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Yarraville Terminal 2022 Safety Case Summary

Contents

O3 Glossary

O4 Message from the Yarraville Terminal Manager

05 Mobil in Australia

O6 Safety Policy

07 Introduction – Major Hazard Facility Yarraville Terminal Overview

12 Safety Case Summary

Appendix – License to Operate MHF

20 Need More Information?

Glossary

So far as is reasonably practicable (SFARP) The measure of risk after implementation of control measures that eliminate or reduce risks to so far as is reasonably practicable.

Consequence The outcome of an event or incident expressed qualitatively or quantitatively, being loss, injury, disadvantage or gain.

Control Measure Measures for prevention or mitigation of a potential major incident by reducing the likelihood of a potential major incident and/or of reducing the magnitude or severity of the consequences.

Mobil Oil Australia or Mobil means Mobil Oil Australia Pty Ltd, the entity that has management and operational control of Yarraville Terminal and is therefore defined as the designated "operator" under the Victorian OHS Regulations 2017.

Hazard Physical or chemical process, procedure or circumstance at the terminal which could result in a potential major incident.

HAZID Hazard Identification process.

Incident A specific event or extended situation that has an undesirable and unintended impact on the safety or health of people, on property, or on the environment.

Likelihood A qualitative description of probability and frequency.

Local community Local community includes members of the general public who reside in, or are in management and control of workplaces, or of places where persons gather for recreational, cultural, or sporting purpose, located in the surrounding area, whose health or safety could be adversely affected by a major incident at the terminal.

Loss of containment Unplanned release of product to the atmosphere.

Major incident (MI) An uncontrolled incident, including an emission, loss of containment, escape, fire, explosion or release of energy, that:

- a) involves Schedule 14 materials, and
- b) poses a serious and immediate risk to health and safety.

Mitigation Measures implemented in advance of an unplanned event aimed at decreasing or eliminating its impacts.

OHS Regulations Occupational Health and Safety Regulations 2017 (Vic). The Safety Case was developed in accordance with these regulations, which were applicable at the time of the submission. Yarraville Terminal continues to maintain compliance with the latest regulations. OIMS Operations Integrity Management System, which is Mobil's safety management system.

Risk A product of the likelihood of a potential major incident and the severity of associated consequences to persons both on site and off site.

Safety Case A Safety Case is prepared or revised under Part 5.2, Division 8 of the Occupational Health and Safety Regulations 2017. The Safety Case must demonstrate that the facility is operated and maintained in a safe manner.

Safety Assessment A process of:

- Potential major incident and hazard (cause) identification (HAZID)
- Risk assessment
- Control Measures analysis
- So Far As is Reasonably Practicable Assessment

Schedule 14 material Means a material mentioned in Schedule 14 of the OHS Regulations 2017.

WorkSafe Victoria The safety regulator in Victoriaresponsible for assessing Safety Cases and issuingoperating licences to major hazard facilities.

Message from the Terminal Manager

Safety is Mobil Oil Australia's core value and we are committed to protecting the health and safety of our workers and the local community. We put safety first in everything we do in operating the Yarraville Terminal, so that we can achieve our goal of Operational Excellence.

Since operations commenced at Yarraville Terminal in 1926, Mobil has been proactive in assessing the risks that may be present in our operations, identifying any hazards and implementing controls to manage those hazards. In keeping with these efforts, the Yarraville Terminal Safety Case is the product of an extensive process that involved a comprehensive review of the terminal's operations.

This work and the resulting safety systems described in the Safety Case are designed to create a safe workplace and a culture that truly values the safety of those working here and the surrounding community. While the Yarraville Terminal Safety Case and this Safety Case Summary have been developed to comply with the Occupational Health and Safety Regulations 2017, Mobil's approach to safety and corporate citizenship extends beyond strict compliance with applicable laws. We strive for operational excellence, and are committed to engaging with the communities in which we operate, and helping them to understand our business. We believe it is fundamentally important to maintain open lines of communication with the community, and ongoing formal and informal communication with Hobsons Bay and Maribyrnong City Councils, local schools, WorkSafe Victoria, EPA Victoria, Fire Rescue Victoria, Port of Melbourne and other major hazard facilities in the industry. We value these relationships and the open communication created by this engagement, which helps us to continually improve the way we operate.

Steven Flynn Yarraville Terminal Manager



Our goal is to operate in a way that ensures Nobody Gets Hurt!



Mobil in Australia

Mobil Oil Australia is a subsidiary of ExxonMobil Australia, one of Australia's leading energy companies. In Australia, ExxonMobil operates a number of product distribution terminals and bulk storage facilities around the country, including the fuel distribution terminal in Yarraville.

Fuel products are delivered to the Terminal through pipelines from Mobil's Altona Terminal and Viva Energy's Geelong Refinery, as well as by marine vessels through Port of Melbourne's Holden Dock facility. Any products that are not immediately loaded-out are stored in one or more of the Terminal's 28 bulk fuel storage tanks. Yarraville Terminal is the largest fuel storage and distribution terminal in Melbourne, supplying around one third of Victoria's fuel needs.

Being the largest fuel distribution terminal in Victoria for the bulk supply of petrol (gasoline),

diesel and aviation fuel, Yarraville Terminal handles fuel that makes its way throughout Victoria as well as into Southern New South Wales. Products are transported from the Terminal to wholesale customers and end users in a variety of ways, including by road, pipeline, and ship. Mobil is committed to maintaining safe and environmentally responsible operations at all of its sites and focuses on reducing the risk of any potential major incident to so far as is reasonably practicable at all its sites, including Yarraville Terminal.



ExxonMobil's Safety Policy

The Yarraville Terminal is operated in accordance with ExxonMobil's global Safety Policy. This policy requires compliance with all applicable laws and regulations. The policy also requires that facilities are designed to appropriate standards, and are operated and maintained with systematic identification and management of safety, health and environmental risks. The Operations Integrity Management System (OIMS) is Mobil's safety management system and provides a structured approach to meeting this commitment.

It is the Company's policy to conduct its business in a manner that protects the safety of employees, others involved in its operations, customers, and the public. The Company will strive to prevent all accidents, injuries, and occupational illnesses through the active participation of every employee.

The Company is committed to continuous efforts to identify and eliminate or manage safety risks associated with its activities. This commitment includes an ongoing improvement of all aspects of our Operations Integrity Management System, OIMS. Accordingly, the Company's policy is to:

- design and maintain facilities, establish management systems, provide training and conduct operations in a manner that safeguards people and property;
- respond quickly, effectively, and with care to emergencies or accidents resulting from its operations, in cooperation with industry organisations and authorized government agencies;
- comply with all applicable laws and regulations, and apply responsible standards where laws and regulations do not exist;
- work with government agencies and others to develop responsible laws, regulations, and standards based on sound science and consideration of risk;
- conduct and support research to extend knowledge about the safety effects of its operations, and promptly apply significant findings and, as appropriate, share them with employees, contractors, government agencies, and others who might be affected;
- stress to all employees, contractors, and others working on its behalf their responsibility and accountability for safe performance on the job and encourage safe behaviour off the job;
- undertake appropriate reviews and evaluations of its operations to measure progress and to foster compliance with this policy.

Introduction to Major Hazard Facility

This Safety Case Summary provides information about safety at Yarraville Terminal. It is a summary of the hazards that may cause a major incident at the terminal, and addresses the likelihood of such incidents occurring and the control measures that are in place to prevent or minimise the consequences of such incidents, should they occur.

Copies of this Safety Case Summary have been distributed to the Hobsons Bay and Maribyrnong City Council libraries. It is also available on the ExxonMobil Australia website (www.exxonmobil.com.au).

The Safety Case for Yarraville Terminal has been developed in consultation with both the Hobsons Bay and Maribyrnong City Councils to ensure community interests are observed and protected.

Importantly, we have discussed this Safety Case with the Emergency Response Managers for each council to ensure that emergency arrangements and communication are consistent between all parties.

We have consulted and worked closely with Fire Rescue Victoria with regard to Occupational Health and Safety Regulations requirements and, in particular, when developing emergency response procedures for all potential major incidents at Yarraville Terminal.

Mobil employees, including our Health and Safety Representatives, are also actively involved in developing and implementing operating and maintenance procedures for new projects and in conducting risk assessments, audits and inspections.

As part of Mobil's commitment to continued improvement, the Safety Case is reviewed and updated regularly. In addition, this Summary document will be updated, as required, to ensure it continues to accurately reflect the operations of Yarraville Terminal.



What is a Major Hazard Facility?

What is a Major Hazard Facility?

A major hazard facility is defined by the Occupational Health and Safety Regulations 2017 as an industrial site that stores, handles or processes large quantities of hazardous materials, including chemicals and dangerous goods that are above the threshold levels detailed in Schedule 14 of the Regulations.

A facility that stores or handles hazardous material above the threshold quantities must be registered as a major hazard facility. Yarraville Terminal handles refined petroleum fuels above the threshold quantity of some of these 'Schedule 14 Materials' and was first registered as a major hazard facility in 2002, when this regulatory requirement came into force.

What is a Safety Case?

The Occupational Health and Safety Regulations 2017 require that all major hazard facilities have a licence to operate. To obtain a licence, a facility must submit a Safety Case for assessment by WorkSafe Victoria. The Safety Case must demonstrate that the facility is operated and maintained in a safe manner. The Yarraville Terminal Safety Case was verified and accepted by WorkSafe and the current licence to operate was issued in December 2017 for a five year period. A copy of the licence is included in the Appendix.

Mobil has systems in place to ensure that the Safety Case and its requirements are maintained, reviewed and revised in accordance with the OHS Regulations. This includes assessing the need for resubmission of the Safety Case when significant changes have occurred at the Terminal.

What are Schedule 14 Materials?

Schedule 14 of the OHS Regulations defines what materials must be considered in the scope of the Safety Case. The scheduled materials at Yarraville Terminal are discussed in detail in the 'Hazardous Materials' section of this document.

What is a Potential Major Incident?

A potential major incident is an uncontrolled incident, including an emission, loss of containment, escape, fire, explosion or release of energy that involves Schedule 14 materials and poses a serious and immediate risk to health and safety.



Yarraville Terminal Overview

Yarraville Terminal was constructed in 1926 for the supply of products into the Victorian marketplace. Initially the Terminal consisted of four fuel and 20 lubricant tanks, with products shipped in from overseas.

Yarraville Terminal was upgraded to accommodate Altona Refinery production from 1949. In 1987, an expansion of the Yarraville Terminal lubricant facilities were expanded and Holden Dock was upgraded.

In 2011, lubricant oil blending and packaging operations at the Terminal ceased and decommissioning of those facilities was finalised in 2012. Also in 2012, ethanol storage and blending facilities were commissioned at the Terminal.

Mobil is continuing to invest in fueling Victoria with the construction of an additional tanker truck loading bay and dedicated pipeline reconfiguration to minimise waste fuel.

Today, Yarraville Terminal is a major Victorian distribution terminal for bulk petrol, diesel and aviation jet fuel. The terminal operates 24 hours a day, 365 days a year and occupies an area of approximately 15 hectares in the inner Melbourne suburb of Yarraville. The site has been licensed to operate as an MHF since December 2002 when the Major Hazard Facility regulations commenced.

Approximately four billion litres of refined fuel products pass through the Yarraville Terminal each year. Refined products are transported to Yarraville Terminal by pipeline from Mobil Altona Terminal and from Viva Energy's refinery in Geelong or by ships at Holden Dock. Refined products are normally distributed from the Terminal by truck with road tankers transporting approximately eight million litres of bulk refined product per day from the Terminal predominantly to customers in Victoria and Southern NSW.

Yarraville Terminal handles approximately 120 marine tankers each year via Holden Dock. Before being collected by road tankers or loaded onto ships, fuel products are stored in the Terminal's tank farm, with a total capacity of 120 million litres in the main compound and 40 million litres in the lower compound. The tanks contain varying quantities of Schedule 14 flammable substances, including various grades of petrol, jet fuel, hydrocarbon slops and ethanol, and non-Schedule 14 substances, including diesel. Several other tanks contain either water or are currently decommissioned and oil-free.

Yarraville Terminal is located within the boundaries of the City of Hobsons Bay, however it borders the City of Maribyrnong. Consequently, we have consulted with both councils during the development of this Safety Case. There are limited buffers between the Terminal and mixed commercial and residential zoned areas to the west and northwest. The nearest residents are approximately 20 metres from the site boundary in these directions. Stony Creek backwash is located to the south of the Terminal, while the Yarra River borders it to the east.



Schedule 14 Materials

Yarraville Terminal handles and stores a number of materials that are classified as Schedule 14 materials under the OHS Regulations. These materials are predominantly stored in the tank farm,

1

however they may also be in transit through terminal pipelines, marine vessel transfers and truck loading.

Yarraville Terminal also handles and stores non-Schedule 14 materials that are combustible such as diesel fuel.

Jet Fuel Packaging Group II and III materials Slops Ethanol	Material	Common Names	Description	
<complex-block></complex-block>	Flammable materials	Jet Fuel Slops	Liquids which meet the criteria for Class 3 Packaging Group II and III materials	
<complex-block></complex-block>				
	Yanaville Ten			Safe Performance Self Accurate A Continuous Risk Assessment Prov
				ANALYSE AACT

The Safety Case demonstrates how Yarraville Terminal is being managed and operated safely to ensure that risks to personnel are reduced and that potential damage to property, the environment and the community is minimised. In particular, the Safety Case illustrates how the major hazards at Yarraville Terminal are identified, understood and controlled. It also facilitates further continuous improvement in our safety and reliability performance and provides a mechanism to demonstrate compliance.

SFARP	To make a workplace safe you must ensure that the risks have been reduced to So Far as is Reasonably Practicable (SFARP)
Identify Hazards Must know your facility	 Facility Description Explains the facility layout, equipment and processes. Necessary to be able to identify hazards
Assess Risks So that risks can be controlled	Safety Assessment A process of hazard and potential Major Incident identification, risk assessment, control measures analysis and so far as is reasonably practicable assessment
Identify Controls So that practical controls can be implemented	 Safety Management System A comprehensive integrated system for managing or organizing safety through implementation of processes, procedures and practices Controls which would result in a significant increase in risk if disabled or ineffective
Performance Standards Controls remain effective	 Performance Standards A benchmark, target or reference level of performance set for a control measure, or an aspect of the SMS against which performance may be tracked
Emergency Response Response controls in place	 Emergency Response Procedures Identify the potential consequences from a Major Incident and pre-plan combating strategies and steps, considerations and recovery procedures

Safety Management System

The Operations Integrity Management System (OIMS) is Mobil's safety management system. OIMS provides a structured framework to identify and control risks by:

- defining the scope and objectives of the safety management systems
- establishing procedures for the management of hazards
- identifying responsibility and accountability
- determining functional verification and measurement
- providing feedback mechanisms that ensure the appropriate preventative and mitigation controls at Yarraville Terminal are implemented, maintained and remain effective.

OIMS is subject to extensive ongoing assessment and review to ensure continuous improvement and adequate control and monitoring of risks. All relevant changes are subject to formal change control processes.

Safety Assessment

A key step of the Safety Case process is to involve employees in completing a thorough safety assessment of the Yarraville Terminal. The safety assessment identifies hazards that could potentially lead to a loss of containment, and major incidents that could potentially occur if the hazards were not effectively managed. We then assess the likelihood and consequences of each of these potential major incidents. And finally we identify the controls already in place to eliminate and reduce the risk of a major incident occurring and look at additional controls that could further reduce the risk so far as is reasonably practicable. Mitigations include controls that reduce the magnitude and severity of consequences to people both onsite and offsite.

OIMS 11 Elements



Hazard Register

Another key component of the Safety Case is the hazard register. This register captures all findings and assumptions made during the safety assessment process, including hazards that could lead to a potential major incident, as well as detailed prevention and mitigation control measures and examples of the possible consequences of these potential major incidents. Controls to reduce the consequences and the escalation potential of major incidents are also documented. Potential major incidents include:

- Un-ignited spills
- Fires
- Explosions.

High contribution hazards that could potentially lead to a release of liquid hydrocarbon if not controlled and managed are:

- Failure of equipment
- Failure of operating and maintenance procedures
- Mechanical impact and vibration
- Over-pressure of pipelines
- Vehicle impact on process piping or equipment
- Over-fill of storage vessels
- Corrosion.

Potential Major Incidents

The Yarraville Terminal safety assessment focused on the loss of containment of hydrocarbons

because all releases of these liquids have the potential to cause harm to personnel and the plant even if they do not ignite. The infrastructure considered includes the tank farm, pipelines, pump areas, the Vapour Recovery Unit, wharf operations, the truck load rack and other site services.

Historically, evidence suggests that the majority of hydrocarbon releases do not ignite. However, personnel close to the site of a release may be harmed by:

- Mechanical energy released
- Health effects of the release.

The immediate consequences of an un-ignited release strongly depend on the direction of the release and are typically localised. Off-site risks to close neighbours that may be potentially impacted by a major incident are also examined in the Safety Case.

In addition the Yarraville Terminal Safety Case includes assessment of the potential for other Major Hazard Facilities to impact on the safety of the Yarraville Terminal as well as any impact on those sites from the Yarraville Terminal. Facilities considered in this assessment are Mobil Altona Refinery, Viva Energy Newport Terminal and Caltex Newport Terminal.



Control Measures

In the safety assessment we identify all controls that have the potential to reduce risks associated with a potential major incident. Effective control measures are designed to include compliance with appropriate standards, ongoing risk assessment, effective management of change and workforce involvement. The focus of these control measures is to:

- Eliminate the hazard
- Reduce the likelihood of a major incident
- Reduce the potential severity of the major incident
- Mitigate the consequences should the major incident occur.

The control measures in place to protect against hazards include:

- Equipment inspection programs
- Permits to do work
- Lifting controls
- Change approval process
- Vehicle controls (speed limits, entry restrictions,
- and ignition controls)
- Operational procedures
- Shutdown systems
- Monitoring and observation of process conditions
- Testing of protective devices
- Training of personnel to perform their tasks.

Although the majority of controls at Yarraville Terminal eliminate or prevent risks, they are also in place to ensure that if the unexpected occurs, the severity of the incident is minimised (mitigated).

Examples of controls to mitigate the escalation of potential major incidents include:

- Monitoring and surveillance
- Emergency shutdown systems
- Fire protection
- Safety equipment
- Personal protective equipment
- Emergency Response Plan

Emergency Shutdown Systems

Shutdown of equipment items and the isolation of equipment and storage areas are controls for preventing loss of containment if an abnormal situation is detected early enough, or for mitigating the consequences of a potential major incident if not detected early enough. Emergency shutdown systems are activated if abnormal operating conditions are detected, if loss of containment occurs or to prevent the release.

Emergency Response Plan

A comprehensive Emergency Response Plan has been prepared for Yarraville Terminal. The ERP is regularly tested (major tests may include the community and emergency services) to ensure efficient and effective response so as to reduce the consequences should a potential major incident occur.

Mobil ensures that adequate resources (people, equipment, skills, and consumables) are available at the site, or can be readily obtained, in the event of any potential major incidents.

A site-wide emergency alarm system is installed at the Terminal to enable early warning of an incident or a potential incident so that potentially hazardous areas are quickly evacuated and the consequences of an incident for personnel are eliminated or reduced.

The emergency alarm system is the immediate response to an emergency and comprises continuous sirens, red flashing lights and continuous ringing bells within buildings.

The siren is tested weekly at 8:30am on Thursdays. Other than at this regular test time, on hearing the emergency alarm, all non-essential personnel on site muster at their emergency assembly area for a headcount.

Yarraville Terminal is equipped with extensive fixed and mobile fire protection systems, emergency shut-down and isolation systems and other equipment to protect against and combat fire in any section of the facility.

The local emergency services, notably Fire Rescue Victoria, are consulted and involved in the development of our emergency response procedures.

Community Response

The potential major incidents that have been identified for Yarraville Terminal are predominantly associated with liquid hydrocarbon release and escalation through fire and/or explosion ("high consequence events"). The safety assessment has shown that for the majority of high consequence events, the impact is expected to be contained within the terminal boundary. However, some high consequence events have the potential for offsite impacts. Events with offsite impacts are considered to have a very low probability of occurring. Mobil, through its Safety Management System, applies controls to manage the risk of our operations (see Safety Management System section).

In the event of an incident occurring with offsite impact, Victoria Police have responsibility for managing any necessary evacuation in consultation with the Terminal and FRV Incident Controller. If necessary, the police may use the electronic media, including the State Emergency Warning System (SMS) or via major radio stations 3AW (693 AM), ABC (774 AM) and local community radio station Stereo 974 (97.4 FM) to broadcast information and advice to the community. Typical instructions may include "shelter in place" which could include closing doors and windows and turning off air conditioning systems in the event of smoke to prevent it from entering properties. If an evacuation is required Victoria Police will notify and coordinate with the local community directly.

The Terminal also has systems in place for early notification to key community contacts including local schools and kindergartens. Both Hobsons Bay and Maribyrnong City Councils are kept informed of incidents and can provide information.

Mobil hosts Community Information sessions and the community is always welcome to attend to ask about the facility and its operations.

Mobil provides feedback on incident investigations to the community as part of these Community Information sessions. Community members can also contact the Terminal directly via its 24 hour Community Hotline – 9286 5112.

Sirens at the Yarraville Terminal are sounded to alert on-site personnel only. People in the community do not need to take action in response to the sounding of these sirens. In the case of an emergency, Police and other Emergency Services personnel will direct community members if any action is required.



Appendix ii

This Licence is issu	ed to the operator		
Mobil Oil Australia I Level 9, 664 Collins Docklands VIC 300 ACN: 004 052 984	Street		
and authorises the	facility:		
29 Francis St Yarraville Victoria 3013			
to operate as a Maj	or Hazard Facility.		
Licence Number	Date Granted	Effective Date	Expiry Date
MHL 024/08	18 October 2022	04 December 2022	03 December 2027
Conditions and Sch subsequent page(s		ssociated with this licer	nce are detailed in
Rally		ield Commander	02 December 2022
Robert Kelly			

Appendix ii

Licence to operate a Major Hazard Facility

Conditions:

No Conditions.

The Schedule 14 materials present or likely to be present at the facility are listed in tables 1 and 2 below

Extracted from Table 1 of Schedule 14, Occupation Health and Safety Regulations 2017

ITEM	MATERIAL	CAS or UN No. Included UNDER NAME
40	PETROLEUM AND RELATED VAPOUR CLOUD FORMING SUBSTANCES- Gasoline, Naphtha, Benzene, Crude Oils (not of hazard category 1), Reformate (light), Natural Gas condensates (that meet the criteria for hazard category 2), Motor Spirits, Toluene, Acetone, Methyl Ethyl Ketone, Methyl Tert-Butyl Ether and n-Pentane) maintained at ambient temperature and pressure	-

Extracted from Table 2 of Schedule 14, Occupation Health and Safety Regulations 2017

ITEM	MATERIAL DESCRIPTION	
13	Flammable liquids, hazard categories 2 or 3 that, once ignited, sustain combustion	

Note:

The small quantities of other Schedule 14 materials mentioned in the Safety Case that may be present at the facility are noted.

RKelly	Deputy Field Commander	02 December 2022
Robert Kelly		
OH\$17/13193	Page 2 of 2	BMS: FOR 17.490 - 01/2022



Need more information?

This document presents a summary of the Safety Case for Yarraville Terminal. Should you like to know more about any of the information in this document, please contact Mobil:

Yarraville Terminal Manager

Steven Flynn

Address: 29 Francis St, Yarraville Telephone: (03) 9286 5061

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The Terminal's Community Hotline provides contact 24 hours a day: PH: (03) 9286 5112.

More information regarding the requirements for Major Hazard Facilities is available from the Worksafe Victoria website www.worksafe.vic.gov. au or via telephone through the WorkSafe Victoria Advisory Service on 1800 136 089 (toll free).



Yarraville Terminal is operated by Mobil Oil Australia Pty Ltd, an affiliate of Exxon Mobil Corporation. The terms Corporation, Company, affiliate, ExxonMobil, Mobil, Esso, our, we and its as used in this document may refer to Exxon Mobil Corporation, to one of its affiliates or to any one or more of the foregoing. The shorter terms are used merely for convenience and simplicity.