

Bemidji State University
State Agency Pollution Prevention Summary Report
FY 2001

Part I - General Information

Average Employee Count:

Faculty and staff (academic year) - 474

Faculty and staff (summer) - 428

Student Employees (academic year) – 615

Student Employees (summer) - 170

Staffed Facility Locations: 2 - BSU main campus

Center for Research and Innovation

Report Application: All BSU facilities are included in this report

P2 Training Activities: No specific training was implemented. However, procedures and opportunities for participating in waste reduction and recycling activities, both on and off campus, are communicated through a faculty/staff computer information list, the campus newspaper, and information provided by the BSU Environmental Advisory Committee.

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. The results of the audit indicate that a retrofit investment of \$133,000 would yield annual combined water and water heating savings of \$64,000. A simple payback would be realized in just over two years. The estimated ten year savings on the investment is over \$500,000. The electrical audit report is still pending. The cost of the audit was \$20,000. The decision to proceed with the suggested retrofits will depend on the results of the electrical audit and the availability of funds.

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 University participated in the State's 2000 Pollution Prevention Week activities by posting pollution prevention messages and information on the faculty/staff computer e-mail list. Articles on pollution prevention awareness and activities were also published in the campus newspaper during the school year. The Students for the Environment, a campus student organization, worked with the campus food service provider and Residential Life to heighten awareness on food waste and promote food waste reduction.

A number of projects completed in FY 2001 will result in energy and cost savings. New variable frequency drive motors for our HVAC systems were installed in the Student

Union. Two thousand four hundred watts of incandescent lighting was replaced by 760 watts of T8 fluorescent lighting in the BSU Field House. A \$340 rebate was received for the project. Annual energy savings are predicted to be approximately 7300 kWh or about \$300 at current rates. Emergency exit lighting for several buildings was connected to the emergency generator, allowing removal of the batteries previously used. Undetermined savings will be realized with the elimination of the annual battery maintenance and replacement costs. Fifty ton and 150 ton air conditioning units serving the administrative services building were removed. A central chiller now serves the building. The chiller is a more energy efficient closed loop system that reduces the loss of refrigerant gases and other chemicals used in the process.

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 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.

BSU maintenance procedures still include the use of electrostatic painting and low VOC paint whenever possible. The use of organic solvent-based wood sealers has been discontinued. A water based product is now used.

A moratorium on herbicide and fertilizer application to lawns around a single parent family-housing dormitory continued. BSU is cooperating with the Minnesota Department of Natural Resources and Beltrami County to restore and stabilize the Lake Bemidji shoreline. This spring a 220 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 materials and labor to install a fence for this year's project. Approximately \$20,000 has been committed to continue the project for next year.

Preliminary preparations to remove a 560 gallon underground gasoline tank were made this spring. The actual removal will be completed this fall. The tank has been used for boat motor fuel at the BSU Outdoor Program Center. Its removal will mitigate potential pollution problems caused by leaks and spills. Boat motor fuel will instead be purchased at local gas stations.

BSU offices are encouraged to incorporate waste reduction and pollution prevention into their daily operations. 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.

Part 4 - Program Matrix

Program or Activity Type	Ongoing Activity	FY 00 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		X	
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		X	
18. Ice Control, Sanding			
19. Laboratories	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
33. Tires			
34. Technical support			
35. Water treatment, Conservation			
36. Other			

Part 5- Signature of Agency Head

Dr. Jon E. Quistgaard
President, Bemidji State University

Date