

## CHAPTER 6

### CLOSING AND RECCOMENDATION

#### 6.1. Conclusion

Based on the evaluation, there were 5 department that have bad condition in PT. Mega Andalan Plastik Industri (MAPI), which are Raw Material warehouse, finished good department, Crusher department, Production department, and Administration department.

Non-conformity condition were identified from each physical work environment of Work Improvement in Small Enterprises (WISE) guideline. The most non conformity condition based on the guideline was the minimum of first aid equipments and bad layout that can influence the flow of work to become innappropriate. The other non conformity condition were limitation of handling tools, washing facilities and cleaning tools, shelves to provide the materials and products, pallets, and container boxes. There were also no proper guards in some machine and shelves and no labels to gave sign to the products and some material handling tools. The resting corners in PT. Mega Andalan Plastik Industri (MAPI) were also in a bad condition. Some machine also had a unclear emergency switch control. The departments that hade the most non conformity workplace condition were finished good department and Production department and the department that hade the lowest non conformity was administration department.

The causes from each non conformity condition were also been identified. Each of the non conformity condition hade different root causes. The cause of minimum first aid equipment was because PT. Mega Andalan Plastik Industri (MAPI) have not provide a first aid equipment. The causes of the limitation of shelves, material handling tools, pallet, and container boxes were also that PT. Mega Andalan Plastik have not provide it more. The cause of the bad layout were the arrangement of materials and products that can disrupt the flow of work. The bad arrangement that happens in certain department were also happen because the limitation of shelves. No proper guard on machine was the current proper guard in the crusher machine is not feasible and there were no proper guard on the shelves was the design of the shelves can't support the workers to provide a proper guard. The cause of the unclear emergency switch control was PT. Mega

Andalan Plastik Industri (MAPI) rarely did some maintenance for the switches. This condition would make the switches became more unclear and not visible for the workers. Bad environment and too many useless stuff at the resting corners was the causes of the unworthy resting corners and the unworthy of washing facilities and clean toilet happens because the limitation of the cleaning tools to cleaned up the toilets.

The improvements from these non conformity condition were PT. Mega Andalan Plastik Industri (MAPI) have to expand the size of work area of some departments, rearrange the layout of certain departments, provide more facilities such as handling tools (home place for the tools, pallets, container boxes, shelves), provide more cleaning tools, provide more first aid equipment's, make a new pathway mark, make a labels for each handling tools, do some maintenance for the proper guards and the unclear emergency switch controls.

## **6.2. Recommendation**

PT. MAPI needs to do the implementation as soon as possible to reduce the unfeasible and Non-conformity condition based on the short term and long term improvements.

## REFERENCES

- BRADY, (2019). 5S Floor Marking Color Standard. Accessed on 1<sup>th</sup> October 2019 from <https://www.bradyid.com/applications/toughstripe>
- Dewi, L. T, Cynthia, R., 2015, *Applying WISH Programme to Improve Productivity of Home Industry*, Proceedings 19th Triennial Congress of the IEA.
- Dickson, (2015). Daftar Isi Kotak P3K (Pertolongan Pertama Pada Kecelakaan). Accessed on 27 September from <https://www.produksielektronik.com/daftar-isi-kotak-p3k-pertolongan-pertama-pada-kecelakaan/>
- Kawakami, T., Ujita, Y., 2004, *Work Improvement in Small Enterprises package for trainers*, International Labour Organization.
- Mendis, M. V. S., 2016, *Workplace Design and Job Performance: A Study of Operational Level Employee in the Apparel Industry of Sri Lanka*, International Journal of Scientific and Research Publications, 6(12), 148-153.
- Nama, M., 2016, *Productivity and workplace improvement using ergonomics; A case study*, International Journal of technical Research and Applications, 4(3), 296-299.
- Odeku, K. O., 2015, *Importance of the welfare facilities in the workplace: issues in perspectives*, The Scientific Journal for Theory and Practice of Socio-economic Development, 4(7), 23-46.
- Takeyama., H., 2005, *A Case Study on Evaluation of Improvements Implemented by WISE Project in Philippines*, Industrial Health, 44, 53-57.
- Winsted, B. T (2019). Pallet Rack Identification Guide to Warehouse Racking & Pallet Storage. Accessed on 1<sup>th</sup> October 2019 from <https://www.sjf.com/racktypes.html>