

Longford Crude Oil Stabilisation and Gas Plants

Safety Case Summary





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Message from the Longford Plants Manager

Here at Longford Plants, we work to promote a culture of safety, health and operational excellence. We are committed to protecting both the people at our site and those in the surrounding community.

Longford Plants is one of the most important industrial facilities in Australia. It has been operating for nearly 50 years and in that time the oil and gas passing through its network of pipes and vessels has contributed significantly to the national economy, fuelling growth in industry and employment.

Longford has been supplying most of Victoria's gas requirements since 1969 and today we continue to supply the much needed gas that fuels our stoves and heats our homes.

The Longford plants are licensed as a Major Hazard Facility under the Victorian Occupational Health and Safety Regulations 2017. This document is a summary of the Safety Case prepared for the Longford site.

Given the integral nature of the infrastructure we manage, the continued safe operation of Longford Plants is our key priority. The Safety Case is a document not only for assisting us to maintain our safe operation but also in demonstrating our ability to operate safely to regulators and the community.

We place the highest priority on operating flawlessly in all aspects of our business. The Safety Case provides a review of our operations and processes which includes the identification of potential major incidents that could occur, assessing the risks associated with these major incidents and demonstrating the controls we have in place to manage these risks so far as reasonably practicable.

We manage the risks associated with our operations through the implementation of our Operations Integrity Management System (OIMS), which provides a systematic process to set objectives, measure progress, plan improvements

and ensure accountability for results. Our highly skilled workforce rigorously employs this proven management system in all work processes and at all levels.

We are continuously striving to improve our personnel safety, process safety, security, health, and environmental performance.

We are committed to engaging with the communities where we operate, and helping our stakeholders to understand our business.

We believe it is fundamentally important to maintain open lines of communication with the community, and we regularly engage with our neighbours, the local Council, hospitals, schools, emergency services and regulators. We believe these interactions help us to continually improve our operations, educate stakeholders about our operations and ensure we remain a valued member of our community.

A commitment to safety is a core value and an integral part of Esso's culture. Our aim is to ensure each employee and contractor leaves work each day safe and in good health. We will never stop working toward our goal of Nobody Gets Hurt.



David Anderson
Longford Plants Manager

Glossary

So Far As Reasonably Practicable (SFARP) The measure of risk after implementation of control measures that eliminate or reduce risks to so far as reasonably practicable. Equivalent to reducing risk so far as reasonably practicable (SFARP).

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

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

Esso Australia or Esso Means Esso Australia Pty Ltd, the employer entity that has management and control of Longford and is therefore defined as the designated “operator” under the Victorian OHS Regulations 2017. Esso provides services to EARPL and is its wholly owned subsidiary.

Esso Australia Resources Pty Ltd (EARPL) EARPL is the Operator of the 50:50 Gippsland Basin Joint Venture (“GBJV”) between EARPL and BHP Billiton Petroleum (Bass Strait) Pty Ltd (“BHPB”).

Hazard Any activity, event, procedure, situation or circumstance that could cause or could potentially lead to a Major Incident or could escalate to a Major Incident.

HAZID Hazard Identification.

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 facilities.

Loss of containment Release of product to the atmosphere, or the environment.

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
- b) poses a serious and immediate risk to health and safety.

MHF Major Hazard Facility

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).

OIMS Operations Integrity Management System, which is Esso’s safety management system.

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

Safety Case A Safety Case is prepared or revised under Division 6 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 consisting of the following:

- Potential Major Incident and Hazard (cause) Identification (HAZID)
- Risk Assessment
- Control Measures analysis
- So Far As Reasonably Practicable Assessment

Schedule 14 materials Means a material mentioned in Schedule 14 of the Occupational Health and Safety Regulations 2017.

WorkSafe Victoria The safety regulator in Victoria responsible for assessing Safety Cases and issuing operating licences to major hazard facilities.

Esso Australia

Esso Australia and Esso Australia Resources Pty Ltd (“EARPL”) are subsidiaries of ExxonMobil Australia, one of Australia’s leading oil and gas companies.

EARPL operates the extensive network of offshore platforms in Bass Strait, which produce oil and gas and pipes it to processing facilities at the Longford Crude Oil Stabilisation and Gas Plants (“Longford Plants”). Natural gas liquids (ethane, propane and butane) and stabilised crude oil are transported from the Longford Plants through two pipelines to the Long Island Point Fractionation Plant and Crude Oil Tank Farm in Western Port, Victoria.

Longford, with its three gas plants and one crude oil stabilisation plant, is one of the most important industrial facilities in Australia.

The Gippsland Basin joint venture operation between Esso and BHP-Billiton produces a significant proportion of the nation’s crude oil requirements and is also the major gas producer within the State of Victoria.

Natural gas from the offshore production facilities and processed at the Longford Plants is provided to Victorian and interstate gas distributors.

Esso has responsibility for the day-to-day management decisions and the operations of the production and processing facilities.

Esso is committed to maintaining safe, healthy and environmentally responsible operations at all of its sites. Esso supports all efforts to reduce the potential for a major incident to so far as reasonably practicable at the Longford Plants and all its sites. Although the probability of a major incident occurring is low, measures are in place to ensure that the consequences from such an event are also reduced to so far as reasonably practicable.

*Longford Plants from above.
Key: CSP – Crude oil Stabilisation Plant;
GP1/GP2/GP3 – Gas Plants;
GC1 – Gas Conditioning Plant*



Safety Policy

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.

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 organizations 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

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



Occupational Health and Safety Regulations

Major Hazard Facilities

A major hazard facility is defined in the Occupational Health and Safety Regulations 2017 and includes sites that store, handle or process large quantities of hazardous materials, including chemicals and dangerous goods that are above the threshold quantities detailed in Schedule 14 of the Regulations.

A facility that has hazardous material above the threshold quantities must be licensed as a major hazard facility. The quantity of 'Schedule 14' materials at the Longford Plants is above the threshold quantity and the facility has been a licensed major hazard facility since 2002.

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 Longford Plants Safety Case was verified by WorkSafe and a new licence to operate was issued in December 2017. A copy of the licence is included in Appendix ii.

Esso 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 review and revision of the Safety Case when changes occur at the facilities. WorkSafe assess changes to the Safety Case where applicable.

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 the Longford Plants are discussed in detail in the 'Hazardous Materials' section of this document.

Major Incidents

A 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.



Longford Plants Overview

First opened in 1969, the Longford Plants play a vital role in the production of oil and gas from Bass Strait. The facility consists of three gas processing plants and a crude oil stabilisation plant.

Hydrocarbons in both liquid and gaseous form from the oil and gas reservoirs in Bass Strait are transported to the Longford Plants via pipeline, where they are processed to produce commercial sales gas (mainly methane and some ethane), raw Liquefied Petroleum Gas (LPG, mainly a mix of ethane, propane and butane) and stabilised crude oil.

The Crude Stabilisation Plant receives crude oil from the Bass Strait platforms. The crude oil is stabilised by heating the oil and then separating and removing the lighter components (methane, ethane, propane and butane) through three stages of pressure reduction. The final stage occurs at just above atmospheric pressure and is called stabilised crude oil, which is then transported by pipeline to the Long Island Point facilities for storage and distribution as feedstock for oil refineries.

Gas Plant 1 is a Lean Oil Absorption Plant. This means that it produces commercial sales gas from raw gas through the absorption of LPG and condensate using special purpose oil (lean oil), which has an affinity for these components but not for methane which is the main component of sales gas.

Gas Plants 2 and 3 use a cryogenic process to remove the heavier hydrocarbons from the raw gas. This process is different from that used in Gas Plant 1. It is essentially a distillation process operated at very low temperatures, generated by progressively dropping the pressure of the gas stream and removing liquids for processing in the Gas Plant 1 or Gas Plant 2 LPG systems. The LPG is then transported via a dedicated pipeline to the Long Island Point Plant for separation into its three components: ethane, propane and butane. The remaining gas (mainly methane) is commercial sales gas which is recompressed before leaving the plant.

The Gas Conditioning Plant (GC1) was commissioned in 2016/2017 and was built to remove mercury and CO₂ from the gas stream coming from the Marlin Slugcatcher. Mercury is removed via absorbers and CO₂ is removed using an Amine Solution.

The Longford Plants are located on a 169-hectare site and, in addition to the processing plants, contains administration buildings, a laboratory, a control room, an occupational health centre, fire-fighting equipment shed, warehouses, construction compounds and workshop facilities, which are all located to the north of the plant processing areas. Utilities such as hydrocarbon flares and water treatment ponds are located to the south and away from the main processing areas.

Esso Australia is also in the early stages of developing a Gas Conditioning Plant at its existing Longford facilities. The Gas Conditioning Plant will remove excess carbon dioxide (CO₂) and mercury from gas from new fields in Bass Strait.

Longford Plants Overview

Personnel

The Longford Plants workforce varies between 200 and 330 personnel, including operations, maintenance, construction, laboratory, warehouse and administration personnel during normal daytime operations. This number varies depending on additional activities such as construction, inspection programs and new projects that are underway.

Locality and Community

The Longford Plants site is located in a rural area on Garretts Road, Longford, with the 169-hectare property zoned for industrial use. Longford is in Gippsland, approximately 200km east of Melbourne and 20km south of the regional city of Sale. There are no residential properties within approximately 2km of the plant. A small number of residential properties lie within 5km but these are sparsely distributed.

Figure 2 shows an aerial photograph of the Plants. Facilities to the north of the site include the

Heliport, the Fire Training Ground, the incoming pipelines which transport raw gas and raw crude from offshore, the commercial sales gas pipelines and gas metering stations (owned and operated by APA-GasNet), and the LPG and crude pipelines to Long Island Point. The remaining land immediately surrounding the Longford Plants is used for agriculture.

The local community who may be involved in a major incident at Longford Plants include:

- People that visit the site and adjacent Heliport and Fire Training Ground.
- Emergency Services personnel that respond to a major incident.
- Wellington Shire Council Emergency Management Group personnel, including Municipal Emergency Resource Officers.
- Farmers who lease EARPL/BHPB land.
- APA Group metering station personnel.
- Compressor station personnel (Jemena).

Figure 2 – Aerial Photograph of Surrounding Area



Hazardous Materials

The Longford Plants handle and store a number of materials on site that are classified as Schedule 14 materials in the OHS Regulations.

Material	Location	Description
Crude Oil	Large volumes within the Crude Stabilisation Plant including the crude surge tanks. Smaller volumes present in the inlet separators of each gas plant and also within the Slugcatchers.	Crude oil is a naturally occurring, flammable liquid found in rock formations in the earth consisting of a mixture of hydrocarbons of various molecular weights. It arrives at the Longford Plants via pipelines from the offshore facilities in Bass Strait. Stabilised Crude Oil is a product of Longford operations and is stored at site before transfer by pipeline to Long Island Point for subsequent storage and distribution.
Methane (Natural Gas)	Natural gas is processed within all the Longford Plants where isolatable inventories may be significant.	Natural gas is predominantly methane (90%) with lesser amounts of the heavier hydrocarbons, and is a colourless, odourless and flammable gas. It arrives at Longford via pipelines from the offshore facilities in Bass Strait. Methane (natural gas) is a product of Longford Plants operations and is contained at site in pressurised vessels before transfer by pipeline to major gas transmission networks in Victoria and inter-state.
Liquefied Petroleum Gas (LPG)	Mainly in the Gas Plant 1 LPG accumulators.	LPG is a generic name for materials including ethane, propane and butane. It is a colourless, odourless and flammable material used for heating and transport purposes. It is stored as a liquid but will quickly vapourise on release. LPG is a product of Longford operations and is stored at site in pressurised storage vessels before transfer by pipeline to the Long Island Point Facilities for subsequent processing and distribution.
Propane	Mainly in refrigerant storage within the Crude Stabilisation Plant and Gas Plants 1 and 2.	Propane is a colourless, odourless and flammable material and will readily ignite at normal temperatures. In high concentrations propane is an asphyxiate. As with LPG, a loss of containment of propane can lead to cold temperatures that may cause cold burns or low temperature embrittlement of tanks or equipment. At Longford Plants it is transported to site via tankers and used as a heating/cooling medium in the Crude Stabilisation Plant and Gas Plants 1 and 2.
Methanol	Storage tanks adjacent to the Slugcatchers and also in a transportable tanker.	Methanol is a clear flammable liquid with an odour similar to alcohol. Its vapours readily form ignitable and explosive mixtures with air at room temperature. Methanol fires burn with a clean non-visible flame that can be difficult to detect. Methanol is used to remove hydrates that can cause blockages in process streams.
Hydrogen Sulphide	No on site storage. H2S is associated with crude oil and LPG (raw feed) processing.	Hydrogen sulphide is a highly odorous and toxic gas generated in the process of sulphur removal from crude oil and LPG. It is recognised by its rotten egg smell.
Hydrogen Peroxide	Tank near the north pond behind the Crude Stabilisation Plant.	Hydrogen peroxide is a corrosive and unstable clear liquid that decomposes very slowly to form water and oxygen. It is used at Longford Plants for water treatment.

Table 1

Safety Case Summary

The Safety Case demonstrates how the Longford Plants are being managed and operated safely to ensure that risks to personnel, damage to property and risk to community is reduced to so far as reasonably practicable.

In particular, the Safety Case illustrates how the major incident hazards at Longford are identified, understood and controlled. It also facilitates further continuous improvement in our safety and reliability performance and provides a mechanism to demonstrate compliance with the regulations.

Longford Plants Safety Case development and sustainment

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 <ul style="list-style-type: none">▪ Explains the facility layout, equipment and processes, with focus on the safety and protective systems▪ Describes the location and the surrounding community▪ Necessary to be able to identify hazards
Assess Risks So that risks can be controlled	Safety Assessment <ul style="list-style-type: none">▪ A process of hazard and potential major incident identification, control measures analysis and SFARP assessment▪ Identify the things that could go wrong (hazards) and cause a major incident to occur▪ Identify the equipment, systems and procedures (control measures) in place to ensure the hazards don't eventuate▪ Assess the adequacy of the existing control measures to reduce risks to SFARP▪ Identify additional measures to improve existing or add new controls to achieve SFARP▪ Ensure the Emergency Plan addresses all of the possible major incidents
Identify Controls So that practical controls can be implemented	Safety Management System <ul style="list-style-type: none">▪ A comprehensive integrated system for managing or organizing safety through implementation of processes, procedures and practices Critical Controls <ul style="list-style-type: none">▪ Controls which would result in a significant increase in risk if disabled or ineffective
Performance Standards Controls remain effective	Performance Standards for Critical Controls <ul style="list-style-type: none">▪ 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 <ul style="list-style-type: none">▪ Identify the potential consequences from a Major Incident and pre-plan combating strategies and steps, considerations and recovery procedures

Safety Case Summary

Safety Management System

The Operations Integrity Management System (OIMS) is Esso'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 Longford Plants are implemented, maintained and remain effective.

OIMS is subject to extensive audit and review to ensure continuous improvement and that it adequately controls and monitors risks. All relevant changes are subject to formal change control processes.

Safety Assessment

A key step of the Safety Case process has been to involve employees in completing a thorough safety assessment of the Longford Plants.

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 the major incidents. Finally we identify the controls already in place to prevent and mitigate the potential major incident, and look at any additional controls that could further reduce the risk to so far as reasonably practicable.

The Safety Case demonstrates how the Longford Plants are being managed and operated safely to ensure that risks to personnel, damage to property and risk to community is reduced to so far as reasonably practicable. In particular, the Safety Case illustrates how the major incident hazards at Longford are identified, understood and controlled. It also facilitates further continuous improvement in our safety and reliability performance and provides a mechanism to demonstrate compliance with the regulations.

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. The register documents hazards that could potentially lead to a major incident, as well as detailed prevention and mitigation control measures, and examples of the possible consequences of these potential major incidents. Major incidents include unignited spills or vapour clouds, fires or explosions. Controls to reduce the consequences and the escalation potential of such events are also listed.

The key hazards and causes to control and manage to ensure there is no large release of gas or liquids from pipes, vessels and equipment include:

- Objects dropped from a height onto process equipment or piping
- A vehicle impacting with process piping or equipment
- Corrosion or erosion of the plant
- Low temperature induced brittle failure of pipes or vessels
- Error by personnel carrying out activities on site
- Overpressure of equipment
- Failure of small diameter fittings or pipes
- Equipment seal failure
- Valve leak
- Structural failure.

Major Incidents

The safety assessment focused on the loss of containment of hydrocarbons because all releases of gases and liquids held at pressure have the potential to cause harm to personnel and plant even if they do not ignite. Historically, evidence suggests that the majority of releases do not ignite. However, personnel close to the site of a release may be harmed by:

- Mechanical energy released
- Asphyxiant or toxic effects of the release
- Temperature of the material.

The immediate consequences of an unignited release are strongly dependent on the direction of the wind and are typically localised.

Off-site risks to nearby neighbours and persons offsite potentially impacted by a major incident are also examined in the Safety Case.

Safety Case Summary

Control Measures

From the safety assessment, controls that have the potential to reduce risks associated with the major incidents have been identified. The adequacy of the control measures is subject to ongoing review and includes continued compliance with appropriate standards, ongoing risk assessment, effective management of change, performance monitoring of controls and workforce involvement. The focus of the control measures implemented is to:

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

The control measures in place to protect against hazards include: equipment inspection programs, permits to do work in the plant, crane and lifting controls, a change approval process, vehicle controls (speed limits, entry restrictions, and ignition controls), operations and maintenance procedures, shutdown systems, monitoring and observation of process conditions, testing of protective devices and training of personnel to perform their tasks.

Although the majority of controls at the Longford Plants eliminate or prevent risk, this is only part of the safety measures in place at the facility. Controls are also in place to ensure that if the unexpected occurs, the severity of the incident is minimised (mitigated). Examples include monitoring and surveillance, emergency shutdown systems, safety equipment and personal protective equipment.

Emergency Shutdown Systems

Shutdown of equipment items and the isolation of equipment and processing areas are controls for preventing loss of containment if an abnormal situation is detected, or for mitigating the consequences of a major incident if not detected early enough. Emergency shutdown systems are automatically activated if abnormal process conditions are detected; however, shutdown systems can be manually activated by operations personnel if loss of containment occurs or to prevent a release.

Emergency Response Plan

A comprehensive Emergency Response Plan (ERP) has been prepared for the Longford Plants. 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 major incident occur.

Esso ensures that adequate resources (people, equipment and skills) are available at the site, or can be readily obtained, for use in the event of any major incident.

A plant-wide emergency alarm system is installed at the site to enable early warning of an incident or a suspected 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 in high noise areas and continuous ringing bells within buildings. On hearing the emergency alarm, all non-essential personnel on site muster at their emergency assembly area for a headcount. The siren is tested weekly on Tuesdays.

The Longford Plants are equipped with a fire truck, comprehensive fixed and mobile fire protection systems and other equipment to combat fire in any section of the plant. Most site-based employees are trained in fire-fighting and first aid.

The local emergency services, in particular the Country Fire Authority and Victoria Police, are consulted and involved in the development of our emergency response procedures.

A full test of the Emergency Response Plan is carried out at a maximum interval of every three years.

Safety Case Summary

Community Notification and Response

The safety assessment has shown that the risk to the public is considered very low with no incidents able to impact neighbouring residences. Only a small number of events have the potential to extend off site (i.e. within a few hundred meters of the boundary fence).

An incident resulting in a crude oil fire could release non-toxic smoke that may impair visibility in areas around the Longford district. The exact locations impacted would depend on the wind direction.

In the event of any of these occurrences, Victoria Police and other authorities will ensure that appropriate warnings are issued to the potentially affected community.

There are a number of potential incidents that could encroach on the facility's security fence, impacting neighbours and potentially disrupting traffic on Garretts Road, however the likelihood of this occurring is extremely low. In the event this does occur, Victoria Police will introduce traffic control points as appropriate. Sirens at the Longford Plants 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 unlikely event that the local community is required to take any action following a major incident, the emergency services will inform the affected people of the action required.

Esso has also implemented a community notification system where community members are able to subscribe to a text message alerts system. Alerts are sent to the community to advise of operational issues, incidents, emergency response exercises and other plant issues. The alerts enhance our ability to communicate with the community and ensure the community is informed of any potential issues and understand if there are risks with respect to plant activity.

Community Engagement

Esso has been an active member of the Gippsland community since it first went exploring for oil and gas in Bass Strait in the 1960s.

Esso has always strived to be a valued member of the communities within which it operates and has developed many longstanding community partnerships, including with local primary and secondary schools, hospitals, emergency response organisations such as CFAs, surf lifesaving clubs, marine rescue and a host of community service groups.

Our approach to community engagement and corporate citizenship involves more than compliance with applicable laws, sound business practices and operational excellence. We consider our community relationships an essential element of our business.

Our community engagement includes financial support for local charitable organisations, employee volunteering awards and programs. Our community investment is centered around our operations, where we actively support a host of organisations each year through our Community Contributions Program. We focus on projects that promote education (maths, science and engineering) for local students, environmental projects that have positive impacts on our community, health and safety, community support and access to the arts.

We also ensure that we remain in touch with the views and concerns of our community. We maintain this dialogue through direct engagement through community briefings, community surveys and engagement forums. These channels provide an avenue for Esso to understand the concerns of the community, provide information updates on our business developments and to respond to questions about our operations.

We are committed to being a good neighbour, creating productive and sustainable relationships and being an active member of the communities where we operate.



Need more information?

This brochure provides information to the community and is a summary of the Safety Case for Longford Plants. Should you wish to make further inquiries regarding any of the information in this document, contact can be made with Esso representatives:

David Anderson – Longford Plants Manager

Address: Garretts Road
Longford VIC 3851

Telephone: (03) 5143 4016

Facsimile: (03) 5149 6496

Further information regarding:

– the requirements for Major Hazard Facilities is available from the WorkSafe Victoria website: www.worksafe.vic.gov.au.

– the Occupational Health and Safety Regulations 2017, you can contact:

OR

Safety, Health, Environment and Security Department

Address: GPO Box 400
Melbourne VIC 3000

Telephone: (03) 9270 3333

Facsimile: (03) 9270 3578

WorkSafe Victoria Advisory Service

Telephone: (03) 9641 1444

Telephone: 1800 136 089 (toll free)

Email: info@worksafe.vic.gov.au

Appendix ii



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

Esso Australia Pty Ltd
12 Riverside Quay
Southbank
Victoria 3006

ACN: 000 018 566

and authorises the facility located at

Longford Crude Stabilisation & Gas Plants
Garretts Road
Longford
Victoria 3850

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 017/05	23 October 2017	11 December 2017	10 December 2022

Conditions:

No Conditions.

Michael Coffey

Head of Hazardous Industries & Industry Practice

11 December 2017

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



Appendix ii

Licence to operate a Major Hazard Facility

Attachment 1 to MHL 017/05

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

Extracted from Table 1 of Schedule 9
Occupational Health and Safety Regulations 2007

MATERIAL	UN Nos INCLUDED UNDER NAME
Hydrogen Sulphide	1053
LP Gases	1011, 1012, 1075, 1077, 1978
Methane or Natural Gas	1971, 1972

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

MATERIAL	DESCRIPTION
Compressed and liquefied gases	Compressed or liquefied gases of Class 2.1 or Subsidiary Risk 2.1
Flammable materials	Liquids that meet the criteria for Class 3 Packing Group I Materials (except for crude oil in remote locations)
Flammable materials	Liquids that meet criteria for Class 3 Packing Group II or III.
Oxidising materials	Oxidising materials that meet the criteria for Class 5.1 Packing Group I or II

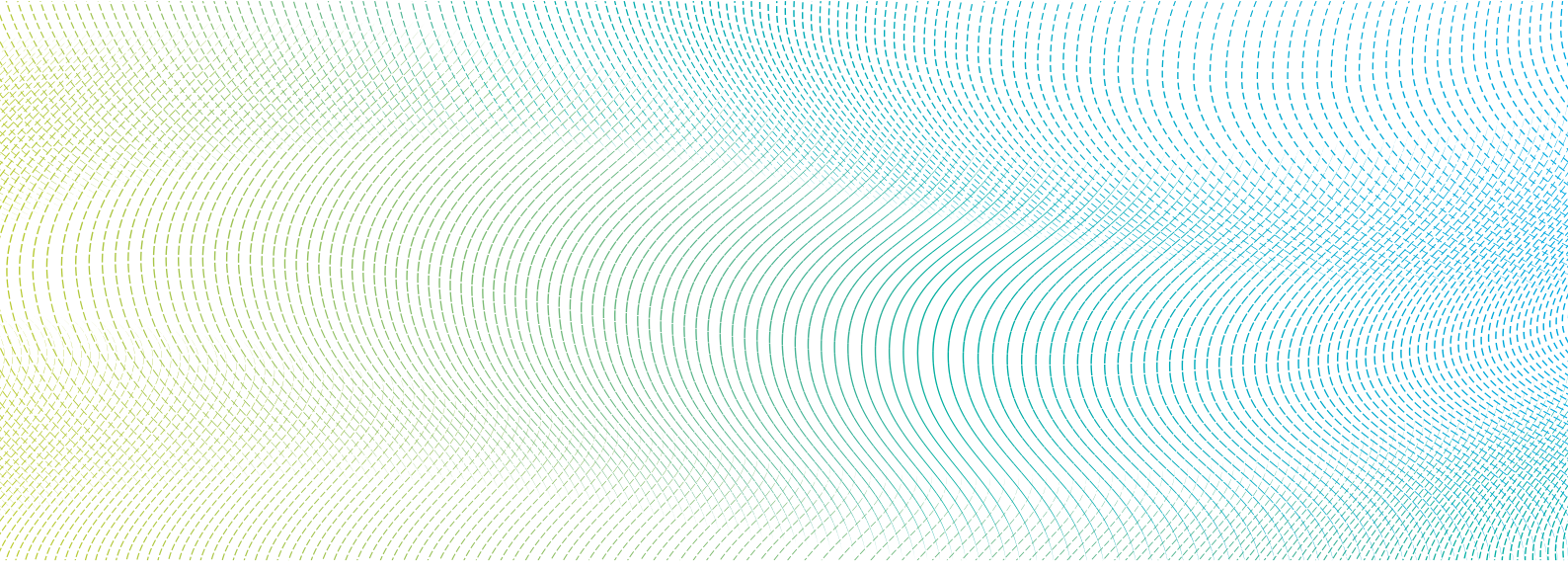
Note:

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

Michael Coffey  Head of Hazardous Industries & Industry Practice 11 December 2017

MH/INT/02/258
FOR 9,490 / 16 August 17





ExxonMobil

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Esso Australia Pty Ltd
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exxonmobil.com.au

Esso Australia Resources Pty Ltd ("EARPL") and BHP Billiton Petroleum (Bass Strait) Pty Ltd are 50:50 co-venturers in a joint venture for the exploration, development and production of oil and gas from Bass Strait and are the owners of the Longford Facility. EARPL is the designated Operator of the joint venture under the Gippsland Basin Joint Venture Operating Agreement. EARPL receives services, including personnel, from its wholly owned subsidiary, Esso Australia Pty Ltd ("Esso"). Esso is "operator" as defined in the Occupational Health and Safety Regulations 2007.