

Terminals Pty Ltd




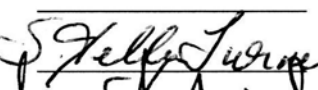


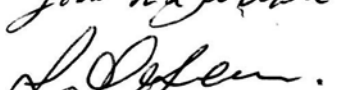
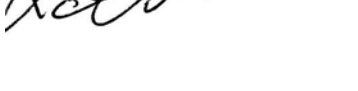

Geelong Terminal Bulk Liquids Storage Terminal

Environment Improvement Plan

December 2006 to 2008

Terminals Geelong acknowledges the Environment Improvement Plan, developed in consultation with community representatives {Terminals Geelong Community Consultative Committee (TGCCC)}, the Environment Protection Authority (EPA) and the City of Greater Geelong and agrees to use its best endeavours to complete the actions contained within.

Signatories to the Terminals Geelong 2006 Environment Improvement Plan are:

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	Mr. G. Horman, Terminals Managing Director
	Mr. C. Fasolino, Terminals State Manager
	Mr. G. O'Sullivan, Terminals Operations Manager
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Overview

1. Introduction

This Environment Improvement Plan (EIP) is the first for the Terminals Pty Ltd (Terminals) Geelong bulk liquids storage facility, and has been developed in response to Environment Protection Authority (EPA) and community requests. The EIP has been prepared by Terminals in consultation with EPA, other Agencies and the Terminals Geelong Community Consultative Committee (TGCCC).

The EIP will continue the process of continual environmental performance improvement at the Geelong facility through long term upgrading of the site.

Areas to be covered by this EIP include:

- Emissions to atmosphere;
- Discharges to water;
- Soil and ground water contamination;
- Ecosystem impacts;

The facilities and operations will comply with the requirements of EPA, Worksafe and the Country Fire Authority (CFA) as well as ISO Standards 9001 and 14001.

Progress in achieving the objectives and targets outlined in the EIP will be discussed with TGCCC and EPA representatives on a regular basis, typically monthly.

The EIP will be subject to complete review and reassessment in December 2008. The EIP review process will include an assessment of emission and waste production standards for the industry and any new or emerging technologies that will minimise or eliminate waste generation. The ongoing assessment of waste generation and waste management initiatives is currently incorporated into the site Waste Management Plan which is also subject to 2 yearly review.

However, if new or emerging technologies are identified in the period between EIP or WMP reviews, that will minimise or eliminate waste generation at the Terminals Geelong facility, they will be assessed, and, if appropriate, implemented.

It is therefore acknowledged that the EIP is a working document that may undergo amendment, following agreement between all parties, to incorporate new procedures, methods, targets and objectives.

1.1 EIP Objective

The objective of the EIP is to provide a long term vehicle to drive continual improvement of the site in the area of environmental management, thereby minimising environmental impacts.

The EIP is not intended to cover items already included in EPA Waste Discharge Licence No. EW214 or any EPA Works Approvals which currently or could be approved during the life of this document. Licence and Works Approval conditions are statutory requirements which therefore fall outside the scope of an EIP which is a commitment by Terminals to improve its environmental performance beyond what that required by legislation.

The targets have been prioritised so that actions that have the greatest environment improvement potential are completed first.

1.2 Terminals Pty Ltd

Terminals Pty Ltd is a wholly owned subsidiary of STA Australia Pty Ltd. It provides port side bulk liquid storage and handling services to its clients at four operating sites. These sites are located at Coode Island in Melbourne, Corio in Geelong, Port Botany in Sydney and Osborne in Adelaide.

An associated company, Bulk Storage Terminals Limited, is also the leading terminal operator in New Zealand with facilities in Auckland, Wellington, New Plymouth and Mount Maunganui.

In addition to operating its own sites, Terminals has extensive experience in managing and operating cryogenic liquefied petroleum gas storage facilities on behalf of Orica at Port Botany, adjacent to the Terminals Bulk Liquids Storage Facility.

Total capacity owned and operated by Terminals in Australia is 125,000 m³. Terminals' commitment to the industry it serves began in Victoria in 1961 with the construction of its first facility at Coode Island. Since then it has provided continuous service to its clients in a professional manner.

In the past fifteen years, Terminals has improved its operating practices and procedures to rival world standards. This has been principally through the recruitment of storage and process engineering expertise from the chemical and oil industry, and the use of highly specialised consultants in environmental management, risk management, loss prevention and occupational health and safety. An extensive capital works program has been undertaken on all sites to address the requirements of the Victorian Major Hazards Facilities legislation and the lessons learned from the Site A Coode Island facility fire in 1991.

2. Existing Facility

The Geelong Bulk Liquids Storage Facility is located at 40 Wharf Road, Corio, Geelong. The site comprises approximately 7.6 ha of land and water area leased from Toll Geelong Ports (refer Figure 1). The site is within an industrial area that is strategically located in relation to the deep-water port and road and rail transport.

The adjacent and nearby land uses include:

- To the north of Terminals is the Shell Refinery and further north is Geelong Grammar School and the associated equestrian facility. Immediately adjoining the site is Wharf Road;
- To the east is Refinery Pier and Corio Bay;
- To the west is Cheetham Salt and the railway line. The Ford Geelong Casting Plant is to the south-west;
- To the south there are a number of industries including Incitec Fertilisers, OMYA, BHP Wire Mill, and BHP Rod Mill.

The site commenced operations in 1973 for the importation and storage of Vinyl Chloride Monomer (VCM) for PVC manufacture. The facility has slowly developed over the past 30 years to comprise 4 Horton spheres for the storage of VCM, 1 semi-pressurised tank (originally for mono isopropyl amine), 9 atmospheric storage tanks, a Horton Sphere for butadiene storage and an atmospheric storage tank for monoethylene glycol (in progress).

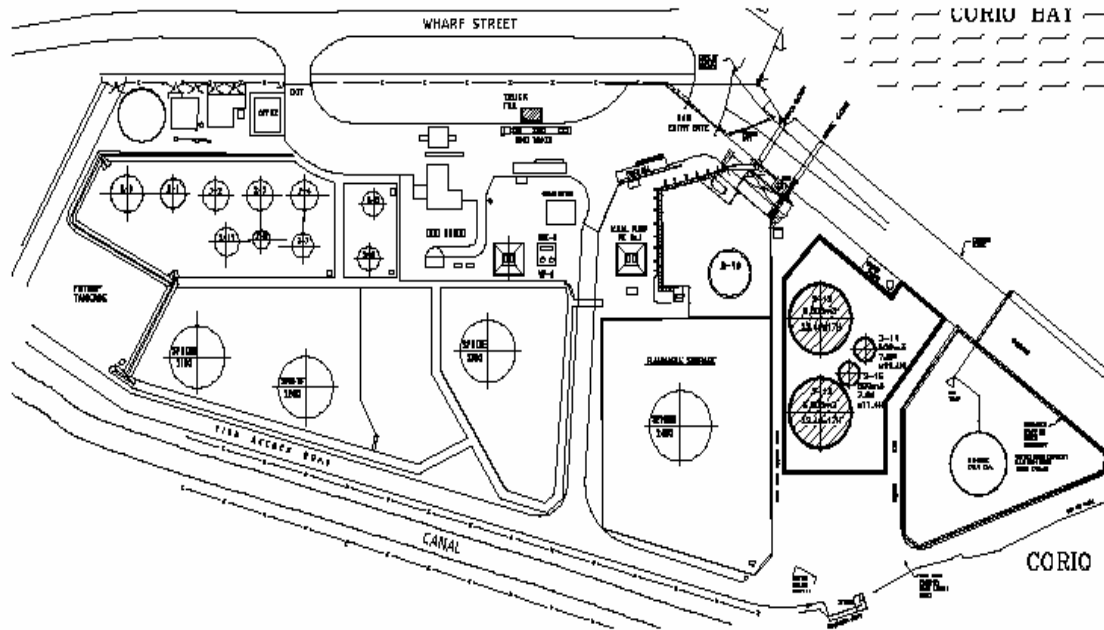
Chemicals currently stored at Geelong include caustic soda, Shellsol A150, methyl ethyl ketone, n-heptane, isopropyl alcohol, gasoline, monoethylene glycol, toluene and VCM, with butadiene storage to commence in October 2006

The facility has been continually improved since commencing operation. Some of the improvements that have been implemented in the last 10 years are:

- Upgrade of the fire system which now exceeds regulatory requirements;
- Nitrogen blanketing to all flammable liquids;
- Sealed loading of all flammable products;
- Fall protection on top loading gantry;
- Upgraded spill control systems;
- VCM vapour recovery systems and improved isolation systems;
- Nitrogen purge of VCM loading hoses;

The site is also a Major Hazard Facility as defined by Worksafe and received a 5 year Major Hazard Facility Licence in 2002 with no conditions. The licence is due for renewal in 2007.

FIGURE 1 – SITE PLAN



2.1 Emissions to Air

In accordance with EPA Waste Discharge Licence No. EW 214 requirements, there are no discharges of VCM to air, except during planned maintenance.

Hydrocarbon emissions to air from the atmospheric storage tanks are restricted to a maximum of 5 kg/d/tank, calculated in accordance with USEPA procedures.

Emissions to air from the butadiene transfer pipeline and the storage sphere will be controlled by a natural gas fired combustor, as required. The combustor will also be utilised to control odorous emissions to air from the bitumen storage tanks during ship to shore transfers.

2.2 Water Discharges

Town water is used on site to conduct weekly checks of the fire deluge system and for ten yearly hydrostatic testing of storage tanks and spheres.

Only domestic sewage is discharged to the Corio sewer, at an annual rate of approximately 229 m³.

Stormwater collected within the Terminals operational areas, truck loading bays, pump bays and driveways is transferred to an intermediate bund, where it is inspected and tested (pH and visible contamination) before being discharged, via the API separator into the Shell Refinery outfall channel.

2.3 Prescribed Liquid Waste

Prescribed liquid waste generated from Terminals Geelong operations principally results from line and tank washing and contaminated stormwater. Total prescribed liquid waste generation for the period 2005/2006 was 28.9 kilolitres.

3. Improvement Description

3.1 Broad Description of the Targets

3.1.1 Introduction

The environmental improvements described in this section are to be completed by 31 December 2008. Appendix 1 lists a summary of target dates.

This EIP addresses the aim of the site Environmental Management System to strive for continual improvement in environmental performance.

3.1.2 VCM Sphere Internal Inspection and Maintenance

Terminals will investigate the feasibility of increasing the time between VCM sphere internal inspections, from the current 10 years to up to 15 years, by examining:

- alternative non destructive testing regimes that can be done externally;
- the use of sphere fittings that have greater operational life.

The advantages of this are that spheres would spend less time out of service and the amount of liquid waste generated and emissions to atmosphere can possibly be decreased by up to 50%.

3.1.3 Water Reuse and Reduction

Current town water use at the Terminals Geelong facility is 6.13 megalitres per year (2005/2006). The major water uses on site are the testing of fire water deluges on a weekly basis and the hydrostatic testing of tanks and spheres as part of their 10 year inspection regime.

There is already an EIP action to extend sphere inspections from 10 to up to 15 years, which will reduce the amount of water used (3.1.2).

Terminals will investigate other opportunities to recycle process water, use recycled water from neighbouring facilities or provide process water to other industries, if viable. In addition, possible uses for stormwater captured in the intermediate bund will be examined.

3.1.4 Sphere Water Injection

In case of a leak from the bottom of the spheres there is provision to add a water heel in the sphere bottom which minimises VCM liquid leaking into the bund while mitigating actions are carried out. The existing system is manual and requires personnel to connect a water hose to a valve located outside the bund wall.

It is proposed to replace this with a system that is located remote from the spheres.

3.1.5 Tank Overflow and Spillage

Currently the atmospheric storage tanks do not have high level alarms but rely on manual dips to ensure tanks are not overfilled. Recently a tank was overfilled when a calculation error was made whilst filling two tanks with the same material.

To provide a further level of safety it is proposed to install high level alarms on all tanks that contain product stored in more than one tank.

Longer term it is proposed to install high level alarms on all atmospheric storage tanks.

3.1.6 Groundwater Contamination

Terminals will monitor and have active involvement in the containment and clean up of the contaminated groundwater under the site, originating from the Shell refinery to the north.

EPA has issued a clean up notice to Shell for the containment and cleanup of this groundwater contamination.

Terminals will install under tank liners on all new tanks and any existing tanks that have been raised above ground for floor repairs or maintenance.

3.1.7 Greenhouse Gas Emissions

Current greenhouse gas emissions from the Terminals Geelong facility, expressed in units of carbon dioxide equivalents, are 983 tonnes per year. Following construction of the proposed bitumen storage facility this will increase to an estimated 1,897 tonnes per year.

Terminals will continue to track and report energy usage on site to help develop opportunities for reducing greenhouse emissions. When the replacement of existing equipment is necessary, new more energy efficient units will be used, where possible.

3.1.8 Asbestos

Terminals will replace any remaining asbestos gaskets with asbestos free gaskets, when the opportunity arises.

3.1.9 Community Consultation

Terminals will support the existing community consultative committee by conducting regular meetings, making staff available to attend and providing resources when required.

Terminals will also organise site tours for community members and the general public on a regular basis.

Terminals will develop an emergency response plan that includes details of an annual communication plan to residents within the broader North Geelong/Corio area.

3.1.10 Butadiene Tanker Movements

Terminals will use its best endeavours to ensure that trucks transporting butadiene travel north along Shell Parade to Princes Hwy and avoid passing the Geelong Grammar roundabout at school drop off and pickup times.

3.2 Other Issues

3.2.1 *Community Consultation*

Terminals is committed to consultation with the local community and other stakeholders through various arrangements including TGCCC, Greater Geelong City Council, Toll Geelong Port etc. and will facilitate involvement of the community into the future. Progress towards goals, targets and objectives will be shared regularly with the community.

This will be done by producing an Improvement Action Report that will be updated regularly by Terminals. The report will be maintained on the TGCCC web site and discussed at community meetings if required.

The community will be given information and access to verify progress themselves as they see fit. This will ensure that the local and broader community is kept abreast of proposed developments on the site, including enhanced safety measures and environmental controls.

Ongoing consultation with the community will also provide opportunity for positive input as well as providing a forum to raise concerns. Terminals will carefully consider all inputs, and will accommodate these wherever practicable. Where the inputs are not accommodated in full, Terminals will provide explanations and written reasons for their decision.

3.2.2 Emergency Procedures

Notwithstanding EPA related matters, the Country Fire Authority (CFA) is the principal emergency response group likely to be involved in any events that occur on site. Considering the nature of the materials stored and managed within the site it is likely that the CFA would attend any significant event that occurred.

Terminals Geelong has a comprehensive Emergency Procedures Plan that includes consideration of the following topics:

- Types of emergency;
- Hazardous materials stored on site;
- Emergency scenarios and consequences;
- Internal emergency resources, including: alarms, assembly areas, shutdown systems, gas detection systems, power supply, safety and emergency equipment, spillage collection and retention;
- Incident control centre and command structure responsibilities and duties;
- Procedures covering a range of projected emergency scenarios;
- Responsibilities for emergency communications;
- Emergency training, exercises and evaluation;
- Plan review and revision.

3.2.3 Health, Safety & Environment Management

The site has a comprehensive integrated health, safety and environment management system which is common to all Terminals sites.

Terminals currently holds ISO 14001 Environmental Management System accreditation for their Melbourne, Geelong and Botany facilities.

All work (including Hot Work and Confined Space Work) will be in accordance with the Safety Management Manual and will conform to Major Hazard Facilities requirements.

3.2.4 Security

The site has a perimeter fence with intruder detection on the remote fence lines. Access to the site is controlled via security access gates and traffic flow is one way through the site.

The site is always manned, with either operational personnel or a security guard when the site is shut down.

Wharf security remains under the control of Toll Geelong Port and Shell refinery.

3.2.5 Noise

Existing terminal operations are not considered significant noise sources, particularly when the surrounding and unrelated heavy industrial uses are taken into consideration. The predominant noise sources within the current facility are primarily truck movements within the site and mechanical equipment such as pumps, fans, etc.

It is noted that even though Terminals Geelong is a 24 hour per day operation during the week, the nature of the surrounding industrial uses and the location of the facility, remote from any sensitive land uses would mean that it is highly unlikely noise would be an issue. Therefore no reduction targets are proposed.

Noise would however be considered during the detailed design stage of any future expansion of the facility to ensure compliance with State Environment Protection Policy N1 requirements.

4. Management and Operations

4.1 Philosophy and Procedures

Terminals is a major operator within the Australian petrochemical industry, providing storage and handling services for bulk liquids including chemicals, petroleum, solvents, vegetable oils, tallow and liquefied gas. The current philosophy of providing a high standard, cost effective service to clients with a commitment to health, safety and environmental issues is applied to the Geelong facility.

Terminals will comply with all relevant State environment protection policies, waste management policies, environmental regulations and waste discharge licence conditions.

The Terminals corporate Environment Policy is reproduced below:

It is the policy of Terminals to operate our facilities in a manner that will protect the environment.

This policy is founded on:-

- *Identifying and managing the environmental risks associated with our business.*
- *Providing training and promoting environmental awareness and responsibility amongst all employees.*
- *The efficient use of resources and minimisation of waste or loss.*
- *Periodic environmental assessments of our facilities, from which ongoing improvement programs will be implemented.*
- *Compliance with regulatory requirements is the minimum acceptable level of performance.*

4.2 Current Operations

4.2.1 *Product Stewardship*

Terminals regards one of its prime contractual roles is to ensure the quality and quantity of its clients products is maintained as they pass through the terminal.

4.2.2 *EPA Licence*

The Geelong site has a current EPA waste discharge licence (No. EW214).

The EPA licence is performance based, relating to emission principles and criteria. An annual environmental performance report is required rather than specific source emission limits. This is due to both air and water emissions being minimal.

The annual environmental report to EPA covers the following areas:

- Air monitoring
- Water monitoring
- Groundwater monitoring
- Energy efficiency and greenhouse gases
- Prescribed wastes
- Environmental incidents

4.2.3 *Major Hazard Facility Licence*

In 2000, Victoria introduced new legislation entitled the Occupational Health and Safety (Major Hazard Facilities) Regulations 2000. This legislation requires facilities storing certain materials (flammable, explosive or toxic substances called Schedule 1 materials) above specified quantities to be registered as Major Hazard Facilities (MHF) and to submit a Safety Case to the Government to obtain a MHF licence. This facility is one of 48 sites that are currently designated MHFs in Victoria.

In July 2002 Terminals Geelong obtained a five-year licence to operate as an MHF.

The MHF regulations require modifications to the MHF to be reviewed, revised and submitted to Workcover before commissioning the change.

4.2.4 Quality Assurance

Quality certification to ISO 9001 has been achieved through Lloyd's Register for all Terminals facilities. In addition, ISO 14001 environmental management system accreditation has been achieved at Melbourne, Botany and Geelong. It acknowledges a high standard of consistent operations and safety in supplying Terminals services. The following key safety and environment areas are included:

- Occupational health and safety;
- Operating procedures;
- Training;
- Modification form changes;
- Incident reporting and investigation;
- Contractor and driver inductions;
- Licence/Regulations/Standards control;
- Maintenance;
- Contract review;
- Purchasing.

4.2.5 Responsible Care

Terminals has been a long standing associate member of the Plastics and Chemical Industry Association (PACIA). As such, it has been an active participant in the Responsible Care program and has supported this industry initiative for improved performance. Terminals' Geelong facility has achieved 100% compliance with the Responsible Care guidelines.

Terminals also supported the Community Right to Know Code of Practice, by active participation in the chemical industry "Open Door" program. Safety and operating statistics have been provided to PACIA for the preparation of annual industry statistics on safety performance.

To ensure that the community is adequately informed about the facility and its operations and to provide an opportunity for the community to express any concerns, Terminals will continue to support the Terminals Geelong Community Consultative Committee. Terminals takes a significant role in the committee and provides all relevant operating statistics and details of incident occurrences, injuries etc. as requested.

4.2.6 Maintenance

Terminals operators are multi-skilled. Consequently they undertake routine maintenance inspections to meet the following objectives:

- Regulatory requirements;
- Achieve maximum serviceable life from the company's assets;
- Maintain an acceptable level of customer service through the minimisation of plant and equipment down-time;
- Maintain plant and equipment in such a way that the risk of personnel injury is minimised;
- Standardise the maintenance system throughout the company's terminals;
- Develop and maintain a reliable system for the recording of maintenance work.

These maintenance procedures and checks are documented and form part of the ISO9001 Quality System.

4.3 Health, Safety and Environment Management

4.3.1 Overview

Health, safety and environmental (HS&E) performance is Terminals' highest priority.

Terminals are committed to ensuring the health and safety of its staff and the community, to preserve the environment and to protect property and materials stored.

Performance in these areas is achieved through a comprehensive and systematic management system, called Process Safety Management, to ensure barriers are in place, in use, demonstrable and effective to prevent significant incidents, and minimise consequences from the inherent hazards of the business.

4.3.2 Introduction

Terminals is the largest independent bulk liquid chemical storage and handling company in Australia, providing product handling and storage services for over ninety companies in as many different chemicals for many diverse industries.

From a HS&E perspective, the range of chemicals handled differs greatly and includes the following types of hazards:

- Flammable;
- Poisonous;
- Toxic;
- Known and suspected human carcinogens;
- Corrosive;
- Polymerisable;
- Combustible;
- Oxidising agent;
- Highly volatile.

4.3.3 Safety, Health and Environment Management

It is the corporate objective of Terminals to be the acknowledged leader within its industry in the quality of services provided and in its safety, health and environmental performance.

In order to operate safely and effectively, the company has a defined management structure, which implements policies set by senior management. These policies are detailed in comprehensive management systems that comprise manuals, programs, procedures and plans on activities such as Occupational Health and Safety, Operations, Maintenance, Engineering, Training, Quality, Safety Audits, Environmental Management and Emergency Procedures.

Any environmental incidents are logged in a computer based Environmental Incidents Register which includes a requirement for "root cause" analysis and the implementation of corrective actions. All community complaints relating to environmental matters are also logged in the Environmental Incidents Register.

4.3.4 Safety Management Systems

Process Safety Management is a systematic approach to the identification, understanding, assessment and ultimately control of process hazards. The major focus is to minimise, if not prevent, incidents and accidents.

The system is based on the "Technical Management of Chemical Process Safety" developed by the Centre for Chemical Process Safety of the American Institute of Chemical Engineers.

4.3.5 Environment Management Plan

An Environment Management Manual (EMM) has been developed for Terminals' facilities in Australia. Terminals has ISO 14001 accreditation for its Melbourne, Geelong and Port Botany facilities. Its purpose is to cover the requirements for environmental protection, and management of the operations of Terminals in relation to routine on-site and off-site activities. This plan will continue to be applied to the redeveloped facility and will include the setting of emission and environmental goals and the ongoing audit of the site environmental and operating systems (refer Sections 4.3.7 and 4.3.8).

4.3.6 Safety Performance

The "continued improvement" philosophy is entrenched in the Process Safety Management Model. It is essential to Terminals' business success to monitor parameters for performance, set objectives then develop and implement plans to achieve nominated targets.

Action plans developed from incidents and audits are monitored to completion using a computer based management follow up system.

Terminals encourages investigation of near misses as well as minor and significant incidents. This "root cause" analysis ensures that a greater number of lessons can be learned and improvements made. Severity and frequency of incidents are reduced using this method.

An active Occupational Hygiene and Health Program is in place. Annual medical checks are conducted on all operating personnel. Noise, and on older sites asbestos assessments, have been independently carried out by external professional occupational hygienists, and all recommendations have been implemented.

4.3.7 Environmental Monitoring

Terminals will continue to assess environmental performance through the conduct of environmental monitoring programmes. These include:

- Stormwater – Quarterly samples will be collected to determine suspended solids, toxicity, visible oil/grease, pH and total organic carbon (TOC) concentrations;
- Ambient air quality – Butadiene concentrations will be determined at one location upwind of the combustor and two locations downwind from the combustor during wharf line purging after ship unloading;
- Combustor emissions to air:
 - The concentrations and rates of emission of butadiene, carbon monoxide and oxides of nitrogen will be determined on an annual basis during wharf line purging after ship unloading of butadiene;
 - The concentrations and rates of emission of odour, hydrogen sulphide, sulphur dioxide, volatile organic compounds, carbon monoxide and oxides of nitrogen will be determined on an annual basis during transfer of bitumen from the ship to the storage tanks.

All environmental monitoring is conducted by National Association of Testing Authorities (NATA) accredited laboratories, in accordance with Victorian Government requirements.

4.3.8 Audit Programme

Terminals will continue to examine methods of improving environmental performance through the conduct of an audit programme. Specifically, this will include:

- Compliance Audit
 - Three monthly (Terminals, Geelong Operations Manager);
- EMS Audit
 - Six monthly (Lloyds Register Quality Assurance)
 - Twelve monthly (Terminals National Safety and Environment Manager and external industrial facilities auditor appointed pursuant to the Environment Protection Act 1970).

Appendix 1

Summary of Targets

SUMMARY OF TARGETS 2006 - 2008

Element	Target Objective	Due
VCM Sphere Internal Inspection and Maintenance	- Investigate increasing 10 yr internal inspections to 15 yrs	4 th Qtr 2006
	- Investigate options of water displacement & GRS for next scheduled sphere internal inspection	4 th Qtr 2006
Water Reuse and Reduction	- Investigate increasing sphere 10 yr internal inspections to 15 yrs	4 th Qtr 2006
	- Investigate opportunities to recycle water, use recycled water from neighbouring facilities, provide process water to other industries or use stormwater	1 st Qtr 2007
Sphere Water Injection	- Replace water injection to sphere with remote system	2 nd Qtr 2007
Tank Overflow and Spillage	- Design storage tank high level system for 2 IPA tanks	1 st Qtr 2006
	- Install high level alarms on IPA tanks	2 nd Qtr 2006
	- Install high level alarms on remaining tanks	2 nd Qtr 2007
Groundwater Contamination	- Monitor Separate Phase Product (SPH) levels in wells at front of site	Ongoing
	- Liaise with Shell re clean up notice and impact on Terminals	Ongoing
	- Undertake quarterly groundwater monitoring to gather more data on hydrogeology & contamination plume levels.	Ongoing
	- Assess data & investigate preferred recovery strategy	2 nd Qtr 2007
	- Monitoring of key boundary wells	Ongoing
	- Install under tank liner with leak detection on all new tanks	Ongoing
	- Install under tank liner with leak detection for any existing tank lifted for maintenance	Ongoing
Greenhouse Emissions	- Regular reporting of energy and associated GHG emissions.	3 rd Qtr annually
	- Consider replacing damaged motors with high efficiency motors, on an opportunity basis while assessing cost and practicality	4 th Qtr 2008

SUMMARY OF TARGETS 2006 – 2008 (cont)

Element	Target Objective	Due
Asbestos	- Replace remaining asbestos material as opportunity allows	2 nd Qtr 2007
Community Consultation (3.1.8)	- Undertake regular community liaison meetings. - Undertake general & specific tours of site for community as per TGCCC actions. - Conduct site tours on needs basis for community in general. - Develop an emergency response plan which includes details of an annual communication plan to residents within the broader North Geelong/Corio area	Ongoing 3 rd Qtr 2006 As required 4 th Qtr 2006
Butadiene Tanker Movements (3.1.9)	- Use best endeavours to ensure trucks for butadiene use Shell Parade and avoid school pickup and drop off times	3 rd Qtr 2006
Butadiene Project	- Construct and commission butadiene sphere as per works approval. (refer Appendix 2) - Terminals to consider an extra monitoring point on site boundary when conducting butadiene ambient air quality monitoring program after commissioning	4 th Qtr 2006 4 th Qtr 2006

Appendix 2

Butadiene Works Approval
