#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1. Background

PT. Mega Andalan Plastik Industri (MAPI) is a company that produces product from plastic seeds. The outputs from this company are sent to home industries and shops. The products of PT. Mega Andalan Plastik Industri (MAPI) are varied, so the quantity of products are in high quantity and the range of delivery is wide.

Based on the observation and interview, PT. Mega Andalan Plastik Industri (MAPI) has some problems. The problems are the bad workplace conditions. The bad workplace condition happens in Raw material warehouse, finished goods department, Production department, Crusher department, and Administration department.

The work area and the shelves to accommodate the materials and products in some departments are limited and it influence the arrangement of materials and products. If the arrangement of materials and products is not in a suitable position in the work areas, then the impact of these problems is the materials and products are placed on the floor and the pathway mark are covered. This problem also affect the flow of work.

There was also a lack of material handling tools and no proper home place for tools. These problems influence the searching time when the workers need the tools. For instance, when there is an emergency on the machine, then the workers have to spend time finding the tools.

There are no proper guards on some machines and shelves. This condition increase the possibility of getting injured for the workers and the possibility of the materials and products fall from the shelves. If the materials and products fall from the shelves, then it will get damaged and the quality will decrease.

There were also no labels for the materials, products, and material handling tools. No specification labels on the materials and product can affect the searching time because the quantity of materials and products is high. No labels for the material handling tools will lead the workers to not put the tools back in the proper place and also when the tools are broken, there is no person in charge. The minimum facilities of first aid equipment influence the safety of the workers when getting injured. When there is an emergency, the workers who helped the victim needed to find first aid equipment in another department. So, it also affect the searching for the first aid equipment. Unworthy resting corners, washing facilities, and toilets were also in bad condition. This unworthy condition affect the inconveniences workers when using it.

Therefore, some evaluation and analysis are needed to solve the problems that happen in each departments in PT. Mega Andalan Plastik Industri (MAPI). The strategy to solve these problems is based on the standard of Work Improvements in Small Enterprises (WISE) guideline.

# **1.2. Problem Formulation**

The workplace condition is improper and PT. Mega Andalan Plastik Industri (MAPI) need to improve the workplace.

# 1.3. Objective

The objective in writing this final thesis are as follows:

- a. Evaluate the bad workplace condition in PT. MAPI;
- Determine the Non-Conformity based on the evaluation using Work Improvement in Small Enterprises (WISE) guideline;
- c. Analyze the Non-conformity workplace condition to find the root causes;
- d. Proposed improvement based on the root causes;

# 1.4. Scope & Limitation

There's also some scope & limitation of the problem so the objectives are more directed, is:

- The workplace improvement is done in all department in PT. Mega Andalan Plastik Industri (MAPI) except maintenance department;
- b. The proposed improvements is done by using the Work Improvement in Small Enterprises (WISE) guideline;