Operational safety improvement in medical-grade oxygen production plant in some Nigerian hospitals

Akintayo Kehinde Akeen
University of Lagos, Nigeria

Medical-grade oxygen constitutes a source of life in hospitals. Medical oxygen belongs to the medical gases family utilized by medical practitioners in treating sick patient in the hospitals. The methodology adopted for this research work is the administration of questionnaire to the most senior technical personnel in the plant operation hierarchy, while regular visit to the oxygen plant was conducted in the course of this research work. Major findings from this research are the absences of developed and implementable written Safety Information, No established systems to response to plant operational hazards, Process flow diagram of Medical Oxygen Plants are no easily accessible to plant engineers, No evidence of safety meetings or induction, Use of Personnel Protective Equipment (PPE) was not in force, No evidence of Accident or Near misses reporting or documentation nor Plant daily logging system or documented plant operation monitoring system. The major improvement to the Oxygen Plant at the conclusion of this research work is the adoption of an online Oxygen Plant performance daily logging system, adoption of no work without PPE, Safety induction of Plant Operator and other Plant supporting personnel was proposed for adoption, Process flow diagram of the Oxygen Plant was made available to the Plant Operator for understanding of plant flow sheet, Safety Policy sample was made submitted for adoption.

Biography
Akintayo Kehinde Akeen is a Master of Process Engineering Degree holder from University of Lagos, Nigeria. He is an American Society of Sanitary Engineer Certified Medical Gas System Specialist. He has over seven years working on Oxygen Production at BOC Gases Nigeria and Federal University Teaching Hospital as Safety Intern/Plant Engineer and Medical Oxygen Plant Safety Engineer. He has presented five (5) Technical Paperson Medical and Industrial gases. He is a Corporate Member Nigerian Society of Chemical Engineer and Nigerian Society of Engineers. He has volunteered his services as Medical Gas System Specialist to some public hospitals in Nigeria to ensure improved services.

kehinde.akintayo@gmail.com

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