoka Ramsey Community College consists of two campuses. This report covers both campuses. The staff has not received any P2 training.

St. Cloud State University, St. Cloud, MN

St. Cloud State University (SCSU) employs full- and part-time approximately 1600 administrative, teaching, clerical, and technical maintenance personnel. The campus consists of 42 buildings and is situated on over 100 acres. For purposes of this report, all campus locations will be included. Members of the SCSU staff are receiving an increasing level of training in the areas of pollution prevention and recycling. During the past few years the services of an outside consulting firm, MacNeil Environmental Inc. (MEI), have been expanded to better address this training issue. They now provide some MS4 information/training focusing on education about storm water pollution prevention on campus and in cooperation with the City of St. Cloud. Consulting costs keep rising and SCSU is moving to an in house staff to replace MEI in Sept. 06.

Riverland Community College

Riverland Community College has four campuses in three cities located in southern Minnesota- Albert Lea, Austin, and Owatonna. This report is for all four sites.

The college employees approximately 300 full-time and part-time faculty and staff. The staff has not received any formal pollution prevention training.

Bemidji State University

Average Employee Count: Faculty and staff – 560; Student Employees –589

Staffed Facility Locations: 2 - BSU main campus and Center for Research and Innovation

Report Application: All BSU facilities are included in this report.

Staff did not receive any specific P2 training, but members of the administration, faculty and staff and students did attend the inaugural conference of the [Upper Midwest Association for Campus Sustainability \(UMACS\)](#) on the College of Saint Benedict Campus on May 17-19, 2006. UMACS was established to encourage the sharing of information and resources on campus sustainability through networking, cooperative research, and by hosting regular meetings to bring together academic and operations people from a variety of campuses.

Central Lakes College

Central Lakes College has four campuses in two cities located in central Minnesota- Brainerd, and Staples. This report is for all four sites.

The college employees approximately 400 full-time and part-time faculty and staff. The staff did not have any formal pollution prevention training.

Part 2: Policy and Regulatory Activities

Alexandria Technical College, Alexandria, MN

Alexandria Technical College employs a continuous improvement process that promotes excellence in environmental management and stewards towards energy efficiency by using the implementation of environmentally friendly products and waste stream reduction programs both internally and with our vendor partners. ATC finds audio and video conferencing, on-line employee education products and electronic transfer of reports and data to be energy and time efficient processes that reduce our energy and consumable product consumption.

Minneapolis Community & Technical College (MCTC)

In order to regulate pollution prevention we have updated our Chemical Hygiene plan to control chemical procurement, reduced waste streams and reduced our hazardous waste generation to a Very Small Quantity Generator. Building and Hazardous Waste Inspections are completed weekly to ensure compliance.

Northwest Technical College, Bemidji, MN

Northwest Technical College does not have a written policy or regulations that dictate or keep track of pollution control. Our desire for energy efficiency has a direct impact on pollution reduction. We do have an understanding in our Information Technologies (IT) Department that all equipment that is purchased is the most energy efficient available and energy star rated. We do encourage the use of electronics for communication in the forms of e-mail, teleconferencing, interactive television, faxing and hosting meetings on campus to control vehicle usage. The Plant Operations (PO) has an unwritten policy of using only low VOC water based paints, floor seals, sealants and caulks for maintenance and repair. PO also uses only energy star rated replacement motors. PO also makes sure that all renovations and building upgrades, remodels and additions are energy efficient to save operating costs and at the same time reduce our use of energy and pollution generation. The Campus recently entered into an energy management and reduction services agreement with Energy Services Group (ESG) that will guarantee a reduction in our energy consumption and pollution generation. A roofing project that completely replaces the roof with new insulation and a MNSCU Standard covering was started last summer and completed in the spring of 2006. It was initiated with heat loss and infrared scans that showed considerable heat loss. The entire heating system was upgraded this winter with new high efficiency boilers, and a new digital HVAC temperature control system. An entire building lighting and electrical retrofit was done this past year that includes new energy efficient main service board, T8 lighting, occupancy controls, vending machine controls.

St. Cloud Technical College, St. Cloud, MN

We use electronic communications and teleconferencing with our clients whenever possible. We have switched to electronic application procedures when registering for classes. Students are encouraged to use the electronic payment system whenever possible. High efficiency office equipment is purchased whenever possible.

Minnesota State University, Moorhead

Minnesota State University Moorhead is committed to the preservation, protection, and where possible, the enhancement of our environment in all matters of operation. This includes the obvious goals of meeting or exceeding all applicable local, state, and federal requirements; as well as

fostering responsible stewardship by our personnel of all natural resources both in the work place and at home in the community. We promote a proactive policy in environmental matters - one that anticipates and addresses problems before they become a regulatory matter.

MSUM recognizes the strong environmental impact it has and is committed to developing the means to reduce its use of toxic materials, release of pollutants, and generation of hazardous wastes. Maximum results will be achieved through the education of the campus community, and continued investigation and implementation of environmentally friendly products and programs.

MSUM is constantly working towards reducing our environmental impact as a community. Students, faculty, and staff receive education through workshops, electronic newsletters, etc. about environmental policy and awareness to ensure the quality of participation on campus in environmentally healthy practices. Departments are encouraged to purchase recycled goods, reuse materials, conserve energy, and properly dispose of discarded materials. MSUM currently reduces paper volume by using campus e-mail, promoting teleconferencing, utilizing pod casting & vacating, providing classroom materials online, and by making registration and other administrative procedures paperless.

A large part of the environmental duties for MSUM is to set an example for the surrounding community, as well as nationwide academic communities. This model is presented each and every day, and continues to grow and develop as environmental policies improve and gain recognition.

Anoka Ramsey Community College, Coon Rapids and Cambridge, MN

Anoka Ramsey Community College practices pollution prevention in all of our activities including our labs, maintenance, purchasing environmentally friendly products and those that reduce hazards. Electronic communications are encouraged with all of our business contacts and vendors.

St. Cloud State University, St. Cloud, MN

Pollution prevention continues to be a factor in purchasing and implementation of new procedures. In addition, SCSU procurement policies demand office paper with 30% minimum total recycled content and 30% post-consumer fiber content. Bath tissue is 95%, or more, recycled/post consumer fiber.

Riverland Community College, MN

Currently Riverland encourages our employees to car pool as an alternative to single-occupancy vehicle commuting. We are now requesting that departments report monthly the number of miles they are carpooling and how many are participating. Employees are encouraged to have teleconference meetings between the campuses whenever possible to cut down on travel.

Whenever possible we purchase energy-efficient appliances to reduce state-energy uses at our college. All lighting fixtures have been retrofitted with energy-efficient ballasts and bulbs. We have an agreement with our local utilities to curtail our electricity use by 163 kW per day in Austin whenever we are requested to. In Albert Lea, we have a propane back-up system that we use when asked by the local utilities. In November 2005 in response to the Governor's Executive Order 05-16 we lowered all thermostats to the recommended guidelines. In spring 2006 all thermostats were raised to the recommended guidelines. We will continue this practice as the seasons change. By

monitoring academic classes and campus functions we are able to set units back to unoccupied temperatures through our computerized energy management system.

Over the last few years we have encouraged the faculty to use environmentally friendly products and chemicals that would not have to be treated as a hazardous waste when disposing of them. We have succeeded in going from a Small Quantity Generator to a Very Small Generator.

Bemidji State University

Bemidji State University has established an environmental policy statement that states in part: In our general operations, Bemidji State University will strive, wherever possible, to:

1. Conserve natural resources and support sustainable practices,
2. Conduct affairs in ways which safeguard the environmental health and safety of students, faculty, staff, and members of the broader community,
3. Reduce the generation of wastes and the use of toxic substances and promote strategies to reuse and recycle those wastes which cannot be avoided; and purchase renewable, reusable, recyclable and recycled materials.

In pursuing our educational and research missions, Bemidji State University will strive, wherever possible, to:

1. Foster an understanding of and responsibility for the natural environment,
2. Convey knowledge regarding environmental and health issues relevant to various academic disciplines,
3. Encourage environmental research,
4. Conduct teaching and research in an environmentally responsible way,
5. Provide a forum for the open flow of information within the university community and the community at large regarding environmental issues and their relationships to other social issues.

The complete statement can be viewed on the web at http://www.bemidjistate.edu/ehs/content/bsu_env_plcy.pdf

As a 2005 signatory of the Talloires Declaration, BSU has made a formal commitment to protecting the environment and to pursue an environmental agenda. More information about the Talloires Declaration can be found at http://www.ulsf.org/programs_talloires.html.

Central Lakes College

Currently Central Lakes College encourages our employees to car pool as an alternative to single-occupancy vehicle commuting. Employees are encouraged to have teleconference meetings between the campuses whenever possible to cut down on travel.

Whenever possible we purchase energy-efficient appliances to reduce state-energy uses at our college.

Some lighting fixtures have been retrofitted with energy-efficient ballasts and bulbs resulting in a rebate for the Staples Campus from Todd Wadena Cooperatives. We have an agreement with our local utilities to curtail our electricity and natural gas. We have a propane back-up system at Brainerd that we use when asked by the local utilities. Staples campus has a 1000 gallon fuel oil

reserve. We have finished an energy audit and are currently working with Energy Management Services to re-lamp all our buildings at Central Lakes College.

Over the last few years we have encouraged the faculty to use environmentally friendly products and chemicals that would not have to be treated as a hazardous waste when disposing of them. We have succeeded in going from a Small Quantity Generator to a Very Small Generator.

Part 3: Quantifiable Measurements for Activities Satisfying Executive Order 04-08

- 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.

Alexandria Technical College, Alexandria, MN

Alexandria Technical College currently participates in the State vehicle lease program. Our current fleet of leased vehicles has been upgraded to include five vehicles that are more fuel efficient. ATC has eliminated four vehicles from their fleet to reduce fleet capacity of fuel inefficient vehicles. As office equipment is replaced, we strive to find more efficient equipment. More efficient flat screen computer monitors have replaced most of the CRTs at our facilities to reduce energy consumption. Seven new energy efficient roof-mounted HVAC replacement systems have been installed during the reporting period.

Energy conservation strategies have been a major focus for ATC's Facilities and Maintenance Department. Our continuous energy conservation program includes winterizing all overhead and exterior doors each fall and replacing T-12 fluorescent lighting with a T-8 fixture. The T-8 fixture is 30% more energy efficient than the T-12 model. Our team has replaced one-half of the exterior windows in our main facility with more energy efficient models. This is part of a phased plan that will continue until all of the exterior windows have been replaced. More energy efficient burner units are purchased to replace nonfunctional units on our heating system. A company was contracted to calibrate and tune up all of the heating system boilers during the reporting period.

Our Facilities Maintenance Department has converted most of their cleaning products from aerosol sprays to either pump sprays or squirt bottles to reduce our generation of and exposure to VOCs. This has been communicated to our staff so that they may make informed decisions when purchasing these products.

Landscaping of newly developed areas employ xeriscaping designs to reduce the use of gasoline-powered maintenance equipment, fertilizers and also to reduce fire hazards.

Minneapolis Community & Technical College (MCTC)

- c. Encourage employees to consider alternatives to single-occupancy vehicle commuting.
 - c. 2005 - MCTC is in the process of encouraging employees to consider alternatives to single – occupancy vehicle commuting. We offer discounted bus passes, free motorized vehicle parking and bike racks.
 - c. 2006 – MCTC is continuing to encourage alternatives to single occupancy vehicle commuting. We have also installed 50 new bike racks and employees have the option of 4 10 hour days to cut down on commuting.
- 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.
 - f. 2005- MCTC is also in the process of procuring and using products with the lowest potential to contribute to air pollution. Our products are low in volatile organic compounds (VOC's). Examples include: Stride Citrus HC which is GS-37 certified and has 0g/L VOC, Glance NA is GS-37 certified and has 0.1 g/L VOC and Freedom Stripper has 100.7 g/L VOC (this was a reduction from the Envirosolution Stripper).
 - f. 2006 – MCTC is continuing to procure and use products with the lowest potential to contribute to air pollution. In addition to those in 2005 we have procured the following: SP Straight Seal which is a non-solvent sealer which lowered VOC's by 22% or 105g/L over the previous sealer and SP Green Solution which will lower the VOC's over JP Freedom by 39%.

Northwest Technical College, Bemidji, MN

- a. We have reduced our fleet of travel vehicles from 11 down to 3 in the past 2 years because of off campus meeting reductions and the promoted use of electronics for meetings and communication. One of the 3 remaining vehicles in the line-up is E-85 rated, and is a Travel Management lease vehicle. The other two are campus owned. A list of all Minnesota E-85 supplying fuel stations has been supplied in the Travel Management vehicle, with a note to only refuel with E-85. The vehicles are tuned and maintained on a regular basis and all pollution control equipment is maintained for peak operating efficiency. Reduction in travel has been substantial, but has not been tracked or substantiated due to staff and budget reductions.
- b. E-85 has been recently introduced in three Bemidji fuel stations.
- c. Faculty, Staff, and Administration are encouraged to use alternative electronic communication. Due to lack of adequate staffing and budgeting there are no reduction figures from a standard to calculate.
- d. Energy Star rated office equipment and replacement/repair for HVAC equipment is being done.
- e. In the past year Energy Services Group located at 15500 Wayzata Boulevard, Suite 1003, Wayzata, MN 55391 (952) 473-3162 entered into a contract with Northwest Technical College and MnSCU to provide a guaranteed energy and cost saving program. They are monitoring usages of all of our recent building, lighting and HVAC upgrades and can provide detailed cost and usage analysis. We removed old boilers and installed 3 new high

efficiency boilers (90%), and converted from a steam system to hot water. A new computerized, digital, HVAC control system was installed that utilizes multi-point space occupancy, and time inputted technology control. A complete building lighting upgrade was done with a new digital controlled main power panel, energy efficient lighting with motion detector controls, new LED exit lighting, vending machine controls, and one high efficiency rooftop replacement unit that supplies HVAC to the computer labs. A complete new roof replacement project started this summer that will bring the insulation and skin up to the MnSCU roof standards. Also in the roofing project are wind breaks for the front entry and new energy efficient windows in the entry and atrium area. Duct work was professionally cleaned in the spring of 2006.

- f. We do purchase low volatile cleaning supplies and use water based paints, floor sealers, and carpet cleaners. We use a licensed pest control service, (Ecolab). We have not used fertilizers for at least 5 years. Our Automotive and Automotive Machine programs have changed from solvent to water based parts washers. They have purchased and are using an antifreeze recycling machine. They use absorbents and mats that are recycled Batteries, tires, metals, and oils/filters are recycled. The Dental program recycles their heavy metals.
- g. We use 62" and 90" lawn mowers to reduce the amount of time spent with gas engines running. We have added paver patio areas and sidewalks around the building to reduce the amount of trimming time required. We do not know of any air alert days in our community at the present time. We use a brush mounted sweeper in the winter to minimize the amount of sidewalk de-icers.
- h. We purchase our electricity through Ottertail Power Company.

St. Cloud Technical College, St. Cloud, MN

We lease our vehicles from Travel Management Division, what they purchase is what we use. We refuel our leased vehicles with the fuel recommended by Travel Management Division; they are refueled with the cleanest fuel available. While staff is on college business carpooling is encouraged and practiced.

We use an energy management system that helps improve the efficiency of the HVAC system and improve indoor air quality. We are in the process of replacing the ballasts in the lights with electronic ballasts. The campus lights are on motion detector sensors so the lights turn off when they are not needed, this conserves electricity. Before building the new St. Cloud Technical College addition, Energy Design Assistance, by Conservation Wise from Xcel Energy, helped design the new facility with efficiency in mind to lower energy bills by an average of 30 percent. Energy efficient equipment used included:

- Office and classroom occupancy sensor lighting controls.
- Alternative classroom and office lighting designs
- Premium efficiency supply/return fan motors.
- CO2 control of outside air.
- Lo E clear2/alum frame windows
- R25 roof insulation
- R16 wall insulation

We continually review our products and use the most environmentally friendly products available in our labs, classrooms and maintenance area.

Planting of trees and building expansion have reduced the need for use of gasoline powered equipment, less mowing.

Pollution Prevention Activities in the past year include ongoing programs and practices that deal directly with the areas checked in the table. We have programs to recycle, reuse or substitute, when possible, the chemicals and materials used on the campus that may pollute the environment.

Minnesota State University, Moorhead

MSUM is actively participating in all eight areas of MN Executive Order 04-08. However, reporting of quantifiable measurements is provided for only two specific areas: Landscaping & Renewable Energy. The remaining six activities for executive order 04-08 are discussed in Part 4: Pollution Activities during the Fiscal Year.

Anoka Ramsey Community College, Coon Rapids and Cambridge, MN

Last year we committed to two activities to address executive order 04-08. They were items a. and b. pertinent to purchase or lease of fuel-efficient vehicles/least polluting vehicles and refueling vehicles with cleanest fuel available.

St. Cloud State University, St. Cloud, MN

St. Cloud State University is moving toward commitment to the full a-h range of Executive Order 04-08 activities as follows.

Note: Much of our progress is general only, (currently very expensive to qualify with hard specifics), as we study and promote system changes to efficiently capture this type of information as we move toward reliable benchmarking and control within an "Academic Freedom" parameter environment.

Virgin paper use of about 850 reams (4,250 #) of colored paper used in our student union copy shop was close to the 838 reams used last year. (Where feasible, recycled color paper was used.) All of the white paper used in that copy shop was standard campus recycled paper of minimum 30% recycled content and 30% post-consumer fiber content. Campus consumption of this standard recycled paper stayed about the same as last year about 47,400 reams (or 237,000 pounds). More data will be sought on 100% post-consumer fiber content paper usage possibilities.

- a. SCSU is focused on purchasing/leasing the most fuel-efficient and least polluting vehicles that meet our operational needs. We've gone from 16 E-85 capable motor pool vehicles to 18 of them as we have replaced our 2 highest mileage and dedicated Public Safety vehicles. (We have 25 total motor pool vehicles after our 2 new E-85 (Taurus 2005 purchase). Meanwhile, E-85 fuel usage for this fiscal year has remained within 50 gallons of last fiscal years totals of 13,500 gallons. One 15 passenger van was replaced with a 12 passenger unit. Grounds Maintenance and Athletic Departments are experimenting with golf cart sized/type vehicles also. Everything is being done within the limitations of overall total cost control and remaining economic life. (This presently limits hybrid considerations; but, we are making the effort). Air Emission reduction calculations are not shown because they are pretty much a wash with virtually the same E-85 fuel usage (within 50 gallons of last fiscal years total of 13,500 gallons, in spite of an increase of E-85 vehicles from 16 to 18 totals).

- b. SCSU is promoting E-85 usage also by making campus refueling with it more convenient. This is in addition to 2 more E-85 vehicles as described in a. above.
- c. SCSU encourages employees and students to consider alternatives to single-occupancy commuting by co-sponsoring free bus rides with St. Cloud Metropolitan Transit Commission (MTC). Ride shares and car pools are also encouraged and promoted.
- d. SCSU purchase of "Energy Star" appliances and office equipment is encouraged to reduce state energy use. Our IT and Computer Store technicians and managers are a vital part of SCSU controls and Energy Star sleep mode encouragement to promote reduced state energy use compliance. As is strict review of leased or purchased copiers and other office machines. Future SCSU rental unit appliance replacement purchase planning is being challenged to incorporate energy considerations.
- e. SCSU employs energy-conserving strategies in our buildings. For instance, Centennial Hall Renovation is underway with special Design/Engineering contracts and Excel Energy Utility specialist involvement to ensure life cycle energy savings. This joint planning has also earned us project rebates of up to \$14K. Memos encouraging heating energy conservation and retrofit projects such as new more energy efficient dorm window replacement are also underway while we become more focused on better building design. PAC heating control valves are being replaced as part of energy improvement.
- f. SCSU actively procures cleaning and painting products based on potential air pollution. Bleach is being restricted. Surface wetting and liquid pump sprays are promoted over aerosols. VOCs are discouraged with a special review committee and O/EHS participation to ensure substitution or replacement. Latex paint is promoted with oil based paint use very restricted.
- g. SCSU is experimenting with landscaping and prairie growth which reduces gasoline use.
 - i. SCSU is experimenting with wind generated electricity provided through Excel Energy. Investment is minimal to promote learning opportunities which will help balance higher cost.

Riverland Community College

Riverland's first commitment to Executive Order 04-08 was to encourage employees to refuel state-operated vehicles with the cleanest fuel available. In May 2005, our Truck Driving program began using Bio-Diesel fuel (less than 500 parts of sulfur per million) in 45% of its trucks, compared to using regular diesel fuel that is 1300 parts of sulfur per million. This year we are using it in 100% of our trucks. This fuel does not work as well in real cold weather, so when weather permits we will use the cleaner fuel.

The second commitment was to mow some areas of our campus less than usual. Approximately 8 acres are being mowed less in Austin (estimating 3 hours of tractor use and 5 gallons of fuel per time) In Owatonna, 4 acres are prairie grasses that require very little mowing or care.

Bemidji State University

Employ energy-conserving strategies in state-owned or leased buildings – in progress.
Purchase electricity generated from renewable sources – initiated purchase of wind power energy blocks in September 2006.

Central Lakes College

Central Lakes College's first commitment to Executive Order 04-08 was to purchase or lease the most fuel-efficient and least polluting vehicles that meet the operational needs of the state department. In June we purchased three vehicles that have capabilities to burn E85 fuel.

We have installed a furnace that will burn corn at our Ag Facility. The payback for the furnace is expected in 2 to 3 years.

The second commitment was to employ landscaping that reduces the need for gasoline-powered maintenance equipment. We have reduced our maintained grounds by 4.5 acres by planting prairie grass and building ponds and gardens. We have an ongoing commitment to use prairie restoration plots and gardens college-wide.

Part 4: Pollution Prevention Activities during the Fiscal Year

1. Absorbents

Northwest Technical College, Bemidji, MN

Our Automotive and Automotive Machine programs use absorbents and mats that are recycled.

Minnesota State University, Moorhead

MSUM continues to utilize cloth-type pads and drip pans whenever possible. These absorbents are cloth-type rags, pads, & socks and are used primarily in Printing Services, Physical Plant, and Dept. of Art & Design. Launderable rags are available and used at some locations.

St. Cloud State University, St. Cloud, MN

Absorbent pad and pans or other similar products and launderable rags are increasingly available and used at SCSU. Absorbent materials to contain hazardous chemical spills near floor drains are being supplemented with drain covers and increased training and inspections.

2. Adhesives

Minnesota State University, Moorhead

MSUM currently enforces the use of only low or no VOC products within buildings to primarily accommodate people with Indoor Air Sensitivities. Products containing VOCs are reviewed prior to use by the Dept. of Environmental Health & Safety so that proper arrangements can be made to minimize personal exposure and indoor air pollution. Contractors are educated on the Indoor Air Sensitivity Program and are expected to comply.

St. Cloud State University, St. Cloud, MN

As a matter of practice, SCSU contractors are required to use adhesives that do not generate hazardous vapors. This is not always possible to enforce as often as we would like. (Specific products that provide superior adhesion are sometimes warranted.) But we keep reducing their usage as we find alternatives. The primary goal is to employ a product that will not produce Volatile Organic Compounds (VOC's) that may cause temporary air quality concerns with building occupants. This last year suspected VOC's from replacement floor tile under a new print shop machine reduced daily initial start up run quality for weeks.

3. Air Quality, CFCs

Minneapolis Community & Technical College (MCTC)

Low VOC's:

2005 - Purchasing products with the lowest potential to contribute to air pollution is ongoing and will continue in fiscal year 2006. Examples include: Freedom Stripper 100.7 g/L VOC changed to Spartan GreenSolutions Stripper 61.0 g/L VOC, Spartan Sheen 17 Floor finish 45.0 g/L to Spartan GreenSolutions finish 0g/L VOC and Spartan Extraction II 20.9 g/L to Clean By Peroxy 0 g/L.

2006 – MCTC is continuing to purchase products with the lowest potential to contribute to air pollution. In addition to those in 2005 we have purchased the following: SP Straight Seal which is a non-solvent sealer which lowered VOC's by 22% or 105g/L over the previous sealer and SP Green Solution which will lower the VOC's over JP Freedom by 39%.

St. Cloud Technical College, St. Cloud, MN

In our Automotive Technology and HVAC technician programs, students learn to work with refrigerants under direct supervision of the instructor following all regulatory guidelines using proper equipment and reclaiming procedures.

Minnesota State University, Moorhead

All air handling units/heating systems and drains are routinely inspected and maintained. Maintenance performed on systems containing CFCs are conducted by certified technicians. CFCs are completely recovered, recycled, and documented. Appliances containing CFCs are recycled through approved vendors.

St. Cloud State University, St. Cloud, MN

SCSU continues to go beyond recycling Freon. A central Chiller Plant costing over \$3 million was recently put online. It has added capacity to existing systems and reduced CFC's by using R22 refrigerant. The University has been able to continue retiring cooling towers and R12 & R113 chillers as more buildings are linked to the chilled water system.

4. Antifreeze

Northwest Technical College, Bemidji, MN

Our Automotive and Automotive Machine programs have purchased and are using an antifreeze recycling machine.

Minnesota State University, Moorhead

All antifreeze products are recycled by contract with a local reclamation service.

St. Cloud State University, St. Cloud, MN

SCSU is moving away from using antifreeze to winterize cooling coils (they are drained and ducted to warm air) and is using more controls to reduce fleet use of antifreeze.

Central Lakes College

Central Lakes College has an agreement with Safety Kleen to recycle our antifreeze.

5. Audits

Minnesota State University, Moorhead

MSUM recently completed a university-wide energy audit. Energy Services Group examined electricity use in both indoor and outdoor lighting, assessed the steam heating system for steam traps, and performed a first-ever water usage audit. Reducing outdoor lighting needs for several hours during the night and implementing motion sensors indoors to save energy are several goals MSUM hopes to achieve. The audit is completed, however, there is no quantifiable data as of yet to start making improvements throughout campus. The report's data and campus improvements will be included in the 2007 P2 summary report.

The Department of Environmental Health and Safety and Physical Plant staff periodically conduct internal audits of university facilities. These audits cover such areas as hazardous waste, storm water management, storage tanks, laboratory procedures, and energy consumption. Individual departments are also asked and encouraged to self-audit periodically.

St. Cloud State University, St. Cloud, MN

SCSU Audits - MacNeil Environmental Inc. has performed increased environmental audit functions as part of their Environmental Health & Safety (EHS) contract with SCSU. These relate to elements of hazardous waste disposal, storage tanks, storm water and the OSHA laboratory standard, which encompass pollution prevention. The SCSU Chemical Hygiene Officer (CHO) has received specialized off site Laboratory Safety training this past year. He has become increasingly instrumental on hazardous waste audits, waste prevention planning, hazardous waste removal, and leading emergency response/evacuation planning. Departmental and MnSCU support, staffing focus, and investigative activities in these areas have also increased!

SCSU has continued to implement the suggestions of the latest Minnesota State Colleges and Universities (MnSCU) facilities condition survey. Survey environmental recommendations included specific purchases and capital/repair projects. These effect HVAC and electrical system revisions and both energy and water conservation measures. The University is continuing to benefit from their insights.

6. Automotive Fuels

Northwest Technical College, Bemidji, MN

E-85 has been recently introduced in three Bemidji fuel stations.

Minnesota State University, Moorhead

The automotive fleet is available to faculty, staff, and students. Due to the broad nature of vehicle use and the lack of area stations providing E-85, it continues to be difficult for the university to monitor the amount of E-85 fuel purchased. The fleet includes 10 sedans, two minivans, and three 12-passenger vans. Two sedans and two minivans are equipped for E85 use. The use of E85 fuel is encouraged. To help reduce emissions and save energy the Physical Plant uses a GEM E-4 electric car for use on the main campus while the Athletics Department uses three GEM E-4 cars to travel throughout campus. The cost to operate the GEM E-4 cars is approximately \$30 per year averaging 50 miles per week, whereas a gas automobile would require a cost of approximately \$400 for the same use. During summer months bio-diesel is primarily used in the Physical Plant's lawn tractors, skid steer and pay loader equipment, trucks, and other heavy equipment. During winter months these same vehicles are fueled with low-sulfur diesel fuel. The Physical Plant also operates a propane fueled truck.

Anoka Ramsey Community College, Coon Rapids and Cambridge, MN

We have not replaced any of our fleet vehicles this year. We did outright purchase a security vehicle that is E-85 capable from an auction service.

St. Cloud State University, St. Cloud, MN

SCSU has added two 2005 Taurus alternative fuel (ethanol E-85) 5 passenger autos (new total of 18) to their Motor Pool total of 25 vehicles. They produce limited carbon monoxide. Now, University on-site E85 refueling has pumped (within 50 gallons of previous financial year); (about 13,500 gallons) of it for motor pool use this last fiscal year. (The Minnesota Dept. of Commerce/State Energy Office also monitors E85 usage.)

Bemidji State University

Bemidji State University has 59 maintenance and fleet vehicles.

One is a gas-electric hybrid and six are flexible fuel vehicles. None were operated on E85 fuel during FY 2006 due to limited availability of the fuel in our region, decreased range of travel, and manufacturers' cautions about performance issues during periods of extreme cold and heat. Discussion with a local dealer indicated that the temperature related performance concerns have not been a problem for E85 users in the area and E85 fuel has become more available. Therefore, we plan to begin use of E85 in FY 2007.

Central Lakes College

Central Lakes College purchased 3 vehicles from travel management to burn E85 fuels.

7. Automotive Maintenance

Northwest Technical College, Bemidji, MN

The vehicles are tuned and maintained on a regular basis and all pollution control equipment is maintained for peak operating efficiency.

Minnesota State University, Moorhead

Automotive fleet maintenance is primarily conducted by off-campus vendors. Any on-campus maintenance is conducted in the Physical Plant's auto mechanics shop. All used oil, filters, and antifreeze are recycled by local vendors. The university also uses a citrus-based environmentally friendly parts washing fluid in its auto mechanics shop.

St. Cloud State University, St. Cloud, MN

The SCSU vehicle repair shop has revamped procedures for brake pad/shoe replacement to ensure asbestos fiber release control by sending doubtful units out. Replacement pads are non-asbestos. The Diesel Repair, Locksmith, Plumbing, Print, and Driving Range shops have been using a water based parts washer that generates only a small amount of sludge to be disposed of as hazardous waste. Only art in KVAC remains with Stoddard solvent, often forcing us up into Small Quantity Generator (SQG) status. We are working with them to change this.

8. Batteries

Northwest Technical College, Bemidji, MN

Batteries, tires, metals, and oils/filters are recycled.

St. Cloud Technical College, St. Cloud, MN

All batteries are recycled. When a new lead-acid battery is purchased, the old one is taken in for exchange. Other batteries are recycled through a local supplier.

Minnesota State University, Moorhead

All batteries, including lead acid, nickel cadmium, lithium, mercury oxide, and silver oxide, continue to be collected and recycled. Automotive batteries are changed and recycled through a local dealer. Use of alkaline rechargeable batteries is promoted to those departments who use large amounts.

St. Cloud State University, St. Cloud, MN

SCSU stores unreliable automotive lead acid batteries in a secondary container until recycling pickup and is also recycling smaller sealed lead acid batteries. Non Special Program hazardous waste type batteries are managed for recycling/reclamation quarterly through Batteries Plus and through the University of Minnesota Chemical Safety Day Program whom we now have a MnSCU contract with.

Central Lakes College

It is an ongoing policy of the college to collect used batteries and dispose of them through a recycling center.

9. Cleaning Supplies

Northwest Technical College, Bemidji, MN

We do purchase low volatile cleaning supplies and use water based carpet cleaners.

St. Cloud Technical College, St. Cloud, MN

Environmentally friendly cleaning supplies are used. MSDS sheets are maintained in the maintenance office, accessible to all custodians, application and safety procedures are adhered to when products are dispensed and used.

Minnesota State University, Moorhead

All buildings are equipped with general cleaning stations involving equipment that accurately dispense the proper amount of a concentrate needed to reduce waste. The campus has moved away from not only low VOC cleaners, but many of the products in use are actually Green Seal approved. These products help those individuals in the MSUM community who suffer from Multiple Chemical Sensitivities in addition to being environmentally friendly. To help reduce volume and waste, cleaning supplies that are no longer used by a department are made available for use to other departments. Improvement continues as cleaning supplies become increasingly safer and are being tested and implemented on a regular basis.

St. Cloud State University, St. Cloud, MN

A SCSU committee has been in place for several years that reviews cleaning products that can be substituted for those which pose a hazard to the employee using them or pose a pollution risk. Re vamping is being considered to provide more authority to that committee. Cleaning products are purchased in bulk as much as possible and then transferred into hazard labeled re-useable/refillable bottles and containers. VOC considerations are very important (as they also are in our painting products).

Bemidji State University

Environmentally preferable cleaning products have been introduced for use in the student residence areas. The products include a floor cleaner, multi-purpose cleaner, glass cleaner and carpet cleaner. All the products are Green Seal certified.

Central Lakes College

Through an ongoing program with vendors and suppliers, biodegradable products are purchased and used at the college. The paper supplies for shop and restroom areas are of the state's highest "green EPA "rating.

10. Commuting and Transportation

Minneapolis Community & Technical College (MCTC)

Commuters:

2005 - Discounted bus passes, free motorized vehicle parking and bike racks are all ongoing and will continue in fiscal year 2006.

2006 – MCTC is continuing to offer discounted buss passes, free motorized vehicle parking and bike racks. We have also installed 50 new bike racks and employees have the option of 4 10 hour days to cut down on commuting.

Northwest Technical College, Bemidji, MN

We have reduced our fleet of travel vehicles from 11 down to 3 in the past 2 years because of off campus meeting reductions and the promoted use of electronics for meetings and communication. One of the 3 remaining vehicles in the line-up is E-85 rated, and is a Travel Management lease vehicle. The other two are campus owned. A list of all Minnesota E-85 supplying fuel stations has been supplied in the Travel Management vehicle, with a note to only refuel with E-85. The vehicles are tuned and maintained on a regular basis and all pollution control equipment is maintained for peak operating efficiency. Reduction in travel has been substantial, but has not been tracked or substantiated due to staff and budget reductions.

Faculty, Staff, and Administration are encouraged to use alternative electronic communication. Due to lack of adequate staffing and budgeting there are no reduction figures from a standard to calculate.

St. Cloud Technical College, St. Cloud, MN

Carpooling is strongly encouraged when on college business.

Minnesota State University, Moorhead

Approximately 77% of MSUM students are living off campus. This along with faculty and staff equals a large commuter base for the University. University administration continually promotes students to take advantage of on-campus living and promotes new student housing construction projects. Campus Security has begun utilizing bicycles instead of automotive vehicles to patrol campus. The university is increasing the number of bicycles racks around campus promoting their use. Two programs have been implemented with great success reducing the number of single-car commuters. The Metro Area Transit bus system has arranged a partnership with MSUM to allow free transportation for students, faculty, and staff. Routes run every ten minutes and reduce the number of commuters, especially during inclement weather. During the 2004-05 academic year the program averaged over 50,000 riders per year. For the 2005-06 year approximately 60,000 riders utilized this service and it continues to increase in popularity and riders. MSUM Student Senate implemented a Taxi rider ship program for MSUM students. The Drive-a-Dragon program allows students to take a taxi (fueled by E-85) anywhere in the Fargo-Moorhead Metro Area for \$2 during the hours of 9 pm-6:30 am. There are approximately 2000 students enrolled in this program. Also, due to the diversity of programs at MSUM, any students, faculty, or staff attending off-campus meetings and conferences are strongly encouraged to form a car pool in order to reach their destination.

St. Cloud State University, St. Cloud, MN

SCSU has moved beyond subsidizing bus passes for students and faculty to joining with Student Government and St. Cloud MTC to provide a new Free Ride program. This includes evening transportation in the campus area. This partnering with St. Cloud Metropolitan Transit Commission provides free service on 17 bus routes to current SCSU ID cardholders. Over 30 Apartment complexes are within 20 bus minutes of campus. Parking congestion is reduced. Clipper West route riders have increased.

Central Lakes College

It is an ongoing policy of the college's to encourage car pooling whenever possible. Currently Central Lakes College encourages our employees to car pool as an alternative to single-occupancy vehicle commuting. Employees are encouraged to have teleconference meetings between the campuses whenever possible to cut down on travel. Meetings are scheduled ITV whenever possible.

11. Education, Communications and Training

St. Cloud Technical College, St. Cloud, MN

Training is being provided to staff on proper handling of hazardous materials. A Hazardous Waste program is in place and the appropriate staff was trained on its contents.

Minnesota State University, Moorhead

The Dept. of Environmental Health & Safety continues to educate the university community regarding hazardous waste management, pollution control measures, storm water runoff, spill prevention, and other requirements throughout the year. Due to the diverse community and resources on our campus, MSUM offers many classes with respect to environmental education. These classes follow strict curricula of current and past issues, events, and a complete understanding of environmental processes. Students have taken the initiative to form groups of their own that help raise awareness within the community as well. These groups help educate the university community by becoming involved in yearly events such as Earth Week, campus cleanup day, and many more.

A new environmental class titled People and Environment is added to the incoming freshman core curriculum. The goal of the class is to develop students' understanding of the concept of sustainability and the challenges in responding to environmental problems. Students will examine how societies and the natural environment are intimately related and develop a better understanding of ecosystems and the ways in which different groups interact with their environments.

In Fall 2003, a group of MSUM students came together to create a Sustainable Campus Initiative. This document contained a list of goals and recommendations for MSUM to help university evolution toward a more sustainable future. This document was taken to MSUM student senate, and work began on creating a student fee to be used for sustainable campus projects. The fee was implemented in fall 2004. The environmental fee is \$3 per semester and is charged to each full-time student during Fall and Spring semester. This money goes into a fund that generates approximately \$45,000 per semester. Of those funds, 100 percent are directed toward the development of sustainable procedures, programs, facilities, and curriculum. Projects currently under way include a wide variety of tasks that affect facilities, policy, curriculum, services, and education of the MSUM community. The development of a student-owned wind turbine, which would provide power for student facilities including the student union, wellness center, and health center, has taken first priority. Other projects included developing and implementing a residence halls' recycling program, becoming a member of National Wildlife Federation's Campus Ecology Program, and working with architects to ensure that the construction of the student wellness center follows LEED (Leadership in Energy and Environmental Design) certification recommendations. A task force was formed to manage the money and to research options for improving the MSUM environment. The Sustainable Campus Initiative Committee evolved from that task force and is now managing the funds. The Sustainable Campus Initiative Committee has MSUM students as a majority and contains university

staff members, faculty members, and administrators. Regular meetings are held bimonthly during the academic year.

The students main outreach efforts were their Earth Day events. Their major accomplishment was signing of the Talloires Declaration by MSUM President Dr. Roland E. Barden and Student Senate President James Cailao. This declaration states the university is willing to incorporate sustainability in its teaching and business practices. President Dr. Roland Barden, Student Senate President James Cailao, and Sustainable Campus Committee co-chair Dr. Karen Branden all gave speeches regarding sustainability and the university. Two videos were shown as well. The first titled "Koyaanisqatsi", which is a non-verbal movie on our world and the changes that it is going through. The second titled "Case Study on Interface and Corporate Social Responsibility", is an on-line video of Interface CEO Ray Anderson giving a speech to attendees of the Corporate Social Responsibility Summit in 2005, which was held in Sydney, Australia.

St. Cloud State University, St. Cloud, MN

The Environmental and Technological Studies Department of SCSU reflects increased opportunities for pollution prevention emphasis in the region of laboratory procedures. This last year a professor and six of her students attended our joint City/SCSU public storm water input meeting and asked about several complex Best Management Processes (BMPs). An internship program has expanded Hazardous Waste controls! An online degree in aviation maintenance management is now available. A Master of Science program in Environmental and Technical Studies, begun six years ago and serving a wide variety of backgrounds, finds about a third of program students are licensed teachers returning to school. Other research interests include recycling, landfills, and public perceptions of fuel cell technology.

After the charter class of 20 nursing students received their baccalaureate degrees May 9th 2004, the program continues to grow.

Bemidji State University, Bemidji, MN

Bemidji State University continues to require environmental courses for satisfactory completion of the Liberal Arts core. "Focus on the Environment" is one of seven areas in the University's Liberal Education Program. Students pursuing a bachelor's degree must take a minimum of one, three credit course, from this area.

In conjunction with the 2005 Earth Day, the Environmental Advisory Committee began issuing brief tips to faculty and staff about ways to reduce waste, both at work and at home. The messages are posted to the faculty/staff e-mail list. They were originally planned as an Earth day promotion but have been continued with a new tip being posted periodically.

BSU became a member of the National Wildlife Campus Ecology program in the spring of 2006.

BSU Environmental Studies major, Tessa Haagenson, was selected as a 2005 National Wildlife Federation Campus Ecology Fellow. She was awarded a \$1000 fellowship to support her project to educate students and the community about global warming and related issues and to explore a

student fee to support wind energy development at BSU. She will be doing global warming presentations to community audiences beginning in the fall of 2006.

BSU has established an endowment fund through the BSU Foundation that allows individuals and/or groups donating money to the foundation to designate it for support of environmentally sustainable programs. The fund will be used for student scholarships and to support projects related to environmental sustainability at Bemidji State University. The fund was approximately 70% endowed as of July 2006.

Central Lakes College

Annually the staff and faculty of Central Lakes College are trained in RTK, Blood Borne Pathogens, crisis management, etc. Programs and departments that need additional training such as: Hazardous chemicals and wastes, Lock out-tag out, confined spaces, ladders and lifts, etc. are trained annually as needed.

12. Electronics

St. Cloud Technical College, St. Cloud, MN

All electronics (circuit boards, computer monitors, computers etc.) are properly disposed of through licensed contractors.

Northwest Technical College, Bemidji, MN

Energy Star rated office equipment and replacement/repair for HVAC equipment is being done.

Minnesota State University, Moorhead

The re-use of PC's on the MSUM campus is very much encouraged. There is a strong program towards department trading of PC's and donation to student organizations and non-profit organizations. This program reduces the number of required new PC's and extends the service life of older machines. Also, most of the electronics on the MSUM campus have been updated to meet Energy Star requirements that help reduce campus-wide consumption of resources. All unwanted electronics are recycled through the Dept. of Environmental Health & Safety, who in turn works with recycling vendors from the state contract list.

St. Cloud State University, St. Cloud, MN

The SCSU business office provides for the reuse of some computers, electronic equipment and other property through the surplus property resale program. E-mail announcements also help relocate electronic equipment from surplus to reuse in another department. Other electronic equipment (shipments totaling about 49,950# and net cost of about \$14,620) were recycled for somewhat offsetting commodity and precious metal credits. Styrofoam from computer, electronic, and other shipping cartons was also recycled.

Bemidji State University, Bemidji, MN

All Apple and Gateway computers and HP printers purchased through the University Computer Support Services are Energy Star compliant.

13. Energy - Use

Northwest Technical College, Bemidji, MN

In the past year Energy Services Group located at 15500 Wayzata Boulevard, Suite 1003, Wayzata, MN 55391 (952) 473-3162 entered into a contract with Northwest Technical College and MnSCU to provide a guaranteed energy and cost saving program. They are monitoring usages of all of our recent building, lighting and HVAC upgrades and can provide detailed cost and usage analysis. We removed old boilers and installed 3 new high efficiency boilers (90%), and converted from a steam system to hot water. A new computerized, digital, HVAC control system was installed that utilizes multi-point space occupancy, and time inputted technology control. A complete building lighting upgrade was done with a new digital controlled main power panel, energy efficient lighting with motion detector controls, new LED exit lighting, vending machine controls, and one high efficiency rooftop replacement unit that supplies HVAC to the computer labs. A complete new roof replacement project started this summer that will bring the insulation and skin up to the MnSCU roof standards. Also in the roofing project are wind breaks for the front entry and new energy efficient windows in the entry and atrium area. Duct work was professionally cleaned in the spring of 2006.

We purchase our electricity through Ottertail Power Company.

St. Cloud Technical College, St. Cloud, MN

Our College campus uses clean burning natural gas for heating and #2 fuel oil as a backup fuel. Our Building Maintenance Supervisor has instituted a regular preventative maintenance program to ensure the boilers are operating at peak efficiency. This ensures the fuel is burned efficiently releasing less pollutants into the air.

Lights are on automatic motion sensors, when not required the lights turn off to conserve energy.

Minnesota State University, Moorhead

To help better understand ways the university community can save on energy consumption, the campus conducted an energy audit. This audit examined lighting, heating, and will include a first ever water usage assessment. Recommendations following the energy audit's approval will most likely include additional lighting sensors in academic and campus residence halls, steam trap reductions in the heating system, reducing water usage in restrooms, and implementing energy saving procedures for the indoor pool area.

Abiding with Executive Order 05-16, Providing for Energy Conservation Measures for State Owned Buildings, MSUM implemented operational changes to conserve energy and reduce state energy costs by lowering heating temperatures, raising cooling temperatures, and other measures as defined in the executive order by Governor Pawlenty.

Design and planning of a new Student Wellness Center will center on adopting practices of LEED Certification. LEED (Leadership in Energy and Environmental Design) Green Building Rating System[®] is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings.

When purchasing new electronic office equipment and appliances, MSUM continues to purchase Energy Star rated devices through state contracts or select vendors.

St. Cloud State University, St. Cloud, MN

As part of a \$3 million energy conservation project with NSP, SCSU has shaved peak demand by about 25%. Occupancy sensors, LED exit lights, high efficiency fluorescent lights, and variable frequency motor drives also reduce consumption and pollution as does the computerized energy management system. More efficient lights are planned for our main athletic facilities. Florescent bulbs were recycled. Trash was burned in Elk River to produce electricity.

Bemidji State University, Bemidji, MN

BSU continued an ongoing program of replacing T-12 fluorescent lights and ballasts and incandescent lights with T-8 high efficiency lamps and electronic ballasts and compact fluorescent lighting. During FY 2006, the replacements resulted in a net reduction of approximately 32, 472 watts of lighting. It is estimated that this will reduce electrical energy consumption by about 142,000 kWh. BSU also received a rebate of \$6500 for the project through Otter Tail Power Company’s participation in the [Minnesota Conservation Improvement program](#) (CIP).

The resulting emissions reductions are:

Reduction (lb)

CO	CO ₂	Hg	NO _x	PM10	PM2.5	SO ₂	VOC
41.673	261,531.274	0.006	581.424	52.766	40.535	1,050.062	5.405

BSU continued an on-going process of installing motion detectors in campus bathrooms and rooms with intermittent use. The sensors automatically turn on lights when the room is entered and turn them off after a period of inactivity. Sensors will continue to be installed on an ongoing basis as funding and time permits.

It should be noted that total energy use is influenced by a number of variables, such as occupancy loads, temperature, humidity, and hours of operation. Therefore, observed changes in energy consumption cannot be attributed solely to any one activity such as reducing lighting wattage. Normalization for these variables is necessary for accurate analysis of energy use. The values in this report have not been normalized.

Central Lakes College

The College has an ongoing agreement with the local utilities to curtail usage when required. Whenever possible we purchase energy-efficient appliances to reduce state-energy uses at our college.

We are phasing out T-12 lighting to retrofit to T-8 lighting. Some lighting fixtures have been retrofitted with energy-efficient ballasts and bulbs resulting in a rebate for the Staples Campus from Todd Wadena Cooperatives. We have an agreement with our local utilities to curtail our electricity and natural gas. We have a propane back-up system at Brainerd that we use when asked by the local utilities. Staples campus has a 1000 gallon fuel oil reserve. We have finished an energy audit

and are currently working with Energy Management Services to re-lamp all our buildings at Central Lakes College.

14. Energy Production

Minnesota State University, Moorhead

As a Charter Member of the Capture the Wind program, MSUM has been purchasing renewable wind energy since 1999 and currently has a 10 year agreement with Moorhead Public Service to purchase a block of 333,332 KWH/ year of wind generated electricity; this represents 2% of the campus’s power needs. This equates to a total emissions reduction (lb): CO – 97.666; CO2 – 612,940.882; HG – 0.014; NOX – 1,362.661; PM10 – 123.666; PM2.5 – 95; SO2 – 2460.990; and VOC – 12.667. This commitment has a substantial impact on the environment, reducing the amount of greenhouse gases emitted into the air by an estimated 723,000 pounds each year. That is equivalent to planting 99 acres of trees each year or taking 72 cars off the road each year by reducing pollution. At the end of 10 years, MSUM will have prevented an estimated 7.3 million pounds of green house gases from being emitted into the air, which is equivalent to planting 986 acres of trees or removing 723 cars from the road over that 10-year period.

Following the implementation of a Student Green Fee during 2004, the Sustainable Campus Initiative Committee continues to strongly pursue the construction of a 1.5 million dollar wind turbine. It is proposed that electricity produced will be equal to the amount needed to operate the Student Union, Student Healthcare Center, and proposed Student Wellness Center complex.

St. Cloud State University, St. Cloud, MN

As with the SCSU lighting improvements identified above in Item 13, NSP also conducted an audit into all other phases of energy savings. These recommended improvements have been made as well. For instance, a new boiler was installed and is now frequently operated. This boiler operates on No. 2 oil, and MPCA-required air pollution testing has shown minimal (far below any action level) pollution particles being emitted from the stacks when this boiler is being operated.

Bemidji State University, Bemidji, MN

In February of 2005, the Bemidji State University Student Senate passed a resolution supporting the purchase of wind-generated electricity through participation in Otter Tail Power Company’s [TailWinds](#), wind energy program. The University began purchasing 61,600 kWh/mo of wind-generated electricity for \$2.60 per 100 kWh block above the regular cost, in September 2005. In May 2006, the rate was reduced to \$1.60, retroactive to September 2005. The University is considering using the savings to purchase additional wind energy blocks. The wind-generated electricity reduces annual emissions by the following amounts:

Reduction (lb)

CO	CO ₂	Hg	NOx	PM10	PM2.5	SO ₂	VOC
216.586	1,359,263.136	0.032	3,021.850	274.243	210.672	5,457.514	28.090

15. Groundwater Wells

St. Cloud Technical College, St. Cloud, MN

The wells on SCTC campus are used for lawn irrigation.

Minnesota State University, Moorhead

MSUM currently obtains water from only one well site. This well is located at the Buffalo River Science Center and provides water to that facility only. The well at the Science Center is an 83 foot well that utilizes groundwater from the Buffalo Aquifer. This well is regularly monitored by the Minnesota Department of Health. The main campus of MSUM is supplied by Moorhead Public Service. They obtain 85% of their water supply from the Red River, and only 15% from seven groundwater wells.

St. Cloud State University, St. Cloud, MN

SCSU has a small number of groundwater monitoring wells used for research purposes. This last year one was repaired after being struck by an unknown automobile. Earth Science (Bret Allie) was very involved in the process.

Central Lakes College, MN

We use our own well to supply water to irrigate the grounds at the Staples Campus.

16. Heavy Metals

Northwest Technical College, Bemidji, MN

The Dental program recycles their heavy metals.

St. Cloud Technical College, St. Cloud, MN

During the past year the individuals working at the SCTC campus made a commitment to finish removing as much mercury metal from the classrooms and labs as possible. As a result almost all classrooms are now mercury free. Thermostats and gauges contain the only mercury left on campus. As thermostats, gauges etc, need replacing we are replacing them with non-mercury containing parts.

Minnesota State University, Moorhead

Within the photo development areas on campus, silver continues to be reclaimed. Also, all mercury bearing thermometers continue to be replaced by non-toxic alternatives as they are found.

St. Cloud State University, St. Cloud, MN

Campus-wide, efforts are underway at SCSU to minimize mercury use and mercury thermometers. Waste photographic paper and chemicals are processed off-site to render them non-hazardous and recover silver. Conversion to a bulk storage and transfer process for spent photo-fixer has cut costs. Several conventional darkrooms across campus including ones in Environmental and Technological Studies have been removed. (They were replaced with electronic imaging systems.) Only KVAC Art (Ted Sherarts) now has a active teaching darkroom.

Also, about 20 pounds of video and audio film has been recycled through Generic Media of Minneapolis thanks to MnTAP's Source materials exchange listings. Minor amounts of gold, silver,

copper, and palladium were recovered from our electronic recycling program. Containers of heavy metal compounds were removed from SCSU using the U of M Chemical Safety Day Program.

17. HVAC, Indoor Quality

Northwest Technical College, Bemidji, MN

Energy Star rated office equipment and replacement/repair for HVAC equipment is being done

St. Cloud Technical College, St. Cloud, MN

Indoor air quality at St. Cloud Technical College is a high priority. A regular preventative maintenance program is in place to ensure the HVAC system is clean, filters are changed periodically and the system is operating at peak efficiency. This ensures good indoor air quality for the employees and students.

Minnesota State University, Moorhead

The Department of Environmental Health and Safety, in collaboration with the Physical Plant, reviews any carpeting plans prior to installation insuring low VOC adhesives are used and the carpet meets the Carpet and Rug Institute's indoor air quality emission guidelines. EH&S also oversees the Indoor Air Sensitivity Program that involves the monitoring of adhesives, paints, cleaning products, etc. that may contain VOCs when used in campus buildings.

St. Cloud State University, St. Cloud, MN

SCSU is using a carbon dioxide chart recorder to assist in ventilation troubleshooting. Custodial staff, HVAC staff, HR personnel, and DOER Industrial Hygienists have become much more involved in complaint and mold response. Many special forms are being used to procure and track occupant data. MacNeil Environmental Inc. (MEI) has performed six air sampling surveys expanding to seven buildings. The painting department not only uses water based paints and varnishes but is also upgrading ventilation controls to improve and IAQ. A paint spray booth was added to Performing Arts Scene Shop. Strict carpet emission controls are used extensively to limit Volatile Organic Compounds (VOC's). Chemistry stockroom chemical storage shelves were replaced with ventilated units. Art ceramic wet wiping/HEPA vacuum controls were improved.

Minnesota Department of Administration, Facilities Management Bureau "Building Air Quality" 5/95 guidelines for building owners and facility managers have been extensively studied and implemented. High efficiency vacuum cleaners, special bags and HVAC filters help.

SCSU Health Services, Maintenance, Public Safety, and Lindgren Child Care Center heads are taking the lead on disaster planning and participated on campus in a large scale simulated mustard gas release as part of a community drill. Over 100 campus volunteers also participated in the toxic gas release mock disaster simulation.

Central Lakes College

We contracted Energy Savings Groups to purchase new boilers and controls at the Brainerd Campus to reduce and save energy. We have also upgraded our system at the Staples Campus.

18. Ice Control, Sanding

Northwest Technical College, Bemidji, MN

We use a brush mounted sweeper in the winter to minimize the amount of sidewalk de-icers.

St. Cloud Technical College, St. Cloud, MN

The Building Maintenance employees use environmentally friendly ice melt on our sidewalks. This cuts down on the use of straight salt.

Minnesota State University, Moorhead

The University's Physical Plant aggressively removes ice and snow and uses primarily sand-only methods of ice control on campus sidewalks, parking lots, and other susceptible areas. Each spring the remaining residue is swept up and recycled at the city compost site.

St. Cloud State University, St. Cloud, MN

Masonry sand works well by not being too abrasive on our SCSU equipment. Salt use in sanding mix was minimized by controlling salt content based on outside temperature. An additional sanding unit allowed improved sidewalk sanding response. Very little mix was stockpiled. It was moved to indoor storage into a garage bay.

19. Laboratory

St. Cloud Technical College, St. Cloud, MN

As the laboratories and classrooms at SCTC are being renovated new and updated equipment is being installed to prevent pollution of the air. (Air filtering systems in paint booths, welding areas and labs to prevent pollutants from being released into the air.)

Minnesota State University, Moorhead

Extensive safety and procedural training/testing are required of all students participating in Chemistry and Bioscience labs. Chemical neutralization is taught and incorporated in many experiments, producing a sewer-friendly product. Chemicals continue to be centralized and tracked with an electronic inventory system. This system allows faculty/staff to track and inventory chemicals at MSUM facilities eliminating the need for duplication of chemicals and providing less waste.

St. Cloud State University, St. Cloud, MN

SCSU Laboratories - MacNeil Environmental Inc. (MEI) trained Science staff and faculty last winter on pollution prevention and waste minimization at SCSU as part of OSHA Laboratory Standard training. MEI's role has expanded to include principal consultants, special audits, and having a Certified Industrial Hygienist on campus almost daily. There is a bigger focus on radiation controls. Chemistry Stockroom ventilation and storage unit ventilation were improved. Jim K. (DOER CIH) surveyed the storage also checking for VOCs. Health Services is improving policies and laboratory controls as a result of voluntary OSHA Industrial Hygiene inspection partnering. They have been very proactive in upgrading Blood borne Pathogen controls, and both written response plans and cleaning/disinfection schedules.

The Chemistry Safety Committee (CSC) and Chemical Hygiene Officer (CHO) and new CHO assistant have been instrumental in fostering better lab user training, labeling, eyewash/shower inspection and hazardous waste control. They have assisted the expansion of SCSU's hazardous waste disposal and recycling program to ID & remove over 25 unknowns. A staff member (recently added to the SCSU Chemistry department) has made major progress in hazardous waste controls and better utilizing local city sewer system (POTW) contacts and treatment criteria to save over

7,000\$. Peers have teamed with the University of Minnesota to recycle surplus laboratory glassware.

After hours work controls and the Chemical Hygiene Plan (CHP) reviews have received special emphasis in all College of Science and Engineering (COSE) departments having labs. Renovations have included the addition of more plumbed eyewashes. Better Formaldehyde and mercury controls are being used.

20. Landscaping

Northwest Technical College, Bemidji, MN

We use 62" and 90" lawn mowers to reduce the amount of time spent with gas engines running. We have added paver patio areas and sidewalks around the building to reduce the amount of trimming time required.

St. Cloud Technical College, St. Cloud, MN

Building expansion and planting trees is reducing the amount of grass that needs to be cut. However, Green areas are left in tact to prevent storm water runoff pollution.

Minnesota State University, Moorhead

Current procedures for lawn, tree, and flower maintenance for the university campus continue to be reviewed in order to reveal areas where improvement is needed. Due to the large grassy mall area in the center of campus, it remains difficult to make improvements without drastic changes to its aesthetics and character. During the past year approximately 0.7 acres of perennial and annual gardens have replaced lawn grass areas in and around buildings, including areas disturbed while replacing/upgrading underground water supply lines to campus buildings and around the newly constructed Science Lab Building. These new gardens equate to a total emissions reduction (lb): CO – 345.488; CO₂ – 628.955; NO_X – 1.837; PM₁₀ – 1.060; PM_{2.5} – 0.976; SO₂ – 0.129; and VOC – 11.244.

MSUM's Regional Science Center implements a minimum landscaping policy. The Science Center is home to natural prairie and large wooded areas. Very little mowing is provided, which not only reduces fuel consumption and emissions, but also allows the Science Center to promote an environmentally friendly image. Weed control with invasive leafy spurge is being done without the use of pesticides. Instead, MSUM continues to implement a control program that uses *Aphthona nigriscutis*, the Black Dot Leafy Spurge Flea Beetle, to help control leafy spurge. As adults the beetles feed on the foliage, but do not severely harm the plant. However, the larvae live in the root system and feed on the roots, thus killing the plant. So far, after introduction the beetles are colonizing and results in weed control have been noted. This program not only saves money and labor, but is also extremely environmentally beneficial due to the close proximity to the Buffalo River and Buffalo State Park.

St. Cloud State University, St. Cloud, MN

SCSU has joined with the City of St. Cloud on many of their storm water control plan initiatives including community outreach/education and public meetings. These initiatives are now being combined with MnSCU ones developed by Don Beckering with MPCA's Scott Fox to improve our Storm Water Plan. Many initiatives involve landscaping, catch basin overflow and construction project runoff controls. Leaves, sand, silt, curb drains, and point outfalls are also being monitored and better controlled.

Bemidji State University, Bemidji, MN

An 860 ft² planting area previously planted with annuals was planted with native perennial plants. The University has a goal of expanding native perennial plantings across campus.

The University continues to maintain over 600 feet of Lake Bemidji shoreline with native plants and rocks as part of a lakeshore restoration and stabilization project that was completed in 2003.

Central Lakes College, MN

We reduced our maintained grounds by 4 acres by planting prairie grass and building ponds and gardens. We are on ongoing reduction phase.

21. Materials Exchange

Minnesota State University, Moorhead

Used PC's are reallocated to other departments on campus to reduce the need for additional and/or new machines. Recently used PC's have also been made available to student organization and non-profit use. This program reduces the number of discarded computers on campus and saves budget money for many departments.

St. Cloud State University, St. Cloud, MN

Glass, plastics, aluminum cans, steel, and carpet, some building materials, furniture, styro foam, and cardboard are recycled at SCSU; also lard and cooking oil. A local farmer's hogs are fed leftover food.

22. Office Supplies

Northwest Technical College, Bemidji, MN

Energy Star rated office equipment and replacement/repair for HVAC equipment is being done

Minnesota State University, Moorhead

Online resources have greatly reduced the amounts of office supplies used by MSUM. University e-mail is provided and encouraged to reduce paper for memo's, announcements, and correspondence. Many educators have chosen to use online resources for classes including assignment and note postings, exams, syllabi, and announcements. The administration continues taking steps towards reduction of mass-produced items such as student bulletins, and liberal studies worksheets, billing and financial account information, and registration materials. These items have instead been made available to all students online. Last academic year, MSUM used approximately 36,828 reams of office paper. This amount included 36,043 reams of 30% post-consumer content paper, 520 reams of 100% post-consumer content paper, and 265 reams of virgin content paper.

St. Cloud State University, St. Cloud, MN

SCSU extensively uses paper with 50%-recycled content and 30% post-consumer fiber content and has held usage to about the same as last year (47,400 reams). Office and computer paper is recycled. An exception is most of about 850 reams of colored paper used in our student union copy shop. (Whenever feasible, recycled color paper was used; and all white paper used in that copy shop)

was standard 30% minimum post-consumer content recycled paper included in our bulk campus supply counts.) Recycled photocopier toner cartridges are purchased. Ink and toner cartridges are recycled. Using e-mail to post surplus supplies for use in other departments has been very successful about 25 times this past year. Desks, plants, pesticides, produce, chemicals, furniture, computers and cooking oil for bio-diesel were also recycled.

23. Oil, Oil Filters

Northwest Technical College, Bemidji, MN

Automotive and Automotive Machine programs use oils/filters that are recycled.

St. Cloud Technical College, St. Cloud, MN

Used oil is collected and re cycled, oil filters are drained for 24 hours and recycled.

Minnesota State University, Moorhead

All oil and oil filters currently used by MSUM are recycled through an approved vendor.

St. Cloud State University, St. Cloud, MN

SCSU oil filters are drained for over 24 hours to qualify as special hazardous waste. Motor oil is collected and recycled.

24. Paints, Coatings, Stripping

Northwest Technical College, Bemidji, MN

We do purchase low volatile cleaning supplies and use water based paints, floor sealers, and carpet cleaners.

St. Cloud Technical College, St. Cloud, MN

The Instructors of our auto body class use lead free low Volatile Organic Compound (VOC) paints in the auto body lab. Latex paints are used by our maintenance department whenever possible.

Minnesota State University, Moorhead

MSUM has developed a policy to purchase and use only chemicals with low or no VOC's while addressing the issue of indoor air quality and Multiple Chemical Sensitivities (MCS). Some of the products that MSUM uses are Glidden's Lifemaster 2000 paint and Buckeye cleaning products. Glidden's Lifemaster 2000 paint is a no-VOC line of paint and are virtually odorless. The Buckeye products currently used are biodegradable and one, Star Spray, is "Green Seal Approved".

St. Cloud State University, St. Cloud, MN

SCSU has converted almost all possible paint coatings to water based products to limit Volatile Organic Compounds (VOC's).

Bemidji State University, Bemidji, MN

BSU maintenance procedures continue to reduce the use of organic solvent-based wood sealers. Water-based paints and finishes are used whenever possible.

25. Parts Cleaning

Northwest Technical College, Bemidji, MN

Our Automotive and Automotive Machine programs have changed from solvent to water based parts washers. They have purchased and are using an antifreeze recycling machine. We do purchase low volatile cleaning supplies and use water based paints, floor sealers, and carpet cleaners.

St. Cloud Technical College, St. Cloud, MN

Our Automotive department has a contract with Safety-Kleen systems to provide and recycle parts cleaners.

Minnesota State University, Moorhead

The university uses a citrus-based environmentally friendly parts washing fluid in the automotive mechanic shop.

St. Cloud State University, St. Cloud, MN

SCSU has experimented with more environmentally friendly brake cleaner and parts washer fluids in the auto repair shop. The Art Department (only non water based solvent) and print shop use a solvent recycling service, which provides them pollution prevention "WE CARE" (r) training.

Bemidji State University, Bemidji, MN

The industrial Technology department has eliminated print screening activities and the 65-70 gallons per year of parts cleaning waste it generated.

Central Lakes College, MN

The programs that have parts washers have switched to a more environmental friendly product that can be cleaned and recycled. Over the last few years we have encouraged the faculty to use environmentally friendly products and chemicals that would not have to be treated as a hazardous waste when disposing of them. We have succeeded in going from a Small Quantity Generator to a Very Small Generator.

26. Personal Care Products

Minnesota State University, Moorhead

Through an Indoor Air Sensitivity Program, MSUM provides education to users of buildings deemed with having chemically sensitive occupants. This program informs occupants about the potential negative impacts of perfumed soaps, fragrances, air fresheners, residual cigarette smoke, etc.

27. Pesticides, Fertilizers

Northwest Technical College, Bemidji, MN

We use a licensed pest control service, (Ecolab). We have not used fertilizers for at least 5 years.

St. Cloud Technical College, St. Cloud, MN

We try to use the minimum levels of pesticides and fertilizers necessary to maintain attractive grounds. Application staff is trained to properly and safely use these products.

Minnesota State University, Moorhead

MSUM uses very few pesticides. Products that are used produce residues with a short active residence time in the environment. These products are measured accurately and are diluted according to manufacturers' instructions when in use.

At the Regional Science Center minimal landscaping practices are standard. Minimal mowing and use of very few chemicals helps preserve the natural prairie and wooded areas. Weed control with invasive leafy spurge is being done without the use of pesticides. Instead, MSUM has implemented a control program that uses *Aphthona nigricutis*, the Black Dot Leafy Spurge Flea Beetle, to help control leafy spurge. These beetles while adults feed on the foliage, but do not severely harm the plant. The larvae however, live in the root system and feed on the roots, thus killing the plant. So far, after introduction, the beetles are colonizing and results in weed control have been noted. This program not only saves money and labor, but is also extremely environmentally beneficial due to the close proximity to the river.

To help prevent harmful spills and to ensure that any spills are taken care of properly, a Spill Response Program continues to be implemented for the Physical Plant in conjunction with the university's storm water program. This deals specifically with pesticides and herbicides, as well as with other spills such as petroleum based substances. The program included education to staff as well as a centralized location for all spill response supplies.

St. Cloud State University, St. Cloud, MN

At SCSU, we try to use the minimum levels of pesticides and fertilizers necessary to maintain attractive grounds. Application staff is trained to properly and safely use these products and to avoid phosphates. Special emphasis is given to proper mixing quantities and cleanup in the event of an accidental spill. Phosphate use concerns were addressed in MS4 actions and public community concern/ outreach meetings.

28. Policy Statement

St. Cloud Technical College, St. Cloud, MN

St. Cloud Technical College endeavors to comply in every way with all local, state and federal environmental regulations. SCTC recycles and reuses products whenever possible to help prevent pollution of the environment.

Minnesota State University, Moorhead

The Department of Environmental Health and Safety at MSUM is a strong advocate for protecting the environment. Pollution prevention is a component of our effort to deliver a safe work environment. Successful pollution prevention activities rely on the cooperation and participation of the campus community to ensure a safe and healthy workplace. The EH&S Department is committed to the preservation, protection, and where possible, the enhancement of our environment in all matters of operation. This includes the goals of meeting and exceeding all applicable local, state, and federal requirements; as well as fostering responsible stewardship of all natural resources by personnel in the work place and in the community. We promote a proactive policy in environmental matters; one that anticipates and addresses problems before they become regulatory matters.

St. Cloud State University, St. Cloud, MN

Policy Statement: "The leadership of St. Cloud State University recognizes the strong environmental impact it has and is therefore committed to developing the means to reduce its use of

toxic materials, release of toxic pollutants, and generation of hazardous wastes. The University strives to reduce, and, where possible, eliminate toxic materials, damage, and waste, while realizing that there are limits to its ability to move toward that goal. Maximum results will be achieved through the education of its employees and clientele, continued investigation and implementation of environmentally-friendly substitute products, and dedication to its recycling program."

29. Printing

Minnesota State University, Moorhead

Campus Printing Services has moved to using vegetable-based inks and are using paper products containing a high percentage of recycled material. Press/roller washes and fountain solutions that are water based and low in VOC's are currently used. Printing Services is also using a safer plating chemistry and recycles their aluminum plates, litho film and reclaimed silver. The student newspaper, which is printed off-campus, also uses soy inks and is printed on 20% post consumer paper.

St. Cloud State University, St. Cloud, MN

SCSU exceeds all requirements for use of soy-based inks in materials that are printed either in its campus print shop or those which are processed by a private company. Plastic film is recycled for silver recovery. Recycled paper products are used in the majority of all printing requests. SCSU Printing Services also recycles books, directories, and newsprint.

Bemidji State University, Bemidji, MN

The industrial Technology department has eliminated print screening activities and the 65-70 gallons per year of parts cleaning waste it generated.

30. Procurement

Minnesota State University, Moorhead

As a state agency, MSUM has a procurement department in conjunction with the State of Minnesota Materials Management Division. We also utilize Central Stores, which is an expansion of state surplus services. The Physical Plant has centralized all of its chemicals and supplies. This has created less volume in storage and enables university staff to use improved products that are constantly coming onto the market. University personnel have been educated about purchasing materials that are highly environmentally compatible. Pollution risk and hazardous waste disposal costs are emphasized. All departments have also been encouraged to purchase on a 'need only' basis to reduce stock and storage time.

St. Cloud State University, St. Cloud, MN

SCSU uses toilet paper and towels of 100% total recycled fiber content and up to 20% post consumer fiber content. Some carpet fibers are recycled.

Bemidji State University, Bemidji, MN

Paper use was as follows:

FY2006

30% post consumer = 4, 400 (22, 000 lb)
 Virgin = 6, 424 reams (32, 120 lb)

Paper Type	Energy use (BTUs)	Emissions (Lbs CO ₂)	Wood Use (Lbs)
30% PC	376 Million	55, 635	54, 000
Virgin	616 Million	91, 385	112, 000

FY 2005

30% post consumer = 4, 400 reams
 Virgin = 6, 810 reams

Paper Type	Energy use (BTUs)	Emissions (Lbs CO ₂)	Wood Use (Lbs)
30% PC	367.641 Million	55,555	53,386
Virgin	655.038 Million	96,725	118,074

Use of 30% post consumer recycled paper remained the same as compared to FY 2005. There were 386 fewer reams (1930 lb) of virgin paper used in FY 2006. The associated energy reduction is approximately 39 million BTUs.

BSU continues to support and encourage campus departments to incorporate waste reduction and pollution prevention into their daily operations. The Purchasing Office holds office supply vendor fairs for university departments each year. The events provide an opportunity to make contacts and establish relationships with office supply vendors. Vendors who specialize in remanufactured toner cartridges are invited and several departments on campus use their products. All used toner cartridges are either returned to the vendor or picked up by a vendor who remanufactures toner cartridges.

In addition, remanufactured printing cartridges are available from office supply vendors, recycled content copy and computer printer paper are supplied through Central Stores, and double sided copying is encouraged throughout campus.

31. Remanufactured Parts

Minnesota State University, Moorhead

MSUM currently uses remanufactured printer cartridges and Xerox copier dry ink and toner cartridges.

St. Cloud State University, St. Cloud, MN

SCSU uses remanufactured photocopier cartridges.

Bemidji State University, Bemidji, MN

The maintenance and purchasing departments are continuing to work together to limit the need to purchase new electric motors and plumbing and steam valves by having worn and defective units reconditioned or rebuilt for reuse whenever possible.

The Purchasing Office holds office supply vendor fairs for university departments each year. The events provide an opportunity to make contacts and establish relationships with office supply

vendors. Vendors who specialize in remanufactured toner cartridges are invited and several departments on campus use their products. All used toner cartridges are either returned to the vendor or picked up by a vendor who remanufactures toner cartridges.

In addition, remanufactured printing cartridges are available from office supply vendors, recycled content copy and computer printer paper are supplied through Central Stores, and double sided copying is encouraged throughout campus.

32. Tanks

Minnesota State University, Moorhead

MSUM has two 20,000 gallon underground tanks classified as above ground elevated tanks. These tanks are equipped with continuous slab vaults, alarms, overfill protection, leak detection, and are inspected weekly. The Physical Plant also maintains a 1,000 gallon gasoline tank, and a 560 gallon diesel tank. These are aboveground, double walled tanks equipped with overfill protection, etc.

A vital part in managing these tanks is the emergency spill response procedures. MSUM currently has updated procedures in place and training provided to respond towards spills, overfill, puncture, and other such emergencies.

St. Cloud State University, St. Cloud, MN

Tanks (storage) - a single unused Underground Storage Tank was found under Richard Green House decking and removed. A single unused (UST) will remain at SCSU. It is empty and below the basement floor of AH, an occupied house. It was recently cleaned and filled with solid foam. Monitoring and perhaps removal is being planned. Spill containment control was expanded outside the dike to the delivery connections of our twin #2 fuel oil Aboveground Storage Tanks (ASTs). One of our #6 USTs was found to be leaking due to pipe movement. Remediation and replacement are underway. Further SPCC plan and training action is underway.

33. Technical Support

St. Cloud Technical College, St. Cloud, MN

Technical support is provided through MPCA, DOER Safety and Industrial Hygiene Unit, University of Minnesota Chemical Safety Day Program and other agencies as needed.

Minnesota State University, Moorhead

MSUM recently completed a professional energy audit conducted by the Energy Services Group. For more information on the audit, please refer to the 'Audits' section of this report.

Routine assessments are performed internally at MSUM. The involvement of faculty, students, and staff on campus lends a high level of expertise to this assessment. Currently the Sustainable Campus Initiative Committee is working on a campus-wide environmental assessment through the National Wildlife Federation's Campus Ecology Program.

St. Cloud State University, St. Cloud, MN

St. Cloud State University is one of the most highly accredited colleges in the nation and frequently has highly accredited Technical Support provided by its Occupational/Environmental Health and Safety consultant, MacNeil Environmental Inc. (MEI). MEI has several Masters level O/EHS specialists on staff and has maintained a Minnesota Licensed Professional Engineer (Civil and

Environmental) on campus for eight years in an office in the Buildings and Grounds Management center. The ready availability of this Certified Safety Professional/Certified Industrial Hygienist engineer has aided SCSU recycling, renovations, and waste minimization efforts. It has also fostered close support to the contractors and maintenance & custodial employees, supervisors, and managers most at risk on campus and most involved in pollution prevention projects and efforts. This has also aided substantial reductions in costs associated with Hazardous Waste and battery recycling.

34. Tires

Northwest Technical College, Bemidji, MN

Our Automotive and Automotive Machine program use tires that are recycled.

St. Cloud Technical College, St. Cloud, MN

All tires are recycled through local vendors.

Minnesota State University, Moorhead

All used tires are replaced and recycled at an off campus vendor.

St. Cloud State University, St. Cloud, MN

About 95 tires are recycled each year at SCSU at a cost of about \$1.25 each. They are ground up and become components in other products.

Central Lakes College

We encourage our heavy equipment and diesel programs to have suppliers take the used tires when purchasing new.

35. Water Treatment and Conservation

Minnesota State University, Moorhead

A computer managed watering system has been installed on the athletic field, in addition to the systems installed on the campus mall area and surrounding landscaped areas. This system initiates watering at night, thereby reducing water evaporation. A storm water detention pond and underground drainage system was recently completed and is managed under the university's storm water pollution prevention program. This system significantly reduces the amount of contaminated run-off water directly flowing into the city's storm sewer. An energy audit was recently conducted by Energy Services Group with a focus on a water usage assessment.

St. Cloud State University, St. Cloud, MN

This past year progress continued at SCSU on replacing systems to reduce water use. Extensive lead-in-water testing has been completed in the campus houses being used for office space. Results were all well below the action level and most were below 5.0 ug/l. A MnSCU survey resulted in some water conservation improvements. A dorm (SBH) flushing retrofit project cut water usage by half. However, the lower flows put SBH into a subsequently higher rate which resulted in anticipated saving becoming a wash.

Bemidji State University, Bemidji, MN

Water conservation devices installed in 2002 continue to reduce water consumption by approximately three million gallons per year as compared to pre-installation usage. That represented a savings of approximately \$25,000 in FY2006.

36. Other

Minnesota State University, Moorhead

Storm Water Management

MSUM has developed a storm water pollution prevention program (SWPPP) in order to minimize the harmful effects of storm water runoff and its potential to affect the water quality of the Red River. The SWPPP includes public outreach, education, and involvement; controlling illicit discharges; maintaining clean construction sites; and pollution prevention and good housekeeping measures. Some of the year's activities are listed in the following paragraphs.

Students helped post storm water informational pamphlets, brochures, and other educational materials at several public locations throughout the university campus. This past year a student intern created a brochure specific to the university's storm water program, including "hotline" numbers to call for both the university and the City of Moorhead so community members can report concerns of potential storm water pollution. The Department of Environmental Health & Safety's storm water website, featuring not only the university's programs and info, but also local, state, and federal storm water information, was further developed and updated by students. Student interns assisted in updating a specific Emergency Spill Response Program for the Physical Plant addressing any potential large spills that might enter the storm water drainage system. Physical Plant staff attended the training sessions, which also included table top discussions on various spill scenarios and response procedures. In cooperation with the Sustainable Campus Initiative Committee, featured speakers included storm water education at public lectures during Earth Week. In conjunction with Earth Week, MSUM had it's annual campus cleanup event involving students, faculty, staff, and administrators helping clean lawns, parking lots, landscaped areas, storm drains, boulevards, etc. promoting the event as a means to also minimize potential storm water pollution from runoff. University community members attended public informational sessions involving storm water educational presentations, brochures, pamphlets, and open discussions. All campus parking lots and roadway storm drains were stenciled by students educating the general community warning not to dump anything into the drains, as it may eventually drain into the Red River. Students put up posters around campus educating university community members to monitor parking lots & grounds and report potential sources of storm water contaminants by calling a "hotline" phone number. Students working with the Dept. of Environmental Health & Safety were trained on storm water drain inspections and took part in assisting the Physical Plant with the process.

Physical Plant employees responsible for university grounds received training on storm water impacts from lawn care, landscaping and pest control applications. Procedures are in place for vehicle and lawn equipment washing requiring it be accomplished within interior wash bays. Procedures are in place involving regular parking lot and sidewalk cleaning with machine sweeping and vacuuming removing surface sediment and debris. MSUM has in place an on-going storm drain inspection and cleaning program that includes storm drain grates, detention pond, pump station, catch basins, and other appurtenances. Evaluation in the use of alternative products,

primarily pesticides and herbicides, continues to be investigated to minimize contaminated storm water. MSUM primarily utilizes sand as an alternative to salt when addressing icy sidewalks and parking lots, minimizing pollutant runoff, and in addition, the sand is swept up each spring and recycled in use. Hazardous material storage areas are inspected on a regular basis. Hazardous material storage areas are enclosed, utilize spill prevention, and are provided with secondary containment systems and spill response. This past year an Emergency Spill Response Program was further developed that included updated training with Physical Plant staff in providing better preparation towards addressing hazardous material spill response. Exterior signs are placed in problem areas reminding neighboring pet owners to collect and place in a proper receptacle their animal's fecal waste. A vehicle maintenance program is in place that reminds drivers of both fleet and service vehicles to regularly inspect their vehicles and report any maintenance concerns to the Physical Plant.

St. Cloud State University, St. Cloud, MN

SCSU has recycled glassware from the Biology stockroom due to the ongoing initiative of a very supportive faculty member.

Part 5: Matrix of College/university and Categories

Alexandria Technical College, Alexandria, MN

Activity Type	Ongoing	FY 2005	Planned	Quantifiable Data Included?
1. Absorbents	√	√		
2. Adhesives	√	√		
3. Air Quality, CFCs	√	√	√	
4. Antifreeze	√	√		
5. Audits	√	√		
6. Automotive Fuels	√	√	√	
7. Automotive Maintenance	√	√		
8. Batteries	√	√		
9. Cleaning Supplies	√	√		
10. Commuting and Transportation				
11. Education, Communications and Training	√	√	√	
12. Electronics	√	√		
13. Energy -Use	√	√		
14. Energy – Production				
15. Groundwater Wells				
16. Heavy Metals	√	√		
17. HVAC, Indoor Air Quality	√	√	√	
18. Ice Control, Sanding	√	√	√	
19. Laboratory	√	√		
20. Landscaping	√	√	√	
21. Materials Exchange	√	√		
22. Office Supplies	√	√		
23. Oil, Oil Filters,	√	√		
24. Paints, Coatings, Stripping	√	√		
25. Parts Cleaning	√	√	√	
26. Personal Care Products				
27. Pesticides, Fertilizers	√	√		
28. Policy Statement		√		
29. Printing	√	√		
30. Procurement	√	√		
31. Remanufactured Parts	√	√		
32. Tanks				
33. Technical Support	√	√		
34. Tires	√	√		
35. Water Treatment and Conservation	√	√		
36. Other				

Minneapolis Community & Technical College (MCTC)

Activity Type	Ongoing	FY 2005	Planned	Quantifiable Data Included?
1. Absorbents				
2. Adhesives				
3. Air Quality, CFCs				
4. Antifreeze				
5. Audits				
6. Automotive Fuels				
7. Automotive Maintenance				
8. Batteries				
9. Cleaning Supplies				
10. Commuting and Transportation	05 & 06			
11. Education, Communications and Training				
12. Electronics				
13. Energy -Use				
14. Energy – Production				
15. Groundwater Wells				
16. Heavy Metals				
17. HVAC, Indoor Air Quality				
18. Ice Control, Sanding				
19. Laboratory				
20. Landscaping				
21. Materials Exchange				
22. Office Supplies				
23. Oil, Oil Filters,				
24. Paints, Coatings, Stripping				
25. Parts Cleaning				
26. Personal Care Products				
27. Pesticides, Fertilizers				
28. Policy Statement				
29. Printing				
30. Procurement	05 & 06			
31. Remanufactured Parts				
32. Tanks				
33. Technical Support				
34. Tires				
35. Water Treatment and Conservation				
36. Other				

Northwest Technical College, Bemidji, MN

ACTIVITY TYPE	ONGOING	FY 2005	PLANNED	DATA INCLUDED
1. ABSORBENTS	X			X
2. ADHESIVES	N/A			
3. AIR QUALITY, CFC's				
4. ANTIFREEZE	X			X
5. AUDITS				
6. AUTOMOTIVE FUELS	X			X
7. AUTOMOTIVE MAINT.	X			X
8. BATTERIES	X			X
9. CLEANING SUPPLIES	X			X
10. COMMUTING AND TRANSPORTATION	X			
11. EDUCATION, COMMUNICATIONS, TRAINING				
12. ELECTRONICS	X			X
13. ENERGY USE	X			X
14. ENERGY PRODUCTION				
15. GROUNDWATER WELLS	N/A			
16. HEAVY METALS	X			X
17. HVAC, INDOOR AIR QUALITY			X	
18. ICE CONTROL/SANDING	X			X
19. LABORATORY	X			X
20. LANDSCAPING	X			X
21. MATERIALS EXCHANGE				
22. OFFICE SUPPLIES				
23. OIL / OIL FILTERS	X			X
24. PAINTS/COATINGS/STRIPPERS	X			X
25. PARTS CLEANING	X			X
26. PERSONAL CARE PRODUCTS				
27. PESTICIDES / FERTILIZERS	X			X
28. POLICY STATEMENT				
29. PRINTING				
30. PROCUREMENT	X			X
31. REMANUFACTURED PARTS				
32. TANKS	X			X
33. TECHNICAL SUPPORT				
34. TIRES	X			X
35. WATER TREATMENT	N/A			

St. Cloud Technical College, St. Cloud, MN

Activity Type	Ongoing	FY 2006	Planned	Quantifiable Data Included?
1. Absorbents				
2. Adhesives				
3. Air Quality, CFCs	X			
4. Antifreeze	X			
5. Audits	X			
6. Automotive Fuels				
7. Automotive Maintenance	X			
8. Batteries	X			
9. Cleaning Supplies	X			
10. Commuting and Transportation	X			
11. Education, Communications and Training	X			
12. Electronics	X			
13. Energy -Use	X			
14. Energy – Production				
15. Groundwater Wells	X			
16. Heavy Metals	X	X		
17. HVAC, Indoor Air Quality	X			
18. Ice Control, Sanding	X			
19. Laboratory	X			
20. Landscaping	X			
21. Materials Exchange				
22. Office Supplies	X			
23. Oil, Oil Filters,	X			
24. Paints, Coatings, Stripping	X			
25. Parts Cleaning	X			
26. Personal Care Products				
27. Pesticides, Fertilizers	X			
28. Policy Statement	X			
29. Printing				
30. Procurement	X			
31. Remanufactured Parts				
32. Tanks				
33. Technical Support	X			
34. Tires	X			
35. Water Treatment and Conservation				
36. Other	X			

Riverland Community College

Activity Type	Ongoing	FY 2006	Planned	Quantifiable Data Included?
1. Absorbents	X			
2. Adhesives				
3. Air Quality, CFCs				
4. Antifreeze				
5. Audits				
6. Automotive Fuels	X			X
7. Automotive Maintenance	X			
8. Batteries	X			
9. Cleaning Supplies	X			
10. Commuting and Transportation	X			
11. Education, Communications and Training				
12. Electronics				
13. Energy –Use	X			
14. Energy – Production				
15. Groundwater Wells				
16. Heavy Metals				
17. HVAC, Indoor Air Quality	X			
18. Ice Control, Sanding	X			
19. Laboratory	X			
20. Landscaping	X			X
21. Materials Exchange				
22. Office Supplies				
23. Oil, Oil Filters,	X			
24. Paints, Coatings, Stripping	X			
25. Parts Cleaning	X			
26. Personal Care Products				
27. Pesticides, Fertilizers	X			
28. Policy Statement				
29. Printing				
30. Procurement				
31. Remanufactured Parts				
32. Tanks				
33. Technical Support				
34. Tires	X			
35. Water Treatment and Conservation				
36. Other				

Bemidji State University, Bemidji, MN

Activity Type	Ongoing	FY 2006	Planned	Quantifiable Data Included?
1. Absorbents				
2. Adhesives				
3. Air Quality, CFCs				
4. Antifreeze				
5. Audits				
6. Automotive Fuels				
7. Automotive Maintenance				
8. Batteries				
9. Cleaning Supplies				
10. Commuting and Transportation	X			
11. Education, Communications and Training	X			
12. Electronics		X		
13. Energy – Lighting	X	X	X	Yes
14. Energy – Production			X	Yes
15. Groundwater Wells				
16. Heavy Metals				
17. HVAC, Indoor Air Quality		X		
18. Ice Control, Sanding				
19. Laboratory	X			
20. Landscaping	X			
21. Materials Exchange				
22. Office Supplies	X			
23. Oil, Oil Filters,				
24. Paints, Coatings, Stripping	X			
25. Parts Cleaning		X		
26. Personal Care Products				
27. Pesticides, Fertilizers				
28. Policy Statement	X			
29. Printing				
30. Procurement				
31. Remanufactured Parts	X			
32. Tanks				
33. Technical Support				
34. Tires				
35. Water Treatment and Conservation	X			
36. Other				

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Activity Type	Ongoing	FY 2006	Planned	Quantifiable Data Included?
1. Absorbents				
2. Adhesives				
3. Air Quality, CFCs				
4. Antifreeze	X			
5. Audits				
6. Automotive Fuels	X			
7. Automotive Maintenance				
8. Batteries	X			
9. Cleaning Supplies	X			
10. Commuting and Transportation	X			
11. Education, Communications and Training	X			
12. Electronics				
13. Energy -Use	X		Fall 06	
14. Energy – Production				
15. Groundwater Wells	X			
16. Heavy Metals				
17. HVAC, Indoor Air Quality	X			
18. Ice Control, Sanding				
19. Laboratory				
20. Landscaping	X			
21. Materials Exchange				
22. Office Supplies				
23. Oil, Oil Filters,				
24. Paints, Coatings, Stripping				
25. Parts Cleaning	X			
26. Personal Care Products				
27. Pesticides, Fertilizers				
28. Policy Statement				
29. Printing				
30. Procurement				
31. Remanufactured Parts				
32. Tanks				
33. Technical Support				
34. Tires	X			
35. Water Treatment and Conservation				
36. Other				