In a warehouse with an immense number of stored products, it is critical to prevent any chance of hazardous liquid spills. To achieve this, we propose implementing early detection techniques for hazardous material spillage which ensuring workplace safety in industrial warehouses. The proposed project uses Deep Learning and Image processing techniques to detect and notify workers in real time about possible hazards. Our technology continuously scans the environment by installing a network of cameras throughout the facilities, taking visuals that are then evaluated for indications of spillage. With the help of a convolutional neural network (CNN), especially single stage detection models like YOLO trained on a variety of datasets of spill photos, the system is able to precisely identify substance spills in the workplace or industry. By taking a proactive stance, the likelihood of accidents is reduced, spill situations are promptly handled, and workplace safety is improved overall. Through adopting the initiative, the likelihood of accidents is reduced, spill situations are properly handled, and workplace safety is improved overall. In addition to enhancing worker safety, our technology ensures regulatory compliance, cuts down on downtime, and boosts warehouse productivity.