

Abstract

This project deals with a “green” cleaning products company in Southern California. Business has increased 38% in the past year along with changes in production capacity and capability, so the company has identified a need for a sustainable model of manufacturing at their new and expanded facility. Goals of promoting sustainable waste management, minimizing types of lean waste, properly storing inventory, improving workplace communication, and defining production tasks will be addressed in this facilities redesign through 5S. The biggest component and outcome of the facility design will be organization. This leads to a goal of eliminating waste, which will in turn promote sustainable manufacturing practices. Further described in the Design chapter, the 5-S implementation looks at waste reduction and/or removal, so areas of the facility will be compared and judged accordingly. Each of the four areas mentioned in design will have been affected at least one component of 5S, especially the areas of standardization and sorting. In addition, methods for continuous improvement will allow opportunities for employees to be accountable with each other, management, and the environment. The project can be justified with or without labor reduction, considering the fact that the new proposal recommends removing five workers. The number of Raw material storage areas went down by two and the number of Finished Goods storage locations went down by three. The recycling/waste management program solely can justify this project, producing an NPV = \$59155.70 over ten years, while promoting recycling, reducing, reusing, and rethinking.