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Association of  
Regulatory  
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Commissioners

# NATURAL GAS OCCUPATIONAL HEALTH AND SAFETY REGULATIONS

*Presented by Martin Asare  
Energy Commission*

*NARUC REGULATORY PARTNERSHIP PROGRAMME BETWEEN  
PUCO & MoE & EC & PURC*



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## **NATURAL GAS O H & S REGULATIONS *Contd.***

Discussions on

- Standards and Procedures for Construction
- Operation and Maintenance of Facilities and Installations



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## **NATURAL GAS O H & S REGULATIONS *Contd.***

- Standards and Procedures for Construction
  1. Building
    - Standards – The design and construction of every building shall meet the standards set out in the National Building Regulations.
    - Doors – 2-way pedestrian traffic shall be designed and fitted in a manner to permit persons approaching from one side of the door to be aware of persons on the other side of the door.



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## **NATURAL GAS O H & S REGULATIONS *Contd.***

- Floor and Wall Openings – a space measuring 300mm or more shall be maintained in a floor, pavement, platform or yard; a space of at least 750mm high and 300mm wide shall be maintained in a wall or partition.
- Open Top Bins, Hoppers, Vats and Pits – where an employee has an access to any of the above-mentioned open top enclosures or other open top enclosure from a point directly above the enclosure, the enclosure shall be fitted with a fixed ladder on the inside wall of the enclosure and shall be
  - i covered to prevent the employee from falling into the enclosure, or
  - ii provided with a walkway that is not less than 500mm wide and is fitted with guardrails



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## **NATURAL GAS O H & S REGULATIONS *Contd.***

- Ladders and Stairways – where an employee is to move from one level to another level that is more than 450mm higher or lower than the former level, the employer shall install a ladder, stairway or ramp between the levels.
- Guardrails – every guardrail shall consist of
  - i. A horizontal top rail or line not less than 900mm and not more than 1100mm above the base of the guardrail;
  - ii. A horizontal intermediate rail or line spaced midway between the top rail or line and the base of the guardrail; and
  - iii. Supporting posts spaced not more than 3m apart at the centres.



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## **NATURAL GAS O H & S REGULATIONS *Contd.***

### **2. Temporary Structures and Excavations**

- Barricades – where a vehicle or pedestrian may come into contact with a temporary structure, a person shall be positioned at the base of the temporary structure or a barricade shall be installed around it to prevent any such contact.
  
- Temporary Stairs, Ramps and Platforms- temporary stairs, ramps and platforms shall be designed, constructed and installed to support any load that is likely to be imposed on them and to allow safe passage of persons and equipment on them.



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## NATURAL GAS O H & S REGULATIONS *Contd.*

- Scaffolds – the erection, use, dismantling or removal of a scaffold shall be carried out by or under the supervision of a qualified person

Excavation - before the commencement of work on an excavation, trench or tunnel or the creation of an opening in a bullhead, deck or similar structure, the employer shall mark the location of all pipes, cables and conduits in the area where the work is to be done.

- where an excavation, trench or opening constitutes a hazard to employees, a barricade shall be installed around it.

- Safety Nets – where there is a hazard that tools, equipment or materials may fall onto or from a temporary structure, the employer shall provide a protective structure or a safety net to protect from injury any employee on or below the temporary structure



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## NATURAL GAS O H & S REGULATIONS *Contd.*

3. Elevating Devices – shall meet international standards
  - Personnel Transfer Baskets – only under emergency; and under visibility and environmental conditions to ensure safety





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## **NATURAL GAS O H & S REGULATIONS *Contd.***

- Operation and Maintenance of Facilities and Installations
  1. Electrical Equipment, Elevating and Safety Devices – shall be repaired and maintained by a qualified person appointed by the employer.
    - No device shall be used or operated
    - i. With a load in excess of the load that it was designed and installed to operate safely
    - ii. - Shall be inspected and tested by a qualified person to determine that the prescribed standards are met
    - iii. - Regular record of inspections and tests shall be kept.



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## **NATURAL GAS O H & S REGULATIONS *Contd.***

2. Electrical Safety – all testing work on electrical equipment shall be performed by a qualified person or an employee under direct supervision of a qualified person.
  - Signs – “DANGER HIGH VOLTAGE” in letters that are not less than 50mm in height on contrasting background shall be posted in a conspicuous place at every approach to a live high voltage electrical equipment



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## **NATURAL GAS O H & S REGULATIONS *Contd.***

- Stairway, Walkway and Ramp – every stairway, walkway and ramp used by employees shall, as far as practicable, be kept free of dust, dirt and waste and scrap material in a work place shall be removed as often as is necessary to protect the safety and health of employees and shall be disposed of in such a manner that the safety and health of the employee shall not be compromised.
- Temporary Structure – the working surface of a temporary structure used by an employee shall, where practicable, be kept free of grease, oil or other slippery substance and of any material or object that may cause an employee to slip or trip.