

Pollution Prevention:
Summary Report Summary Report

Consolidated from reports submitted by members of the Interagency Pollution Prevention Advisory Team for the fiscal year 2004
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IPPAT Agency Contacts

<p>Anoka-Hennepin Technical College 1355 West Highway 10, Anoka, MN 55303 Contact: David Jeffrey 763-576-4725</p>	<p>Bemidji State University 1500 Birchmont Drive NE, Box 10 Bemidji, MN 56601-2699 Contact: Richard Marsolek 218-755-3988</p>
<p>Mankato State University 111 Wiecking Center, Mankato, MN 56002 Contact: Rob McGinn 507-389-5568</p>	<p>Metropolitan State University 700 East Seventh Street, St. Paul, MN 55106 Contact: Thomas Maida 651-793-1725</p>
<p>Minnesota State Colleges and Universities (MNSCU) 550 Cedar Street, St. Paul, MN 55101 Contact: Sally Grans 651-296-7083</p>	<p>Minnesota State University-Moorhead 1104 7th Avenue S, Moorhead, MN 56563-2996 Contact: Alan Breuer 218-477-2998</p>
<p>Minnesota West Community and Technical College 1011 First Street W, Canby, MN 56220 Contact: Jeff Harms 507-223-7252</p>	<p>North Hennepin Community College 7411 85th Avenue N, Brooklyn Park, MN 55445 Contact: Larry Meyers 763-424-0772</p>
<p>St. Cloud State University 720 Fourth Avenue S., St. Cloud, MN 56301-4498 Contact: Jim A. Williams 320-308-2266</p>	<p>Southeast Technical College 308 Pioneer Road, Red Wing, MN 55066 Contact: Greg Williams 507-453-2770</p>

Introduction

The Pollution Prevention Summary Report is a consolidation of the summary reports on pollution prevention activities for the fiscal year 2004, submitted by participating Minnesota state agencies.

Purpose of the report

Every year, state agencies are required to prepare a summary of their progress in preventing pollution. This report fulfills the requirements of Governor's Executive Order 99-4 providing for the implementation of pollution prevention by state government. Agency contacts are listed on the opposite page.

Organization of the report

This report is divided into four parts:

- Description of each agency, including the number of employees, locations of the agencies, and pollution prevention training held during the last year.
- Summary of each agency's policy and regulatory activities that have incorporated pollution prevention (P2) in its broader sense.
- Summary of each agency's efforts toward pollution prevention within specific category headings. It is designed to facilitate greater use of the document by participating agencies and by others seeking information about pollution prevention opportunities.
- Matrix of the agencies providing activity summaries under the different categories. It allows the reader to identify all the categories in the report for which a particular agency has provided a summary of activities.

An original signed copy of each agency's report is on file at the Office of Environmental Assistance. For more information, contact Emily Moore at the OEA at 651-215-0201 or toll-free at 800-657-3843.

Part 1

Agency Descriptions

Part 1 includes general information about the participating agencies, including size of staff; the number of locations, and the amount of pollution prevention training staff has had during fiscal year 2004.

Bemidji State University (BSU) – Bemidji State University includes two locations: the BSU main campus and the Center for Research and Innovation. BSU employs approximately 541 faculty and staff, and 615 student employees. This summary reports on both locations. No specific training was conducted in FY 2004.

North Hennepin Community College (NHCC) – Approximately 360 staff work at our agency, which has two locations: North Hennepin Community College campus and off-campus classes at Buffalo High School, Buffalo, Minnesota. We are reporting only for North Hennepin Community College. P2 training is required of Plant Services staff and certain other staff, and is voluntary on part of other staff.

St. Cloud State University (SCSU) – St. Cloud University employs approximately 1,500 administrative, teaching, clerical, and technical maintenance personnel in both full- and part-time positions. The campus consists of 42 buildings and is situated on more than 100 acres. For purposes of this report, all campus locations will be included. Members of the SCSU staff are receiving an increased 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., 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.

Southeast Technical College – Minnesota State College-Southeast Technical has 151 employees; departments include instructional, support staff, clerical, maintenance, administration, student services, financial aid, placement, custom services, marketing, and outreach departments. Minnesota State College- Southeast Technical consists of three facilities referred to as Red Wing Campus, Winona Campus, and Winona Airport Campus. This report will cover the agency as a whole.

The college has not offered any formal training to all staff on pollution prevention; however, formal policies exist on recycling, waste prevention, and hazardous waste management. Trade and Industrial faculty and maintenance personnel are provided annual training on hazardous waste management as a component of a comprehensive safety program.

Part 2

Policy and Regulatory Activities

North Hennepin Community College – NHCC has identified the sources of waste generation on campus and evaluated the waste stream from these sources. Plans have been developed and implemented to separate recyclable/recoverable items in these waste streams to make better use of resources. Recyclables such as aluminum, glass, cardboard, etc. have been recycled for several years here on campus. Office supply products such as file folders and binders are recovered, redistributed, and reused when staff leave or clean out files.

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

Part 3

Pollution Prevention Activities during the Fiscal Year 2004

Part 3 contains information about the pollution prevention activities practiced by the participating agencies. The information is organized by category of material, listed alphabetically. All individual agency summary reports that address pollution prevention measures for a given material are listed in the same order as in Part 1.

1. Absorbents

St. Cloud State University – Absorbent pad and pans or other similar products and launder able 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.

Southeast Technical College – Absorbents are used in the Aviation Maintenance Technology, Industrial Maintenance, Auto Body Technology, Automotive Technology, Machine Tool and Die, and Truck Driving programs, as well as the maintenance department. Absorbents used include pads, socks, and spill sorb. All used products are incinerated.

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and Truck Driving programs, as well as the maintenance department. Absorbents used include pads, socks, and spill sorb. All used products are incinerated.

2. Adhesives

North Hennepin Community College – NHCC uses several types of adhesives, primarily in the art and plant services departments. Every effort is used to properly control product and follow manufacturer recommendations to ensure all adhesives are completely used and handled correctly to avoid being wasted.

St. Cloud State University – 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 that may cause temporary air quality concerns with building occupants.

3. Air Quality, CFCs

North Hennepin Community College – NHCC considers indoor air quality a high priority. Air quality sampling has been performed on problem/suspect areas, and corrective action is taken to prevent reoccurrence. Several of the older buildings have been renovated over the past five years with new higher efficiency air handling units installed that provide for better air filtration and increase fresh air supplied to interior spaces of these buildings.

CFC refrigerants are used on campus in central plant chillers (R-134), and several smaller air-conditioning (R-12) and refrigeration units (R-408, 22). No supplies or stocks of refrigerant are kept on campus. Refrigeration units that are found to be leaking are repaired and retrofitted with a more ozone friendly replacement refrigerant. This type of work is performed by qualified outside contractors.

St. Cloud State University – 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 CFCs by using R-22 refrigerant. The university has been able to continue retiring cooling towers and R-12 and R-113 chillers, as more buildings are linked to the chilled water system.

Southeast Technical College – All work involving refrigerants is performed by licensed contractors on physical plant equipment. 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 reclaimers.

4. Antifreeze

North Hennepin Community College – The college no longer uses antifreeze to winterize cooling coils. A different method has shown favorable results and will be continued. Small quantities of automotive antifreeze from lawn equipment are brought to a local recycler.

St. Cloud State University – SCSU is moving away from using antifreeze to winterize cooling coils and is using more controls to reduce fleet use of antifreeze.

Southeast Technical College – Antifreeze is used mainly in the Automotive Technology program and is recycled; no antifreeze is sewerred.

5. Audits

St. Cloud State University – MacNeil Environmental Inc. has performed increased environmental audit functions as part of their Environmental Health and Safety contract with SCSU. These relate to elements of hazardous waste disposal, storage tanks, and the OSHA laboratory standard, which encompass pollution prevention. The SCSU Chemical Hygiene Officer has received specialized off-site laboratory safety training this past year. He has become

increasingly instrumental on hazardous waste audits, waste prevention planning, and hazardous waste removal. Departmental 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 facilities condition survey. Survey environmental recommendations included specific purchases and capital/repair projects. These affect HVAC and electrical system revisions and both energy and water conservation measures. We are continuing to benefit from their insights.

Southeast Technical College – No formal audits have taken place for pollution prevention except for audits mandated by the MPCA, OSHA, and other regulatory agencies.

6. Automotive Fuels

Bemidji State University – Bemidji State University has 52 vehicles in its fleet. There are no E85 vehicles in the fleet. Bemidji State University continues to operate two battery-powered maintenance vehicles that were purchased to replace two full-sized vans. Annual fuel savings are expected to be about \$250.

North Hennepin Community College – Fuel for grounds equipment is stored in an aboveground 285-gallon diesel tank, which has spill containment. Gasoline for small equipment is kept in approved safety cans and stored in an approved safety cabinet. E85 fuels have not been used on our older vehicles.

St. Cloud State University – SCSU has 16 alternative fuel (ethanol E85) autos in its motor pool. They produce limited carbon monoxide. The college now has on-site E85 refueling and pumped about 13,500 gallons for motor pool use last fiscal year. The Minnesota Dept. of Commerce/State Energy Office also monitors E85 usage.

Southeast Technical College – The college has a total of 29 vehicles. Twelve are semi trucks for our Truck Driving program. The rest of the vehicles consist of four maintenance vehicles, two cars used for Driver Training, and eleven other vehicles used for staff travel and program needs. Currently, the college has no vehicles that can use E85 fuel. The Truck Driving program will use biodiesel fuel when it is available in Winona. Automotive fuels are used for college vehicles and by Maintenance, Automotive Technology, Truck Driving, and Aviation Maintenance Technology programs. Minimum amounts of fuel are stored on site in approved containers. When vehicles are purchased, fuel economy is a factor in selection. Our Truck Driving program stores trucks in a heated garage during the winter months to reduce warm-up time to improve fuel *26 Interagency Pollution Prevention Advisory Team* efficiencies. The college also has installed a driving simulator, reducing student time spent in the trucks learning the basics. The savings on fuel and maintenance on the trucks cover the cost of the simulator.

7. Automotive Maintenance

North Hennepin Community College – Major vehicle repairs are performed by auto dealerships. Minor maintenance such as oil and filter changes are performed by qualified staff on campus. The used oil, filters, and antifreeze are recaptured by staff and sent to a local vendor for recycling.

St. Cloud State University – The SCSU vehicle repair shop has revamped procedures for brake pad/shoe replacement to ensure asbestos fiber release control. Replacement pads are non-asbestos. The Diesel Repair, Locksmith, 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.

Southeast Technical College – Automotive maintenance is performed in the Automotive Technology program and maintenance department. All oil and oil filters are recycled.

8. Batteries

North Hennepin Community College – All batteries are recycled. Every effort is made to ensure that when a new lead-acid battery is purchased, the old one is brought in for exchange. Other batteries are recycled through a local supplier.

St. Cloud State University – SCSU stores unreliable automotive lead acid batteries in a secondary container until recycling pickup and is experimenting with 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's Chemical Safety Day Program.

Southeast Technical College – Old batteries are turning in when the college purchases new vehicle batteries are purchased. Any other lead acid type batteries are taken to a recycling center. Small batteries purchased are the mercury-free type.

9. Cleaning Supplies

North Hennepin Community College – Environmentally friendly cleaning supplies are used. MSDS sheets are maintained in each custodial closet, and safety procedures are adhered to when products are dispersed and used.

St. Cloud State University – A SCSU committee has been in place for several years to review cleaning products that can be substituted for those which pose a hazard to the employee using them or pose a pollution risk. Cleaning products are purchased in bulk as much as possible and then transferred into hazard labeled reusable/refillable bottles and containers.

Southeast Technical College – Cleaning supplies whenever possible are purchased from existing state purchasing contracts, which have resulted in the use of safer products.

10. Commuting and Transportation

St. Cloud State University – SCSU has moved beyond subsidizing bus passes for students and faculty to partnering with student government and St. Cloud Metropolitan Transit Commission to provide a new Free Ride program, a free service on 17 bus routes to current SCSU ID cardholders. This includes evening transportation in the campus area. Over 30 apartment complexes are within 20 bus minutes of campus. Clipper West route riders have increased 107 percent for January 2004 compared to January 2003, reducing parking congestion.

Southeast Technical College – The college has purchased two vans to allow larger groups to travel together whenever possible to reduce the number of vehicles used for travel. Interactive video and/or speakerphones are used for meetings between the Red Wing and Winona campuses to reduce travel.

11. Education, Communications, and Training

Bemidji State University – 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. Members of the Students for the Environment, a student organization, attended a Wind Energy Conference sponsored by U.S. Senator Byron Dorgan and the Energy and Environmental Research Center at the University of North Dakota.

A student-developed program entitled "It's Good to Be Green" was presented at the annual student scholarship day and subsequently to the members of the Environmental Advisory Committee. The PowerPoint presentation described the economic, social, and environmental benefits of implementing environmentally prudent decisions and actions into university operations and policies. The program was well received, and it is planned to make the presentation available to the entire university community during the up-coming school year.

On Earth Day (April 22, 2004) the BSU Environmental Advisory Committee passed a resolution urging the University to:

- Sign the Talloires Declaration during a public event occurring fall semester 2004.
- Continue to pursue the goals outlined on the master plan. Particularly goals associated with parking and transportation sustainability.

- Develop an endowment through the foundation, which would allow individuals and/or groups donating money to BSU to choose environmental sustainable programs.

North Hennepin Community College – Brightly colored signs and containers are prevalent in buildings and on grounds throughout campus. Plant Services staff are aware of the importance of the college's recycling effort, and new hires are trained on proper procedure before being allowed to work independently.

St. Cloud State University – The Environmental and Technological Studies Department of SCSU reflects increased opportunities for pollution prevention emphasis in the region of laboratory procedures. 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. The charter class of 20 nursing students received their baccalaureate degrees on May 9.

Southeast Technical College – The college provides training to appropriate staff and students on safe handling and disposal of materials. Posters are displayed in each lab area as reminders.

12. Electronics

North Hennepin Community College – All discarded electronics are properly disposed of by a licensed local contractor. The college has started leasing much of the electronics that was once bought, used, and then discarded in the past. Leasing electronic equipment reduces NHCC's waste stream quantities of this type of material, as the leased equipment is returned to the distributor once the lease is up.

St. Cloud State University – 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 32,000 pounds and net cost of about \$11,000) was recycled for somewhat offsetting commodity and precious metal credits. Styrofoam from computer, electronic, and other shipping cartons was also recycled.

Southeast Technical College – Old computers are first offered to other MnSCU colleges. Remaining computers are then sold to the public through advertised sales. Scrap electronic equipment is recycled through vendors from the state contract list.

13. Energy – Lighting

Bemidji State University – BSU continued an ongoing program of replacing T-12 fluorescent and incandescent lights and ballasts with T-8 and compact fluorescent lighting. During FY 2004, the replacements resulted in a net reduction of approximately 45,000 watts of lighting. The estimated annual savings is \$5,500 or approximately 0.8 percent of the university's annual electric service bill. In addition to the energy savings, BSU received \$8,977 in rebates for the project, through Otter Tail Power Company's participation in the Minnesota Conservation Improvement program (CIP).

BSU continued an ongoing 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. The devices limit the energy used for lighting in areas that are used frequently, but for short periods of time. Sensors will continue to be installed on an ongoing basis as funding and time permits.

North Hennepin Community College – At present NHCC has renovation projects taking place in several areas. These renovated areas will have energy-efficient lamps, ballast, and motors. All used lamps are recycled by a licensed local contractor.

St. Cloud State University – As part of a \$3 million energy conservation project with NSP, SCSU has shaved peak demand by about 25 percent. Occupancy sensors, LED exit lights, high efficiency fluorescent lights, and variable frequency motor drives also reduce consumption and pollution, as does the upgraded 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.

Southeast Technical College – The college has installed and continues to upgrade an energy management system to monitor HVAC systems to improve efficiencies. In 1996, all campus buildings were included in the Northern States Power Company energy retrofit program for state owned buildings. Lighting retrofits included both interior and exterior fixtures. The energy savings achieved will pay for the retrofits within 8½ years for combined electric and natural gas savings. As part of the retrofit project, hot water heaters were installed to allow the boiler to be off-line during summer months and a thermo-ice storage unit was installed to allow the chiller to make ice during off-peak times from 11:00 p.m. to 6:00 a.m. and then cool the building during the day from stored ice providing chilled water circulated through HVAC coils. Other major retrofits included replacing electric fryers, steamers, and grills to natural gas units. Boiler efficiencies were also gained by installing oxygen trim control to improve combustion efficiency and turbulators to reduce heat loss through flue.

14. Energy – Production

Bemidji State University – BSU is continuing to explore the possibility of participating in Otter Tail Power Company's TailWinds, wind energy program. Through this program, the university can purchase 100 kWh blocks of wind-generated electricity for \$2.60 per block above the regular cost. The additional charge goes toward the development of wind energy. To offset the additional cost, BSU is looking at ways to improve energy conservation on campus, seeking grants and rebates that would support the program, and discussing the possibility of establishing a wind energy endowment fund through the University Foundation.

North Hennepin Community College – North Hennepin Community College does not have standby generator capacity. No electrical energy is produced at this site. Monthly usage of electricity and fuels are closely monitored to help ensure efficient operation of facilities.

St. Cloud State University – As with the SCSU lighting improvements identified above in category 13, *Energy-Lighting*, and 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 # 2 oil, and MPCA-required air pollution testing has shown minimal (far below any action level) particulate pollution emissions from the stacks when this boiler is in operation.

15. Groundwater Wells

North Hennepin Community College – There is one deep well on site, which is used for lawn irrigation purposes only.

St. Cloud State University – SCSU has a small number of groundwater monitoring wells used for research purposes.

Southeast Technical College – The Winona campus has one well, which has required permits from MPCA and DNR and is used for once through cooling for the condenser on the chiller units. In 1997, a study was conducted on possible ways to reduce well water consumption. It was determined that a variable frequent drive motor would reduce water consumption by approximately 40 percent during times when only one chiller was needed on line.

16. Heavy Metals

North Hennepin Community College – Hazardous waste disposal for instructional chemicals is handled through the University of Minnesota.

St. Cloud State University – 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 to 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 and replaced

with electronic imaging systems. 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. Many containers of heavy metal compounds were removed from SCSU using the University of Minnesota's Chemical Safety Day Program.

17. HVAC, Indoor Air Quality

North Hennepin Community College – The college plans to continue its program of monitoring and testing indoor air quality. Last year NHCC tested its Plant Services and Activities Buildings.

St. Cloud State University – SCSU is using a carbon dioxide chart recorder to assist in ventilation troubleshooting. Custodial staff, HVAC staff, and Human Resource personnel 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. 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 indoor air quality. Strict new carpet emission controls are used extensively to limit volatile organic compounds. 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 cleaner 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.

Southeast Technical College – To improve air quality in our lab areas, HVAC improvements have been implemented and exhaust systems were installed. In our Auto Body Technology lab, we have installed a vacuum system to capture sanding dust. A new paint booth was installed in FY 03 at the Red Wing campus. Plans are underway to remove all ducts lined with fiberglass, replaced with exterior lined ducts.

18. Ice Control, Sanding

Bemidji State University – A liquid snow and ice removal product is being used, primarily on entryways to campus buildings, to reduce sand and salt use. Salt and sand is still more cost-effective for large-scale use, such as parking lots and sidewalks.

North Hennepin Community College – All sidewalks are cleared of snow and ice, and Ice Melt is applied as needed throughout the winter. A plowing contractor performs snow removal from parking lots. The college determines when and where to sand parking lots in order to keep sand use to only what is needed.

St. Cloud State University – 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 is stockpiled, and the small stockpile of mix is kept on a slab and covered with tarpaulins to control salt leeching.

Southeast Technical College – Ice control for walkways is done by using a calcium chloride type ice melter. Sanding with sand/salt mixture is used on roadways and parking areas. Sanding is done when needed, and amounts vary depending on conditions.

19. Laboratory

Bemidji State University – The BSU Chemistry Department continues to incorporate micro-scale laboratory techniques into its courses. This reduces both the amount of hazardous wastes generated and the amount of new chemicals needed.

North Hennepin Community College – The college contracts with MacNeil Environmental on a yearly basis to provide professional technical expertise in this area.

St. Cloud State University – 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. 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 identify and remove over 70 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 reviews have received special emphasis in all labs in the College of Science and Engineering Departments. Renovations have included the addition of more plumbed eyewashes, and better formaldehyde controls are being used.

Southeast Technical College – The college now has science labs on both the Red Wing and Winona campuses. Instructors and the maintenance staff have received training in the OSHA lab standards. Products are purchased only in quantities needed for experiments to reduce the amount of hazardous chemicals that need to be disposed of.

20. Landscaping

St. Cloud State University – 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. 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.

Southeast Technical College – The college received a grant to convert approximately 6.5 acres to prairie grass restoration. This project, when complete, will reduce grounds maintenance and costs in fuel, labor, and equipment.

21. Materials Exchange

North Hennepin Community College – Used but serviceable computers and components have been given to other schools that expressed a need. Excess office equipment is given to other schools and also turned in to the state's Materials Management Division for use elsewhere.

St. Cloud State University – Glass, plastics, aluminum cans, steel, carpet, some building materials, Styrofoam, and cardboard are recycled at SCSU, as well as lard and cooking oil. A local farmer's hogs are fed leftover food.

Southeast Technical College – Materials exchange website is checked to determine if any materials listed could be used for college needs.

22. Office Supplies

Bemidji State University – The university continues to purchase copy machine paper with at least 30 percent recycled content for use in all campus copy machines. This policy results in a somewhat higher cost (\$1,500-\$1,700 per year). 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.

North Hennepin Community College – Central Duplicating Services section provides both new and recycled office supplies to all departments on campus. In 2004 the college purchased 68.4

tons of paper. The post-consumer content for the paper is 20 percent. The paper required 22,401,014 BTUs to produce, which corresponds to 359,796 pounds of CO2 equivalents. 379,390 pounds of wood were used to produce the paper.

St. Cloud State University – SCSU extensively uses paper with 50 percent recycled content and 30 percent post-consumer fiber content. Office and computer paper is recycled. An exception is most of 838 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 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.

Southeast Technical College – Office supplies are purchased off state contracts or obtained through surplus properties whenever possible. The business office provides a central store for all college office supplies. Any supplies needed are requisitioned by staff. The college used 5,100 reams of virgin paper in FY 04. The associated energy use to produce the paper was 500,029.4 BTUs. CO2 equivalents were 73,836 and 9,013,3 pounds of wood.

23. Oil, Oil Filters

North Hennepin Community College – The college collects and stores used oil and filters in approved containers and recycles them through a local recycling vendor.

St. Cloud State University – SCSU oil filters are drained for over 24 hours to qualify as special Hazardous waste. Motor oil is collected and recycled.

Southeast Technical College – Oil and oil filters are recycled following all current regulations. Oil changes on customer vehicles in our Automotive Technology program are kept to a minimum to reduce amount of oil and oil filters collected.

24. Paints, Coatings, Stripping

Bemidji State University – BSU maintenance procedures continue to use electrostatic painting and low VOC paints whenever possible. A moratorium on the use of organic solvent-based wood sealers continues. Water based paints and finishes are used whenever possible.

North Hennepin Community College – Minimal painting is done on site by in-house staff. The small quantities of paint/coatings kept on site are used for touch-ups and dried out and discarded when all of product is used up. The services of a local contractor are used for area painting.

St. Cloud State University – SCSU has converted almost all possible paint coatings to water-based products to limit volatile organic compounds.

Southeast Technical College – Latex paints are used whenever possible by our Maintenance department instead of oil base paint products and old paint is often used as a primer rather than purchasing primer paint.

The Auto Body Technology program is using automotive paint with lower VOC ratings. Band and String Instrument Repair and Carpentry programs use strippers and refinishing products. Safer products are considered when possible. All products are stored, used, and disposed of following regulatory requirements.

25. Parts Cleaning

St. Cloud State University – SCSU has experimented with more environmentally friendly brake cleaner and parts washer fluids in the auto repair shop. The Art department and print shop use a solvent recycling service, which provides them pollution prevention “We Care”® training.

Southeast Technical College – The Automotive Technology and Aviation Maintenance Technology programs have purchased aqueous parts washers. These units have been tested and the solution is non-hazardous. When the unit is cleaned, the remaining sludge residue is taken by Safety Kleen when they pick up used oil. The aqueous parts washers have reduced the number of solvent parts washers from four to only one. It now only requires two services per year.

26. Personal Care

Southeast Technical College – Personal care products are used in the Cosmetology program. Students are taught proper usage and application methods. Material safety data sheets are kept on all products used. Past dated products are disposed of properly. Most can be sewered after receiving approval from our local wastewater official.

27. Pesticides, Fertilizers

North Hennepin Community College – All pesticides for pest and weed control and lawn fertilizers are applied by licensed private contractors.

St. Cloud State University – 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 a *Pollution Prevention Summary Report 77* accidental spill. Phosphate use concerns were very prominent in MS4 actions and public community concern/outreach meetings.

Southeast Technical College – The college has reduced applications of pesticides and fertilizers from two to one per year, except for the lawn area around the main buildings.

28. Policy Statement

North Hennepin Community College – North Hennepin Community College strives to do its part in protecting the environment through conscientious use of supplies, materials, and equipment. NHCC recycles *80 Interagency Pollution Prevention Advisory Team* and reuses whenever possible, in order to make full use of the valuable resources that went into making these products.

St. Cloud State University – 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.

Southeast Technical College – Environmental policies exist on OSHA, MPCA, and EPA compliance. They also exist on recycling and waste prevention. Through recycling efforts the college reduced rubbish removal services from twice a week to once a week service mainly through recycling office paper and cardboard and increasing some dumpster sizes.

29. Printing

North Hennepin Community College – While some of our copying is performed on departmental photo copy machines with recycling bins located nearby for disposal of copy errors, NHCC's duplicating section runs off most of the tests, quizzes, handouts, etc. needed on campus, using larger, more cost-effective photocopying machines. Whenever possible, copying error sheets are recycled as note pads. Large printing jobs are sent off-site to commercial vendors.

St. Cloud State University – 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 recycle books, directories, and newsprint.

Southeast Technical College – The college does not have a printing department; however, it is encouraged that staff make double sided copies when possible.

30. Procurement

Bemidji State University – 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.

North Hennepin Community College – A variety of aspects are considered when making purchasing decisions here on campus: life expectancy of the product, shelf life for chemicals, number of uses it can be put to, toxicity of chemical used in an expendable product, versatility of the product, and any special disposal requirements.

St. Cloud State University – SCSU uses toilet paper and towels of 100 percent total recycled fiber content and 40+ percent post consumer fiber content. Some carpet fibers are recycled.

Southeast Technical College – Procurement of products is done through a competitive bidding process following state contracts when possible. Materials management practices involve relocating products/equipment to other departments or MnSCU campuses, trading, or selling at public sale when possible rather than disposing of materials.

31. Remanufactured Parts

Bemidji State University – 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.

North Hennepin Community College – All departments of this college are encouraged to return fax machine ink cartridges to the manufacturer for reuse. Ink cartridges from NHCC's larger machines are sent in for re-inking and reuse in the duplicating section. The purchase of paper products containing some amount of recycled material is strongly encouraged.

St. Cloud State University – SCSU uses remanufactured photocopier cartridges.

Southeast Technical College – Remanufactured parts are used when possible by our Automotive Technology, Auto Body Technology, and maintenance department.

32. Tanks

Bemidji State University –The university's three 30,000-gallon underground heating oil tanks are scheduled for cleaning and inspection. The estimated cost for these services is \$17,000, which includes disposal of waste material from the tank bottoms. Installation of automatic leak detection monitoring is also being considered. The estimated cost of the leak detection system is approximately \$8,000.

North Hennepin Community College – There are two fuel tanks located on this campus. A 10,000-gallon underground storage tank is used for #2 fuel oil for our boiler plant, and a 285-gallon aboveground tank is used for diesel fuel for the college's lawn equipment. The monitoring and secondary containment equipment on these tanks is checked frequently to ensure leaks, spills, or contamination does not occur. An Emergency Response Plan is maintained on site for any future contingency.

St. Cloud State University – Only a single unused underground storage tank remains at SCSU. It is empty and below the basement floor of an occupied house. Spill containment control was expanded *Pollution Prevention Summary Report 89* outside the dike to the delivery connections of our twin #2 fuel oil aboveground storage tanks. Further action is being planned.

Southeast Technical College – A new underground fuel oil tank with electronic monitoring was installed at the Winona main campus in 1993 meeting all current requirements. A under ground used oil storage tank was also removed at that time. Now used oil is stored in 55-gallon drums with a secondary container for spill control. We are still waiting for funding approval to remove and replace the tank at the Red Wing Campus.

33. Technical Support

North Hennepin Community College – Technical support is provided through MnTAP, MPCA, and other state agencies as needed.

St. Cloud State University – Technical support for SCSU is often provided by its highly accredited 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 Civil and Environmental Engineer on campus for seven 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 and 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.

Southeast Technical College – The college has reduced applications of pesticides and fertilizers from two to one per year, except for the lawn area around the main buildings.

34. Tires

North Hennepin Community College – When possible old tires are turned in for recycling at time of new purchases. All other tires are recycled through local vendors.

St. Cloud State University – 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.

Southeast Technical College – Tires are installed off site. We pay to have old tires recycled. The Automotive Technology program no longer has a tire changer, which has reduced the number of old, tires we need to recycle.

35. Water Treatment and Conservation

Bemidji State University – Water conservation devices installed in 2002 reduced water consumption by approximately three million gallons during the last year as compared to pre-installation usage. That represents a savings of approximately \$25,000.

North Hennepin Community College – Plumbing fixtures and supplies with lower gallon-per-minute ratings are used at this facility whenever possible, depending upon the application requirements. Chemically treated water systems like the college's boiler water, and cooling tower chemical treatment systems, as well as closed loop heating and cooling systems are properly isolated from potable water supply by approved anti-siphon devices (RPZ).

St. Cloud State University – This past year, progress continued at SCSU on replacing restroom urinal flushing 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 5.0ug/l. A MnSCU survey resulted in some water conservation improvements.

Southeast Technical College – Some water conservation has been achieved by removing vacuum type gravity flush tanks, which ran continuously, and installing automatic flush valves on the urinals. Other conservation has included installing rain sensors on in-ground sprinkler systems.

36. Other

St. Cloud State University – SCSU has recycled glassware from the Biology stockroom due to the ongoing initiative of a very supportive faculty member.