

The Major Hazard Installation (MHI) Regulations, 2022

Classification of MHIs

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The Presenter: Motlatsi Mabaso

- Motlatsi is a Director and **Technical Signatory** at MMRisk (Pty) Ltd, an Approved Inspection Authority for MHIs
- He holds BSc in **Chemical Engineering** (from UCT)
- MHI **Technical Committee member** for the drafting of new MHI Regulations (Dept of Employment and Labour) (2019 – Present)
- He is a **Chartered** Chemical Engineer (**CEng**) and Member of IChemE (UK)
- Vice President of the S.A. Institution of Chemical Engineers (**SAIChE**) (2019 – 2022)
- Visiting Engineer – **UCT** Department of Chemical Engineering (2017)



About MMRisk (Pty) Ltd



We are Specialists in the field of **Industrial Process Risk and Safety**.

We are an Approved **Inspection Authority** for Major Hazard Installation Risk Assessments, number: CI MHI 0013.

Our services

Major Hazard Installation (MHI) Risk Assessment

HAZOP Facilitation

Emergency Response Planning

Technical Risk Training

Some of our Clients



Presentation Outline

- What are the Major Hazard Installation (MHI) Regulations?
- What are the NEW MHI Regulations (2022)?
- Classification of establishments: Low, Medium, High
- Declassification

What is a Major Hazard Installation?



Plenty of recent local examples ... unfortunately

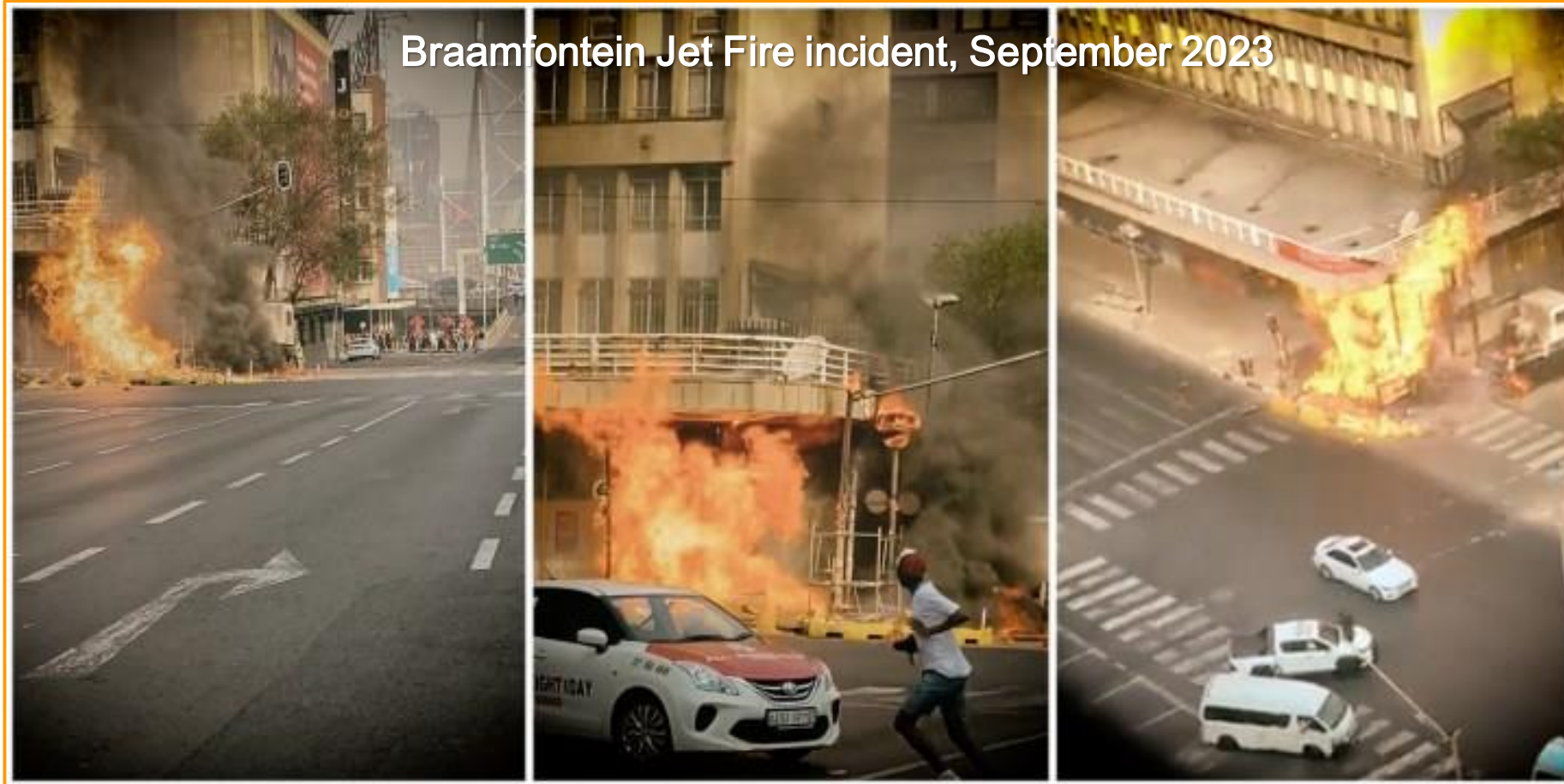


Boksburg Tanker explosion, December 2022

Plenty of recent local examples ... unfortunately



Plenty of recent local examples ... unfortunately



“Major Hazard Installation”

Major Hazard =

The potential to cause a major industrial accident which affects personnel and the public



Installation =

A System or Unit on-site which processes or stores Hazardous Substances (or Dangerous Goods)



The Occupational Health and Safety Act (85 of 1993)



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GOVERNMENT GAZETTE

STAATSKOERANT

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STATE PRESIDENT'S OFFICE

KANTOOR VAN DIE STAATSPRESIDENT

No. 1158.

2 July 1993

No. 1158.

2 Julie 1993

It is hereby notified that the State President has assented to the following Act which is hereby published for general information:—

Hierby word bekend gemaak dat die Staatspresident sy goedkeuring gegee het aan die onderstaande Wet wat hierby ter algemene inligting gepubliseer word:—

No. 85 of 1993: Occupational Health and Safety Act, 1993.

No. 85 van 1993: Wet op Beroepsgesondheid en Veiligheid, 1993.

Regulations

43. (1) The Minister may make regulations—

(c) as to the preventive and protective measures for major hazard installations with a view to the protection of employees and the public against the risk of major incidents;

The MHI Regulations, 2022

STAATSKOERANT, 31 JANUARIE 2023

No. 47970 3

GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF EMPLOYMENT AND LABOUR

NO. R. 2989

31 January 2023

**OCCUPATIONAL HEALTH AND SAFETY ACT (ACT No. 85 OF 1993), as
amended**

PROMULGATION OF MAJOR HAZARD INSTALLATION REGULATIONS, 2022

I, Thembelani Waltermade Nxesi, Minister of Employment and Labour, hereto, after consultation with the Advisory Council of Occupational Health and Safety, promulgates the new regulation relating to Major Hazard Installations; in terms of section 43(1)(c) of the Occupational Health and Safety Act, 1993 (Act no. 85 of 1993).



MR TW-NXESI, MP
MINISTER OF EMPLOYMENT AND LABOUR
DATE: 13/1/2022

Downloadable from:
www.labour.gov.za

mmrisk

MHI Regulations, 2022: overview

1. Definitions

2. Scope of application

3. Management of establishment

4. Notification of establishment

5, 6, 7, 8: Registration of establishment, including suspension

9. Sharing of information

10. Risk Assessment

11. Major Incident Prevention Policy (MIPP)

12. Safety Report

13. Licence to Operate

14. General duties of local government

15. Emergency Plan

16. Reporting of incidents

17. Information and training

18. General duties of suppliers

19. Payable fees

20. The MHI Advisory Council

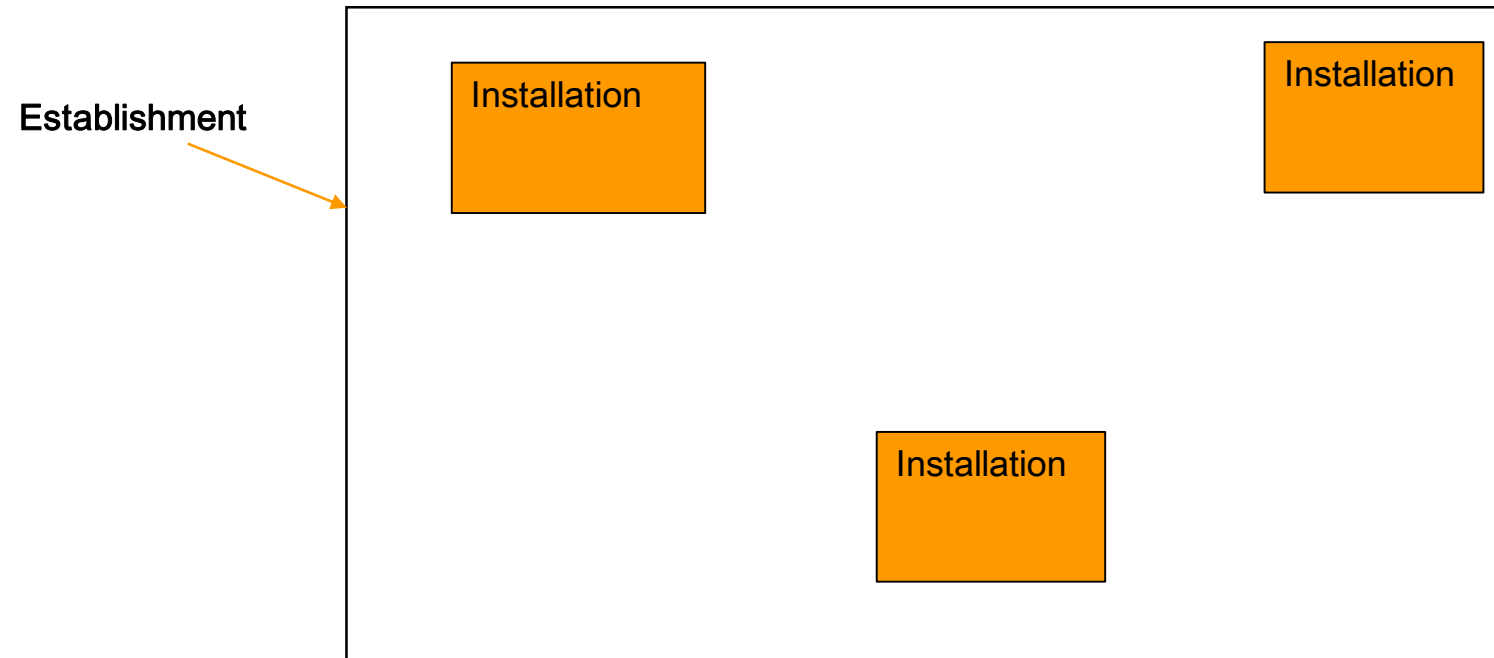
21. Approved Inspection Authorities

22. Duties of Approved Inspection Authority

MHI Regulations, 2022: overview

| | | |
|---|--|--|
| 23. Closure | Annexure A, Chapter 1: Named dangerous substances | Annexure C: Major Incident Prevention Policy |
| 24. Offences and penalties | | |
| 25. Repeal of regulations | Annexure A, Chapter 2: Unnamed dangerous substances (categories) | Annexure D: Safety Reports |
| 26. Short title and commencement | Annexure A, Chapter 3: Pipelines as major hazard establishments | Annexure E: AIA Monthly Reports |
| Annexure A: Dangerous Substances to which these regulations apply | Annexure A: Aggregation Rule | Form A: Notification of an establishment |
| | Annexure B: Payable fees | Form B: Registration as an Approved Inspection Authority |

Installation vs Establishment



MHI Regs 2022: Facility Classification & Named Substances

E.G. Named Substances

Petroleum Products (gasolines, naphtha's, kerosene's, gas oils (including diesel fuels, heating oils, gas oil blends)

LPG and Natural Gas

Ammonia

E.G. Unnamed Substances

e.g. Pyrophoric liquids / solids

Threshold Quantities in TONS (maximum capacity)

250 – 2,500

2,500 – 25,000

> 25,000

20 – 50

50 – 200

> 200

15 – 50

50 – 200

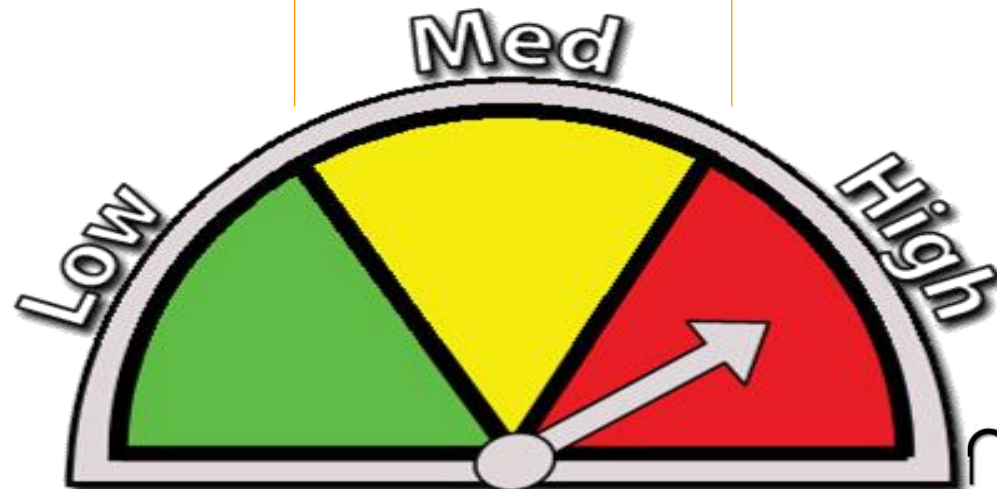
> 200

20 – 50

50 – 200

> 200

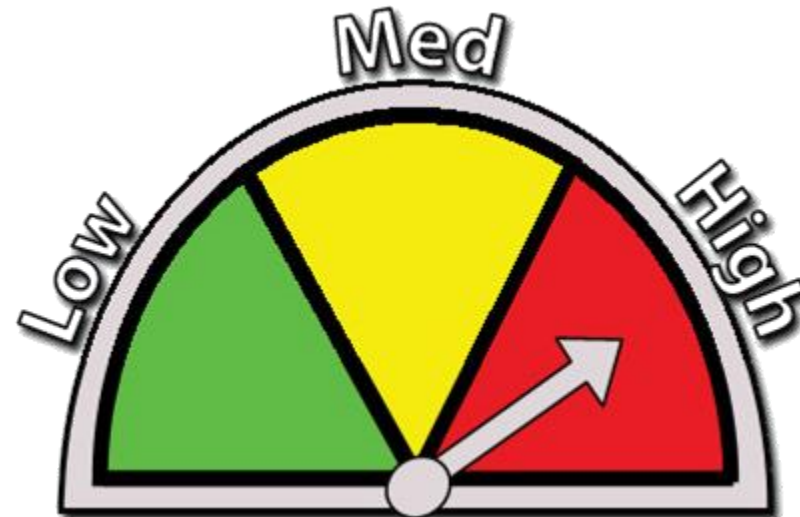
FACILITY HAZARD RATING:



MHI Regulations, 2022: requirements per hazard level

MHI Risk Assessment (MHI),
Emergency Plan (EP)

MHI,
EP,
Major Incident Prevention Policy (MIPP),
Process Safety Management System (PSM)



FACILITY HAZARD RATING

MHI,
EPP,
MIPP,
PSM,
Safety Report (SR)
“Licence to Operate”



**“My site was an MHI before,
but my installations now fall
below the new threshold
quantities... what do I do?”**

Installations below threshold quantities

- Below threshold quantity \neq Safe
- Local government may require an assessment (**vulnerable neighbours**)
- Contact Department of Employment and Labour



Dipotso?

Any questions?