

Your health and safety guide to Major hazard facilities



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Certain types of incidents at major hazard facilities can be catastrophic for workers, the community and the environment.

Major hazard facilities are an essential part of the state's infrastructure, providing important products and services to Victorians. However, these sites handle potentially dangerous quantities of chemicals and other materials.

A major incident, such as the one that occurred at the Longford gas plant in 1998, can result in loss of life and property damage on a very large scale.

This guide will help you understand the risks associated with major hazard facilities, and will explain what you need to do to make your workplace safe.



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About the industry

What is a major hazard facility?

Major hazard facilities (MHFs) are industrial sites which store, handle or process large quantities of chemicals and dangerous goods, including petroleum products.

Examples include oil refineries, chemical manufacturing sites, gas-processing plants, LPG facilities and some warehouses and transport depots.

Victoria has approximately 45 of these sites, which must comply with stringent legal requirements, including preparation of a Safety Case, to ensure they are operated safely.

Visit the WorkSafe website www.worksafe.vic.gov.au for a complete listing of Victoria's major hazard facilities.

What are the risks?

Major hazard facilities use large quantities of hazardous chemicals and other potentially dangerous materials. If something goes wrong at a major hazard site, the consequences can be catastrophic for employees and the surrounding community.

While major incidents are uncommon, they do occur and can result in fire, explosion or the release of hazardous chemicals, putting property and lives at risk.

What is a Safety Case?

MHFs have to demonstrate their operational safety through a Safety Case developed specifically for their unique operations and situation.

The Safety Case sets out the adequacy of the site's safety management system by specifying prevention measures, as well as strategies for reducing the effects of a major incident if one does occur.

It can only be prepared following a full examination of a site's activities to identify major incident hazards and all potential major incidents, and to determine the necessary risk control measures.

The Safety Case must be prepared with the full involvement of employees and their health and safety representatives from all of the different workgroups and functional areas at the site.

The relevant emergency services should be consulted on emergency plan preparation, and local municipal council(s) should be consulted on actions required for the safety of local community members in the event of a major incident.

About the industry continued

Who else has roles?

The local community

As a resident, worker, business operator or other person involved in the local community, you can access information about an MHF from local councils, local libraries or directly from the MHF operator.

The sort of information available includes:

- a summary of the Safety Case and a copy of the licence
- information on operations at the MHF and the materials used there
- information on the range of hazards at the facility and potential major incidents
- how the local community would be notified should a major incident occur, and what people should do.


Local council(s)

Councils representing local communities are entitled to information and consultation with MHFs. Sometimes, an MHF's local community may be within the boundaries of two or more municipalities. Some councils have several MHFs within their boundaries.

Council involvement with an MHF includes:

- consultation on emergency planning as it affects the community
- the MHF working with council emergency planning staff
- receiving information on the MHF for reference purposes
- receiving information to be held at public libraries.

WorkSafe consults with councils during relevant inquiries on MHF issues such as determination, deregistration or licence surrender.



Emergency services and Victorian government agencies

Coordination of agencies involved in regulating MHFs is important to ensure efficient and effective administration of all regulations governing these facilities. To help achieve this, WorkSafe and key Victorian government agencies involved with MHFs have entered into memoranda of understanding (MOU).

Emergency services also have a role under the Regulations to be consulted by MHF operators on emergency planning. Emergency services must be consulted in MHF emergency plan preparation, and involved in periodical testing and review of plans.

The MHF must provide copies of the emergency plan to emergency services and have a copy available on site for them. MOU agencies are consulted by WorkSafe during relevant inquiries on MHF issues such as determination of a site as an MHF, Safety Case assessment, deregistration or licence surrender.

Your legal duties

The law

Occupational Health and Safety Act 2004 (OHS Act)

The OHS Act came into effect on 1 July 2005. It sets out the key principles, duties and rights in relation to occupational health and safety. The duties imposed by the Act cover a wide variety of circumstances, recognising the need for a duty-holder to have flexibility in determining what needs to be done to comply.

The OHS Act is based upon the following key health and safety principles:

- All people – employees and the general public – should have the highest level of protection against risks to health and safety.
- Those who manage or control things that create health and safety risks in the workplace are responsible for eliminating or reducing the risks, so far as is reasonably practicable.
- Employers should be proactive in promoting health and safety in the workplace.
- Information and ideas about risks and how to control them should be shared between employers and employees.
- Employees are entitled – and should be encouraged – to be represented in relation to health and safety issues.

Occupational Health and Safety Regulations 2007 (OHS Regulations 2007)

New Regulations for occupational health and safety came into effect on 1 July 2007.

The major hazard facility part of the OHS Regulations is intended to ensure the safe operation of major hazard facilities in Victorian workplaces in order to prevent major incidents which may lead to injury and death.

To do this, the Regulations impose specific legal responsibilities on licensed operators and employers for the safe management and operation of major hazard facilities.

Licensed operators

To operate an MHF, you must hold a licence or the facility must be registered with WorkSafe pending the issue of a licence. There are specific obligations relating to these licences. For more information on licensing for major hazard facilities, contact the WorkSafe Advisory Service (1800 136 089) or visit the WorkSafe website at www.worksafe.vic.gov.au

Control risk

Operators must identify all major incidents that could occur at the facility and all major incident hazards. You must then conduct a safety assessment of these potential incidents and hazards.

You must eliminate the risk of a major incident occurring. If it is not reasonably practicable to eliminate the risk, you must reduce it as far as reasonably practicable.

You are required to review (and, where necessary, revise) your risk management approach if things change, if control measures are deemed insufficient, if requested by a health and safety representative or if directed to do so by WorkSafe.

Operators also have a duty to develop an emergency plan, as well as a safety role for employees.

Safety management system

You must establish and implement a documented safety management system as the primary means of ensuring the safe operation of the facility.

A safety management system must:

- provide a comprehensive and integrated management system for the control of risk
- be accessible and comprehensible
- set out the operator's safety policy
- describe safety objectives and the systems and procedures to achieve them
- set out how legal duties will be complied with
- include all additional matters specified in schedule 10 of the Regulations (e.g. organisation and personnel, operational controls, management of change, performance monitoring and auditing).

You must also prepare a Safety Case to demonstrate the adequacy of the safety management system and the risk control measures in preventing major incidents.

Because of the risks involved in operating an MHF, operators have specific obligations to consult with employees and the community.

Your legal duties continued

Employees

Your employer is required to protect you from any risks to your health and safety. At the same time, you have a general duty relating to health and safety, as well as specific duties associated with MHFs.

As an employee, you must:

- follow prevention and risk control measures put in place by the operator
- follow emergency procedures where necessary
- immediately inform the operator of any circumstance that you think could lead to a major incident
- take corrective action where necessary and notify a supervisor of any action taken.

The employer(s) at an MHF must also develop a safety role for employees covering how employees will work with the employer to achieve safe operation. The safety role includes procedures for employees to follow in assisting the operator to:

- identify major incidents and major incident hazards
- conduct or review a safety assessment
- adopt or review risk control measures
- establish and implement a safety management system.

Compliance and enforcement

WorkSafe applies a strategy of 'constructive compliance' – a combination of incentives and deterrents – to improve workplace health and safety.

This strategy recognises that real and sustainable improvement in workplace health and safety requires active involvement from employers and employees in identifying hazards and controlling risks.

WorkSafe inspectors have the primary role of targeting unsafe workplace activity, enforcing compliance with health and safety laws, and providing guidance and advice on how to comply with those laws.

Further information on workplace inspections and WorkSafe's enforcement policy is available through the WorkSafe Advisory Service (1800 136 089) or at www.worksafe.vic.gov.au

How to comply

WorkSafe has a range of guidance materials to advise on the required processes and actions that duty-holders must take in order to meet their legal obligations. *Compliance Codes*, *Health and Safety Solutions* and *Guidance Notes* each provide detailed and specific advice for duty-holders seeking to comply with the OHS Regulations 2007. See also the enclosed *More information* sheet for a listing of guidance materials related to Major hazard facilities.

Consult

Operators of MHFs have specific obligations to consult with employees and with the community.

Employees, including contractors and their employees, need to be consulted for their operating knowledge and safety improvement ideas when a facility's Safety Case is being put together. If employees are represented by health and safety representatives, the consultation must involve those representatives – see *Your health and safety guide to Consultation* for further information.

Local councils and emergency services must also be consulted and informed about the Safety Case.

Facility operators must also inform the local council of the facility's systems for alerting the community in the event of a major incident, and provide information on the Safety Case, which community members can access at local libraries.

How to comply continued

Find

The law imposes strict and demanding requirements on operators of MHFs to protect employees and surrounding communities.

Operators are required to prepare a Safety Case that demonstrates that appropriate measures have been taken to ensure that these facilities operate safely.

Fundamental to this process is the identification of potential major incident scenarios.

As with all risk management processes, risks can only be controlled if the underlying hazards are first identified.

Operators must therefore conduct a detailed hazard identification and safety assessment process which investigates and analyses hazards and risks and examines the potential consequences if things go wrong.

This comprehensive process helps operators to understand the events that may lead to major incidents, and is fundamental to implementing risk control measures and evaluating their effectiveness.

Fix

Operators of MHFs must demonstrate in their Safety Case that they have adopted adequate measures to control the risk to health and safety associated with major incident hazards.

There are particular issues involved in operating MHFs safely, and operators must take a comprehensive approach to ensure all risks are controlled.

A documented safety management system must be established and implemented as the primary means of ensuring the safe operation of the facility.

The safety management system needs to be a comprehensive and integrated management approach for ensuring the adequacy and sustainability of control measures adopted in relation to hazards and major incidents.



Review

Operators of MHFs must monitor the effectiveness of safety systems and controls and make improvements where needed.

Technical developments and industry best practice should also be monitored by the operator and any developments or advancements should be adopted to improve safety at the facility.

A review of the risk management approach is also necessary in a number of specific circumstances outlined in the Regulations, particularly when the Safety Case is reviewed and revised in order to renew the licence.

GLOSSARY

Emergency plan – A document outlining hazard- and risk-specific procedures for responding to emergency situations.

Employee – A person employed under a contract of employment or contract of training.

Employer – A person who employs one or more people under contracts of employment or contracts of training.

Hazard – A potential source of harm or injury. The potential to cause injury, illness or disease.

Health and safety representative (HSR) – A member of a designated work group elected to represent employees on matters relating to occupational health and safety.

Licensed operator – A person who holds a licence to operate a major hazard facility.

Major incident – An uncontrolled incident, including an emission, loss of containment, escape, fire, explosion or release of energy that involves any of the materials specified in Schedule 9 of the OHS Regulations.

Major incident hazard – Any activity, procedure, plant, process, substance, situation or any other circumstance that could cause, or contribute to causing, a major incident.

Major hazard facility – A facility where Schedule 9 materials are present or likely to be present in a quantity exceeding the prescribed threshold, or any facility determined by the Authority to be a major hazard facility.

Operator – The person who has management or control over a major hazard facility.

Personal protective equipment – Equipment or clothing used to provide protection, e.g. gloves, safety glasses, hard hats, goggles, earmuffs, safety shoes, respirators and fall arrest systems.

Plant – Any machinery, equipment, appliance, implement or tool; any component of any of these things; and anything fitted, connected or related to any of these things.

Reasonably practicable – See section 20(2) of the OHS Act and the WorkSafe Position on *How WorkSafe applies the law in relation to reasonably practicable*.

Safety assessment – A comprehensive and systematic assessment of all the major incident hazards in the workplace, including all potential major incidents.

Safety Case – A document prepared by the operator of a major hazard facility in order to obtain an operating licence, which demonstrates the adequacy of risk controls and measures adopted by the operator, including a safety management system.

In this series

Hazards

- Your health and safety guide to asbestos
- Your health and safety guide to confined spaces
- Your health and safety guide to dangerous goods
- Your health and safety guide to falls prevention
- Your health and safety guide to hazardous substances
- Your health and safety guide to lead
- Your health and safety guide to manual handling
- Your health and safety guide to noise
- Your health and safety guide to plant

Industries

- Your health and safety guide to construction
- Your health and safety guide to forestry
- Your health and safety guide to foundries
- Your health and safety guide to major hazard facilities
- Your health and safety guide to mines

Subjects

- Your health and safety guide to communicating across languages
- Your health and safety guide to consultation
- Your health and safety guide to controlling OHS hazards and risks
- Your health and safety guide to licensing and registrations
- Your health and safety guide to workplace amenities and first aid

Visit www.worksafe.vic.gov.au for online guidance on all of these topics and more...

The information presented in *Your health and safety guide to major hazard facilities* is intended for general use only. It should not be viewed as a definitive guide to the law, and should be read in conjunction with the *Occupational Health and Safety Act 2004*.

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