

## **Kimberly-Clark Experimental Mill Annual Report for 2008**

### **X-Mill Background**

Kimberly-Clark Experimental Mill applied for the Green Tier program on February 3, 2006 and was formally accepted into the program as a Tier I participant on September 6, 2006.

Kimberly-Clark Experimental Mill is located in Neenah, WI and currently employs 49 people. The facility's primary function is to develop and deliver a continuous stream of innovative product and process solutions for the Family Care business sector.

### **Green Tier Superior Environmental Performance:**

#### **Environmental Management System**

Implementation of an EMS consistent with the "functional equivalency" requirements of Wisconsin Statute §299.83(1)(dg):

- A written site-specific EMS has been prepared and implemented. The Experimental Mill conducted an internal audit of all elements of the EMS in December 2008 to measure compliance with the "functional equivalency" requirements of Wisconsin Statute §299.83(1)(dg). Specific improvement opportunities are addressed through a continuous action plan process.
- EMS program elements and Environmental, Health and Safety Management System are reviewed on a weekly basis with facility management. .

#### **Energy**

Continued reduction of utility consumption:

- Electricity: Replaced a total of 192 400-watt metal halide fixtures with high efficiency fluorescent fixtures since 2006 (a total reduction of 115,316 kilowatt hours). Replaced 128 250-watt metal halide fixtures with high efficiency fluorescent fixtures during 2008. The yearly reduction in kilowatt hours is expected to be 50,252.
- Programmable thermostats are utilized at the Experimental Mill facility (programmed based upon a 10 hour day, five days per week) to reduce energy usage when the facility is not in operation (e.g., nights, weekends, holidays, etc.). Additionally, interior facility lighting is programmed to turn off daily at 4:30 pm.
- Effluent "sludge" from the papermaking process is sent via Neenah Paper to Fox Valley Energy (formerly Minergy), which recycles the sludge into green steam for the Experimental Mill, thereby reducing the Experimental Mill's natural gas consumption and carbon dioxide emissions into the atmosphere.
- The Experimental Mill continues to employ a fork truck usage reduction program implemented during 2007, thereby reducing the amount of propane fuel utilized and carbon dioxide emissions into the atmosphere.

- An ultrasonic air leak audit was conducted in November 2008 to identify leaks within the Experimental Mill compressed air equipment. As of December 2008, approximately 70% of the leaks identified have been corrected, with the remainder scheduled to be completed during the first quarter of 2009. The identification and correction of the leaks has reduced the amount of electricity used to run the equipment to meet the operational needs of the Experimental Mill.
- 2009 Initiative: The Experimental Mill is exploring the option of directly connecting the discharge of leachate water collected from the off-site Shady Lane landfill area (located in the Town of Menasha – currently owned by the Experimental Mill) to the Town of Menasha sanitary sewer system; thereby reducing the energy utilized to pump and transport the leachate off-site.

#### Water

- Reduced operating pressure for equipment wash up hoses from 160 psi to 60 psi, thereby reducing water used for machine washing by approximately 50%.

#### Waste

##### Continued waste minimization efforts:

- An outlet for office waste was established in 2006 so that 100% of office waste is recycled. The same vendor is used for office waste and broke.
- Through a chemical approval process, chemical inventory has been reduced by 59% since 2004. The chemical management process allows the Experimental Mill to control chemical waste volume. In addition, when possible, chemicals are ordered in smaller quantities to minimize the amount of waste.
- 100% of scrap metal is recycled (a total of approximately 88,000 pounds during 2008). Additionally, scrap metal bins were moved inside the building during 2006, thereby eliminating the potential for storm water exposure.
- Effluent paper sludge is sent via Neenah Paper to Fox Valley Energy for conversion into “green steam,” thereby reducing landfill waste.

#### Land Use

- 2009 Initiative: The Experimental Mill plans to sell a portion of a parking lot area on the west side of the property (approximately 1 acre) to the City of Neenah for re-development into a permanent green space.
- As a result of City of Neenah re-development activities, the Experimental Mill has negotiated with the local utility provider to remove and relocate power lines currently located on supports within Little Lake Butte des Morts.
- Continuing commitment to advancing groundwater remediation:
  - 2008/2009 Initiative: Hired an outside contractor, AECOM, to review historical and current site data to develop a conceptual site model (CSM) for the property which describes historical site usage and potential sources of on-site and off-site sources of contamination. A draft was being prepared at the end of 2008. Recommendations will be made to enhance reduction of potential sources contributing to the existing

groundwater contaminant plume which is being treated in the current ground water remediation system.

- 2008/2009 Initiative: Additionally, AECOM was contracted to provide maintenance for an existing, operating groundwater extraction remediation system. During regular maintenance activities, groundwater extraction pumps and transfer lines were evaluated, resulting in the replacement of the pumps and repairs to the transfer lines. Additional evaluation of the treatment system was conducted in order to determine if any enhancements could be made to increase its operating efficiency and effectiveness.

### Training

Commitment to training employees on their roles to assist in maintaining a facility that is environmentally compliant:

- Annual HazComm refresher training is required of all employees and researchers/customers.
- Annual Storm Water Pollution Prevention and Spill Prevention Control and Countermeasure refresher training is required for all employees.

### **Commitment to X-Mill Environmental Policy Statement**

The X-Mill continues to promote and support our Environmental, Health and Safety programs which work to eliminate loss to People, Equipment, Material, and Environment. Facility Management supports and is directly involved with loss control programs.

### **Economic and other benefits of participating in Green Tier**

Participation in Green Tier has accelerated the environmental cost reduction and loss control initiatives at our facility.