4.3.7 Fault Tree Analysis (FTA)

According to Evans and William (2001), the main purpose of the FTA is to help in identifying potential causes of system failures before the failures actually occur. By using the FTA, the prediction of potential incident/ accident that might happen as a result of various potential hazards was presented. These will significantly contribute to a top event to the contributions of various fundamental events (Hammer & Price, 2001). Figure 4.37 shows the FTA for incident or accident that might happen at Company.

From the findings, there are three major probable/ possible factors including not wearing PPE, ESH procedures and human factors. The causes of accident are basically not applying PPE which has been provided at Company. Lack of awareness can contribute to employees' error misjudged situations those distractions by others which include intentionally using defective equipment and inappropriate working positions. Previous research has revealed that excessive number of injuries and accidents are caused by unsatisfactory or absence of safety and health systems (Lin & Mills, 2001). The commonly underlie accidents are poor training, lack of rule enforcement, ignoring safety, low safety awareness and poor maintenance.

As a summary, the most effective safety in workplace is the combination of employers' attentiveness and employees' responsibility because the safety and health accident/ incidents can contribute to inefficiency in carrying out ESH procedure. Davies and Tomasin have mentioned in their study (1996) that many occupational accidents and injuries are due to a breakdown in the existing OSHMS, where an inadequate or non-existence can contribute to high rates of injuries. Therefore, the application of an 'effective' OSH management can lead to industries' safer systems in reducing incidence of injuries and work related diseases.

Fault Tree Analysis (FTA) Result

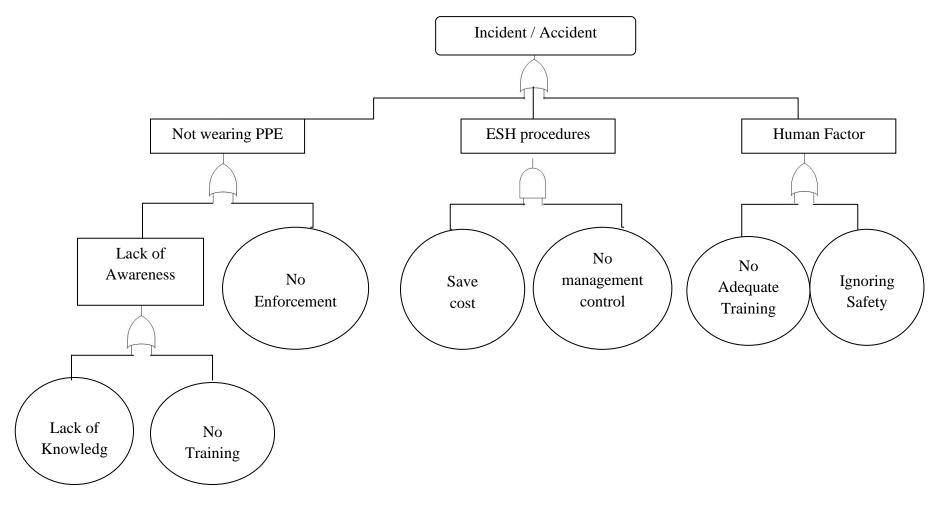


Figure 4.37: FTA for Incident/ Accident that Might Happen at Company