## **ABSTRACT**

PT. XYZ is a company engaged in providing network access installation services and network infrastructure development, particularly in the installation of fiber optic cables and FTTX (Fiber To The X) projects. FTTX (Fiber To The X) is an internet access technology that uses fiber optic cables to reach customers. There are several stages in an FTTX (Fiber To The X) project, including surveying, partner selection, material preparation, installation, testing, and Go-live. There is a potential hazard during the installation stage due to a lack of emphasis on the use of Personal Protective Equipment (PPE) and other safety equipment. The aim of this study is to identify potential hazards and provide recommendations for controlling these hazards up to the emphasis stage. The method used is HIRARC. The HIRARC method is a method for preventing or minimizing workplace accidents, starting from determining the types of work activities, then identifying their sources of hazards to determine their risks. Afterward, risk assessment and risk control will be carried out to reduce the exposure to hazards in each type of work. The results of the study indicate that there are 36 potential hazards during the installation stage of the FTTX (Fiber To The X) project. Based on these results, the author proposes recommendations in the form of a HIRARC Worksheet and a Monitoring system. The Monitoring system functions to emphasize the use of PPE and other safety equipment.

Keywords: FTTX (Fiber To The X) projects, HIRARC, Monitoring System