

IOWA HEALTH - DES MOINES

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COMPANY BACKGROUND



DES MOINES

Iowa Health System is a statewide health provider that encompasses 25 hospitals in metropolitan and rural communities throughout Iowa and in western Illinois. Iowa Health System includes Iowa Health - Des Moines (IHDM), which is where this internship took place. IHDM employs nearly 6,000 people and houses 779 beds. Its four main branches are Iowa Methodist Medical Center, Iowa Lutheran Hospital, Blank Children’s Hospital and Iowa Methodist West Hospital. IHDM prides itself on its compassionate care and its customer service-orientated staff training.

PROJECT BACKGROUND

Medical waste is composed of specialized waste streams that require careful handling and treatment. Medical waste can cost hospitals considerable time, energy and money to process. The goal of this project is to reduce medical waste and regular trash, in order to minimize IHDM’s costs and promote environmental responsibility throughout the hospital.

INCENTIVES TO CHANGE

Red bag waste costs IHDM significantly more to process than regular trash, yet more than one-half of what is thrown in the red bag waste is regular trash. By educating staff about what belongs in the red bag waste, IHDM will benefit financially

and employees will “think before they throw”. As hospitals maintain more rigorous compliance standards it is important to teach environmental responsibility to every IHDM member.



RESULTS

Educational Campaign: While touring the facility the intern observed that employees tended to handle anything with blood on it as hazardous waste. However, only a small portion should be classified as red bag waste. The intern developed an educational campaign, “Think Before You Throw”, which included staff meetings, posters and a net learning module. It is estimated that an effective educational campaign can cut annual costs by an average of \$37,808.

Conversion of red bag waste to regular trash bags

(Radiology and OB departments): The intern identified large-volume producers of red bag waste by speaking with patient care floor managers and shadowing environmental service workers on their pick-up routes. Two areas that were identified as large-volume producers were the Radiology and OB departments. The intern attended staff meetings and spoke with them about the importance of putting the appropriate items with the red bag waste. After these meetings, the floor managers took the initiative to convert some or all of their red bag waste to regular trash. Conversion of the red bag waste to regular trash by these two departments will reduce the red bag waste stream by an estimated 6 percent and save IHDM \$8,972 per year.



Shredded Paper Waste: Eliminating confidential paper waste from the red bag waste stream was a priority for the intern. In 2009 IHDM shredded 205 tons of red bag waste and 166 tons of confidential paper waste. All 166 tons of the shredded confidential paper waste was landfilled. The intern and IHDM’s integrated services management team explored options for removing the confidential paper waste from the medical waste stream. These options included purchasing another on-site paper shredder and converting the current shredder to a two-stream process. If IHDM found a way to recycle the shredded confidential paper, it could save up to \$39,560 per year and divert 166 tons of paper from the landfill.

CONVENTIONAL AIR POLLUTANTS AND GREEN HOUSE GASES DIVERTED IN STANDARD TONS

Total for all sectors					
CO ₂	SO ₂	CH ₄	N ₂ O	CFC	PM-10
192.80	0.80	8.40	0.70	---	0.80

PROJECT	ANNUAL COST SAVINGS	ENVIRONMENTAL RESULTS	STATUS
EDUCATIONAL CAMPAIGN	\$35,788	46.1 TONS	IMPLEMENTING
CONVERSION FROM RED BAG WASTE TO REGULAR TRASH BAGS (OB)	\$1,302	1.59 TONS	IMPLEMENTING
CONVERSION FROM RED BAG WASTE TO REGULAR TRASH BAGS (RADIOLOGY)	\$7,672	9.36 TONS	IMPLEMENTING
SHREDDED PAPER WASTE	\$39,560	166 TONS	RECOMMENDED