

Nahir Katuska Hurtado Mercado

Project Abstract - Abbott



INTERN

Nahir Katuska Hurtado Mercado
BS Chemical Engineering, University of Minnesota
Duluth 2020

PROJECT FOCUS

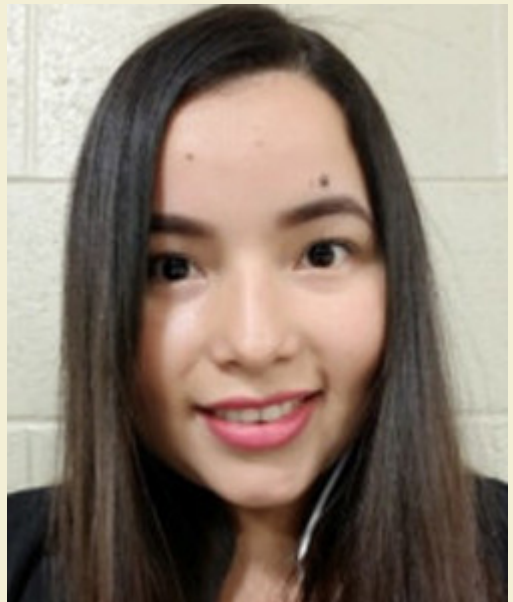
Water

ADVISOR

Matt Domski

COMPANY

Abbott



COMPANY DESCRIPTION

Abbott is a company that has been helping people live their best lives for more than 130 years. It manufactures medical devices, pharmaceuticals, and nutritional formulas. The Woodridge branch focuses on manufacturing cardiovascular devices, specializing in heart valves.

MOTIVATION

Abbott is committed to reducing the environmental footprint of its business operations. The company shares an on-going commitment to protecting the environment, including clean water resources around the world. In 2010, Abbott set a goal to reduce water consumption by 24% by 2020.

INCENTIVE

The Woodridge site has already implemented many water reduction measures, but there is still room for improvement. Implementing water-saving solutions at the Woodridge site will contribute to Abbott's company-wide goals, as well as minimizing costs for water supply, treatment, sewer, as well as energy.

GENERAL APPROACH

This project focuses on identifying and minimizing areas of high water use and other waste streams, as time allows. This will be achieved by investigating how facility processes work and then identifying the best solutions for water and waste reduction, reuse, and recycling.

FOCUS OF RESEARCH / RECOMMENDATIONS

One of the most relevant options for conservation is the optimization of air scrubbers used to clean exhaust from the reactors. Improving the efficiency of the scrubbers will help minimize the consumption of water and reduce costs. Additional areas of conservation to be explored include water purification equipment, irrigation and process water usage.