THE QUARRY INDUSTRY AND
THE OCCUPATIONAL SAFETY AND
HEALTH ACT NO.1 OF 2004 (as amended)

Presented by
Randolph Alvarez
Senior Inspector

14th February 2011
Section 4(1)

Industrial Establishment

1. FACTORY
2. SHOP
3. OFFICE
4. Place of work or other premises

But not: (a) Residential Premises
(b) Other establishments exempted by the Minister
Health and Safety Policy
Section 6 (7) (7A): Sec. 8 (2a)

Policy to be:
1. Written
2. For Industrial Establishment with 25 or more employees
3. In consultation with workers or representatives
4. Communicated to all employees
5. Submitted to the Chief Inspector
6. Safety Practitioner to be appointed
EMERGENCY PLAN
Section 8 (2b)

Emergency plan:
1. There are 25 or more employees
2. There is consultation with worker representatives
3. In writing
4. Based on Risk Assessment in accordance with Section 13A

Chief Inspector may direct the occupier to appoint a Safety Practitioner
SAFETY AND HEALTH COMMITTEES
Section 25E

Every employer together with employees’ representatives to establish Safety and Health Committees where:

(a) Twenty-five or more employees

(b) The Chief Inspector directs in cases of less than twenty-five employees
Risk Assessment
Section 13A

1. Every employer to conduct a Risk Assessment in respect of:-
   (a) The risks to which his employees are exposed.
   (b) The risks to which persons not in his employ, but never the-less exposed to risks from the undertaking.

2. Measures to contain the risks

3. Annual Risk Assessment

4. Record the findings where employees are 25 or more
Duties to persons other than employees
Section 7 (1) (2)

Every employer or self employed persons to ensure persons not in his employ not to be exposed to risks
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Occupier of Industrial Establishment to:

(a) Protect safety and health of the public in the vicinity of his Industrial Establishment from dangers caused by the processes.

(b) Ensure integrity of the plant and systems to prevent fugitive emissions not of an approved standard.
1. Occupier to inform the Chief Inspector of accident causing death or critical injury, forthwith, by telephone, Fax, e-mail or other direct means

1. Occupier to send a written notice in the prescribed form within forty-eight hours of learning of the accident
GENERAL DUTIES OF EMPLOYEES AT WORK

S.10 (1)
S.10(1) (a)

- To take reasonable care of the safety and health of himself and of other persons who may be affected by his acts or omissions at work.
  e.g. Maintenance Personnel’s failure to reinstall a Guard after repairs.
S.10 (1) (b)

• To cooperate with the employer to ensure that a duty or requirement is performed or complied with.

  e.g. The employee not causing an amenity to be maintained.
S. 10 (1) (c)

- To report to his employer, any contravention under this Act or regulations made hereunder, as far as he knows.

  e.g. The Operator bypassing the bimanual mechanism. Also, ref. Refusal to work.
S.10 (1) (d)

- To use correctly the PPE provided for his use.
  e.g. failure to tie off the ‘Fall Arrest Mechanism’.
S. 10 (1) (e)

• To exercise discretion under S15 in a responsible manner.
S. 10 (1) (f)

- There should not be any intoxicant to endanger himself or any other person.
S. 10 (1A)

• The breach of S. 10 (1) is a safety and health offence and is subject to the Industrial Court.
S.10 (2)

• An employee who *wilfully and without reasonable cause* does anything which results in the death or critical injury to another person at work has:
  – Committed an offence; and is
  – Liable in accordance with the *Offences Against the Person Act*. Chapter 11.08
S.10 (3)

- Any employer may discipline, in the customary manner, an employee who breaks the safety provisions of the Act.
The Factories (protective) measures order, 1977

- made by the President under section 34 of the Factories Ordinance
- outlines measures to be put in place under specific construction activities
- consists of 61 paragraphs and 3 schedules.
Paragraph 3(2) deals with:

i. adequate lighting facilities
ii. the wearing of warning vests made of reflectorized material
iii. the provision of protection to combat hazardous dusts, gases, fumes or a deficiency of oxygen.
iv. The use of approved protective equipment to combat the effects of noise exposures.

Schedule 2 of the Order gives the periods of time to be spent given various levels of sound.
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Schedule 2 of the Order gives the periods of time to be spent given various levels of sound.
Paragraphs 7, 12, 14, 22, 45 deal with the need for daily inspections or inputs by an Engineer or a person authorized in writing by him to do so.
Paragraphs 8 and 9 deal with precautions to be taken for minimizing risks of damage to sewer and other utility lines.

Paragraph 16 deals with the “angle of repose” and how it should be treated under certain conditions.

In fact, the first schedule of the Order gives approximate angles of repose for different types of materials.
Paragraph 28 to 38 deal with Blasting and the use of explosives.

Paragraph 39 requires that all excavations remotely located and all wells, pits, shafts or other holes to be barricaded, covered or backfilled.

Paragraph 40 deals with the question of confined spaces, toxic or flammable gases or oxygen deficiency and the need for frequent testing.
Paragraph 42 deals with flameproof apparatus for lighting, and adequate ventilation.

Paragraph 43 deals with the availability of rescue equipment (breathing apparatus, safety harness, basket stretcher) in an emergency.
Paragraph 44 deals with the provision of guardrails for walkways, bridges.

Paragraph 47 deals in specific terms with the issue of workers in unstable areas prone to cave-ins.

- Schedule 3 of the Order is a table laying out the minimum requirements for trench shoring.
Paragraph 48-49 again drives home the point that the shoring must take into consideration the nature of the soil and the depth of dig.

Paragraph 52 even considers the effects of vibrations from traffic and operating machinery in the prevention of slides and cave-ins.
Some Accidents Through the Years
Date of accident- Dec. 2001

- Industry: Quarry
- Height of Bench – 150 feet
- D8 Tractor
- Operator fell out
- Operator was alone: no signalman
- Shortcut for winning material
- Unsafe method of work
Accident No. 2

Date of Accident – Jan 2002

• At construction site (sewerage works)
• Man crushed by reverse gear sound
• There were no mirrors to reveal blind spots
• No signalman
Accident No. 3

- **Date of accident – Dec. 1995**
- At construction site, Pt Lisas
- Fibreglass pipe (55 ft long: 42ins. Diam.)
- Steel casing (35ft long: 54ins O.D)
- Weight of assembly – 3 to 4 tons
- Nylon sling from Crane to pipe 6ins wide: 5/8 in thick
  - Worker pass under pipe assembly
  - Sling burst
  - Pipe assembly fell on worker
THE OCCUPATIONAL SAFETY AND HEALTH (PROTECTIVE MEASURES) Order, 1977

- Blasting Operations and the use of Explosives.

- Paragraphs 28 to 38
• No person to carry out blasting operations unless authorised to do so by the Commissioner of Police on the advice of the Chief Inspector.
Paragraph 28 (3)

- The Chief Inspector is to authorize blasting by persons with knowledge and experience in methods of blasting
- Blasting Operations to be carried out between sunrise and sunset.
The Commissioner of Police, on advise of the Chief inspector, can designate temporary storage areas.
• All loading and firing to be directed and supervised by persons with considerable knowledge and experience in loading and firing.
TO ALL THE QUARRY OPERATORS, CONTRACTORS AND THEIR EMPLOYEES

Please be safe and ensure that safety is exercised by you and your contractors during your various operations.
THANK YOU FOR YOUR ATTENTION