

ABSTRACT

Risk analysis is a crucial step in identifying, evaluating, and controlling hazards that threaten the safety and health of workers. At CV XYZ, a producer of aluminum pans, the risk analysis reveals a high potential for workplace accidents and the absence of a structured risk control procedure.

This study aims to design an occupational health and safety (OHS) risk control process to minimize workplace accident risks and support compliance with ISO 45001:2018 Clauses 6.1.1 to 6.1.4. The research was conducted through hazard identification, risk assessment, and risk control using the Hazard Identification, Risk Assessment, and Determining Control (HIRADC) approach. The results of the risk control were integrated into the business process to develop a structured risk control procedure aligned with ISO 45001:2018 Clause 4.4 using the Business Process Management (BPM) method.

The resulting procedure includes Standard Operating Procedures (SOP) for OHS risk control along with supporting documents such as HIRADC forms, Job Safety Analysis (JSA) forms, treatment implementation inspection forms, accident report and data forms, and OHS compliance regulation forms, all integrated through a dashboard equipped with user guides for each form. By implementing the OHS risk control procedures, the company is expected to be more proactive in managing risks while achieving the target of zero workplace accidents.

Keywords: Risk Analysis, Workplace Accidents, ISO 45001:2018, HIRADC, BPM, SOP, Zero Accident