ABSTRACT

Surabaya Shipbuilding State Polytechnic is one of Polytechnic in Sepuluh Nopember Institute of Technology that has facilities like classrooms and some of laboratories. Surabaya Shipbuilding State Polytechnic consists of three floors, those are I, II and III floor. Researcher will evaluate the safety implementation including electrical safety aspects, fire safety, environmental safety and chemical safety to identify the hazards or illness that caused by working that be there in building rooms.

This research held by measuring and evaluating the grounding system, fire extinguisher, emergency exit, exit sign, exit route, emergency ladder, lighting intensity, noise, working area climate, ventilation, housekeeping, and chemical by apply rule and standard (SNI, NFPA, Safety Law 1970, SKBI, Housekeeping Implementation and OHSA).

Based on this research, this is known that grounding system has comply with the standard \(R < 5\Omega\). For the fire safety, this is only portable fire extinguisher, exit route, exit sign that is not comply with the standard yet, therefore it needs the calculation of portable fire extinguisher, exit sign design, and exit route design to comply with regulation in Safety Law 1970 about safety. In environmental safety there are incompliance such as lighting intensity \(lm < 750\) and \(lm < 1000\) and housekeeping there for this needs implementation of 5R. For chemical safety, there is still less attention at storage process therefore the researcher makes grouping of what kind of chemical material that can be storage in one place without result any reaction.

Keywords: Grounding, emergency exit, lighting intensity, noise intensity, working area climate, ventilation, housekeeping.