MANAGING HAZARDOUS WASTE OF CHEMICAL INVENTORY:  
A CASE STUDY OF TEXTILE MANUFACTURER IN THAILAND

Ravi Raj Singh* and Vilasinee Srisarkun**  
Martin de Tours School of Management and Economics, Assumption University of Thailand

ABSTRACT

This research is a case study of textile manufacturer in Thailand. Being a manufacturing industry, the company is facing a lot of hazardous waste generating in their chemical storage to preparation area. The objective of this research was to find the certain root cause of the waste in the process, which is not adding value. The research is also trying to find the solution and implement appropriate methodology to eliminate non-value added activities from the hazardous chemical inventory. Recommendation, necessary action plan and solution were provided to get rid of non-value added activities and prevent repeated problem. This research mainly applied the process mapping, 5S and 7 wastes to identify the root cause of the problem and eliminate them. The researcher also suggested a continuous improvement plan in order to achieve a sustainable operational improvement of the company. The research observed that the main cause of an increase in hazardous waste is PVC Drums placed in the main inventory area. These PVC Drums were used in 13 different kinds of chemical generating 61.90% of hazardous waste in the process.

Keywords: Hazardous waste, chemical storage, textile manufacturer, Thailand

INTRODUCTION

TEXTI Company is one of the largest textile manufacturers in Thailand, a composite manufacturing unit of denim fabric (from spinning to finishing fabric) since 2006. TEXTI Company is a fully automated manufacturing industry integrated with state-of-the-art machinery from Europe and other parts of the world to produce the best quality of denim...