Terminals Pty Ltd

Geelong Terminal Bulk Liquids Storage Terminal

Environment Improvement Plan

2012 to 2014

The Environment Improvement Plan has been developed by Terminals Geelong in consultation with members of the Geelong Community Engagement Group (GCEG). Terminals Pty Ltd wishes to acknowledge those contributions, and undertakes to use its best endeavours to complete the EIP actions contained within.

Signed  Date 25 March 2013

Carlo Fasolino, Victorian Manager
Terminals Pty Ltd
ABN 87 000 348 407
40 Wharf Road
Corio Vic 3214
Telephone: (03) 5274 6666 Facsimile: (03) 5274 6699
Email: cfasolino@terminalspl.com.au

Contents

Appendix

Overview

1. Introduction

This Environment Improvement Plan (EIP) is the third for the Terminals Pty Ltd (Terminals) Geelong bulk liquids storage facility. The EIP has been prepared by Terminals in consultation with the Geelong Community Engagement Group (GCEG).

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 GCEG at six monthly intervals.

The EIP will be subject to complete review and reassessment in last half of 2014. 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 (WMP) 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.

1.1 EIP Objective

The objective of this EIP is to provide a long term vehicle to drive continual improvement at 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 that may 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 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 ANZ Terminals Pty Ltd. It provides port side bulk liquid storage and handling services to its clients at four operating sites. These sites are located at West 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 160,000 m^3. Terminals' commitment to the industry it serves began in Victoria in 1961 with the construction of its first facility at West Melbourne. Since then it has provided continuous service to its clients in a professional manner.

In the past twenty 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:

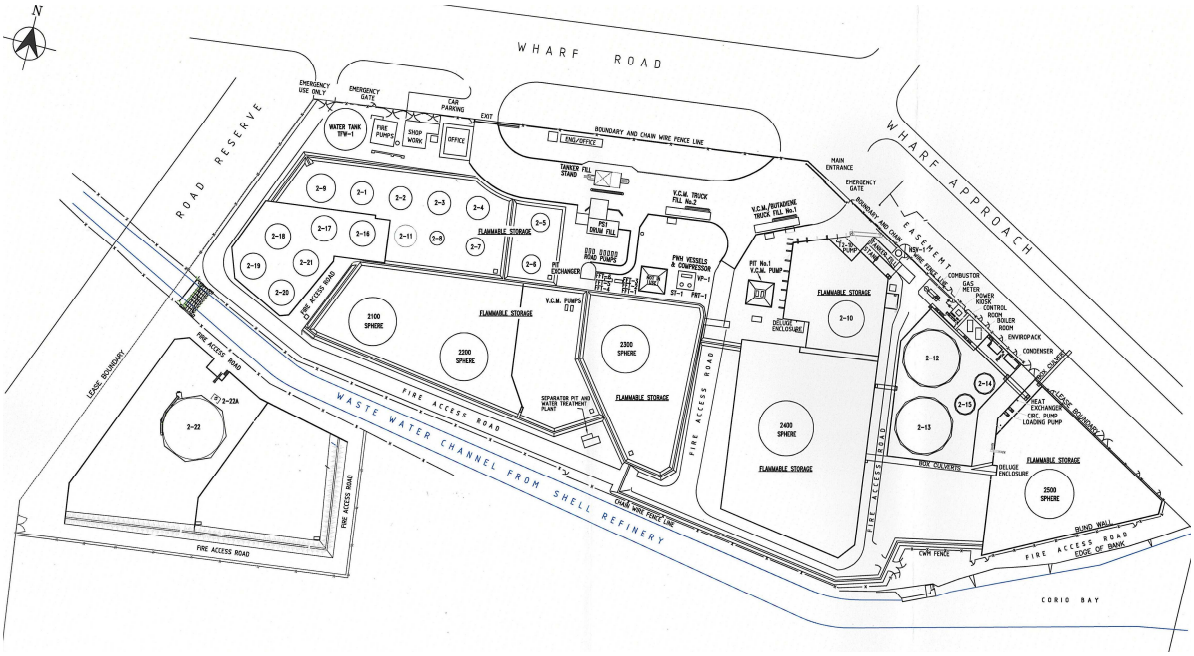
- To the north of the Terminals' site is Wharf Road, with the Shell Refinery immediately beyond it, and the Geelong Grammar School and the associated equestrian facility further to the north.
- To the east is Refinery Pier and Corio Bay;
- To the west is Incitec Pivot bulk distribution warehouse, Cheetham Salt and the Melbourne/Geelong railway line. The Ford Geelong Casting Plant is to the south-west;
- To the south there are a number of industries including Incitec Pivot Fertilisers, OMYA, BHP Wire Mill, and BHP Rod Mill.

The nearest housing to the facility is just over one kilometre from the site boundary, and North Shore Primary School is about 1.3 km from the site.

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 Horton sphere for butadiene storage, 1 semi-pressurised tank (originally for mono isopropyl amine), 16 atmospheric storage tanks, 1 atmospheric tank with internal floating roof for Avgas and 4 atmospheric storage tanks for bitumen.

Chemicals currently stored at Geelong include caustic soda, hydrocarbon solvents, methyl ethyl ketone, heptane, isopropyl alcohol, hexane, monoethylene glycol, liquid fertilizer (UAN), Avgas, VCM, butadiene and bitumen.

FIGURE 1 – SITE PLAN



2.1 Recent Improvements

The facility has been continually improved since commencing operation. Some of the improvements that have been implemented in the last 15 years are:

- Upgrade of the fire system which now exceeds regulatory requirements;
- Nitrogen blanketing tanks with flammable liquids;
- High level alarms on all flammable liquid tanks;
- 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;
- Collection and treatment of vapours from tank filling of chemicals with vapour pressure above 1 kPag;
- Treatment of truck fill vapours for Avgas;
- Increased liquid nitrogen onsite storage capacity

The site is also a Major Hazard Facility as defined by Worksafe and received its third 5 year Major Hazard Facility Licence in 2012 with no conditions. The licence is due for renewal in 2017.

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 2014. 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 Air Emissions

With the combustor now being used to treat emissions from the general chemical tanks, bitumen gantry and shortly avgas gantry it is timely that the monitoring program be updated to capture these new chemicals. As the combustor was originally built to handle butadiene we need to insure that as new chemicals are added the combustor destruction efficiency does not decrease. The extra testing will include at least 1 tank filling operation from a ship involving a volatile chemical (chemicals with a vapour pressure greater than 1 kPag at 20^{o}C), a bitumen tank filling from a ship and loading of a full avgas road tanker.

Even though a tank overflow is a very rare event it is a large uncontrolled air emission if it is not detected quickly, due to the large flow rates involved. To minimise the amount of chemical spilt by ensuring the spill is detected quickly it is proposed install gas detectors in the general chemical tank farm, exchanger area and first flush tanks. This brings the general chemicals in line with the VCM and butadiene which have these gas detectors in place.

To minimise fugitive emissions from volatile chemicals (chemicals with a vapour pressure greater than 1 kPag at 20^{o}C) the leak detection program will be expanded to include volatile chemicals. This will ensure leaks from flanges, valves etc will be picked up quickly and repaired.

3.1.3 Water Reuse and Reduction

Water use at the Terminals Geelong facility was 6.13 megalitres per year in 2005/2006 which was the last time a baseline number was taken. The major water uses on site are the testing of fire water deluges and the hydrostatic testing of tanks and spheres as part of their 10 year inspection regime. Since then steps have been taken to reduce water usage by:

- reducing frequency of testing of sphere deluges from monthly to 3 monthly.
- testing of foam lines to tanks with nitrogen instead of water.
- installing rain water tanks for capturing water from roofs and using to flush toilets, water gardens etc

With the new Shell /Barwon water treatment plant being currently built Terminals believes there are a number of opportunities for us provide clean stormwater to the plant for recycling and use recycled water from the plant for fire systems and vessel hydrotests.

Terminals also wants to investigate opportunities in cooperation with the City of Greater Geelong to provide captured stormwater and clean process water for watering designated landscape opportunities in the local area.

3.1.4 Stormwater

To lessen the amount of stormwater that can be contaminated by onsite processes it is proposed to segregate the operational areas from the tank bunds and site driveways. The rationale behind the segregation is that most of the site is clean and the mostly likely places for stormwater to be contaminated with chemicals are the truck fills, exchanger pits and pump bays. By ensuring the stormwater in these operational areas is not mixed then the amount of stormwater that can be potentially contaminated is lessened therefore lessening the amount of chemicals released to Oyster Cove or stormwater sent offsite for disposal.

It is also proposed to extend the roof of the general chemical loading bay which minimises the amount of stormwater collected in the truck fill bay so saving disposal costs.

To ensure that all potential stormwater contamination sources are identified the stormwater discharge testing is to be tightened with more prompt individual bund sampling before release.

3.1.5 Groundwater Contamination

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

While Terminals is only responsible for groundwater contamination arising from its operation on its site, Terminals will also 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.

Terminals will undertake annual monitoring of groundwater under the site.

Terminals will also install under tank liners with tell tale drains on all new tanks and any existing tanks, when they do not already have such features, that have been raised above ground for floor repairs or maintenance.

Another potential source of groundwater contamination which has not been previously addressed is the storage of drums and isotainers on the ground. It is proposed to install concrete slabs for their storage so any potential spills are easily detected and prevented from entering the groundwater.

3.1.6 Energy Saving

The major users of energy on site are the combustor, bitumen hot oil heaters and butadiene refrigeration plant.

With the greater use of the combustor any saving in gas usage will be important. Currently the combustor is designed to operate at 980 deg C which is fine for butadiene which has a high calorific value but for bitumen vapours which have minimal calorific value a lot of natural gas is required to maintain this temperature. Experience with other combustors has shown that decreasing the operating temperature to 750 deg C has no effect on the destruction efficiency while lessening gas usage. This change requires EPA approval.

The hot oil heaters are also a large gas user on site and with the expansion of the bitumen plant in the next 12 months it will only increase. It is proposed to fine tune the oxygen supply to hot oil heater burners so lessening the amount of gas wasted heating excess air which is superfluous to the combustion process. This was a recommendation from an energy audit of the site.

One of the major users of electricity onsite is the butadiene refrigeration plant. It is proposed to adjust the set point discharge pressure so the load on the compressor is less so decreasing energy usage. This also was a recommendation from the site energy audit.

3.1.7 Greenhouse Gas Emissions

Current greenhouse gas emissions from the Terminals Geelong facility, expressed in units of carbon dioxide equivalents, has increased from 300 tonnes per annum to 1100 tonnes per annum due to the operation of the butadiene and bitumen storage facilities.

To help compensate for these increased greenhouse emissions terminals will investigate viability of the installing solar panels onsite. Terminals will install the solar panels if economically viable.

3.1.8 Emergency Communication

For major incidents, emergency communication is the responsibility of the incident controller (usually the CFA for this site). Terminals role in emergency communication for minor incidents that do not have effects beyond the site is to advise neighbours (and authorities) about the incident. For major incidents, where CFA is the controller of the incident, Terminals will provide such support to the CFA as it can.

In the important area of rehearsing response to a major incident, and better preparing the local community about what to expect, Terminals will work with the CFA to provide education before an incident so the local community has a better understanding of the implications of the hazard and what actions they need to take. This will look at the work done after the 2009 Victorian Bushfires and the shelter in place initiative and will involve both rehearsals, and communication that could take the form of a pamphlet, provided to residents and available on the company and community web sites.

Terminals will also work with CFA to develop messages that would be used in a major emergency and communicated via phone messaging, radio broadcasts and the like, including early advice to the community after an emergency.

Other Issues

3.1.9 Community Consultation

Terminals is committed to consultation with the local community and other stakeholders through various arrangements including GCEG, Greater Geelong City Council, 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 discussed biannually at community meetings.

The community will be given information relevant to the particular EIP item. This may be subject to any "commercial-in-confidence" restrictions deemed by Terminals and Freedom of Information procedures for release of EPA documents. The community representatives also provide another conduit for advising their constituents about information discussed at the GCEG, and bringing back to GCEG issues raised with them by community members. This will assist keeping the local and broader community 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.

3.1.10 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 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.

3.1.11 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.

3.1.12 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 Shell refinery.

3.1.13 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 from the facility is consistent with State Environment Protection Policy N1.

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 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

One of Terminals' prime contractual roles is to ensure the quality and quantity of its client's products is maintained as they pass through the terminal.

4.2.2 EPA Licence EW214

In 2011, EPA updated Terminals Geelong site EPA licence to meet the new guidelines for simplified licences.

The EPA licence is performance based and contains general requirements and specific discharge limits. It also requires an annual performance statement to be completed by 30th September each year.

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.

In July 2007 Terminals Geelong obtained another five-year licence to continue operating as an MHF until at least 2012.

In July 2012 Terminals Geelong obtained another five-year licence to continue operating as an MHF until at least 2017

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

Management of Change

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 a high 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, ensuring that best practice is spread throughout its operations;

Develop and maintain a reliable system for the recording of maintenance work.

These maintenance procedures and checks are documented and form part of the ISO-9001 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 is 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 many different chemicals with over ninety companies from 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.

Elevated temperature

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 "continual improvement" philosophy is entrenched in the Process Safety Management Model. It is essential to Terminals' business success to monitor parameters for performance, set objectives and 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 the maximum 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;
- Groundwater – all wells will be gauged for separate phase and down gradient wells will also be monitored for contamination on an annual basis;
- Combustor - 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. In addition during chemical venting from shipping the outlet of the combustor will be tested for VOC, Hydrogen Sulphide, Sulphur Dioxide, carbon monoxide and oxides of nitrogen.
- Leak detection program for all volatile chemicals to monitor all equipment to identify any unnoticeable leaks for timely repair thus minimising fugitive emissions from the site.

All environmental monitoring is conducted by National Association of Testing Authorities (NATA) accredited laboratories, in accordance with Victorian Government requirements except for leak detection which is done by operators with hand held PID.

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
  - – Nine monthly (Lloyds Register Quality Assurance)
  - – Twelve monthly (Terminals National Safety and Environment Manager).

Appendix 1

Summary of Targets

SUMMARY OF TARGETS 2012 – 2014

Element	Target Objective	Due
Air Emissions	- Update monitoring program for chemical & Bitumen emissions testing to combustor.	1st Qtr 2012
	- Investigate combustible gas detectors at general tank farm, exchanger area & first flush tanks	4th Qtr 2012
	- Implement a leak detection program for General Chemicals with vapour pressure above 1 kPa	1st Qtr 2013
Water Reuse and Reduction	- Investigate opportunities to recycle water, use recycled water or use stormwater with commissioning new Shell /Barwon water treatment plant.	4th Qtr 2014
	- Investigate opportunities in cooperation with the CoGG to provide water for landscaping in the local area.	4th Qtr 2014
Stormwater	- Tighten up water discharge testing & control	2nd Qtr 2012
	- Develop & implement segregation & pump out control systems including drainage systems.	1st Qtr 2013
	- Extend roof over RTL & consider capturing rainwater.	1st Qtr 2013

Element	Target Objective	Due
Groundwater Contamination	- Install under tank liner with leak detection on all new tanks - Eight existing tanks to be retrofitted with liners and leak detection as opportunity arises. - Install concrete sealing slabs for used drums/containers.	Ongoing Ongoing 4th Qtr 2012
Energy Saving	- Lower operating temperature of combustor to below 980 deg C. - Adjustment of oxygen supply to Hot Oil Heaters - Adjustment to Set Point Discharge Pressure for Refrigeration	2nd Qtr 2013 2nd Qtr 2013 4th Qtr 2012
Greenhouse Emissions	- Investigate the viability of installing solar panels. - Install solar panels is economically viable	4th Qtr 2012 4th Qtr 2014
Emergency Communication	- Work with CFA to provide education to local community on what to do in an emergency	4th Qtr 2014
Reporting	– Report the progress of the EIP to the TCEG at 2nd & 4th meetings.	Ongoing