

Case Study

Recycling vs. Disposal Reduces Waste and Cost

Overview

A large pharmaceutical research and development facility generates large volumes of hazardous waste while trying to create a viable pipeline of drug discoveries. Many small plastic containers of liquid waste are consolidated into drums. While the liquid waste is consolidated, the plastic containers still need to be managed as hazardous waste. The InSite team rethinks their operations and management reducing waste, cost and embracing sustainable processes.



Background

To reduce costs, the InSite team consolidates numerous small plastic containers of hazardous waste within the main accumulation areas. This process had previously reduced lab packing waste and reduced costs through volume pricing. Though these efforts were successful, the plastic containers were not considered empty according to State regulations, and therefore needed to be managed as hazardous waste. This generated many yard boxes of empty plastic containers. This created a number of issues that needed to be resolved:

- The yard boxes needed to be constantly moved to different locations due to a limited foot print with in main accumulation areas.
- Movement of yard boxes caused inherent ergonomic and Health and Safety concerns.
- The customer was looking to Clean Harbors to find an alternative method to manage this large volume of waste and reduce cost.

The InSite Program Manager and support team met several times to develop a more sustainable operation to manage the plastic containers that would reduce the volume of hazardous waste and overall cost. The team looked to recycling the plastic containers, thereby reclassifying them and eliminating the cost of disposal.



Challenge

The InSite Program Manager needed to find a space to triple rinse each container, find a water source and locate a place to dispose of the rinsed containers. Challenges needing to be addressed:

- Rinsing operations could not affect daily waste operation within the main accumulation area
- Finding a current recycling roll off close to the main accumulation area reduce ergonomic issues
- Training the staff to effectively rinse the containers to meet the State regulatory definition of "empty".

During the process of finding a recycling roll off the staff could use, the Program Manager noticed that the customer was recycling a large number of 30 and 55 gallon drums and approached the customer to re-purpose those containers for packing waste thereby reducing supply costs.

Approach

The InSite Team found time and space to rinse the containers by integrating it into daily waste operations. Rinsed plastic containers were placed into 55 gallon containers on rollers and brought to a roll off at a loading dock that didn't require lifting eliminating the ergonomic issues. Staff collected the empty 30 and 55 gallon drums weekly and began storing and using them to package hazardous waste.

Results

Through the rinsing and recycling program and reuse of 30 and 55 gallon drums Clean Harbors succeeded in creating a cost effective and sustainable program. In addition:

- Yield a large annual cost savings of \$364,093 form all three sites
- Increase the working footprint of the main accumulation areas
- Ensure compliance with State and Federal regulations
- Show the value of using Clean Harbors as their hazardous waste management contractor.

Rinse and Recycle Program	Reuse Drum Program
Average Quarterly Savings	Average Quarterly Savings
\$ 16,950.00	\$ 19,817.53
Annualized Savings	Annualized Savings
\$ 67,800.00	\$ 79,270.12

