Hutchison Ports Australia

2015

HSEQ Management System

Handling of Dangerous Goods and Hazardous Substances Sub-Plan - SICTL

Version 3

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Register of Amendments					
Ver No	**Page no**	**Date**	**Description of amendments**	**Prepared by**	**Approved by**
Draft 0	All	12 July 2013	Consultation Draft	John Ieroklis	Trevor Ballantyne
Draft 1	All	15 July 2013	Consultation Draft	John Ieroklis	Trevor Ballantyne
1	All	31 July 2013	External stakeholder consultation comments incorporated	John Ieroklis	Trevor Ballantyne
2	All	9 September 2013	DP&I comments incorporated	John Ieroklis	Trevor Ballantyne
3	All	2 April 2015	Amended sections 3.1, 3.2, 4.3.4, 4.3.5, 5.1.2, 5.1.4 – 5.1.8, 5.1.13, 6 and 9 Amended figures 6, 9, 11 and 27 Created sections 3.3, 5.1.3, 5.1.9 – 5.1.12, Created figures 8 and 12 - 26 Sydney Ports comments incorporated	John Ieroklis	Jessykah Miles

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Handling of Dangerous Goods and Hazardous Substances Sub-Plan

1 Purpose

This Handling of Dangerous Goods and Hazardous Substances Sub-Plan (abbreviated to the Dangerous Goods Sub Plan or DGSP for ease) has been created as a means by which Sydney International Container Terminals (SICTL) can comply with the relevant conditions outlined in the Instrument of Development Consent DA-494-11-2003-i listed in Schedule C – Terminal Operations of (the Development Consent). The DGSP is a component of the HSEQ5.1.7 Operational Environmental Management Plan (OEMP) – SICTL and as such is a Tier 3 document within the Hutchison Ports Australia (HPA) Health, Safety, Environment and Quality (HSEQ) Management System. This sub-plan is an example of the commitment of HPA to comply with the Development Consent and work with external stakeholders co-operatively to achieve good operational outcomes. The indicative process of how OEMP sub plans control the operations of the SICTL Terminal is shown below.

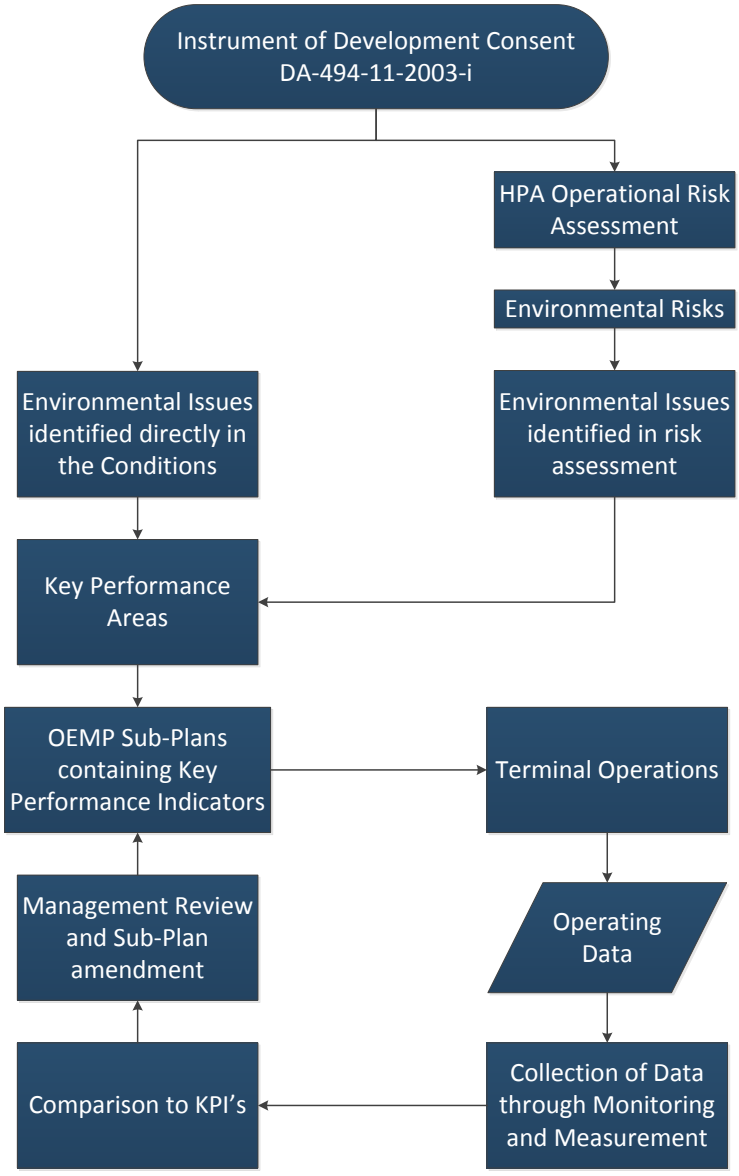

Figure 1 Illustration of how the KPAs and sub-plan control Operations

2 Objective

The objective of this sub plan is to guide the direction of SICTL's operations so that operational staff can carry out their duties whilst remaining aware of the possible dangers of handling Dangerous Goods (DG) and Hazardous Substances (HS). Through this awareness, SICTL can best manage foreseeable impacts successfully. Ultimately, awareness and management of impacts will lead to compliance with the Development Consent. SICTL will utilise this sub-plan in the following ways:

- as a management instrument so that good performance by SICTL and its contractors in the Dangerous Goods and Hazardous Substances Cargo Management Key Performance Area (KPA) can be assured;
- as an instrument that complements HPA's commercial agreements with shipping lines enabling SICTL to support the actions of vessels with the intent of compliance to the Development Consent (where the Development Consent applies to vessels directly);
- as a measure of compliance with the Development Consent in the form of a Key Performance Indicator (KPI) target and a KPI goal;
- as a description of what the KPI actually is and its context for measurement;
- as a basis for consultation with relevant stakeholders in regards to eliminating pollution impacts and the likelihood of incidents involving DGs, and
- as a tool for promoting an ongoing relationship between the relevant stakeholders and SICTL so that any operational problems can quickly be solved.

For the purposes of this sub-plan, Hazardous Substances are taken to be included in all descriptions of Dangerous Goods.

2.1 Environmental Issues Overview

The environmental issues that influence the operation of the SICTL terminal are either identified directly in the Development Consent or are the outcomes of an operational risk assessment carried out by Hutchison Ports Australia (HPA). In either case, the environmental issues are what SICTL will manage. The 10 issues identified in section 1.5.1 of the OEMP are:

- environmental management interface with work health and safety;
- training personnel in environmental management;
- quality of stormwater runoff/ separator tank discharges;
- odour and dust management;
- noise and traffic management;
- waste management;
- **the handling and transit of chemicals and dangerous goods containers;**
- storage of fuels on site;
- impacts on Sydney Airport;
- the management of native and feral animals;
- energy usage. and
- community & complaints handling.

Independent issues or related issues may be grouped together and managed under Key Performance Areas.

2.2 Key Performance Areas Overview

KPAs are an important concept within environmental management because they describe unique and relevant fields of compliance, i.e. 'areas'. The KPAs identified in section 1.6.3 of the OEMP are:

- air quality;
- aviation operational impacts;
- noise and complaints;
- operational traffic;
- water quality;
- ***Dangerous Goods and Hazardous Substances cargo management;***
- waste generation;
- native and feral animal management, and
- energy.

Independent issues or related issues may be grouped together and managed under Key Performance Areas.

2.3 OEMP Sub-Plans Overview

The sub plans to the OEMP are the management instrument which will guide SICTL to achieve compliance in the KPAs. The OEMP sub plans identified in sections 1.6.3 and 4.2.1 of the OEMP are:

- the Air Quality Management Sub-Plan;
- the Aviation Operational Impacts Sub- Plan;
- the Bird Hazard Management Sub- Plan;
- the Noise Management Sub- Plan;
- the Operational Traffic Management Sub- Plan;
- the Stormwater Management Sub- Plan;
- the ***Handling of Dangerous Goods and Hazardous Substances Sub- Plan;***
- the Waste Management On-Site Sub- Plan;
- the Water and Wastewater Management Sub- Plan;
- the Shorebird Management Sub-Plan;
- the Feral Animal management Sub-Plan, and
- the Energy Management Action Sub-Plan.

2.4 Key Performance Indicators Overview

A KPI is an objective and concise measure of one facet of operational performance managed by each sub-plan. By comparing operational data to KPI targets and goals, SICTL can assess its own performance and identify opportunities for improvement. Each OEMP sub-plan has at least one KPI. The context for all KPI's is per Twenty-foot Equivalent Unit (TEU) of throughput. In some instances where the KPI is expected to be low, it is measured for every thousand TEU throughput for convenience. The KPIs managed under this sub-plan are detailed in section 6.

3 Legislative Framework

3.1 Applicable Legislation, Standards and Guidance Documents

The legislation that applies to the implementation of this sub-plan is listed below:

- Protection of the Environment (Operations) Act 1997 (NSW)
- Environmental Planning and Assessment Act, 1979 (NSW)
- Work Health and Safety Act 2011 (NSW)
- Work Health and Safety Regulation 2011 (NSW)
    - Dangerous Goods Act 1975 (NSW, repealed) – provisions saved under the Work Health and Safety Regulation 2011 Schedule 18B clause 63
    - Part 11 of the Dangerous Goods (General) Regulation 1999 (NSW, repealed) – provisions saved under the Work Health and Safety Regulation 2011 Schedule 18B clause 63
- Dangerous Goods (Road and Rail Transport) Act 2008 (NSW)
- Dangerous Goods (Road and Rail Transport) Regulation 2009 (NSW)
- Ports Assets (Authorised Transactions) Act 2012 (NSW)

This sub-plan also aims to achieve outcomes consistent with the intent of:

- The International Maritime Dangerous Goods (IMDG) Code current Edition; Incorporating current amendments;
- IMO Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas (IMO Recommendations)
- AS 3846 The Handling and Transport of Dangerous Cargoes in Port Areas
- The Sydney Ports Dangerous Goods Management Guidelines for Sydney International Container Terminals (15 April 2014);
- The Australian Dangerous Goods Code (ADG) current edition, and
- Port Botany Precinct Emergency Sub Plan.

3.2 Conditions of Development Consent

The Conditions of Development Consent are listed below and are taken from the Instrument of Development Consent DA-494-11-2003-i - Schedule C Terminal Operations (NSW Department of Planning).

Table 1: Conditions of Development Consent

Condition	Conditions of Development Consent
C2.16	**Storage and handling of Dangerous Goods** Prior to the commencement of operation, the Applicant shall develop management measures in consultation with the Major Hazards Unit of DOP regarding the use of the new terminal for loading, unloading and storage of dangerous goods of Classes 2.3 and 6.
C2.17	The Applicant shall ensure that the throughput of dangerous goods of each Class and the unit size shall not exceed those listed in table 6.8 of the Preliminary Hazard Analysis (Revision 7, June 2004) and is required to submit periodic reports to the Director General detailing information on the actual tonnages, numbers of TEUs and package sizes for each class of dangerous goods handled in the previous five years for all port terminals.

Condition	Conditions of Development Consent
C2.18	The applicant shall not store or handle or permit to be stored or handled, dangerous goods of Class 2.3, toxic compressed or liquefied gases above the quantities stored or handled in 1995/96 except in accordance with recommendations 1.1 and 1.2 in the Port Botany Land Use Safety Study (1996).

***N.B:** In a letter dated 4 November 2013, NSW Planning & Infrastructure had indicated to SICTL that consent conditions C2.17 and C2.18 will no longer provide meaningful information to NSWP&I because the port throughput limits specified in consent condition A1.4 were lifted by section 32 of the Ports Assets (Authorised Transactions) Act 2012 (NSW). Given the date of this letter was two days before SICTL commenced operations on 6 November 2013 SICTL has continually monitored the quantities of Dangerous Goods cargo moved through the terminal but has not logged or acted upon any exceedances consistent with the meaning of this dispensation. At the time of writing this revision SICTL has not reached agreement with the lessor, NSW Ports on the submission of a s75W application to amend these conditions.*

3.3 Environmental Protection Licence Particulars

Table 2: EPL Particulars

Parameter	Data
License number	20322
Anniversary date	14 October
Licensee	Sydney International Container Terminals Pty Ltd
Premises	150-160 Foreshore Rd Banksmeadow NSW 2019 Gate B 150- B 153 Sirius Rd, Botany NSW 2019 – new address
Scheduled activity	Chemical storage
Fee based activity	General chemical storage
Scale	0 – 5000kL
Ancillary activity	Shipping facilitates

4 Strategic Approach

4.1 Risk Identification

The risks identified by SICTL to be managed by this sub-plan are:

- Ensuring the off-site risks from DGs within the terminal are not elevated beyond those calculated in the Preliminary Hazard Analysis (revision 7, 2004);
- Damage to containers carrying DGs during handling by SICTL;
- The Management of spills or leaks of Dangerous Goods, and
- Prevention of pollution of SICTL's stormwater drainage system by leaked DGs

A detailed risk assessment and evaluation of control measures will be undertaken by SICTL prior to commencement to ensure the risks are controlled to be as low as reasonably practicable. The mitigation measures specified in this sub plan will be updated to correspond with ongoing changes to the Environmental Risk Assessment.

4.1.1 Exclusions to the Scope of this Sub-Plan

Unless noted otherwise, this sub-plan does not cover Dangerous Goods issues:

- not listed in the Development Consent;
- on board vessels;
- any actions by vessels (movements, noise, emissions etc)
- in Botany Bay beyond the quay line of the SICTL Terminal;
- outside the lease area of the SICTL Terminal;
- of future construction phases (covered in separate CEMP's), and
- beyond the reasonable control or responsibility of HPA.

Emergency Response and Spill Management is covered in HSEQ10.1.3 Emergency Response Plan – SICTL.

Incident investigations are covered in HSEQ8.1.1 Incident Reporting Notification and Investigation Procedure.

Operation of the automatic drainage shut off system is included and described in HSEQ5.1.7f Stormwater Management Sub-Plan.

4.2 Potential Environmental impacts

The handling of DG cargo poses a specific threat to the surrounding environment because of the consequences and possibility of pollution incidents. The quantities involved are also relatively large (being shipping containers) which highlights the scale of the impact. The principle of containment is the basis for most risk management methodologies related to DGs. Strict rules apply to the management of DG cargo throughout the world with the aim of preserving the containment.

In situations where containment is lost or compromised, leaks of liquid or gas are likely to affect the environment through alteration of ecosystems by acute and/ or persistent pollution. This raises the need for adequate handling methods and response protocols to be developed and implemented by SICTL.

4.3 Potential Operational Impacts

The context of potential operational impacts has been restricted to Dangerous Goods containers on the quay apron and within the terminal footprint only. Management of DG cargo or DG emergencies outside the terminal will be undertaken by others.

4.3.1 Off-site Risks arising from Dangerous Goods within the SICTL Terminal

The off-site risks arising from the handling of DGs within the SICTL terminal have been assessed in the Port Botany Expansion Preliminary Hazard Analysis authored by Qest Consulting - Revision 7, June 2004 (PHA). The detail of the PHA risk analysis and types of risk scenarios are beyond the scope of this sub-plan. The DG classes identified in the PHA as posing an elevated risk are Class 2.3 Toxic Gas and Class 6 Toxic Substances.

In the event of an incident, these two classes of DG are likely to affect the surrounding area as they may be spread by wind.

The off-site risks calculated in the PHA are based on the quantities of DGs transited through the terminal annually.

4.3.2 Damage to Containers Carrying Dangerous Goods by SICTL Operational Plant

Although shipping containers are designed to withstand the mechanical stresses involved in transport and handling, they remain vulnerable to damage from a variety of causes. Most cases of container damage arise from incorrectly packed or inadequately braced goods shifting during transport or handling (this is beyond the control of SICTL). There is the low possibility that containers carrying Dangerous Goods may be damaged by SICTL plant if they are landed abruptly, stacked incorrectly or collided. Damage to the outside of the container will not usually result in a leak or spill of product as most DG cargo is packaged cargo – meaning that the dangerous materials are contained in packages within the shipping container (such as drums or aerosol cans).

4.3.3 Spills or leaks of Dangerous Goods

In the unlikely event that the shipping container body and the inner packaging are compromised during handling, a container may leak it's contents within the SICTL lease area.

4.3.4 Site Runoff containing Pollutants

Any DG substances spilt within the SICTL terminal have the potential to contaminate stormwater runoff and therefore impact upon the ecology of Penhryn Estuary and/ or Botany Bay.

4.3.5 Dangerous Goods Leaving the Terminal by Truck or Train

It is the responsibility of any Carriers transporting Dangerous Goods to also carry the necessary documentation as described in Part 11 of the Australian Dangerous Goods Code (ADG), Marine Orders 41, the Dangerous Goods (Road and Rail Transport) Act 2008 (NSW), the MSDS and any other information deemed compulsory by the applicable regulating bodies. The truck driver or train driver is required to carry the necessary documentation in the cabin of the truck or locomotive at all times during the journey.

4.3.6 On-site Diesel Storage and Refuelling Area

The SICTL Terminal will feature an on-site diesel storage facility for the refuelling of plant and vehicles. The potential operational impacts are fuel spills from refuelling vehicles, spill during replenishment and a spill from failure of the tank itself.

5 Implementation of This Sub-Plan

The implementation of this sub-plan will follow a closed-loop approach developed to suit the nature of the Development Consent (listed in section 3.2) that are related to the management of Dangerous Goods cargo. This method is an extension of the process shown in figure 1 and has the primary objective of achieving the conditions outlined in the Development Consent. The closed-loop is explained diagrammatically below:

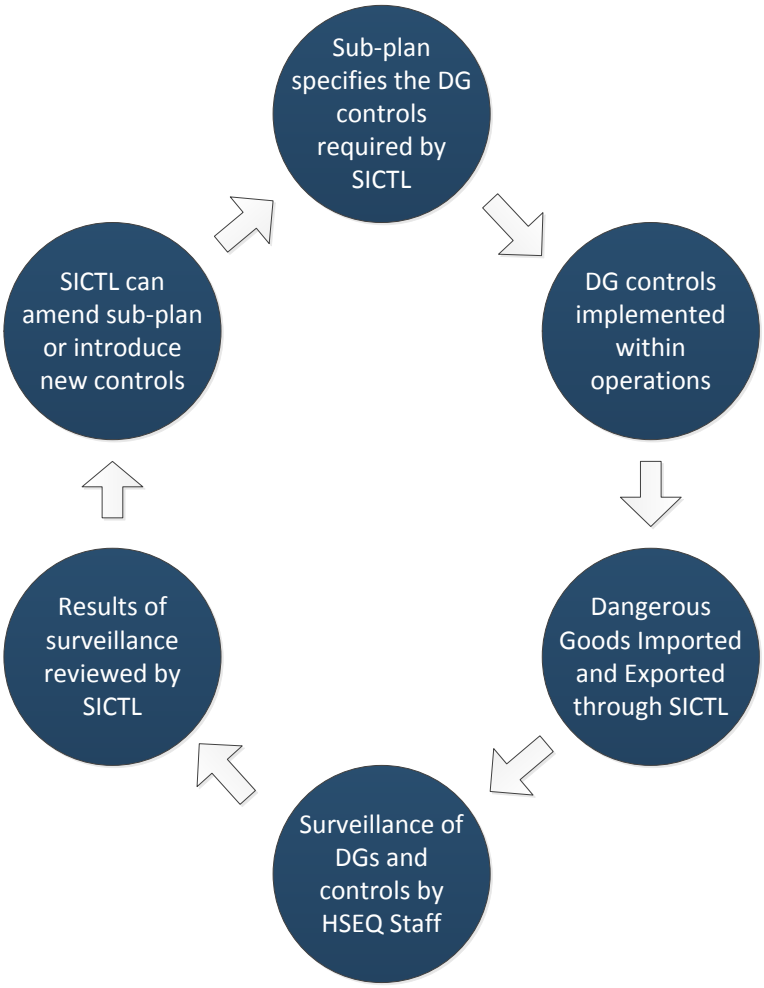

Figure 2 Closed-loop operations of this sub-plan.

The range of DG controls specified in section 5.1 of this sub-plan will be applied to the operations of the terminal by SICTL. Surveillance of DG handling will be undertaken by the HSEQ Staff as a means of confirming the effectiveness of the DG measures and to pre-empt problems. The results of the surveillance will be reviewed by the HSEQ department where the operational activities will also be assessed. Changes to work practices can be introduced or additional controls implemented by SICTL with the aim of complying with the conditions in the Development Consent.

This sub plan and the controls implemented under it aim to work in concert with chapter 11 of the HSEQ5.1.1 Safety Critical Operations Procedures Manual which provides specific guidance on the safety aspects of handling Dangerous Goods at the SICTL Terminal.

5.1 Operational Controls

5.1.1 General Controls on Dangerous Goods within the Terminal

Within the terminal, Dangerous Goods cargoes are subject to special work practices that govern their movement, separation and handling, namely:

- Sydney Ports Corporation has published the Dangerous Goods Guidelines applicable to the SICTL terminal through which the various classes are categorised into **Red Line** and **Green Line** cargoes. These divisions specify permissible time limits for the cargo to remain within the terminal. This system is consistent with the aims of the IMDG, the IMO Recommendations and AS 3846, the residence time limits stipulated in the Sydney Ports Corporation DG Guidelines are programmed into the SICTL Automated Terminal Operating System so that cargo would be moved in accordance with these time limits;
- The Dangerous Goods Guidelines also mandate separation and segregation rules for different classes of DGs as they may not be compatible, these requirements are also programmed into the SICTL Automated Terminal Operating System to guide the placement of Dangerous Goods within the Automated Stacking Area.

5.1.2 Controls on Off-site Risks arising from Dangerous Goods within the SICTL Terminal

The off-site risks arising from Dangerous Goods handled within the terminal were assessed in revision 7 of the Preliminary Hazard Analysis (PHA) authored by Qest Consulting in 2004 (Appendix W of the EIS). The PHA determined that the off-site risks associated with the operation of the Port Botany Expansion were primarily dependent upon the actual quantities of Dangerous Goods present.

The quantities of Dangerous Goods transiting through the terminal were predicted by extrapolating the proportion of DG trade occurring in 2001 – 2003 to when Port Botany will be operating at capacity in 2025. These quantities of annual throughput are presented in table 6.8 of the PHA, reproduced below and have been designated as limitations of quantities in the Development Consent. Note: NEQ means Net Explosive Quantity, items denoted as 'No Restriction' were screened out of the PHA risk analysis on the basis that there would be no off site consequences, limits do not apply in these cases:

Table 3: Permissible annual throughput of Class 1 Dangerous Goods

Representative Material	DG Class	Number of movements		
		Unit size NEQ <1 tonne	Unit size NEQ 2 tonnes	Unit size NEQ 12 tonnes
TNT		No Restriction	83	63

Table 3: Permissible annual throughput of Class 2-9 Dangerous Goods

Representative Material	DG Class	Unit size and number of movements		
		Unit size ≤ 0.5 tonne	Unit size 0.5 tonne	Unit size 20 tonnes
Propane		No Restriction		111
		No Restriction		
Chlorine **Sulphur dioxide** **Ammonia** **Methyl bromide**		No Restriction No Restriction No Restriction 40	0 12 105 0	0 0 0 0
Acrylonitrile		No Restriction		
As per class 3		No Restriction		
		No Restriction		
As per class 3		No Restriction		
Ammonium nitrate		No Restriction		3056

Representative Material	DG Class	Unit size and number of movements		
		Unit size ≤ 0.5 tonne	Unit size 0.5 tonne	Unit size 20 tonnes
		No Restriction		
		No Restriction		
		No Restriction		
Hydrogen fluoride		No Restriction	11	23
		No Restriction		

SICTL is obliged to limit the annual DG throughput to quantities listed in the above tables. SICTL would achieve this by programming these limits into the SICTL Automated Terminal Operating System (TOS) as thresholds. The TOS is the control mechanism governing all container movements within the SICTL terminal and has the ability to recognise classes and UN numbers of Dangerous Goods in containers as manifested by the Shipping Lines (any information not manifested by the shipping line or the sender of the goods would not be known to SICTL). The TOS can when required produce stack reports as to current locations of DGs; the regulator has access to these reports through the terminal operating system. SICTL management can use these stack reports to regulate the arrival of DG containers so that the annual threshold limits in tables 2 and 3 are not exceeded.

The PHA also graphed the measured decline in the trade of Dangerous Goods of class 2.3 over the period 1994 - 2003. SICTL is obliged to limit the throughput to the quantities handled in 1995/ 1996.

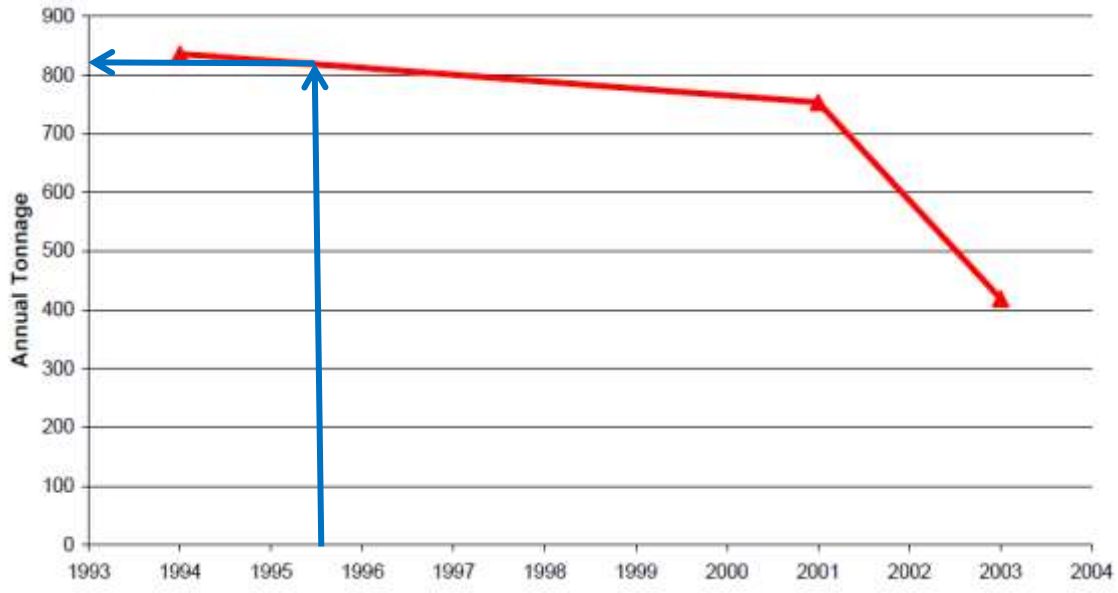

Figure 3 Red line showing Dangerous Goods class 2.3 trade data assumed in the PHA (Preliminary Hazard Analysis figure 10.3) and blue arrows showing the derivation of 1995/ 1996 trade quantity.

From the above graph, **825 tonnes** (average value) of class 2.3 Dangerous Goods were transited through Port Botany in the 1995/ 1996 period. SICTL can limit its yearly handling of this type of cargo through its Terminal Operating System. This will ensure that the quantities of class 2.3 cargo will be managed so as to not elevate the off-site risk.

Any application to change the limits of DGs specified in table 6.8 of the PHA (tables 2 and 3 within this document) will be managed as a modification to the planning approval by SICTL as a separate process. This sub-plan will be amended to reflect any revised limits conditioned by the DP&I.

5.1.3 Controls on Workplace Dangerous Goods

SICTL's maintenance department is the primary custodian of the workplace dangerous goods used during the servicing of plant and equipment. The SICTL purchasing personnel are to obtain the relevant Material Safety Data Sheets (MSDS) for workplace dangerous goods purchased through that department. All MSDS will be entered into the MSDS register kept by Maintenance and will be reviewed monthly by HSEQ. MSDSs older than 5 years old will be replaced.

When not in use, all workplace dangerous goods will be stored in a bunded container capable of holding 120% of the volume of the largest container stored therein.

5.1.4 Controls on Damage to Containers Carrying Dangerous Goods by SICTL Operational Plant

DG containers are not handled by forklift because of the risk of the forklift tynes potentially creating a leak by piercing the sides and even the inner packaging of the container, DG containers are only handled by top-lift systems called spreaders fitted to all plant and cranes.

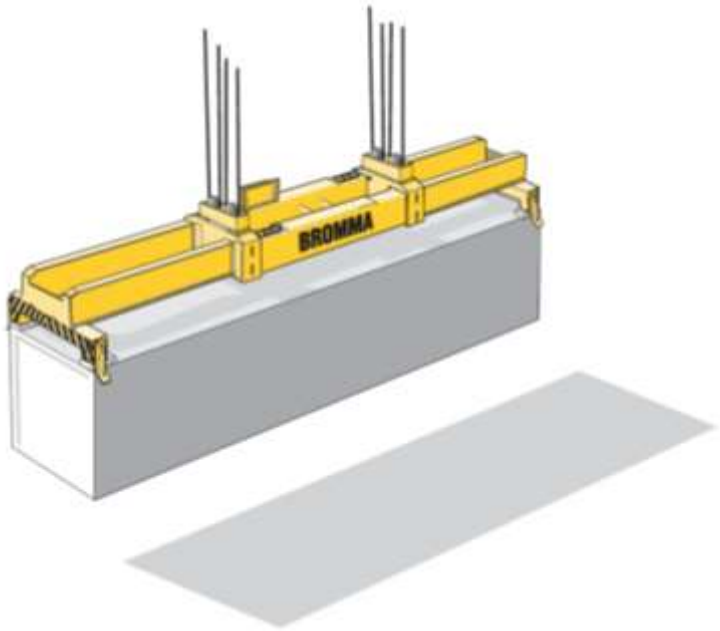

Figure 4 Diagram showing how a spreader is used to lift a container (Bromma Group Standard Manual).

Within the terminal, 'tanktainers' carrying DGs are not stacked below other containers because of the risk of misalignment of the stacked container potentially creating a leak by damaging the frame or the tank. An example of a tanktainer is shown below.

Figure 5 Example of a 'tanktainer' for the transport of liquid cargo.

The majority of container handling within the terminal is performed by the Automated Stacking Cranes. These cranes are guided by laser systems and are programmed to soft-land containers to avoid noise and damage. Manual plant such as Quay Cranes and Shuttle Carriers are fitted with governors that regulate the speed of a descending container, thus lessening the risk of damage from a hard landing. All spreader units (the implement that actually engages the top of a container) are designed with safety mechanisms that do not permit the four twistlocks to release during hoisting.

All SICTL plant operators are trained to handle Dangerous Goods with care and in a manner where the risk of damage is as low as reasonably practicable. All leaks detected or suspected to originate from Dangerous Goods containers (or containers with suspected damage) will be investigated by the Senior Manager, Human Resources and Compliance to pre-empt any spills or leaks. Such investigations may require the involvement of the Consignee / Consignor, Shipping Agent, Sydney Ports Corporation or other third parties. **In all cases, Sydney Ports Corporation will be notified of any damage to or deterioration of containers carrying Dangerous Goods as soon as practicable** in accordance with Clause 265(a)(ii) under Part 11 of the Dangerous Goods (General) Regulation 1999 (NSW – repealed) which continues to remain in force under the Work Health and Safety Regulation 2011 (NSW) Schedule 18B clause 63.

5.1.5 Management of Liquid Dangerous Goods Spills and Leaking Containers

Given the relatively infrequent occurrence of leaks from containers and the variety of spill or leak scenarios that may occur, this sub-plan does not aim to provide a specific solution that will satisfy every 'What if?' scenario. This sub-plan aims to explain the management methods, tools, reasons and decisions that can be applied by SICTL to manage these incidents in a manner that is commercially and environmentally responsible, complies with the Development Consent and does not increase the off-site risk as assessed in the PHA (2004).

Consequently, the management of containers carrying Dangerous Goods leaking on board ships (berthed or not) is outside the scope of this sub-plan as there are a multitude of factors and decisions that are not under the control or responsibility of SICTL. These incidents are managed by the Shipping Line through the ship's own Vessel Management Plan and may require the involvement of the terminal (SICTL), Sydney Ports Corporation, HAZMAT and/ or the Consignee. SICTL will identify how each occurrence is likely to affect the terminal and plan accordingly. This information is in the HSEQ10.1.3 Emergency Response Plan – SICTL.

This sub plan deals with leaks that occur by accidental means, or are discovered whilst the container is anywhere within the SICTL terminal footprint and under the control of SICTL. Deliberate acts of crime or terrorism are not covered by this sub plan. Broadly, the SICTL management process for spills or leaks is broken down into six steps:

Step 1 – DETECT:

- SICTL personnel to be vigilant of possible leaks of DG materials (especially quayside personnel working under Quay Crane removing twistlocks);
- Plant operators to communicate any containers with suspected leaks or suspected damage to SICTL management for checking;
- Any spills or pools of unidentified chemicals discovered in the terminal to raise the suspicion of SICTL personnel so that any leaks can be found and managed;

Step 2 – IDENTIFY:

- SICTL personnel to identify the DG class and the UN number of the leaking material as this determines the management decisions;

Step 3 – NOTIFY:

- SICTL personnel to communicate the incident to SICTL management who will control the incident;

Step 4 - WARN & ISOLATE:

- SICTL personnel to warn others and through communication, keep the container isolated in the event that an evacuation is necessary;

Step 5 – ASSESS:

- The Shift Manager, Operations Manager and/ or Senior Manager, Human Resources and Compliance will have various resources (safety data sheets, container paperwork) available to them to allow the rapid identification of the contents of the container and the selection of an appropriate response strategy (Hazchem guide) given the quantity of the leak and the class;

Step 6 – MANAGE:

- Depending on the class and quantity, various actions and notifications can then be executed (see flowchart) in accordance with HSEQ10.1.3 Emergency Response Plan – SICTL.

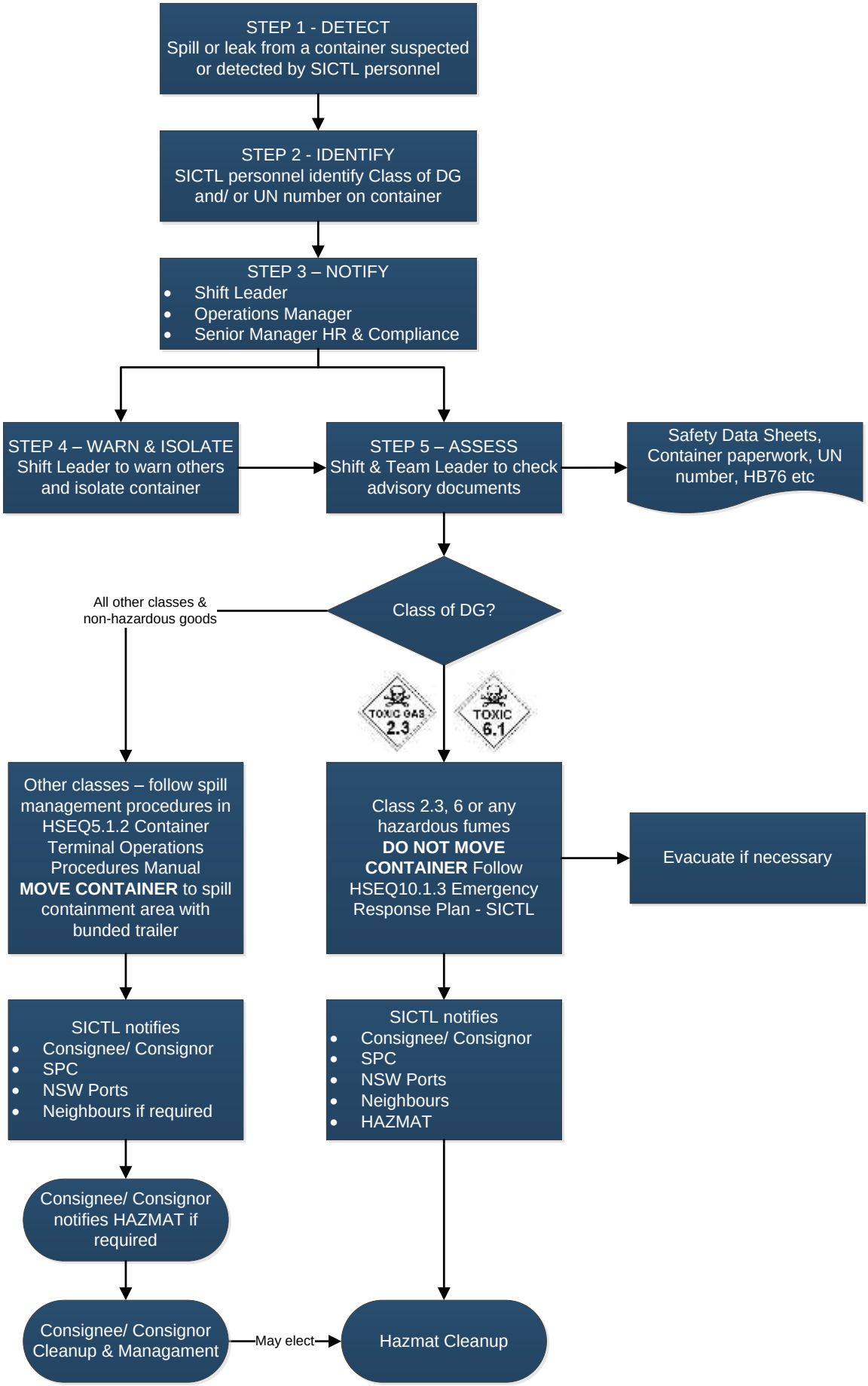

Figure 6 The management of leaking Dangerous Goods cargoes within the SICTL terminal.

In the case of a container leaking liquid, SICTL may decide to manage the risk by moving the container from the quay apron to the spill containment area (shown below). This is a purpose-built area capable of containing the volume of a leaking container in a collection trench. The location of the spill containment area is shown in the below illustration. In cases where the wind direction at the time of the emergency could cause off-site impacts by gases originating from the designated Spill Containment Area, the leaking container will stay on board the bunged trailer (figure 9) and be moved to an area of the terminal where off-site effects would be mitigated.

Figure 7 The location of the spill containment area.

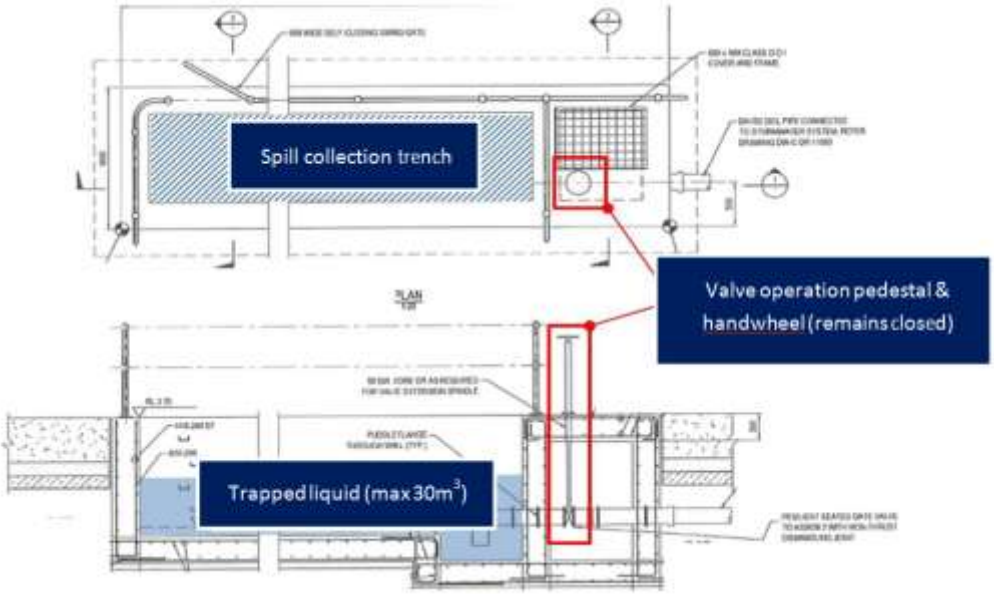

Figure 8 Details of the spill collection trench.

SICTL has a purpose built bunded trailer (increasing to two trailers in the future) that will be kept on standby within the terminal and may be used for the movement of leaking DG containers within the terminal (shown below). This bunded trailer will be towed by yard truck and is large enough to carry one 40' or one 45' container or up to two 20' containers at once. In the event that more than one container is leaking an incompatible class of DG at the same time SICTL may choose to send one class of DGs in the spill containment area and have the other class remain on the bunded trailer, thus maintaining separation.

Figure 9 The bunded trailer for leaking containers upto 45' long.

SICTL will also invest in spill control measures to bund, absorb, stabilise and remove DG/ non-hazardous liquids spilt within the terminal. Some examples typical of the spill response equipment is shown below. The bag-type and bin-type spill control kits feature absorbent materials and Personal Protective Equipment for the cleanup of small spills. They are portable and can be kept in vehicles. Larger bin-type spill kits may be deployed within the maintenance building and in areas where plant usually operates as they are likely to be static. An ongoing monitoring and replenishment program is implemented so the spill kits have the correct type an quantity of contents, an excerpt of the spill kit register is shown in figure 11.

Figure 10 A 50 litre bag-type spill kit and a 240 litre bin-type spill kit

In the event that Dangerous Goods are spilled on the ballast in the rail siding area conventional spill kit absorbent granules or powders may not be effective as the spilled liquid would have percolated through the ballast. In these situations, SICTL may use an oil dispersant liquid such as 'OilGone' (or some other product recommended by the Consignee) to clean up the spill.

Spill Kit Number	Manufacturer & Supplier	Size	Class of Spill Kit	Location	Replenished	Due for Service
1	Global Spill Control (through DRS)	240 Litre Blue Wheelie Bin	General Purpose	SICTL Temporary Compound Generator Diesel Tank	New as at 11 Oct 2013	
2	Global Spill Control (through DRS)	240 Litre Blue Wheelie Bin	General Purpose	Diesel Refuelling Area	New as at 11 Oct 2013 Replenished by SICTL on 27 Nov 2013 Replenished by SICTL on 22 Jan 2014 Replenished by SICTL on 5 Feb 2014	
3	Global Spill Control (through DRS)	240 Litre Blue Wheelie Bin	General Purpose	Maintenance Building - Plant Workshop	New as at 11 Oct 2013 Replenished by SICTL on 21 Nov 2013 Replenished by SICTL on 5 Feb 2014	
4	Global Spill Control (through DRS)	240 Litre Blue Wheelie Bin	General Purpose	ASC3 W5X	New as at 11 Oct 2013	Due for Service
5	Global Spill Control (through DRS)	240 Litre Blue Wheelie Bin	General Purpose	Drivers Amenity Building	New as at 11 Oct 2013 Replenished by SICTL on 5 Feb 2014	
6	Global Spill Control (through DRS)	240 Litre Blue Wheelie Bin	General Purpose	Reefer power pack at Exchange Pad	New as at 11 Oct 2013	Due for Service

Figure 11 Excerpt of the SICTL spill kit register showing how use and replenishment is tracked.

In an emergency SICTL will notify the consignee or consignor of the Dangerous Goods and interface with their technical representatives. The consignee/ consignor will arrange for cleanup and recovery of the spilled material by their service provider in consultation with SICTL or at their discretion, may call Hazmat to manage the leaking container. These actions may involve opening the container to stop the leak. **In all cases, Sydney Ports Corporation and the Australian Maritime Safety Authority (AMSA) will be notified of leaking containers as soon as practicable** in accordance with Clause 265(a)(i) under Part 11 of the Dangerous Goods (General) Regulation 1999 (NSW – repealed) which continues to remain in force under the Work Health and Safety Regulation 2011 (NSW) Schedule 18B clause 63.

5.1.6 Management of Non-Liquid Dangerous Goods Leaks (Especially of Class 2.3 Toxic Gas and Class 6 Toxic Substances)

Dangerous Goods that emit vapours or are in a gaseous form pose a unique risk to SICTL personnel in addition to off-site receivers in the surrounding area. These risks are due to the generally dispersive nature of gases and the difficulties in detecting these leaks without being exposed to the risk of injury or death because many Dangerous Goods gases are:

- Odourless;
- Heavier than air;
- Have an anaesthetic effect when inhaled or
- Are toxic or corrosive to humans.

Figure 12 Dangerous Goods classes having an elevated risk to workers upon leakage of gas or fumes.

In the event a gas or vapour leak from any cargo is detected or suspected by SICTL then the cargo should **not be moved or approached**. The process in figure 6 should be followed and the incident should be managed under the HSEQ10.1.3 Emergency Response Plan – SICTL.

SICTL personnel can isolate the leaking container by communicating to all personnel, vehicles and plant operators to remain away from the leaking container. Quay cranes can also be moved away from the leaking container if the leak occurs on the Quay apron. If warranted in consultation with the regular, evacuation can be organised in accordance with HSEQ10.1.3 Emergency Response Plan – SICTL.

SICTL will notify the consignee/ consignor and also notify neighbouring stevedores if any exclusion zones affect their operations. At its own discretion or upon the advice of the consignee/ consignor, SICTL may call Fire Brigade Hazmat who is properly equipped to deal with gaseous/vaporous Dangerous Goods.

5.1.7 Control of Polluted Runoff/DG Spills from Within Odd-numbered ASC Blocks (The WaterUp Liquid Detention Units)

Upon commencement, the SICTL terminal will feature three Automated Stacking Crane (ASC) areas called 'blocks' where most of the containerised cargo moving between ship and shore will be placed whilst awaiting transit. Additional ASC blocks will be progressively built through the various phases of construction ultimately increasing to thirteen. The ASC blocks are the dominant area where 'Green Line' Dangerous Goods may be placed while on their journey from ship to Consignee and are used as follows:

- **Odd-numbered** ASC blocks will handle solid, liquid and gaseous DG cargo, and
- **Even numbered** ASC blocks will handle **solid and gaseous DG cargo only**, not liquid DGs

Other areas for DG containers are discussed in section 5.1.8 below. Each ASC block contains nine (9) 'lanes' of containers across its width and up to 68 'stacks' of containers along its length. Liquid DG cargo is destined for lanes one and nine in each **odd-numbered** ASC block in order to simplify the detection of any leaking containers (see below). Other types of cargo can still be placed in lanes one and nine including compatible DGs, non-DGs and empties whilst still maintaining priority for liquids.

Figure 13 Details of an ASC block as viewed from the water side.

A stormwater drainage system has been installed under each Automated Stacking block leading to a heavy-metals separator unit. To control the risk of spilled DG pollutants entering the drainage system from **odd-numbered** ASC blocks and being discharged into the surrounding waters, these particular ASC blocks have an additional automatic shut off system installed called the WaterUp Liquid Detention Unit or LDU. The LDU works by using a suite of sensors to constantly monitor and detect pollutants within the stormwater flow and a microprocessor controlling a valve within the drainage line. If the criteria for pollutants are met the unit closes the valve within the drainage line, trapping the polluted water within. Trapped pollutants can then be pumped out and disposed by a contractor. Further details on the WaterUp LDU system are in section 5.1.4 of the HSEQ5.1.7f Stormwater Management Sub-Plan.

5.1.8 Control of Polluted Runoff/DG Spills from Within the ASC Blocks and the Rail Sidings (The PolluPlug System)

Additional to the WaterUp system described above, all drainage outlets facing the Penrhyn Estuary (draining the ASC area and the rail siding) are also fitted with a manually controlled stop valve in the form of an inflatable bladder within each drainage pipe called '**PolluPlug**' shown in the figures below. These bladders are situated downstream of each separator unit and provide a further safeguard against pollutants from spills or firewater entering Penrhyn Estuary as they can be manually closed (inflated) by SICTL personnel in the event of a chemical spill or fire within the ASCs or rail sidings. SICTL would arrange a contractor to pump out the trapped pollutants and dispose accordingly.

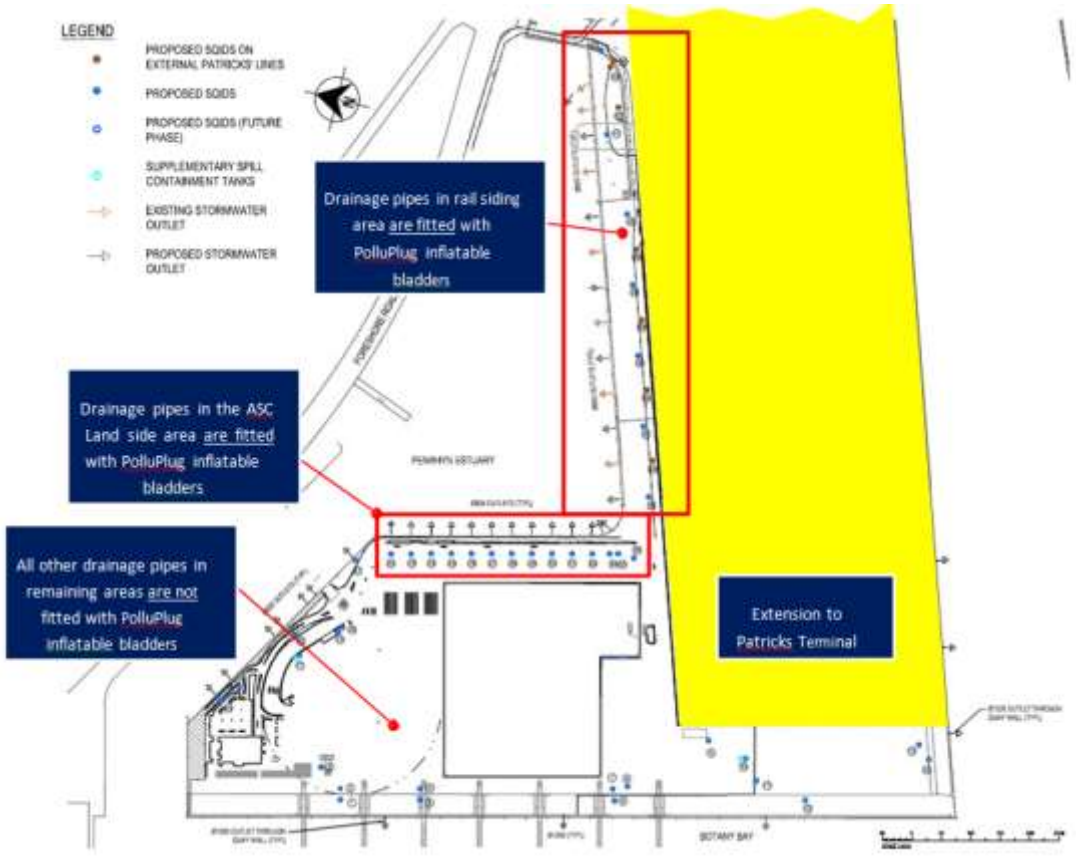

Figure 14 Illustration showing the locations of separator units, drainage outlets and outlets fitted with the 'PolluPlug' inflatable bladders

Figure 15 Looking downstream at a 'PolluPlug' inflatable bladder within the pipe draining ASC bock 1. The photo was taken from within an access chamber

5.1.9 Control of Polluted Runoff/DG Spills from DG containers not placed in ASC Blocks

The ASC Blocks are the default priority destination for (green line) DG cargo handled within SICTL however there may be circumstances where SICTL will need to adopt a flexible approach to yard planning in order to meet operational needs. This would be achieved by temporarily transiting DG cargo in designated 'overflow' areas shown below. This strategy is necessary to alleviate congestion and maintain constant, efficient operations and avoid delays. Situations would include but not be limited to:

- If the DG locations within the operational ASC Blocks are fully occupied;
- If the Automated Stacking Cranes are operating at capacity or the landside exchanges are congested, DG containers may be 'arrived' in the Truck Marshalling Area or Exchange Pad and moved by plant into the ASC blocks through the water side of the ASCs (locations TB1-TB5 and I1-I11);
- If the Automated Stacking Cranes are operating at capacity and the waterside exchanges are congested, DG containers may be diverted to 'overflow' areas (shown below);
- If the Automated Stacking Cranes have suffered a malfunction;
- If the DG Cargo arrives in break-bulk or if the DG cargo is in tanks that are loaded onto 'Flat-Rack' containers or is otherwise considered out-of-gauge (location TB1-TB5);
- If the DG cargo is in a 'frameless' type of Tanktainer (locations SA1, M80-M94);
- If the DG cargo is being moved to or from trains (locations D1-D31 and R1-R10);
- If the DG container needs to be set aside for any reason (including damage) or inspected (locations SA1, M80-M94),

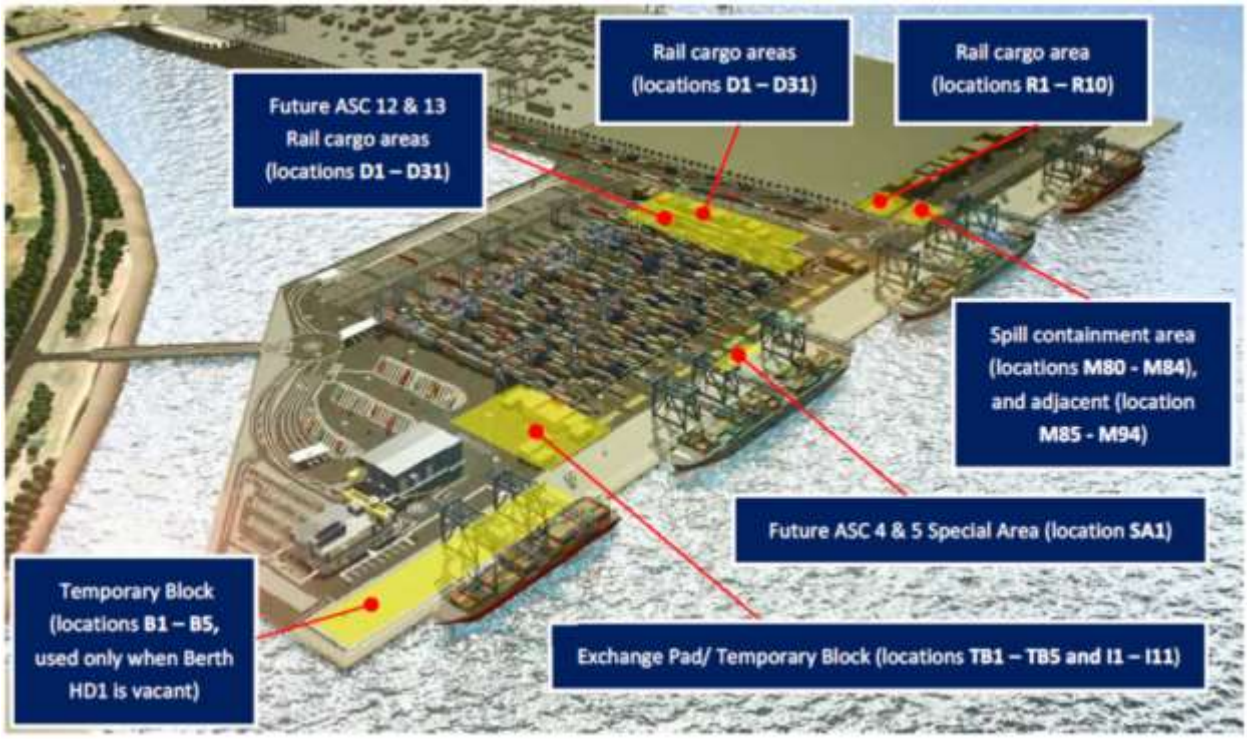

Figure 16 Locations of non-ASC locations for containers carrying solid DGs.

5.1.10 Controls on Dangerous Goods Arriving at the Terminal by Vessel

SICTL has implemented audit processes in order to verify:

- The accuracy of the DG manifest information lodged with Sydney Ports Corporation by the Shipping Agent. This information is lodged before DGs arrive by ship, and
- The placarding of containers arriving by ship matches those described as 'Hazardous' on the ships' manifest after berthing but before unloading.

These processes are explained in the flowcharts on the following pages.

SICTL DANGEROUS GOODS IN-TRANSIT CHECKING PROCESS

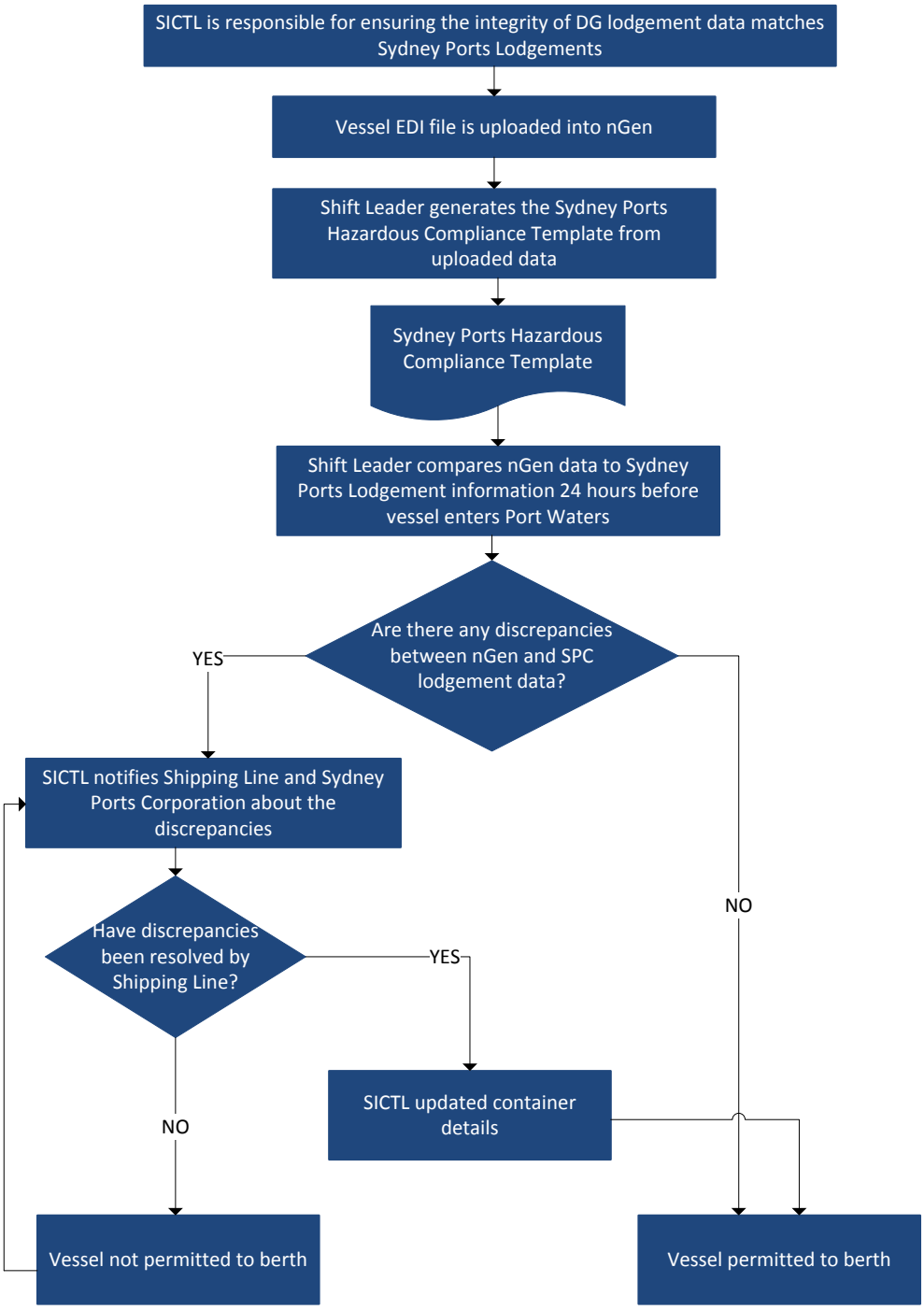

Figure 17 Process used by SICTL to verify inbound DG's lodgement information before vessel can berth

SICTL IMPORT OF DANGEROUS GOODS CONTAINER AUDIT PROCESS FLOWCHART

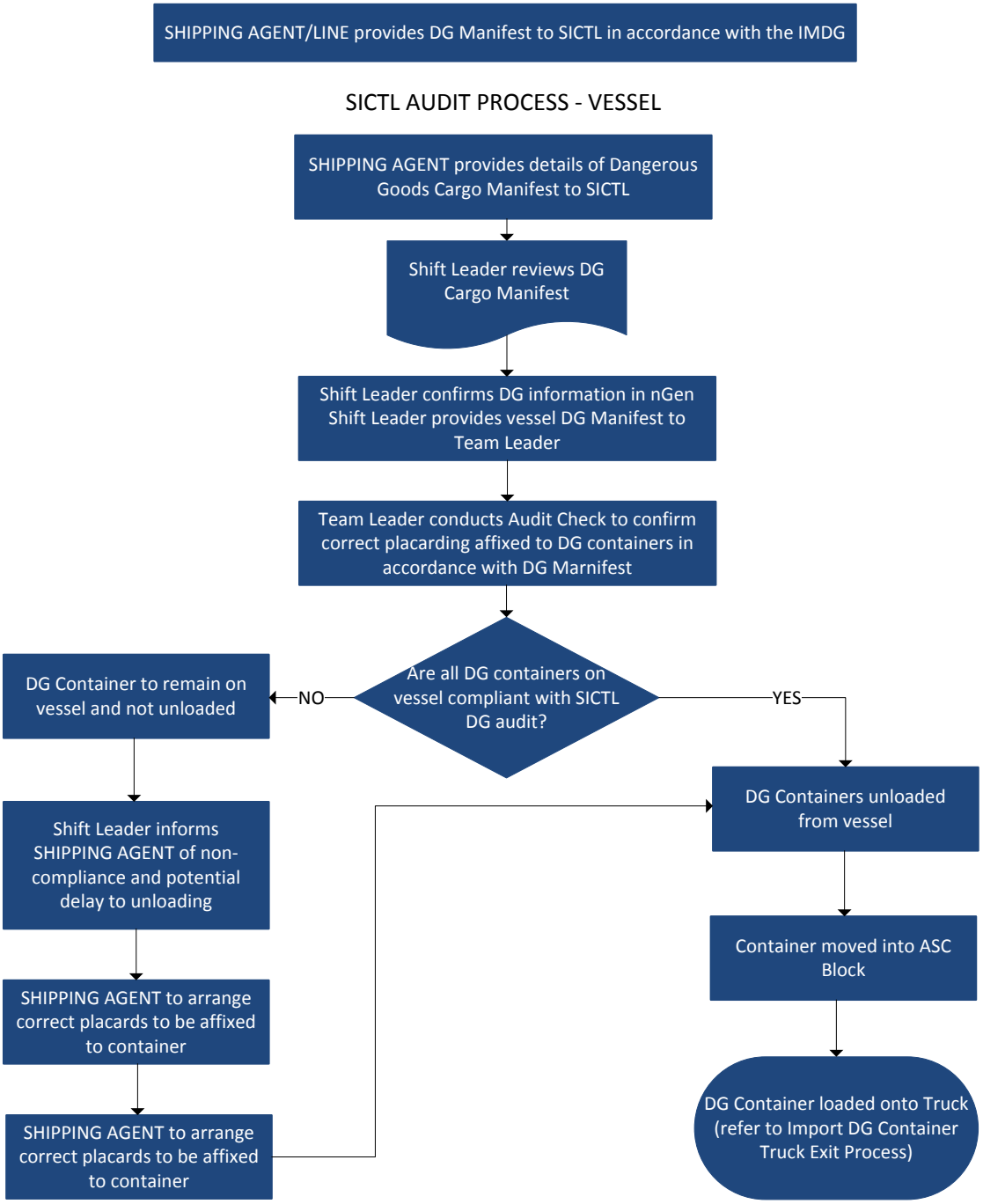

Figure 18 Audit process used by SICTL to check DG containers on board vessels before unloading.

5.1.11 Controls on Dangerous Goods Arriving at the Terminal by Train

SICTL has implemented an audit process in order to verify the placarding of containers that arrive by rail matches those described as 'Hazardous' on the train's manifest. This process is explained in the flowchart below.

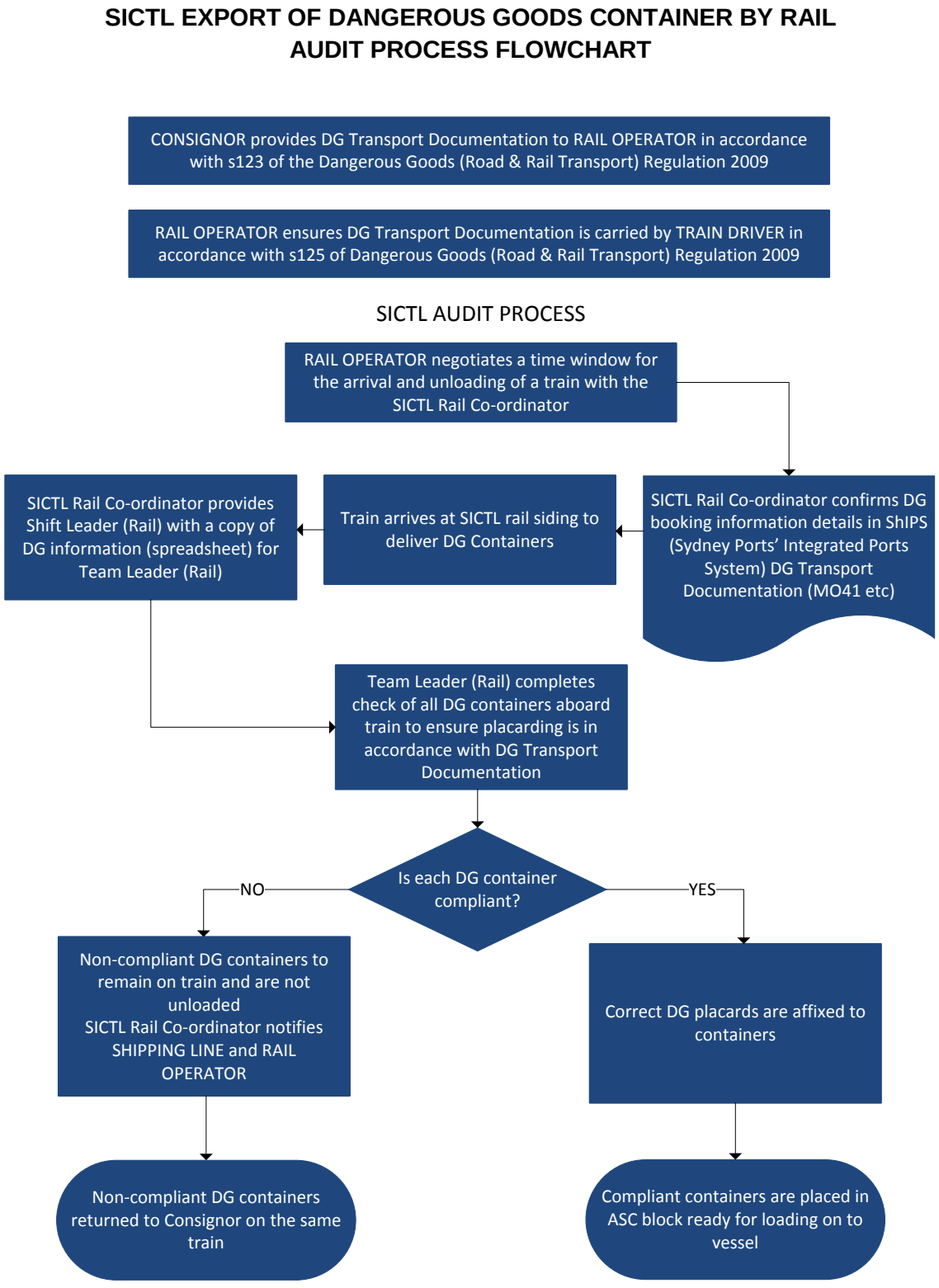

Figure 19 Audit process used by SICTL to check DG containers on board vessels before unloading.

5.1.12 Controls on Dangerous Goods Leaving the Terminal by Truck

SICTL has a duty of care to check that the truck driver's credentials meet the minimum requirements required by the ADG and the relevant legislation when inducting a new driver. New drivers must declare their DG licence and Maritime Security Identification Card information to SICTL during the induction process.

It is the Carriers responsibility to declare the correct information to SICTL and to ensure their drivers are correctly qualified to transport dangerous goods to or from the terminal. Each Carrier is asked to declare this when booking a truck timeslot by completing the relevant sections of the HSEQ5.1.2.1 Import DG Truck Checklist and emailing it to the SICTL Landside Co-ordinator. Before leaving the terminal, an out-gate audit will be carried out to ensure that the information declared on the HSEQ5.1.2.1 Import DG Truck Checklist is valid including a check that the correct placards are on the container(s) being transported and the correct trailers are being used. It is the Carrier's responsibility to ensure the driver complies with

- Part 11 of the ADG,
- segregation requirements (also in the ADG)
- the Dangerous Goods (Road and Rail transport) Act 2008 and Regulation 2009,
- Marine Orders 41 and
- any other law or regulation requiring documentation to be carried.

Figure 20 A 'tanktainer'/ISO tank carrying a Class 8 Dangerous Good loaded aboard a 'stepped' (low) trailer that is prescribed for this type of cargo.

The checking processes for import and export containers carried by truck to or from the SICTL terminal are explained in the flowcharts on the following pages.

SICTL IMPORT OF DANGEROUS GOODS CONTAINER AUDIT PROCESS FLOWCHART

CONSIGNOR provides DG Transport Documentation to CARRIER in accordance with s122(1) & (2) of the Dangerous Goods (Road & Rail Transport) Regulation 2009

CARRIER ensures DG Transport Documentation is carried by DRIVER in accordance with s124 of Dangerous Goods (Road & Rail Transport) Regulation 2009

SICTL AUDIT PROCESS - TRUCK

CARRIER requests DG PICKUP slot via email to SICTL Landside Coordinator

Landside Coordinator sends DG Import Form to CARRIER.
CARRIER completes DG Import Form and returns completed form to SICTL Landside Coordinator.
Landside Coordinator books timeslot in TAS and notifies CARRIER of booking details.
Landside Coordinator provides Shift Leader (Yard) copies of DG info from CARRIER:
- Copy of DG Import Form and Transport Documentation (eg MO41);
- Driver MSIC number;
- DG Permit number;
- Confirmation of compliance with ADG requirements.

Shift Leader (Yard) provides copy of DG information DG Import Booking Forms and Daily Booking Schedule to Team Leader (Yard)

TRUCK arrives at entry gate at allocated time to pickup DG Container

TRUCK parks in Truck Parking Area awaiting Call Up
DG Check Conducted

Truck Inspected in Truck Parking Area
Team Leader (Yard) checks truck placarding, stowage/restraint and trailer suitability for the type of DG and container being transported.

NOTE: Trailer Height Requirements
This requirement will be met if the height from the ground to the bottom of the tanktainer corner castings measured when fully laden is no greater than 1100mm,

Team Leader (Yard) confirms DRIVER DG Permit and licence nuimbers

NOTE:
A dangerous goods driver license is only required for transport of dangerous goods in the following areas:
(a) in a receptacle with a capacity of more than 500L
(b) if there is more than 500kb in a single receptacle
(c) in the case of intermediate bulk containers (IBCs), where the total capacity of all IBCs is more than 3,000L or where any IBC is filled or emptied while on a vehicle.

to be continued.....

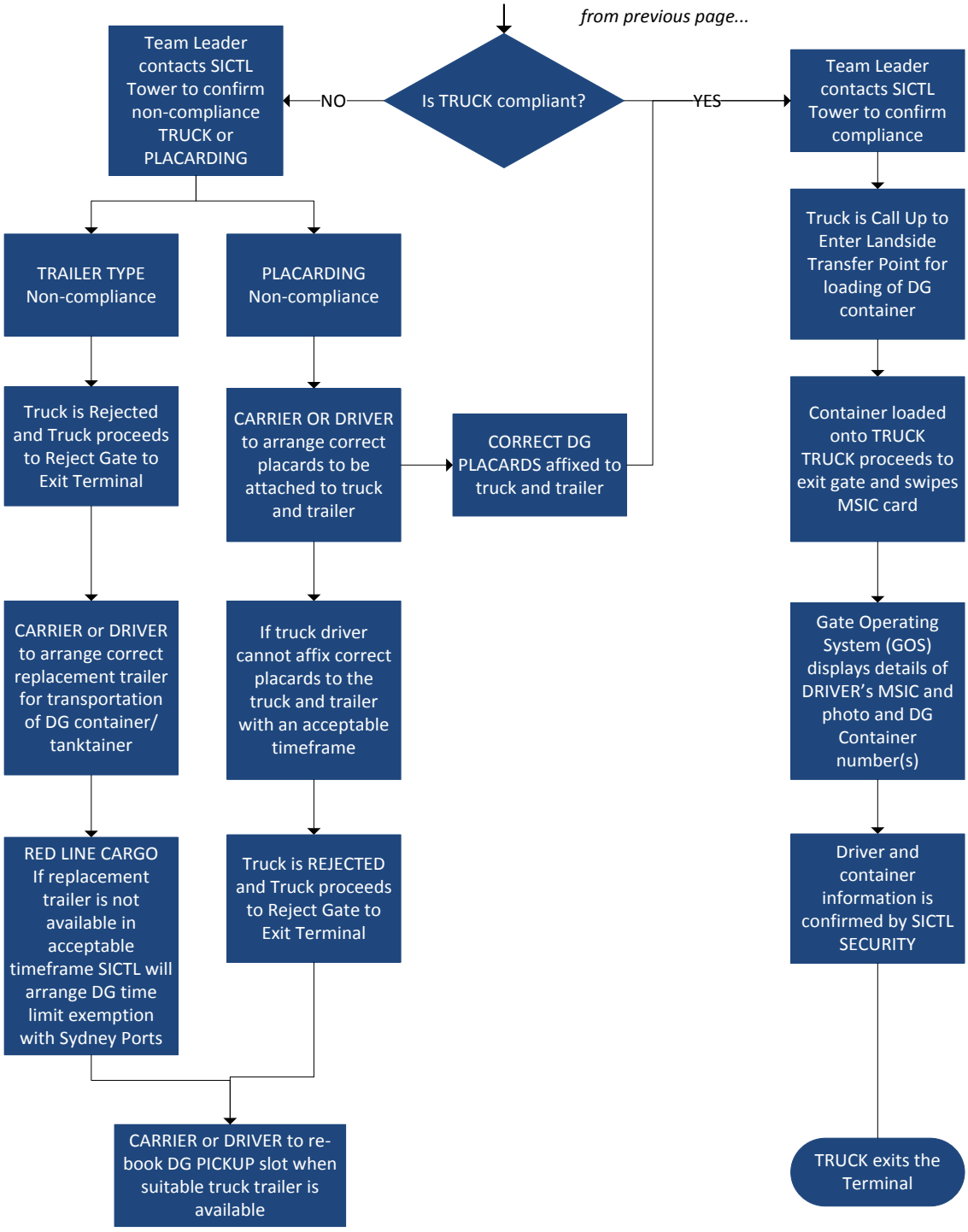

Figure 21 Audit process used by SICTL to check DG containers before they exit the SICTL terminal by truck

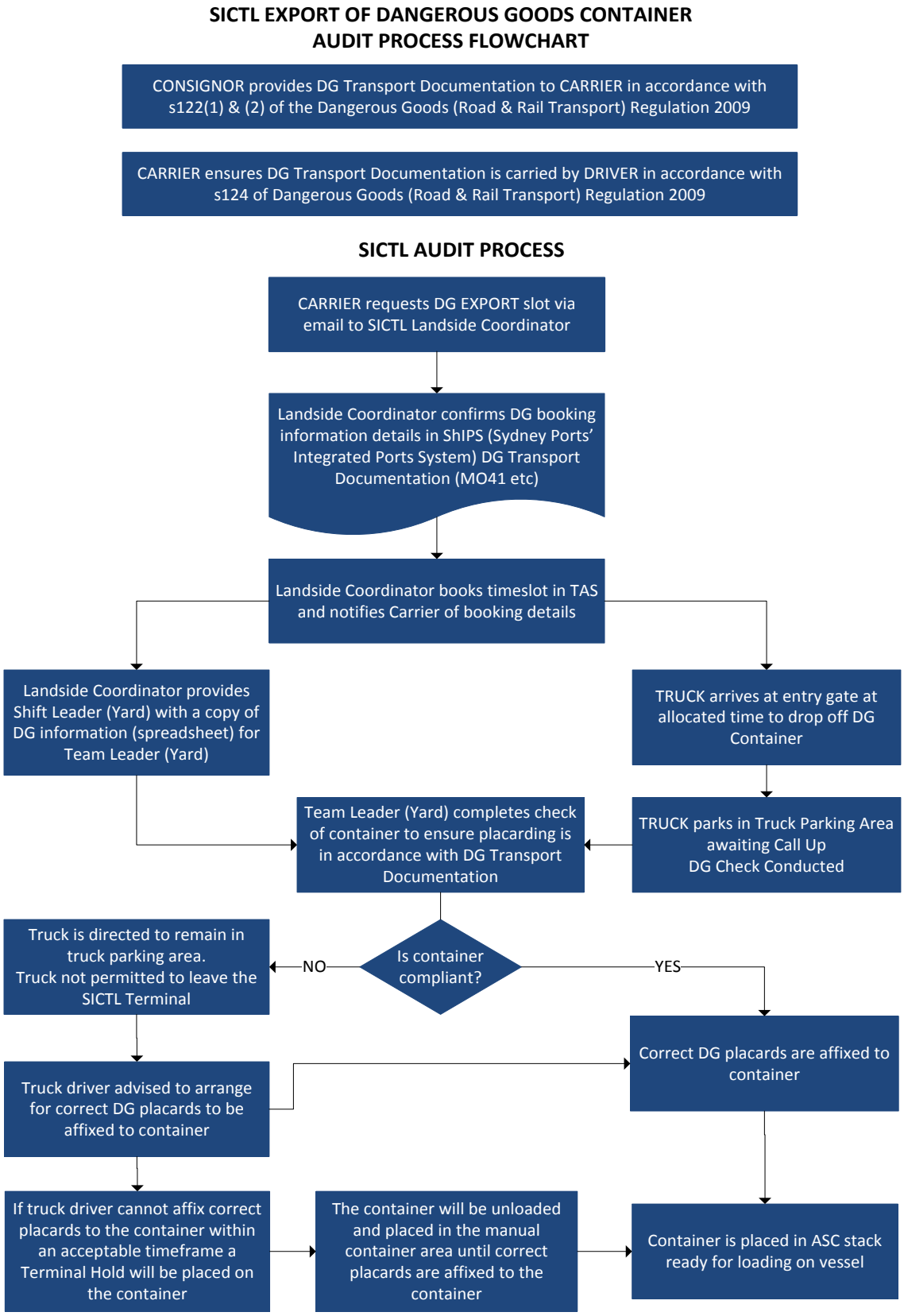

Figure 22 Audit process used by SICTL to check DG containers before they enter the SICTL terminal by truck

5.1.13 Controls on the On-site Diesel Storage and Refuelling Area

Bunding for the on-site diesel storage and refuelling area is achieved through two methods:

- Bunding of the actual storage tank to contain spills or leaks in the event of tank failure, and
- Bunding of the refuelling area to contain spills from refuelling vehicles and plant.

The system chosen for the SICTL terminal is a proprietary system incorporating integrated fuel storage and delivery manufactured by TransTank. This unit is a double-walled, self-bunded tank with capacity of up to 67,120L (safe fill volume), shown below.

Figure 23 An example of the Transtank self-bunded diesel storage unit.

The refuelling areas adjacent to the diesel tank will also be bunded to contain any spills from plant or light vehicles during refuelling (for instance in the case of over-fills or leaking bowser guns/ hoses). The light vehicle refuelling side will feature prefabricated trays with grates fitted on top that are cast into the concrete slab to be flush with the finished surface level as shown below.

Figure 24 The tray and grate bund system for refuelling areas.

The heavy plant refuelling side will feature a 'speed-hump' style perimeter bund with a central drainage pit. This area can be isolated by closing the stop valve fitted to the drainage junction pit. These fixtures are shown below.

Figure 25 The 'speed-hump' style perimeter bund and central collection pit for the heavy plant refuelling area.

Figure 26 The handwheel for the isolation valve at the junction pit.

Any fluids caught in these bunds will be pumped out and disposed by an approved contractor. The TransTank system will also feature a leak detection capability connected to the fuel management system with alerts.

5.2 Training of personnel

The training of personnel on the requirements of this sub-plan occurs during the general terminal induction (incorporating level 1 Environmental Training where an outline of SICTL's Dangerous Goods management methods and placard/ UN number identification is delivered to all new workers). This training will be completed online prior to the new worker arriving at the terminal. Further detailed training on topics such as DG spill response and the gaseous DG leak management methods in figure 6 may be delivered to workers undertaking the level 2 and level 4 environmental training under section 2.3 of the HSEQ5.1.7 Operational Environmental Management Plan (OEMP) – SICTL.

5.3 Monitoring & Reporting Obligations

The SICTL Automated Terminal Operating System (TOS) can recognise and monitor the classes of dangerous goods transiting through the terminal and can monitor at any given time the DGs that are currently within the block. This information is used to ensure SICTL remains below the threshold limits specified in the Development Consent.

The TOS can generate reports showing actual tonnages, numbers of TEUs and package sizes for each class of Dangerous Goods handled within the previous five years. This information will be included in the AEMR and submitted to the DP&I through NSW Ports.

In addition, the TOS threshold measurements and the DG incident KPI data will be collected, analysed and included in the various SICTL reporting mechanisms as shown below:

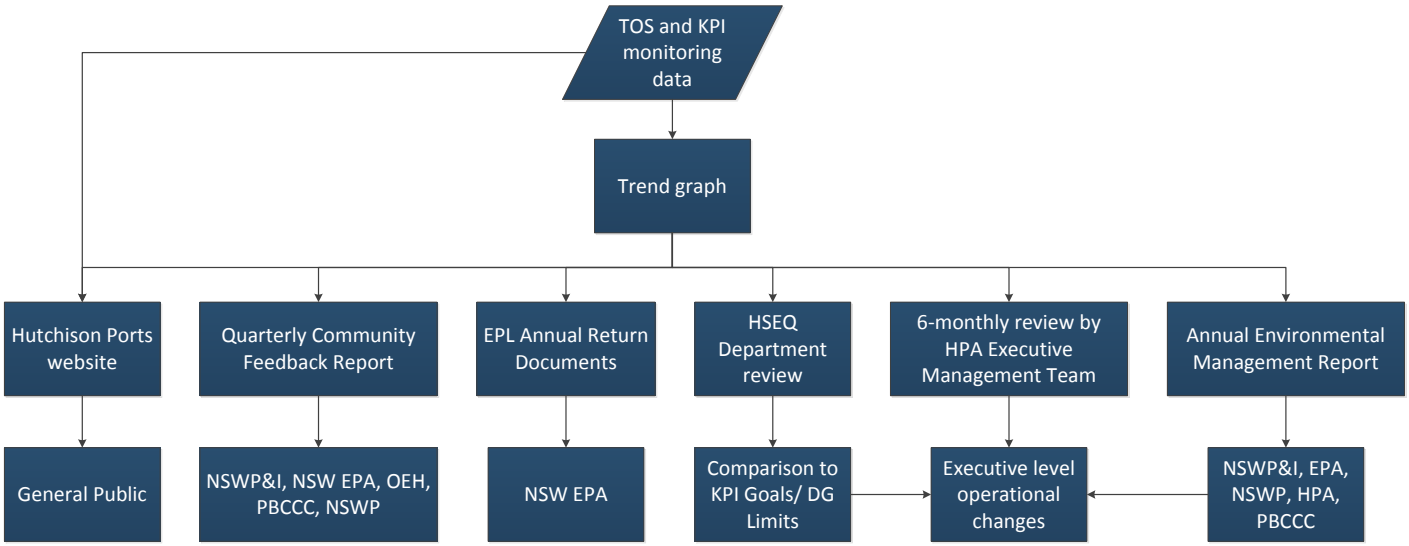

Figure 27 Illustration showing the how the monitoring results are used.

A trend graph will also be uploaded to HPA's website to provide context. SICTL will undertake an annual review of the ongoing monitoring and discuss justification in each Annual Environmental Management Report (AEMR). Section 6.2.1 provides more information on reporting obligations.

6 Performance Expectations

In addition to monitoring the threshold of Dangerous Goods in the terminal every 24 hours through the Automated Terminal Operating System, a complimentary measure of how much this sub-plan is invoked and the effectiveness of the control measures described in section 5.1 is the number of DG (including HS) incidents. This 'cover-all' approach is deemed the most suitable for quantifying this Key Performance Indicator (KPI). The KPI is described in the table below.

Table 5: Management of Key Performance Areas

Key Performance Areas	Key Performance Indicators	Goal
Dangerous Goods and Hazardous Substances Cargo Management	Number of liquid spills or gas leaks during the handling of dangerous goods and hazardous substances, expressed as the **number of incidents per 100,000 TEU of Dangerous Goods and Hazardous Substances cargo handled**	Zero per 100,000 TEU
	Number of exceedances of the DG throughput limits specified in Development Consent Condition C 2.17 per 100,000 TEU of Dangerous Goods and Hazardous Substances cargo handled**	Zero per 100,000 TEU
	As per SPC limits and thresholds	

SICTL aims to meet this KPI goal through proactive management of its operations. The goal adopted by SICTL under this sub-plan is for no DG incidents attributed to the operation of the SICTL Terminal.

Note: The DG throughput limits are those specified in condition C 2.17 of the Development Consent - also in tables 2 and 3.

***N.B:** In a letter dated 4 November 2013, NSW Planning & Infrastructure had indicated to SICTL that consent conditions C2.17 and C2.18 will no longer provide meaningful information to NSWP&I because the port throughput limits specified in consent condition A1.4 were lifted by section 32 of the Ports Assets (Authorised Transactions) Act 2012 (NSW). Given the date of this letter was two days before SICTL commenced operations on 6 November 2013 SICTL has continually monitored the quantities of Dangerous Goods cargo moved through the terminal but has not logged or acted upon any exceedances consistent with the meaning of this dispensation. At the time of writing this revision SICTL has not reached agreement with the lessor, NSW Ports on the submission of a s75W application to amend these conditions.*

6.1 Opportunities for Improvement

Under this sub-plan opportunities for improvement of operational practices and DG controls will be identified by the Senior Manager, Human Resources and Compliance during general inspections of the terminal, inspections of the control measures, analysis of monitoring data and consultation with the workforce. Additionally the Stakeholders or the Port Botany Community Consultative Committee (PBCCC) can raise DG cargo issues directly with SICTL that affect the local environment. These will be treated as opportunities for improvement by the Senior Manager, Human Resources and Compliance and be rectified within agreed timeframes. All such opportunities for improvement will be reported in accordance with the HSEQ2.2.1 Hazard and Improvement Opportunity Reporting Procedure using the HSEQ2.2.1.1 Hazard and Improvement Report Form and registered on the HSEQ Information Management System.

6.1.1 Management of Complaints or Common Issues involving Neighbouring Stevedores

The Senior Manager, Human Resources and Compliance will investigate the complaint or the Dangerous Goods issue in accordance with the process outlined in section 4.6.4 of the OEMP. However, in cases where the findings of the investigation (Step 3) prove that the complaint was caused by a combined effect of the actions by SICTL and another Port Botany lessee (for example, activities carried out near the boundary between SICTL and Patricks Stevedores on the Southern end of the Terminal known as 'The Knuckle') then SICTL will formally notify the complainant with these findings and interface with the other lessee using the below process:

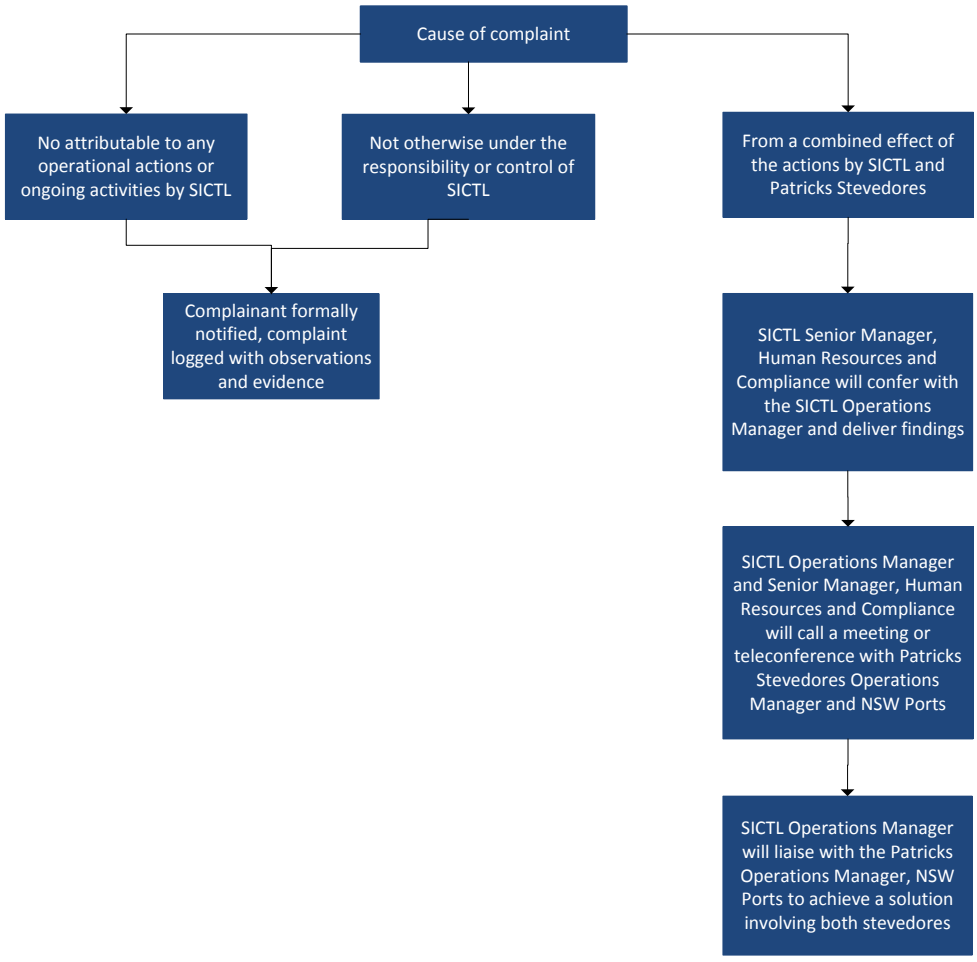

Figure 28 The process of managing complaints involving organisations other than or in addition to SICTL.

SICTL will formally notify the complainant if the findings of the investigation show that SICTL was not responsible. In the event that a shared responsibility exists, SICTL will call a meeting or a teleconference between NSW Ports and Patricks Stevedores where a collaborative solution can be achieved that satisfies the complainant and the operational needs of both stevedores. The SICTL Operations Manager will be the primary interface with the Operations Manager for Patricks Stevedores in this situation.

6.2 Documentation and Record Keeping

SICTL will retain all records of incidents involving DGs for traceability. Additionally, the Tier 4 documents that come under this sub-plan are:

- HSEQ2.2.1.1 Hazard and Improvement Report Form

These documents will be included in the Annual Environmental Management Report (AEMR). They will be administered by the Senior Manager, Human Resources and Compliance. In line with HPA's reporting requirements, incidents and monitoring data will be collated and entered into a database graphing trends over time. Sections of these graphs depicting different time periods will be included in the reports as relevant.

7 Responsibility, Accountability and Authority

7.1 SICTL as Tenant

SICTL retains ultimate responsibility for implementing this sub-plan. SICTL has adopted a shared responsibility approach where all members of the SICTL Terminal workforce are expected to meet the requirements of this sub-plan and be aware of the potential dangers of handling DGs but also the management systems. All staff are made aware of this responsibility during the SICTL induction and in the regular toolbox meetings and prestart talks. The Senior Manager, Human Resources and Compliance provides the necessary expertise, guidance and support.

7.1.1 Senior Manager, Human Resources and Compliance

The Senior Manager, Human Resources and Compliance is part of the HPA Management team and is the primary point of contact at the Terminal who advises the management team and the operations staff about compliance with this sub-plan. Other responsibilities include:

- measuring operational data, assessing trends and facilitating review;
- setting KPI's and generating reports outlined in section 2.2 of the OEMP;
- authoring and amending the OEMP and sub-plans;
- liaising with SICTL management and external stakeholders to determine compliance requirements;
- general surveillance of operations to detect the potential for issues related to DGs;
- advise on control measures required to mitigate impacts on arising from DGs, and
- interface with the OCCC to manage any DG impacts originating from the Terminal which affect nearby residents as they arise.

7.1.2 General Manager, Human Resources and Industrial Relations

The General Manager, Human Resources and Industrial Relations is responsible for giving overall guidance to the operational staff, HPA Management team and SICTL management on the HSEQ Management System which includes the OEMP and its sub-plans. The General Manager, Human Resources and Industrial Relations is also responsible for ensuring adequate HSEQ resources are available to SICTL.

7.1.3 Operations Manager

The Operations Manager is the central point of co-ordination between the Senior Manager, Human Resources and Compliance and the general operational staff such as Shift Managers, Plant Operators and also the shipping lines. The Operations Manager controls all operations of the SICTL Terminal and ensures that the HSEQ resources are being used effectively.

7.1.4 Work Crews and Plant Operators

The SICTL workforce is responsible for understanding the purpose of this sub-plan and the controls specified in it. Working together with the Senior Manager, Human Resources and Compliance, the workforce will implement this sub-plan in their daily work activities.

8 Identification of Stakeholders

8.1.1 Internal Stakeholders

Internal stakeholders are involved with the operation of the Terminal in some way and have an interest in the successful implementation of the controls listed in section 5.1. Most internal stakeholders are under the direction of Hutchison Ports Australia, a list is given below:

- HPA Corporate (the Executive Management Team);
- HSEQ Department;
- SICTL Management at the Terminal;
- SICTL Maintenance Department;
- Operations Personnel ;
- Contractors, and
- Customers (Shipping Lines).

8.1.2 External Stakeholders

External stakeholders are groups or organisations who are affected by or involved with the operation of the Terminal through consultation, communication or approval. Most external stakeholders are government organisations, a list is given below:

- The local community;
- Patricks Stevedores;
- The Port Botany Community Consultative Committee;
- Randwick City Council;
- Botany Bay City Council;
- NSW Ports;
- Sydney Ports Corporation (including Harbour Master);
- NSW Police;
- NSW Ambulance;
- NSW Fire & Rescue, HAZMAT;
- NSW Roads and Maritime Services;
- NSW Department of Planning and Infrastructure, and
- NSW Office of Environment and Heritage/ EPA.

8.2 Consultation with Stakeholders

8.2.1 Ongoing consultation

SICTL will consult with the various stakeholders in different situations where their involvement is appropriate and will cultivate a pro-active and reactive relationship for dealing with feedback. Feedback from stakeholders will be handled in accordance with section 4.6.4 and 4.6.5 of HSEQ5.1.7 Operational Environmental Management Plan. Under this sub-plan, the primary external stakeholder is the Port Botany Community Consultative Committee which includes representatives from the local community and Botany Bay City Council.

8.2.2 Key Personnel Contact Details - SICTL

Name	Position	Contact number
Toll Free Hotline	SICTL Community Information Line	1800 472 888
Jessykah Miles	Senior Manager, Human Resources and Compliance	0459 020 438
Harriet Mihalopoulos	General Manager, Human Resources and Industrial Relations	0408 991 776
Greg Baldock	Operations Manager, SICTL	0459 020 486

9 Referenced Documents

- Instrument of Development Consent DA-494-11-2003-i - Schedule C Terminal Operations (NSW Department of Planning)
- Port Botany Expansion Environmental Impact Statement, URS Australia, 2003
- Port Botany Expansion Preliminary Hazard Analysis, Qest Consulting (Revision 7, June 2004)
- HSEQ1.1 HSEQ Policy Statement
- HSEQ2.2.1 Hazard and Improvement Opportunity Reporting Procedure
- HSEQ5.1.1 Safety Critical Operations Procedures Manual
- HSEQ5.1.2 Container Terminal Operations Procedures Manual
- HSEQ5.1.7 Operational Environmental Management Plan (OEMP) – SICTL
- HSEQ8.1.1 Incident Reporting Notification and Investigation Procedure
- HSEQ10.1.3 Emergency Response Plan – SICTL.
- HSEQ11.4 Compliance Auditing Policy
- HSEQ11.4.1 Compliance Auditing Procedure

10 Review and Auditing of this Sub-Plan

The review and amendment of this sub-plan will be in accordance with sections 5.2 and 5.4 of the OEMP which emphasises the Environmental Risk Assessment as the 'driver' of the review process. Drawing upon the Environmental Risk Assessment for guidance on the depth of the review will help SICTL achieve the following:

- fulfilment of SICTL's commitment to continuous improvement as noted in the HSEQ1.1 HSEQ Policy Statement;
- Rectification of operational or system deficiencies identified during workplace inspections through a holistic and thorough approach;
- Transparent and straightforward auditing of HPA's systems and processes;
- changes to operations directed by management upon review of activities, incidents, monitoring data, AEMRs and KPIs can be reflected in this sub-plan, and
- Supporting SICTL and HPA's competitive market position by implementing beneficial industry trends in environmental best practice.

Detailed provisions for auditing SICTL's environmental management system such as audit scope, depth, frequency and distribution of findings are explained in section 5.2 of the OEMP. Auditing of this Sub-Plan shall be in accordance with:

- condition C 4.5 of the Development Consent; and
- section 5.2 of the OEMP

This sub-plan will be included in the scope of OEMP Tier 3 audits and all Annual Independent Environmental Audits.