

## The Effect of Gas Flare on the Health of Schoolchildren in the Niger Delta Area of Nigeria

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**Abstract :** The proximity of schools to gas flaring sites and the use of simple ventilation systems in school buildings with currently no regulation or laid down blueprint during design and construction in an environment prone to adverse environmental hazards caused by the continuous exploration of oil in the Niger Delta is worrisome. Although a wide health implication has been associated with inhalation of poor air, its effect on the performance of schoolchildren and staffs is poorly understood. Thus, the aim of this research is to explore from professionals around the region the issues surrounding the provision of clean air indoors even though, most developed and developing world are advancing in newer systems and technologies for clean indoor air. This study adopts both qualitative and quantitative approach using both open-ended and semi-structured interview techniques. This paper finds that indoor air quality is not considered during design, selection, and construction of schools. Analysis showed that rather than consider the health effect associated with the inhalation of ambient air by schoolchildren who spend 80% of their active time in schools due to the use of simple open windows and doors as source of breathable air. Advanced ventilation systems were therefore recommended to ensure supplying clean air for school buildings.

**Keywords :** air quality, gas flare, health implication, schools, ventilation system

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