

Industrial Hygiene and Safety Engineering Program

Senior Design Project

Design of Industrial Hygiene and Safety Facilities for a Clinical Laboratory Company

The purpose of this project is to design the hygiene and industrial safety facilities of a company related to the health sector.

The project will be developed in the Precise Clinical Laboratory Company with plant headquarters located in Metropolitan Lima, Peru.

Precise Clinical Laboratory is a private clinical analysis center offering specialized services in clinical laboratory, pathology and blood bank, with the latest technology and high quality standards that ensure the reliability of the clinical results. The company is mostly focused in Occupational Medicine and it has qualified personnel in the field of human safety and occupational health. The company has the ISO 9001-2015 Certification of Quality Management System.

This project includes the following topics:

- Hazards Identification and Risk Assessment (IPER)
- Risk Map Design
- Lighting system design
- Design of routes and evacuation times
- Fire system design
- Design of the signaling system of the facilities.

The evaluations and monitoring required for collection of information will be carried out on Saturdays morning when the personnel perform the updates and verifications of the data information system. Visits to the company will take place weekly, for a period of four weeks.

The project is based on applicable norms, standards and regulations related to occupational health and safety. The open-ended design problem considering restrictions on cost and budgets, risk minimization, social and environmental demands.

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Lighting System Design.

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