

Great River Medical Center

COMPANY BACKGROUND



Great River Medical Center is part of Great River Health Systems, a 378-bed regional health-care system that includes, retail pharmacies, retail medical equipment and supplies services, outpatient renal dialysis center, and a network of specialty and primary-care clinics located throughout the region. As the largest employer in the Burlington area, Great River supports 1,600 employees and 100 physicians, while admitting more than 6,000 patients and performing more than 180,000 outpatient procedures annually. The hospital is also home to one of the world's largest lake-coupled geothermal heating and cooling systems.



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PROJECT BACKGROUND

Great River is known as one of the most energy-efficient hospitals in the Midwest. In staying with its commitment to environmental excellence, the hospital wanted to examine its solid waste production, and find new ways to reduce solid waste generation. Great River currently recycles old corrugated cardboard and shredded paper, and is looking for ways to expand its recycling programs, as well as reduce overall solid waste generation.

INCENTIVES TO CHANGE

As recent recipients of the Hospitals for a Healthy Environment (H2E) Making Medicine Mercury Free award, Great River set its sights on applying for H2E's most prestigious award: the Environmental Leadership Award. One key criterion for this award is to implement a waste management plan whereby at least 25 percent of the hospital's solid waste is reused or recycled. Great River did not have an effective system for waste tracking, and was unable to establish a benchmark. Once a benchmark is established, new recycling and waste reduction programs can be put into place and progress can be made toward reaching the 25 percent waste reduction goal.

RESULTS

Hand Dryers

In 2006, Great River spent nearly \$60,000 on 14 million paper towels for public and staff restrooms. These paper towels were being paid for twice: once for the initial purchase and once for disposal. Installing hand dryers will reduce the large material and disposal costs, as well as reduce the amount of solid waste generated. It is estimated that fifty air hand dryers will reduce paper towel usage by 30-40 percent, resulting in a \$22,000 annual net savings and 11 tons being diverted from the landfill each year. These fifty air hand dryers have been ordered and are currently being installed.

Comprehensive Recycling Program

Great River's new recycling hauler parked a 53' semi-trailer at the hospital's south dock. With this trailer, seven new recycling streams were created:

Newspaper	Office paper
#1 Plastics	#2 plastics
Magazines	Shrink Wrap
Steel/tin cans	

These new recyclables will divert 20 tons of waste from the landfill and generate \$2,100 of revenue each year. A pop can/bottle redemption program was also put into place. In this program, each department is responsible for the redemption



of their cans/bottles, and the redemption money is put into a petty cash fund for the department.

Reusable Sharps

Instituting a reusable sharps container program would eliminate the purchasing cost of the current disposable sharps containers. The company providing the reusable containers would also provide Regulated Medical Waste processing at an 18 percent per pound price reduction over the current method. Additionally 4.6 tons of municipal solid waste would be diverted from the landfill annually at a \$27,600 cost savings.

Laundry Lighting

Great River has its own on-site laundry facility. The lighting at this facility consists of 33 250W metal halide bulbs (on for 10.5 hours each day) and 26, 32W T8 fluorescent bulbs (on 24 hours a day). Replacing the current metal halide bulbs with 25, 250 W ceramic metal halide bulbs, along with putting the fluorescent bulbs on a motion sensor, would save almost 10,000 kWh and \$1,000 each year.

Project	Annual Cost Savings	Environmental Results	Status
HAND DRYERS	\$22,000	11 TONS/YEAR	IN PROGRESS
COMPREHENSIVE RECYCLING PROGRAM	\$2,100	20 TONS/YEAR	IN PROGRESS
REUSABLE SHARPS	\$27,600	4.6 TONS/YEAR	RECOMMENDED
LAUNDRY LIGHTING	\$1,000	10,000 kWh/YEAR	RECOMMENDED

Air Pollutants Diverted in Tons

	Total for all sectors
SO2	0.023
CO	0.003
NOX	0.01
VOC	0.00
PM	0.00

Green House Gases Diverted in Tons (CO2 Equivalent)

	Total for all sectors
CO2	4.96
CH4	0.19
N2O	0.00
CFCS	0.06