

CHIEF DIRECTORATE OF OCCUPATIONAL HEALTH AND SAFETY

MAJOR HAZARD INSTALLATION REGULATIONS ROLLOUT

15 May 2025
Rachel Aphane



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- Mandate : Occupational Health and Safety Act
- Advisory Council
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- Declassification
- Closure



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Introduction

Bill of Rights- Constitution of South Africa

24. Everyone has the right

- a. to an environment that is not harmful to their health or well-being; and
- b. to have the environment protected, **for the benefit of present and future generations, through reasonable legislative and other measures that**

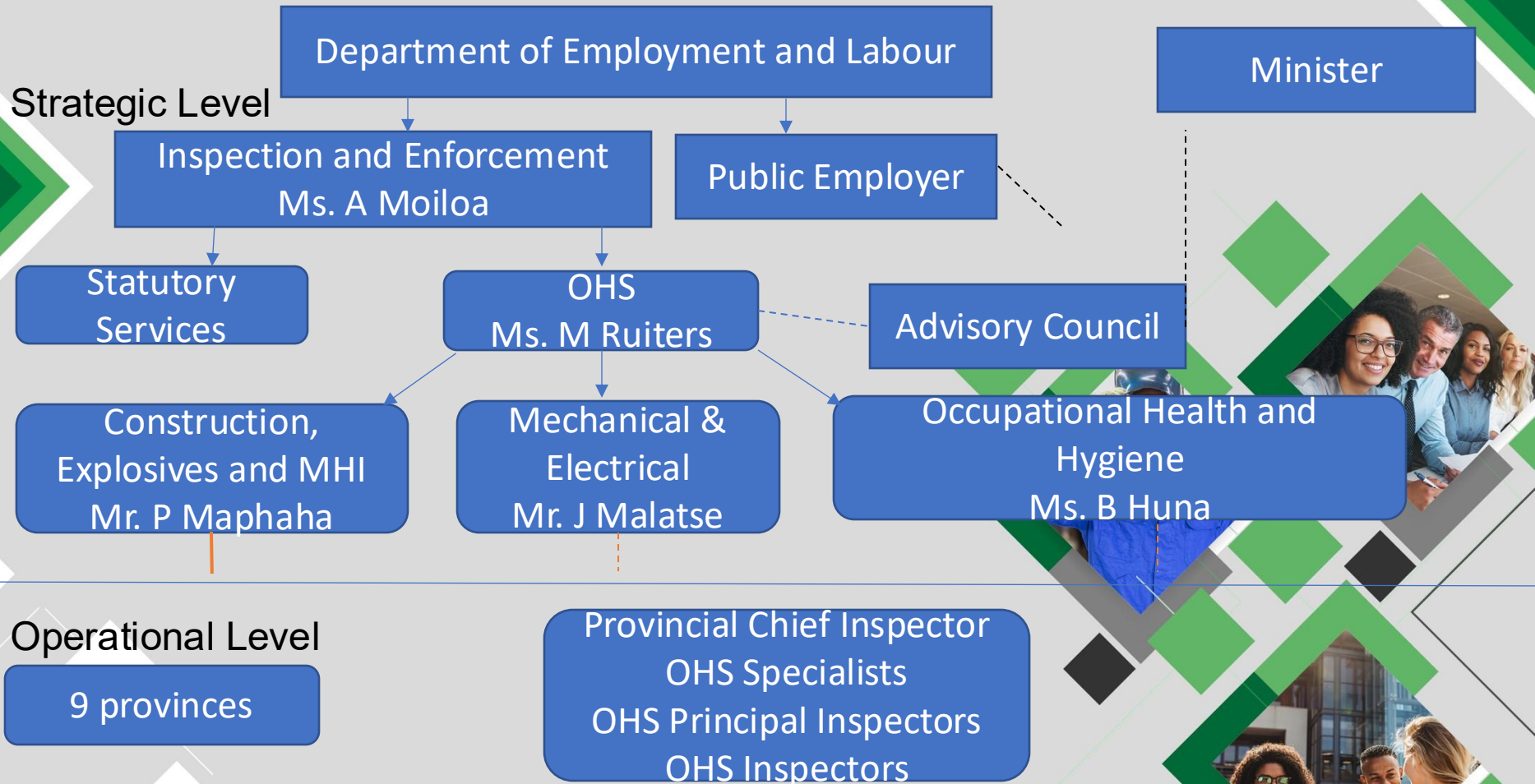


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Organogram



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Occupational Health and Safety Act

Purpose of OHSAct

- to protect for the health and safety of persons at work (employees, visitors, contractors & regulators) and in connection with the use of plant and machinery (operators)
- the protection of persons other than the persons at work against hazards to the health and safety arising out of or in connection with the activities of persons at work (**public**)
- Establish an advisory council regarding OHS matters

Section 2

(1) The Council shall-

(a) advise the Minister with regard to

(i) matters of policy arising out of or in connection with the application of the provisions of this Act;

(ii) any matter relating to occupational health and safety;

(b) perform the functions assigned to it by this Act or referred to it by the Minister



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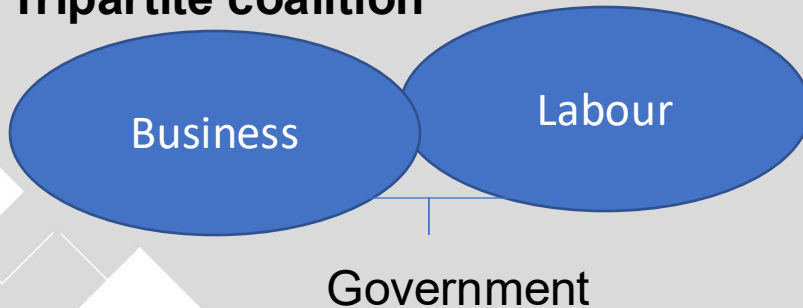
Advisory Council

Section 3: Functions:

(a) advise the Department concerning-

- (i) the formulation and publication of standards, specifications or other forms of guidance for the purpose of assisting employers, employees and users to maintain appropriate standards of occupational health and safety;
- (ii) the promotion of education and training in occupational health and safety; and
- (iii) the collection and dissemination of information on occupational health and safety.

Tripartite coalition



- Chairperson : Ms. M Ruiters – **Chief Inspector**)
- Members: CI, CF, DOH, DMR, OMP, OHH, OHS, Business & Labour



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Technical Committee

- **Establishment of Technical Committee of the Council**

- Section 6 (2)

- A member of a technical committee shall be appointed by the Council by reason of his knowledge of the matter for which the committee is established, and such a member need not be a member of the Council.

- **Regulations**

- Section 43(1)(b)(vii)

....the production, processing, use, handling, storage or **transport of** and the exposure to employees and other persons to, hazardous articles, substances.....

- Section 43(1)(f)

“as to the registration of plant and machinery and the fee payable to the State in respect of such registration;



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Major Hazard Installation Regulations, 2022

Classification

- based on maximum inventory/quantity present on site
 - Annexure A
 - chapter 1 – named substances
 - Chapter 2 -- categories of substances
 - Chapter 3 – major hazard pipelines
- < the low thresholds – fall out of scope of MHI
- AIA must conduct an exit report
- Regulation by Act



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EXIT STRATEGY FOR DECLASSIFICATION

- Confirmation of the quantities on site
 - all material that where not falling within the scope and might now be listed and needs to be verified if they qualify the criteria
- If threshold is still , threshold then it is possible that the installation may no longer be an MHI.
- Now, AIA – check the major offsite impacts
- materials may still be capable of major offsite impacts and this must be checked by the AIA



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EXIT STRATEGY FOR DECLASSIFICATION

The AIA will—

- Perform a consequence analysis of the worst case fires, explosion and toxic gas releases from all the relevant materials on site.
- The following quantitative impact criteria should be plotted on a map of the area:
 - Toxics – the 50% lethality level, using probits or the UK HSE SLOD values.
 - Fires – the 50% lethality or a radiation level of 20 kW/m² with 20 s exposure time Flash fires – the maximum extent of the lower flammable limit (LEL)



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The AIA will—

- The land-use in the area around the facility should be determined and vulnerable receptors marked on a map of the area, i.e. any Level 3 or 4 Sensitivity Developments as per the land use planning clause 4.10 of SANS 1461:2018
- If any of the above impact criteria extend over any Level 3 or 4 Sensitivity developments, then the facility should remain an MHI Establishment
- If none of the above impact criteria extend over any Level 3 or 4 Sensitivity developments, then the facility is no longer considered an MHI Establishment.
- Exit Report including all the above information, calculations, maps etc. should be compiled for the facility by the AIA

United Kingdom: Health Safety Executive (UK HSE), Planning and Development near Hazardous Installations system (PADHI)



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- Submit FORM A, clearly indicating that it is a declassification request with the relevant sections of in the MHI Regulation of 2022.
- Exit Report including all the above information, calculations, maps indicating that municipality has been informed.
- De registration from the MHI database.



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IMPACT OF MHI REGULATIONS ON THE TRANSPORT OF DANGEROUS SUBSTANCES



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Major Hazard Installation Regulations, 2022

Areas of alignments

1. Exclusions
2. Classification and labelling
3. Requirements for safe loading and offloading
4. Emergency Preparedness
5. Information and Training



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1. Exclusions

Scope of Application : Annexure A, chapter 1, 2 and 3

common name of the chemical, UN number, GHS labelling and SDS (HCA Regulations)

Exclusions:

class 1 : Explosives; Nuclear and offshore Installations;; mining; **rolling stock in transit (airways, waterways and road);**

“transit” means a time or place in which dangerous substances are transported by rail, road, waterways or airways, which may be between planned points of departure and arrival

Temporary storage : marshalling bays, truck stops

Adaptations :

- TDG and GHS classification System
- COMAH :Regulations 2015



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Classification and Labelling

UN Classification and codes

Class 1: Explosives

Class 2: Gases (flammable, non-flammable, and toxic)

Class 3: Flammable liquids

Class 4: Flammable solids, self-reactive substances, and desensitized explosives

Class 5: Oxidizing substances and organic peroxides

Class 6: Toxic and infectious substances

Class 7: Radioactive materials

Class 8: Corrosive substances

Class 9: Miscellaneous dangerous goods

Each class is determined based on the most dominant dangerous property of the goods or substance.



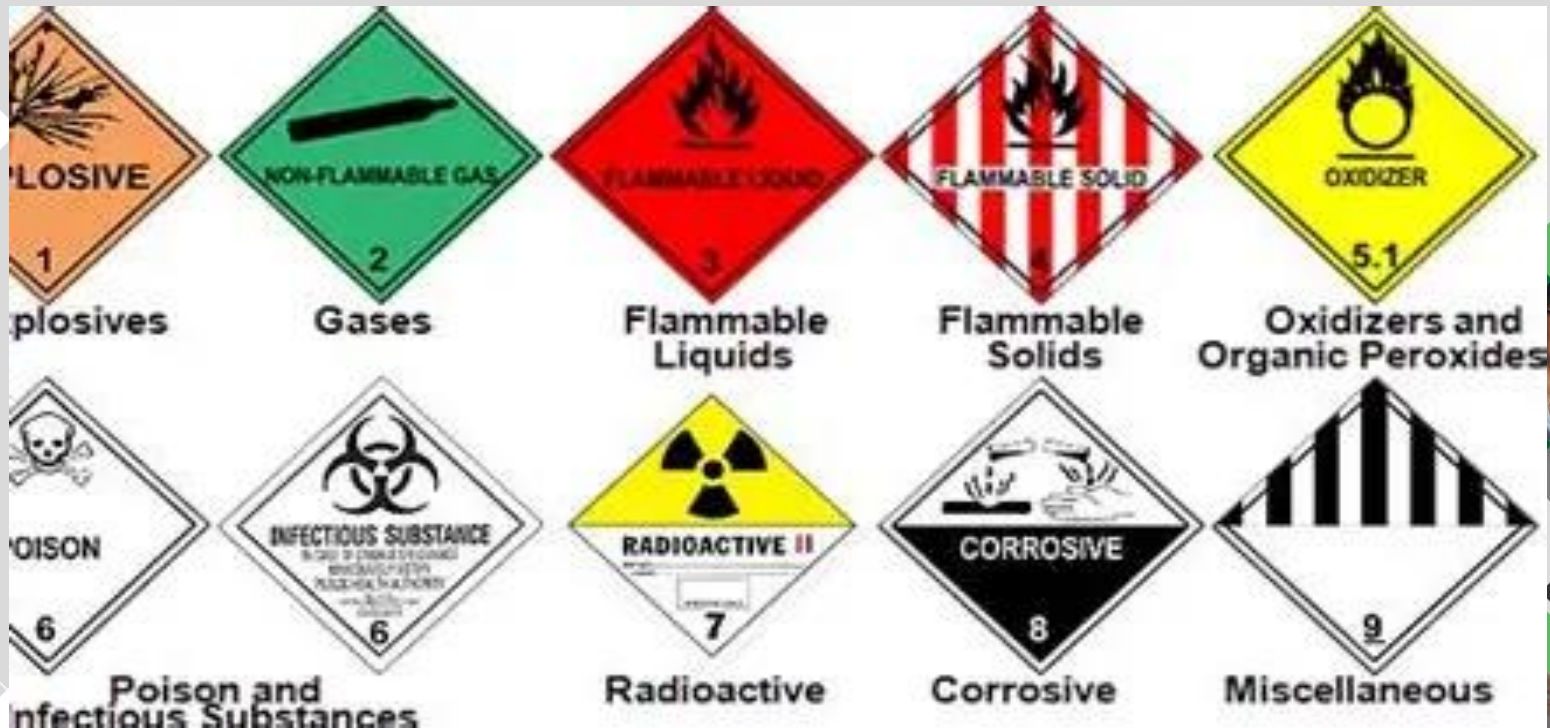
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Classification and Labelling

TDG substances classes



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Classification and Labelling

Major Changes with the new Global Harmonized System (GHS)

There are three major areas of change in the GHS Standard:

GHS Pictograms and Hazard Classes		
		
Explosives	- Flammable - Self-Reacting - Polymeric - Self-Heating - Extremely Flammable Gas - Organic Peroxides	- Explosives - Self-Reacting - Organic Peroxides
		
Acute Toxicity (Oral)	Corrosive	Corrosive (Skin/Respiratory)
		
- Carcinogen - Respiratory Sensitizer - Reproductive Toxicity - Target Organ Toxicity - Asphyxiant - Aspiration Toxicity	Environmental Toxicity	- Irritant - Dermal Sensitizer - Acute Toxicity (Hazardous) - Respiratory Toxicity - Respiratory Irritant - Respiratory No Effect - Local (Skin/Respiratory)

- Labels:** Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.
- Hazard Classification:** The definitions of hazard have been changed to provide specific criteria for classification of health and physical hazards, as well as classification of mixtures. These specific criteria will help to ensure that evaluations of hazardous effects are consistent across manufacturers, and that labels and safety data sheets are more accurate as a result.
- Safety Data Sheets:** Will now have a specified 16-section format.

ABM
Building Value



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Major Hazard Installation Regulations, 2022

What does this mean?

- Classification and labelling is harmonized
- QRA in terms of regulation 10
- Includes safe decanting and canting



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Emergency Preparedness

- Monitoring and compliance : DoT and LG
- ERG card
- Emergency Details
 - 24 hour support
 - SDS (required by ERPG)



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Information and Training

- Advertisements of MHI status in Local Newspapers and by way of posting of notices in the surrounding area
- Sharing of information with adjacent establishments
- Duty to inform
 - Employees, visitors and contractors
 - Aligned with Section 14 of the Act, TDG, IMDG, HCAR
 - Job specific training as well as induction
 - Duration of validity (2 years/12 months)



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Thank You...



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