

Viva Energy's Newport Terminal

Safety Case Summary



Contents

3	—	Message from the Chief Executive Officer
4	—	Introduction and Background Information
		What is a Major Hazard Facility?
5		What is a Safety Case?
		What is the Safety Case Summary?
		What is a Major Incident?
		What is a Scheduled Material?
6	—	Newport Terminal
		Facility Description
7		Safety Assessment
8		Scheduled Materials
9		Control Measures Safety and Hazards
		Safety Management System
		Continuous Improvement
10		Emergency Response
11		Terminal Alarms
12	—	Appendix 1
		Licence to Operate a Major Hazard Facility
14	—	Appendix 2
		Viva Energy Commitment to Health, Safety, Security and Environment
15	—	More Information



Viva Energy's Newport Terminal

Burleigh Street
Newport VIC 3015



Message from the Chief Executive Officer

Achieving Goal Zero

Safety is a core value for Viva Energy and is always our highest priority. We are committed to not harming people, respecting our neighbours, managing safety as a critical business activity, and publically reporting our performance. Goal Zero is our belief that all accidents and injuries are preventable and it is a commitment that extends throughout every level of our business.

Our Newport Terminal holds a Major Hazard Facility (MHF) operational licence. As a MHF, we are required to submit a Safety Case for assessment by WorkSafe Victoria. This outlines the stringent processes and procedures that allow us to safely import, store and distribute petroleum products to thousands of Victorian customers. This document is a summary of that Safety Case and explains how we manage and minimise the risk of potential impacts of our terminal operations on our neighbours and the community.

Across Viva Energy we take a systematic approach to managing safety and preventing incidents.

This means that at all our facilities, including the Newport Terminal, safety is embedded into everything we do. All of our equipment is maintained in top condition and operated within equipment limits. The mechanical integrity of our equipment and pipework is maintained through inspection programs and safety critical equipment is routinely maintained and tested. We have systems, processes and barriers to ensure safe and reliable operations and we train our people and empower them to stop work and address any safety issues identified.

Our commitment to safety and a Goal Zero mindset along with our Safety Management System all drives us to continuously improve our safety performance. This means we actively pursue opportunities to further reduce our risk to as low as reasonably practical. Our stated aim is to have a safety performance we can be proud of, to earn the confidence of customers, share holders and communities in our safety record and to be a good neighbour.

Scott Wyatt
Chief Executive Officer



Introduction and Background Information

This document provides the community with information on Viva Energy's systems and processes to ensure safe and reliable operations are maintained at our Newport Terminal. It includes a summary of the potential major incidents that could occur, including the hazards that could cause those incidents and the control measures that are in place to prevent or minimise any impacts to people and the environment. This document is commonly referred to as the Safety Case Summary and is a requirement of the Occupational Health and Safety Regulations 2017 (OH&S Regulations) for all licensed MHFs.

What is a Major Hazard Facility?

Major Hazard Facilities are industrial sites that store, handle or process large quantities of hazardous chemicals and dangerous goods. Examples include oil refineries, chemical manufacturing sites and some warehouses and transport depots. Petroleum products are classified as either dangerous goods and/or hazardous chemicals, depending on their physical and chemical properties and effects to human health.

There are approximately 35 MHFs in Victoria.

These sites must comply with stringent legal requirements, including preparation of a Safety Case and a have a Licence to Operate and ensure they are operated safely.

Viva Energy's Newport Terminal has been a licensed MHF since 2002. Other MHFs in the immediate vicinity of our Newport Terminal include the Caltex and Mobil Terminals.



What is a Safety Case?

Each MHF is required to submit a Safety Case for assessment by WorkSafe Victoria. In accordance with the OH&S Regulations, the objectives of the Safety Case are to demonstrate Viva Energy has:

- Established a robust safety management system;
- Identified all potential major incidents relating to operation of the facility;
- Identified all hazards and threats that could result in the identified major incidents at the facility;
- Conducted a comprehensive and systematic safety assessment of identified potential major incidents;
- Established control measures to eliminate or reduce risk to health and safety as low as is reasonably practicable;
- Implemented an emergency plan to control and minimise any major incident with potential on-site and/or off-site effects; and,
- Established a review mechanism to ensure the safety case and control measures are continually assessed and updated as necessary.

The Safety Case is prepared with involvement from, and in consultation with, employees and health and safety representatives from Newport Terminal.

What is the Safety Case Summary?

The Safety Case Summary is a document that explains safety processes and controls, as well as the potential impact of the facility on neighbours and the community in the unlikely event of a major incident occurring. The document will be updated as required to ensure it continues to accurately reflect community interests and the operations of Viva Energy's Newport Terminal.

What is a Major Incident?

A major incident is an uncontrolled incident, including an emission, loss of containment, fire, explosion or release of energy that involves a Scheduled Material and poses a serious and immediate risk to the health and safety of people.

What is a Scheduled Material?

The OH&S Regulations define what materials must be considered in the scope of the Safety Case. The Scheduled Materials at Viva Energy's Newport Terminal are flammable liquids and are discussed in detail in the 'Scheduled Materials' section of this document.

Newport Terminal

Facility Description

Viva Energy's Newport Terminal is one of Victoria's primary fuel distribution centres. It services the Melbourne and greater Victorian marketplace for fuels (including Melbourne and Avalon Airports). The terminal operates 24 hours per day, 365 days of the year. It has 40 storage tanks with a total capacity of 140 million litres and vehicle filling gantries for fuels, solvents and lubricating oils.

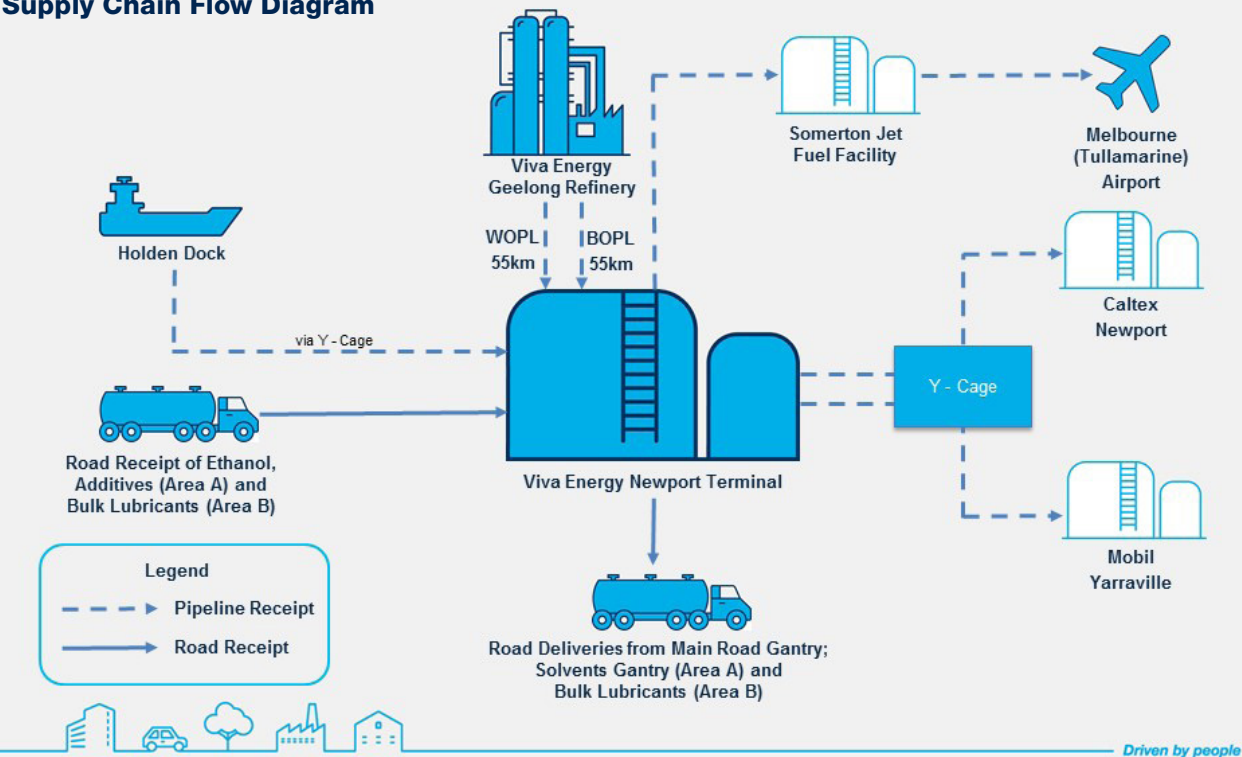
The Terminal is located in Spotswood bounded by Craig Street to the north (between Ramsay St and Drake St) and by High St in the south (between Hall St and Douglas Pde).

A map of the location of the facility is in the More Information section of this document.

Petroleum products are received into the terminal from licenced pipelines originating in Geelong (from Viva Energy's Geelong Refinery in Corio) and Yarraville (marine imports through Holden Dock), as well as receipts from bulk road transport. Products are distributed from the terminal using bulk road transport in combination with direct pipeline supply to other fuel terminals (including jet fuel supply to Melbourne Airport).

The distribution of fuels from the terminal to retail and customer sites necessitates a substantial road transport logistics activity.

Newport Terminal Supply Chain Flow Diagram



Safety Assessment

A safety assessment involves an investigation and analysis of the potential major hazards and major incidents to provide a detailed understanding of all aspects of risk to health and safety associated with major incidents.

The safety assessment was undertaken in accordance with published guidance from WorkSafe Victoria which involves the process outlined below:

- Identify the Scheduled Materials on the site;
- Identify all of the potential major incidents (those which pose a serious and immediate risk to health and safety) that could occur involving these materials;
- Identify all of the things that could go wrong (hazards) that could cause these incidents to occur;
- Identify the equipment, systems and procedures (control measures) in place to ensure those hazards don't eventuate;
- Identify those measures in place to minimise the impact of an incident should it arise;
- Assess the robustness of the identified control measures;
- Demonstrate that all control measures in place are adequate to pass the test of reducing risk so far as is reasonably practicable (SFARP);
- Identify any remedial actions that may be required to introduce new or improve existing control measures; and,
- Ensure the emergency plan addresses all of the possible types of potential major incidents and complies with the OH&S Regulations.

These assessments are carried out by Viva Energy staff across all levels, including shift operators, health and safety representatives, engineers and managers working at Newport Terminal. The process is reviewed by WorkSafe. All assessments are carried out on the basis of the worst-case scenarios whereas the actual risk of a major incident is extremely low.



Scheduled Materials

Viva Energy's Newport Terminal has a number of materials on-site that are classified as Scheduled Materials under the OH&S Regulations.

The OH&S Regulations define what materials must be considered in the scope of the Safety Case. Newport Terminal has a number of scheduled materials on-site, the management of which, if not undertaken correctly, may contribute to or be affected by a major incident.

All materials, whether scheduled or otherwise hazardous, are stored in specifically designed facilities, taking into consideration the properties of the materials. Handling of these materials is undertaken according to documented practices and protocols supported by instrument control systems designed to ensure equipment is operated within its designed parameters. Emergency shutdown systems are installed throughout the facility and an emergency response plan with appropriate fire protection systems is in place.

Flammable Liquids

The scheduled materials present or likely to be present are gasoline, solvent and kerosene.

These products are stored in tanks in the tank farm area and transferred via pipelines to vehicles in the main truck loading gantry for distribution throughout Victoria and interstate, in compliance with regulatory requirements and hazardous area management principles.



Control Measures and Hazards

A hazard is anything in the workplace that has the potential to harm people. A risk arises when it's possible that a hazard will actually cause harm.

A potential hazard in the bulk storage of hazardous chemicals and dangerous goods is escape of material and potential fire or explosion.

Control measures to manage these hazards are the equipment, systems and procedures in place to prevent this occurring.

Potential threats to control measures that could potentially lead to a hazard being realised to cause an incident include: corrosion; equipment failure that causes leaks; over-pressuring or over-filling; failure of operating or maintenance procedures and mechanical impact and vibration.

The Control measures in place to protect against these hazards include:

- Equipment design specifications;
- Instrumented control and trip systems;
- Leak detection systems;
- Pressure relief systems;
- Detailed inspection strategies and schedules;
- Operating and maintenance procedures and training;
- Permit to work procedures; and site access controls;

Control measures are also in place to ensure that in the unlikely event of an incident, it is detected and controlled quickly to minimise the likelihood that it will become serious.

These measures include:

- Site layout and equipment separation;
- Emergency shutdown devices;
- Site alarms; automated water and firefighting foam deluge systems;
- Fixed fire-fighting facilities; and
- A comprehensive emergency plan

Viva Energy's Newport Terminal has its own dedicated firewater storage and pumps, and is supplemented by the town water system for fire response purposes. These control measures are fully documented in the site Safety Management System and are subject to performance assessment and ongoing monitoring to ensure they are reliable and robust.

Impact of a Potential Major Incident

The potential major incidents that have been identified for the terminal are associated with a liquid hydrocarbon release, fire and vapour cloud explosion. The risk of this occurring is reduced to so far as is reasonably practicable by comprehensive systems and procedures.

The impact from a release of flammable liquids and any potential subsequent fire is expected to be contained within Newport Terminal, although it is possible that a vapour cloud explosion could have a significant impact on surrounding industrial and residential areas. In the unlikely event that the effects of an incident go beyond the perimeter of our site the emergency services and local council will work with Viva Energy to manage the impacts to the community.

Safety Management System

Viva Energy's HSSE MS Manual describes the Health, Safety, Security and Environmental Management System that applies at Newport Terminal.

It is underpinned by Viva Energy's General Business Principles, with specific reference to Principle 5, which states:

"Viva Energy companies have a systematic approach to health, safety, security and environmental management in order to achieve continuous performance improvement. To this end, Viva Energy companies manage these matters as critical business activities, set standards and targets for improvement, and measure, appraise and report performance externally. We continually look for ways to reduce the environmental impact of our operations, products and services."

Continuous Improvement

Viva Energy is committed to continuous improvement in order to constantly strive to increase safety and minimise risks. Some examples of current improvement activities include:

- Tank level protection safety upgrades;
- Pump seal leak detection systems upgrades;
- Tank 29 (Jet A1 Fuel) replacement; and
- Pipeline transfer safety upgrades.



Emergency Response

The Newport Terminal Emergency Response Plan (ERP) has been developed in conjunction with the Melbourne Fire Brigade (MFB), as the designated combat agency. Staff at Newport Terminal are trained in first response as well as interagency interaction. Newport Terminal has an on-site alarm and when activated, there is an automatic call-out to the combat agency.

The MFB will lead a response to an incident where required. As the combat agency, the MFB liaises with Viva Energy and other emergency services such as Victoria Police. The Hobsons Bay City Council is informed of any potential off-site risks associated with facility operations.

Training exercises, both desktop and simulations of various incident scenarios are also undertaken on a regular basis. This involves staff from the site and other combat agencies.

In the unlikely event of a major incident, the emergency services will notify and inform affected communities of any actions required to be taken, as well as any potential disruptions such as road closures.

Should an emergency be related to a major incident, Viva Energy will provide a report to local residents and businesses describing the incident, Viva Energy's actions to prevent any recurrence of the incident and any recommended actions that the community should take to eliminate or minimise risks to health and safety.

Fire Fighting and Deluge Systems

All major storage tanks are fitted with automated water deluge systems to provide cooling in the unlikely event of fire. Storage tanks containing flammable products are also fitted with foam protection, as is the main truck loading gantry. Additional foam and water fire-fighting facilities are located strategically around the facility.

Firefighting and deluge systems are regularly inspected and tested to ensure they operate on demand. The MFB, as the control agency, directs firefighting response, with support from Viva Energy personnel.

Terminal Alarms

Alarms are vital in ensuring on-site personnel respond quickly and safely to an incident.

The primary purpose of alarms is for on-site personnel to take action. The alarms are loud and may be heard off-site.

The Newport Terminal alarm system is a two-tone audible system that also alerts emergency services.

Alarm Tones

There are two types of alarms:

General Alarm 30 seconds of an alternating pitch of the alarm. In the event of an incident, the general alarm will sound for at least one minute or more.

All clear 30 seconds of continuous sounding of the siren. This signifies if there is an incident, it is now under control.

The alarms are tested at 1.30pm every Thursday.

An alarm heard any other time means an incident has occurred on site that requires attention by terminal personnel.

The community does not need to take action when an alarm sounds unless instructed otherwise by the Police or Emergency Services.

If you hear a siren and would like more information you can call:

Operational Issues (24-hour line): 1800 651 818

In case of an emergency call 000.

Appendix 1

Licence to Operate a Major Hazard Facility



Licence to operate a Major Hazard Facility

Occupational Health and Safety Act 2004
Occupational Health and Safety Regulations 2017

This licence is issued to the operator

Viva Energy Australia Pty Ltd
Level 16, 720 Bourke Street
Docklands
Victoria 3008

ACN: 004 610 459

and authorises the facility located at

Newport Terminal
Burleigh Street
Spotswood
Victoria 3015

to operate as a Major Hazard Facility.

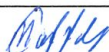
The Schedule 9 materials present or likely to be present at the facility are specified in Attachment 1.

Licence Number	Date Granted	Effective Date	Expiry Date
MHL 019/08	18 October 2017	7 November 2017	6 November 2022

Conditions:

No Conditions.

Michael Coffey



Head of Hazardous Industries & Industry Practice

1 November 2017

MH/INT/02/298
FOR 9.490 / 16 August 17



Appendix 1

Licence to Operate a Major Hazard Facility

Licence to operate a Major Hazard Facility

Attachment 1 to MHL 019/08

List of Schedule 9 materials present or likely to be present at the facility

Extracted from Table 2 of Schedule 9
Occupational Health and Safety Regulations 2007

MATERIAL	DESCRIPTION
Flammable materials	Liquids that meet the criteria for Class 3 Packing Group II or III

Note:

The small quantities of other Schedule 9 materials mentioned in the Safety case are noted.

Michael Coffey



Head of Hazardous Industries & Industry Practice

1 November 2017

MH/INT/02/298
FOR 9.490 / 16 August 17



Appendix 2 Viva Energy Commitment to Health, Safety, Security and Environment



Our Commitment to

Health, Safety, Security and Environment

We believe every incident is preventable and are committed to pursuing the goal of no harm to people and protecting the environment.

We call this Goal Zero.

“You have my full support to stop operations at any time if you are concerned about the safety of yourself or others.”

A handwritten signature in black ink, appearing to read "Scott Wyatt".

Scott Wyatt
CEO
Viva Energy Australia

To make this commitment we will:

- Demonstrate visible and felt leadership for health, safety and the environment
- Ensure that our business plans consider associated HSSE risks including potential impact
- Create targets that measure, assess and report to reduce incidents
- Audit and maintain systems to identify and manage risks and prevent incidents
- Provide appropriate information, instruction, training and supervision
- Comply with our legal obligations and company procedures
- Communicate, support and consult with employees, contractors and stakeholders
- Encourage people to intervene, report unsafe situations and have positive conversations
- Conduct regular reviews and share learnings to continuously improve our performance

vivaenergy.com.au

October 2017

More Information

This information brochure presents a summary of the Safety Case for the Newport Terminal.

Further details may be obtained by contacting:
Poppy Papadopoulos
Viva Energy Australia Pty Ltd,
Level 16, 720 Bourke Street Docklands VIC 3008
Tel: (03) 8823 4444

Newport Terminal
Administration Building
Entry via 381 Douglas Parade
Gantry Entry via 81 Burleigh Street
Spotswood, 3015

More information regarding the requirements for Major Hazard Facilities is available from the WorkSafe Victoria website:

www.worksafe.vic.gov.au

