

Bemidji State University
State Agency Pollution Prevention Summary Report
FY 2002

Part I - General Information

Average Employee Count:
Faculty and staff - 523
Student Employees – 517

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

Report Application: All BSU facilities are included in this report

P2 Training Activities: Staff and members of the Students' for the Environment, a student organization, attended the Minnesota Sustainable Communities Conference in September.

Part II – Policy/Regulatory Activity

Not Applicable

Part III – Topic Specific Information

Otter Tail Energy Services conducted an energy audit of the campus' electrical and water utilities in FY 01. The results of the electrical audit were reported early in FY 02. The suggested energy conservation measures are estimated to cost \$2.39 million to implement. The report projects a \$209,000 annual cost savings with the payback on the investment being 10 years. The cost of the audit was \$20,000. The decision to implement any or all of the suggested measures will depend on the availability of funds.

The University currently utilizes one battery powered maintenance vehicle and will consider purchasing additional ones when fleet vehicles are replaced. The Central Stores and Receiving area operates a battery powered forklift and self propelled pallet jack. The ice arena's Zamboni is also battery powered.

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.

The Students for the Environment continued work started last year with the campus food service provider and Residential Life to heighten awareness on food waste and promote food waste reduction. Members of the group, as well as some staff, attended the Minnesota Sustainable Communities Conference in September.

A lighting retrofit project in two residence halls replaced 100,200 watts of T-12 fluorescent and incandescent lights with 80,160 watts of T-8 and compact fluorescent lighting. The 20,000watt reduction is expected to reduce electrical costs by approximately \$4000 annually. The expected payback time is 2-4 years.

The Building and Grounds Department has purchased a liquid ice control/removal product to assess for use on campus sidewalks. If found acceptable, the product will reduce sand and salt use. Use of the product was limited due to mild winter conditions. Further assessments will be conducted this winter. The department also continued a moratorium on herbicide and fertilizer application to lawns around a single parent family-housing dormitory.

BSU continued for a second year to cooperate with the Minnesota Department of Natural Resources and Beltrami County to restore and stabilize the Lake Bemidji shoreline. This spring a 640-foot section of campus shoreline was stabilized with rock, plants, and other natural materials. Native aquatic plants were planted to replace the lawn and return the shoreline to a more natural condition. BSU contributed approximately \$15,000 to the project in FY2002 and will supply the labor to erect a fence. To date, more than 850 feet of shoreline has been restored. The final segment of shoreline to be restored along campus property will be completed in FY 2003.

The BSU Chemistry Department continues to incorporate microscale laboratory techniques into its courses. This reduces both the amount of hazardous wastes generated and the amount of new chemicals needed.

The department also conducted an extensive clean-out of outdated and/or unused chemical stocks. The chemicals were removed through the University of Minnesota's Chemical Safety Day Program. The chemicals will be redistributed or properly disposed of by the University of Minnesota's waste management services. The disposal cost was approximately \$4000. The project has reduced the potential for spills and the associated liabilities as well as improved safety. The department is continuing to review and reduce chemical stocks in FY 2003.

BSU offices are encouraged to incorporate waste reduction and pollution prevention into their daily operations. During FY 2002, the Purchasing Office held two office supply vendor fairs for university departments to make contacts and establish relationships with office supply vendors. Two vendors who specialize in remanufactured toner cartridges were invited each time 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.

The University continues to purchase copy machine paper with at least 30% recycled content for use in all campus copy machines. This policy results in a somewhat higher cost (\$1500-\$1700/yr). An environmental benefit should be realized through the reduction of the environmental impacts associated with the manufacture of virgin paper. 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.

BSU maintenance procedures still include the use of electrostatic painting and low VOC paint whenever possible. A moratorium on the use of organic solvent-based wood sealers was continued. The use of water-based products was expanded in FY2002.

The maintenance and purchasing departments 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.

Removal of a 560-gallon underground gasoline tank serving the BSU boathouse on Lake Bemidji began in late June. The project was completed in July at a cost of \$2350. Its removal will mitigate potential pollution problems caused by leaks and spills.

Testing of three, 30,000-gallon underground heating oil tanks is planned for FY 2003. The testing will assess the tanks' structural integrity and cost approximately \$1200. Cathodic protection will be installed if warranted by the testing.

Water conservation devices recommended in a FY 2001 energy audit report were implemented this past year. Water saving faucets and showerheads, and devices for urinal and toilets were installed throughout campus. The cost for the retrofits was approximately \$133,000. The total annual water savings is predicted to be approximately \$55,000. Actual savings will be monitored throughout the upcoming year.

Part 4 - Program Matrix

Program or Activity Type	Ongoing Activity	FY 02 Activity	Planned Activity
1. Absorbents			
2. Adhesives			
3. Air Quality, CFC's			
4. Antifreeze			
5. Audits		X	
6. Automotive – Fuels			
7. Automotive – Maintenance			
8. Batteries			
9. Cleaning Supplies			
10. Commuting, Transportation			
11. Education, Communications, & training	X		
12. Electronics			
13. Energy – Lighting		X	X
14. Energy – Production			
15. Groundwater Wells			
16. Heavy Metals			
17. HVAC, Indoor air quality			
18. Ice Control, Sanding		X	X
19. Laboratories	X	X	X
20. Landscaping	X	X	
21. Materials Exchange			
22. Office Supplies	X		
23. Oil, Oil filters,			
24. Paints, Coatings, Stripping	X	X	
25. Parts Cleaning			
26. Personal Care Products			
27. Pesticides, Fertilizers	X		
28. Policy Statement	X		
29. Printing			
30. Procurement, Materials Mgt.			
31. Remanufactured parts	X		
32. Tanks (storage)		X	X
33. Tires			
34. Technical support			
35. Water treatment, Conservation		X	
36. Other			

Part 5- Signature of Agency Head

Dr. Jon E. Quistgaard
President, Bemidji State University

Date