

Chapter 1: Project Company Background

Thermo King is a manufacturer of mobile refrigeration units. The Thermo King plant in Hastings, Nebraska creates products for road, rail, and marine. Thermo King is a subsidiary company of Trane Technologies.

Project Description

In the summer of 2021, the intern was assigned to the Thermo King plant in Hastings to find ways to reduce solid and energy waste at the plant. The main goals that were given to the intern at the beginning of summer was to investigate the refrigerant system and the paint machines.

Pollution Prevention Benefits

The intern broke the management reports into three main sections for pollution prevention benefits: 2A Solid Waste Assessment, 2B Leak Assessment, 2C Paint Department Assessment. The P2 benefits can be found in the table below.

Assessment	Savings	GHG Reduction	Implementation Cost	Payback Period
Solid Waste Assessment	\$79,000	100 MT	\$110,000	1.4 years
Leak Assessment	\$6000	82 MT	\$18,000	3 years
Paint Department Assessment	\$14,000	140 MT	\$150,000	11 years
Other Assessment	\$2000	NA		
Total	101,0000	320 MT		