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### **Estimation of NO<sub>x</sub>, SO<sub>x</sub>, CO and Particulate Matter from stack emission and its hazardous effect on human health**

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#### **ABSTRACT**

*The health impacts of air pollution have received more attention and have recently been subject to extensive study. Exposures to air pollutants have been linked to lung and cardiovascular disease and increases in both hospital admissions and mortality. The present research work was designed to monitor and estimate the Nitrogen Oxides (NO<sub>x</sub>) sulphur oxides (SO<sub>x</sub>), CO and particulate matter and check its hazards effect on human health. The research work was executed at Department of chemistry with the collaboration of environmental laboratories sheikhupura by using the standard methods. During this pollution assessment and health impacted research work, pollutant concentration at source emission was measured. The questionnaires about the health of employees were also asked to check the hazardous effect on human health. The obtained results were compared with the guidelines of Environment Protection Department which are known as national environmental quality standard (NEQS). Out of twenty, fifteen were found exceeding the NEQS limits. Employees who working in the highly polluted industries were mostly suffering from lungs diseases. Overall, only five industries emission were found safe according to Punjab environment protection department guidelines.*

**Keywords:** Air pollution from industries, Air pollution control, Environment and Health aspects.

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