

Lean Green Belt Project Example

Chemically Hazardous Laboratory Waste Disposal



Challenge

Managing the variation of toxicity while establishing a streamlined waste disposal method and assessing compatibilities of chemicals. Complex environmental waste disposal regulations and the interpretation of complicated legislation posed hurdles. Discrepancies between Waste Hauler's requirements and existing practices required too careful examination.



Objective

The project aims to organize The Waste Room, ensure proper labeling and storage, and streamline communications for waste pickups. Safety protocols, chemical compatibility checks, and staff training are key objectives to optimize waste handling, reduce costs, and enhance environmental impact.

Lean Tools Utilized



Kaizen and Gemba:

Initiated initial Kaizen meeting and conducted onsite visit to enhance waste management processes and assess Waste Room operations.



5S:

Recognized necessity for organizing and maintaining cleanliness within the Waste Room environment.



Value Stream Mapping and Root Cause Analysis:

Investigated waste generation and storage processes, pinpointing inefficiencies and areas for improvement.



Poka Yoke:

Introduced measures such as visual instructions, updated signage, and waste segregation techniques to prevent errors and enhance efficiency.

Results



Achieved annual savings of \$9512.69 in waste removal costs.



Efficient waste transfer saving approximately \$1000 annually.



Replaced one-time-use plastic pails with a reusable metal drum, saving \$456/year.



Potential \$738 annual savings on waste hauler charges through effective classification and sorting of non-hazardous waste.



Internal handling for "One Off" items, eliminating the need for frequent waste room pickups, saving approximately \$984 annually.