

# IOWA HEALTH - DES MOINES

DES MOINES



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## COMPANY BACKGROUND

Iowa Health – Des Moines (IHDM) in Des Moines, Iowa, is the largest affiliate of the Iowa Health System. IHDM has a staff of nearly 7,000 employees, houses 779 beds, and is the parent of four hospitals: Iowa Methodist Medical Center, Iowa Lutheran Hospital, Blank Children’s Hospital and Methodist West Hospital. Iowa Health - Des Moines provides a variety of services including treatment and education resources for cancer, cardiac, diabetes, maternity/OB, and rehabilitation. IHDM is committed to “improving the health of our communities through healing, caring and teaching.”

## PROJECT BACKGROUND

IHDM produced approximately 1,400 tons of solid waste in 2011 and spent close to \$100,000 for disposal. Projected solid waste tonnage for 2012 is 1,600 tons and projected expenses exceed \$100,000 for disposal. The intern identified waste reduction, composting and recycling projects after performing a waste audit at the facility. As a result of the intern’s recommendations, IHDM will save thousands of dollars and make a significant impact on the environment by diverting a substantial amount of solid waste from the landfill.

## INCENTIVES TO CHANGE

IHDM is constantly searching for ways to be a more eco-friendly health care provider. This year’s project is the third year IHDM has participated in the Pollution Prevention Intern Program, with the previous two projects focusing on medical waste reduction and water conservation. This year’s project was to conduct a waste stream analysis and develop strategies to reduce waste generation and optimize the efficiency of waste management practices.

## RESULTS

The intern conducted an audit and developed a profile of waste generated at IHDM. The results were then used to identify areas of opportunity to reduce the waste generated and evaluate alternative disposal options.

**Food Waste Composting:** Composting food waste would divert a substantial portion of organic waste from the landfill. The food waste could be collected at the kitchens (pre-consumer) and cafeterias (post-consumer) by kitchen and Environmental Services (EVS) staff using bins provided by the vendor. Training and educational materials are being developed to educate staff and visitors on procedures for disposing of food waste. Capturing 50 percent of the food waste could result in a diversion of nearly 278 tons from the landfill each year.

**Single Stream Recycling:** The existing recycling program at IHDM was good, but was unable to capture all of the “traditional” recyclable materials. Employing a single stream recycling program will ensure that all potentially recyclable materials (cans, bottles, paper, cardboard, etc.) can be collected. Comprehensive training and educational efforts are currently underway to prepare staff and visitors for this new program. A conservative 50 percent capture of this stream would yield a 96 ton diversion from the landfill each year.



## CONVENTIONAL AIR POLLUTANTS AND GREENHOUSE GASES DIVERTED IN STANDARD TONS

Total for all sectors					
CO <sub>2</sub>	SO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CFC	PM <sub>10</sub>
1282.85	0.15	1.29	0.14	0.35	0.07



**Confidential Paper Contracting:** Previously, confidential paper was collected by EVS staff, shredded and disposed of along with the medical waste. Contracting the shredding to a document destruction company will save money and ensure that the paper is recycled, diverting 200 tons of paper from being disposed of each year. It will also allow the facility's shredder to be removed, saving a considerable amount of energy and time for EVS staff.

**Compactor Monitors:** Trash at IHDM is picked up on a set schedule regardless of whether or not the compactors are full. Compactor monitors sense when the units are reaching capacity and will notify staff to request a pick-up. Compactor monitors could significantly reduce the number of trash pickups, saving hauling costs and preventing emissions caused by transportation.

PROJECT	ANNUAL COST SAVINGS	ENVIRONMENTAL RESULTS	STATUS
FOOD WASTE COMPOSTING	\$6,183	278 TONS	IN PROGRESS
SINGLE STREAM RECYCLING	\$4,158	96 TONS	IN PROGRESS
CONFIDENTIAL PAPER CONTRACTING	\$30,086	200 TONS 31,200 KWH	IN PROGRESS
COMPACTOR MONITORS	\$5,017	N/A	IN PROGRESS