**2019 Case Study**

# Ascension Via Christi St. Francis

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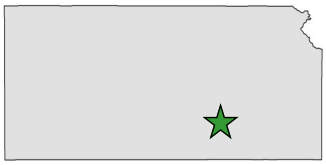

**Company Background**
Ascension Via Christi St. Francis, located at 929 N. Saint Francis in Wichita, Kansas, is the largest hospital in Kansas with more than 500 beds. Ascension is the largest non-profit healthcare provider in the United States and the largest Catholic healthcare provider in the world.

Medxcel is a for-profit subsidiary of the non-profit Ascension Healthcare network. Launched in 2013, Medxcel provides facilities management to 161 hospitals and 2,600 sites of care in 21 states and the District of Columbia. Headquartered in Indianapolis, Indiana, Medxcel is responsible for the physical environment of the healthcare facilities it serves. Medxcel seeks to reduce costs through insourcing rather than outsourcing, improve efficiency and have more control over the quality of a hospital's environment of care.

**Project Background**
Kansas Hospitals for a Healthier Environment (KH2E) is a two-year program hosted by the Pollution Prevention Institute (PPI) and funded by the EPA. The purpose of KH2E is to identify and reduce the environmental and health impact of toxics in the healthcare environment. The KH2E program focuses on the source reduction of health care toxics in four categories: 1) TSCA chemicals and mercury, 2) DEHP and PVCs, 3) cleaners, and 4) toxic interiors and landscapes.

In its first year, the KH2E program worked with Ascension Via Christi, with a long-term goal of applying the same methods used at Ascension Via Christi to other hospitals in the Ascension healthcare network and throughout the state. Year one's work focused on inventorying for TSCA chemicals, with more than 80 TSCA-containing products identified, eight of which were researched for source-reduction potential.

**Incentives To Change**
Ascension Via Christi has a long history of working with the PPI, implementing intern recommendations, reducing emissions and waste, receiving several P2 awards. Some chemicals and materials used within hospitals have been identified as harmful to people and the environment. KH2E seeks to use source-reduction techniques to limit the negative impacts of these toxics. The reduction of toxics fits well into Via Christi's mission, which includes improvement of the health of individuals and communities.

**Projects Reviewed For P2 Potential**
The KH2E program focuses on the source reduction of health care toxics in four categories.

1. TSCA Chemicals and Mercury
Chemical inventories were reviewed for 2014 TSCA Work Plan chemicals. Over 800 products were analyzed and 80 products containing 2014 TSCA Work Plan chemicals. Eight products were evaluated further for P2 potential.

2. Medical Devices
Medical devices and plastics can contain PVC and DEHP, which can be harmful to both patients and the environment. Development of a safe plastics purchasing policy is recommended though it was unclear which devices currently in use contain the targeted toxins.

3. Toxic Interiors and Landscapes
Toxic interiors (furniture, coverings, panels, and partitions) can be made with flame retardants, water proofing and other items that contain hazardous chemicals. The facility utilizes

purchasing standards and is working to eliminate targeted interiors.

Cleaners

Cleaners used by EVS were also investigated for safety and TSCA chemicals. Some cleaners can contain chemicals that can be harmful if inhaled. EVS follows the Healthier Hospitals Initiative Safer Chemicals Challenge for Green Cleaning. I recommend to continue to follow this policy. No cleaners were identified containing TSCA Work Plan chemicals or phenols.

Summary of 2019 KH2E intern recommendations for Ascension Via Christi St. Francis

| Project | Health Impact | Annual Economic Impact | Annual Estimated Environmental Impact | Status |
|---|---|---|---|---|
| Saf-Sol 20/20 | Probable Carcinogen | $140.69 | 4.1 lbs. of tetrachloroethylene<br>2.1 lbs. of methylene chloride<br>0.22 lbs. of carbon tetrachloride | Recommended |
| Industrial Degreaser (SSD II) | Probable Carcinogen | $45.84 | 1.5 lbs. of tetrachloroethylene<br>1.5 lbs. of trichloroethylene | Recommended |
| Parts Washer (Safety-Kleen) | Does not contain 2014 TSCA Work Plan chemicals | N/A | N/A | Not Recommended |
| Nick (Nickel Free Solder Bridgit) | Possible Human carcinogen | N/A | 0.06 lbs. of antimony | Not Recommended |
| Nikal | Known Human Carcinogen | $40.85 | 0.27 lbs. of nickel | Recommended |
| Spray Foams | Inhalation | N/A | Varies | Not Recommended |
| Formalin | Known Human Carcinogen | N/A | Varies | Not Recommended |
| Xylene-Tissue Processors | Reproductive Toxicity | $229.60[3] | 280 gallons<br>1.02 tons of HAP emissions | Recommended |
| Total Annual TSCA Chemical Reduction | | 2,042 lbs. | | |
| Total Annual GHG Reduction[1,2] | | 0.2 $MTCO_2e$ | | |

[1]Does not include projects “not recommended” or with “more research needed”
[2]EPA P2 GHG Calculator with Cost, Apr. 7, 2016
[3]Assumes a 1:1 material exchange of xylene and isopropanol, where isopropanol costs $0.82 per gallon more than xylene.