

## Study and Evaluation of Occupational Health and Safety in Power Plant in Pakistan

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**Abstract :** Occupational Health and Safety issues nowadays have become an important esteem in the context of Industrial Production. This study is designed to measure the workplace hazards at Kohinoor Energy Limited. Mainly focused hazards were Heat Stress, Noise Level, Light Level and Ergonomics. Measurements for parameters like Wet, Dry, Globe, WBGTi and RH% were taken directly by visiting the Study Area. The temperature in Degrees was recoded at Control Room and Engine Hall. Highest Temperature was recoded in Engine Hall which was about 380C. Efforts were made to record emissions of Noise Levels from the main area of concern like Engines in Engine hall, parking area, and mechanical workshop. Permissible level for measuring Noise is 85 and its Unit of Measurement is dB (A). In Engine Hall Noise was very high which was about 109.6 dB (A) and that level was exceeding the limits. Illumination Level was also recorded at different areas of Power Plant. The light level was though under permissible limits but in some areas like Engine Hall and Boiler Room, level of light was very low especially in Engine Hall where the level was 29 lx. Practices were performed for measuring hazards in context of ergonomics like extended reaching, deviated body postures, mechanical stress, and vibration exposures of the worker at different units of plants by just observing workers during working hours. Since KEL is ISO 8000 and 14000 certified, the researcher found no serious problems in the parameter Ergonomics however it was a common scenario that workers were reluctant to apply PPEs.

**Keywords :** workplace hazards, heat hazard, noise hazard, illumination, ergonomics

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