SOUTHERN PORTS
ALBANY BUNBURY ESPERANCE

SPILL PROCEDURE - ESPERANCE

DOCUMENT CONTROL

Version Number	Description	Reviewed by	Approved by	Revision Date	Issue Date
0		B Downe	G Taylor	2008	2008
1		B Downe	J Oldfield	2009	2009
2	Review and significant edits: added reference to spill kit for minor spills in PoE fuel truck	A Leonard	E Carstens	15/8/2011	15/8/2011
3	Reference to INX, new logo and oil spill on unsealed areas	A Leonard		12/05/2015	12/05/2015
4	Inclusion of spill container. Information on spill kits	C Aylott	A Leonard	18/08/2016	18/08/2016
5	Review and update logos	A Leonard		22/06/2018	22/06/2018
6	Map of spill kits.	C Field	A Leonard	19/03/2019	19/03/2019
7	Updated procedure template	M Hough	C Field	21/06/2019	21/06/2019
8	Biosecurity response references	A Leonard	A Leonard	27/07/2-020	27/07/2-020
9	Biennial revision	A Leonard	A Leonard	27/07/2020	27/07/2020
10	Added flow chart for minor spill clean up	A Leonard S Loones S Bates	A Leonard	22/02/2022	07/04/2022

AUDIT

This procedure shall be reviewed / revised

- Where a Risk Assessment / Audit identifies a need to review;
- Legislative changes impacting this Procedure;
- Following a significant incident involving this procedure; or
- At least every 2 years.

Document Users	ALL PERSONNEL
Responsible Person	ENVIRONMENT MANAGER
Revision Trigger	BIENNIAL

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ABBREVIATIONS AND DEFINITIONS

Term	Description
DWER	Department of Water and Environment Regulation
DoT	Department of Transport
HAZMAT	Hazardous Materials
Major spill	Requires response from the Emergency Response Team. Has an extreme risk of impact.
Minor spill	Can be cleaned up within the work area with available equipment. Has a low risk of impact.
SDS	Safety Data Sheet
Significant spill	Requires specialist equipment, personnel or other work areas to assist with the clean-up. Has a high risk of impact
SPE	Southern Ports - Esperance

1. PURPOSE

It is the responsibility of all personnel to prevent spills through appropriate material storage and handling practices but should these controls fail, this procedure is needed to provide guidance on:

- Responding safely to stopping, containing and cleaning-up spills of liquid or solid goods; and
- Ensuring there is compliance with regulatory and customer requirements.

2. SCOPE

This procedure has implications to all Southern Ports – Esperance (SPE) employees and contractors that may be required to respond to spillage or loss of containment of liquids or solids at SPE controlled areas and covers the following activities:

- Clean-up of spilt oil and fuel;
- Clean-up of chemicals;
- Clean-up of mineral concentrates; and
- Clean-up of any other liquid or solid waste

This procedure excludes:

- Responding to oil spills in the marine environment, since this is covered in the SPE Oil Spill Contingency Plan (D20/13612).
- Procedure - Biosecurity Incident Response refer to procedure at D19/4209 and washbay SWI at D19/5573.

3. ROLES AND RESPONSIBILITIES

Role	Responsibility
All	Any significant spills should be reported to the incident controller. In the marine environment this is the Harbour Master (HM), in any landside spills the Shift Superintendent (SS) is the incident controller. Either the HM, SS or their reports must notify the Environment Team as soon as practicable (before COB) and complete an INX report to trigger further investigation.
Emergency Response Team	Maintain Emergency Response Plan (D16/3660), Oil Spill Contingency Plan and ensure all safety/spill response equipment is maintained.
Environmental Manager & Advisor	Follow up non-conformance to ensure legal obligations are met including notification of DWER within 24 hours and check clean-up is suffice.
Shift Superintendent	Supervise landside spill response, raise incident report in INX and inform the Environment Team.
Harbour Master	Supervise waterside spill response, raise incident report in INX and inform the Environment Team.

4. GENERAL SPILL RESPONSE

4.1. Assessment of Health and Safety Risks of the Spilt Material

The procedure assumes staff are aware of general safe work practices (e.g. manual handling and use of SDS). In the event of a spill, it is the responsibility of all personnel to protect their own safety and that of others by assessing the HSE risks of the spilt material including:

- If appropriate safety precautions are not known for the spilt substance, refer to SDS for materials handled at SPE on Chem Alert (Southern Ports intranet) or seek advice from the work area supervisor, Team Leader, or the Environment Manager and Occupational Health and Safety Officer;
- If the material cannot be identified or is a dangerous goods, contact the Shift Superintendent and Harbour Master who may invoke the Emergency Response Plan (D16/3660) if required;
- Hazards associated with any dangerous goods, may necessitate a response by specialised response teams, i.e. HAZMAT;
- If the material has strong odours or vapours, work upwind of the spill site. It may be necessary to use respiratory protection and have first aid resources at hand and is mandatory when toxic vapours may be present. Only when all hazards have been assessed as safe, proceed; and
- Be aware of where you are placing your feet and try not to step on the slippery oily surface oily surface.

4.2. Stop the Leak at the Source

Consider actions required to control the source of the spill this will include:

a. Plugging the hole or shutting the valve / tap;

b. Identify any other reasonable actions that may control the source including repositioning the container. Note for spills from containerised goods, the containers should be positioned onto the spill trailer (refer to Appendix 1 for further details).

4.3. Contain the Spill

- Identify proximity of sensitive receptors including the workforce, the surrounding community or the ocean. Also consider the location of ignition sources or incompatible chemicals that may increase the risks presented by the spill.
- Contain the spill by using absorbent material from the appropriate spill kit – oil and fuel spill or chemical spills kit kits (Refer to Appendix 3 for spill kit information).
- Oil and Fuel Spill Kits – are to be used for diesel, fuel, unleaded petrol, hydraulic oils, grease and other petroleum based lubricant spills. They include oil absorbent booms, pillows and pads, kitty litter or peat. The absorbent materials in oil and fuel spill kits DO NOT ABSORB WATER (hydrophobic).
- Chemical Spill Kits – are to be used for acids, bases (alkalis), paints, solvents, thinners, coolants, degreasers, herbicides and pesticide spills. Some options for containing a spill include:

a. Creating an earthen perimeter bund or using oil absorbent booms to act as a barrier;

b. Preventing access into stormwater drains by:

   i. Using drain covers over pits (drain covers found in all small oil spill kits.;

   ii. Plugging the stormwater pipe using inflatable fenders;

c. Use of absorbent pads around the edge of the hydrocarbon spill;

d. Use of hydrophobic booms to restrict the flow of liquid and keep it pooled within the booms;

e. Redirecting the flow of material to an area that poses less safety or environmental risk;

f. Identify any other reasonable actions that may improve containment.

- As a last resort, other materials such as sand may be used. Avoid using these materials as they create a large amount of contaminated waste.
- For a solids spill, dust suppression measures may be required if dust is an issue.

4.4. Clean-up the Spill

Once the source of the spill has been controlled and the spill contained (immediate threat to the environment has been minimised) the rest of the spill will need to be cleaned-up.

- Oil/fuel spills, continue to use absorbent materials from oil spill kits around site. Used and contaminated absorbent materials should be collected in either 220L drums or in lined skip bins (depending on the size of the clean-up. This applies for spills on sealed and gravel areas

- Spills on gravel areas – clean-up will include the absorbent materials used AND any contaminated soil in the area will need to be scraped up and stockpiled on the southern side of Shed 3. When stockpiling, ALL contaminated soil from an oil/fuel spill (hydrocarbon contaminated) MUST be placed on a tarpaulin, and also be covered in a tarpaulin to prevent further contamination. Notify the Environmental Team of the stockpile to ensure likely contaminants are known help organise treatment, reuse or disposal.
- For mineral concentrate spills scrape up the spillage, use contractor to suck up the product or wash down the affected area. Do not let wash waters enter stormwater drains and contact the Environmental Team to request the most applicable disposal method. Where possible, the material shall be recovered and recycled. This may apply to:
  a. ore concentrate
  b. sulphur granules
  c. chemicals
  d. waste oil / grease
- If material cannot be recycled, advice should be sought from the Environment Team on appropriate disposal methods to ensure compliance with the Environment Protection Act

4.5. Restock Kits

Any personnel who use spill response equipment must ensure it is appropriately replenished and returned to its storage position prior to resuming work. Additional consumables are kept in Stores. Regular checks of all spill response equipment is done as part of regular work order process through the Civil Team.

4.6. Reporting

Staff member who was notified of the spill is to complete an event in the INX reporting system in line with the spill hierarchy and notify Shift Superintenant or Harbour Master. As part of the process the Environment Team needs to be notified to ensure the regulator DWER is informed within 24 hours if there is an emission to the environment (Contacts in Appendix 2).

4.7. Spill Hierarchy

The spill hierarchy depends on the risks of the spilt material that depends on the type of substance spilt as well as the volume of the spill. The following presents guidance on describing a category for the spill.

4.8. Minor Spills

A minor spill is typically:

- easily contained and so does not pose a risk to human health or the environment;
- can be cleaned up by an individual or within the work area using spill response equipment;

Note that:

- Providing there is total clean-up of a spill on a sealed area it can be reported in INX as an Environmental Hazob; and
- If the spill occurs on an unsealed area, it is an emission to land and groundwater and must be reported as an incident.

Oil contamination of unsealed areas on our gravel roads and container storage areas should be avoided. Spillage on an unsealed area is an environmental incident as it may contaminate soil, groundwater and stormwater. Spillage on a sealed area can be bunded, recovered and restricted to a temporary hazard.

Refer to Appendix 1 for a flow chart of the process for minor spills.

4.9. Significant Spills

A significant spill may:

- Not be readily contained by an individual or within the work area using the available spill response equipment;
- May require the involvement of the site's team members from other work areas.
- Likely to endanger safety, result in pollution or disrupt port operations;
- Is an incident and requires reporting and investigation in INX and if there is an emission requires reporting by the Environment Team to DWER or DoT (Contacts in Appendix 2).

4.10. Major Spills

A major spill typically requires:

- Evacuation of personnel and the involvement of the Emergency Response Team in accordance with the Emergency Response Plan (D16/3660);

Examples of major spills are:

- Oil spill into stormwater system or directly into the ocean;
- Flammable materials that are uncontained;
- Hazardous gases that are filling a confined space;
- Ship loading of dry nickel concentrate resulting in a dust cloud;

- Is an incident and requires reporting and investigation in INX and if there is an emission requires reporting by the Environment Team to DWER or DoT (Contacts in Appendix 2)

4.11. Containment Types

There are various types of material storage facilities on site, each providing different levels of material containment.

4.12. Primary Containment

Primary containment describes the vessel in which the material is contained (e.g. a pipeline, drum, tank or container, or the “Spill Container” (refer to Appendix 1)).

4.13. Secondary Containment

Secondary containment describes the infrastructure or facilities that surround vessels/containers (e.g. spill trays, concrete bunds).

This type of containment is designed to collect or prevent material from spreading to other work areas.

It is a minimum requirement of AS 1940 that the secondary containment can hold 110% of the volume of the largest container or 25% of the total volume of materials stored in within the facility.

Chemicals that can result in safety or environmental impacts must have secondary containment.

4.14. Tertiary Containment

Infrastructure often used in work areas that involve large volumes of hazardous materials where secondary containment is not adequate or practically achievable.

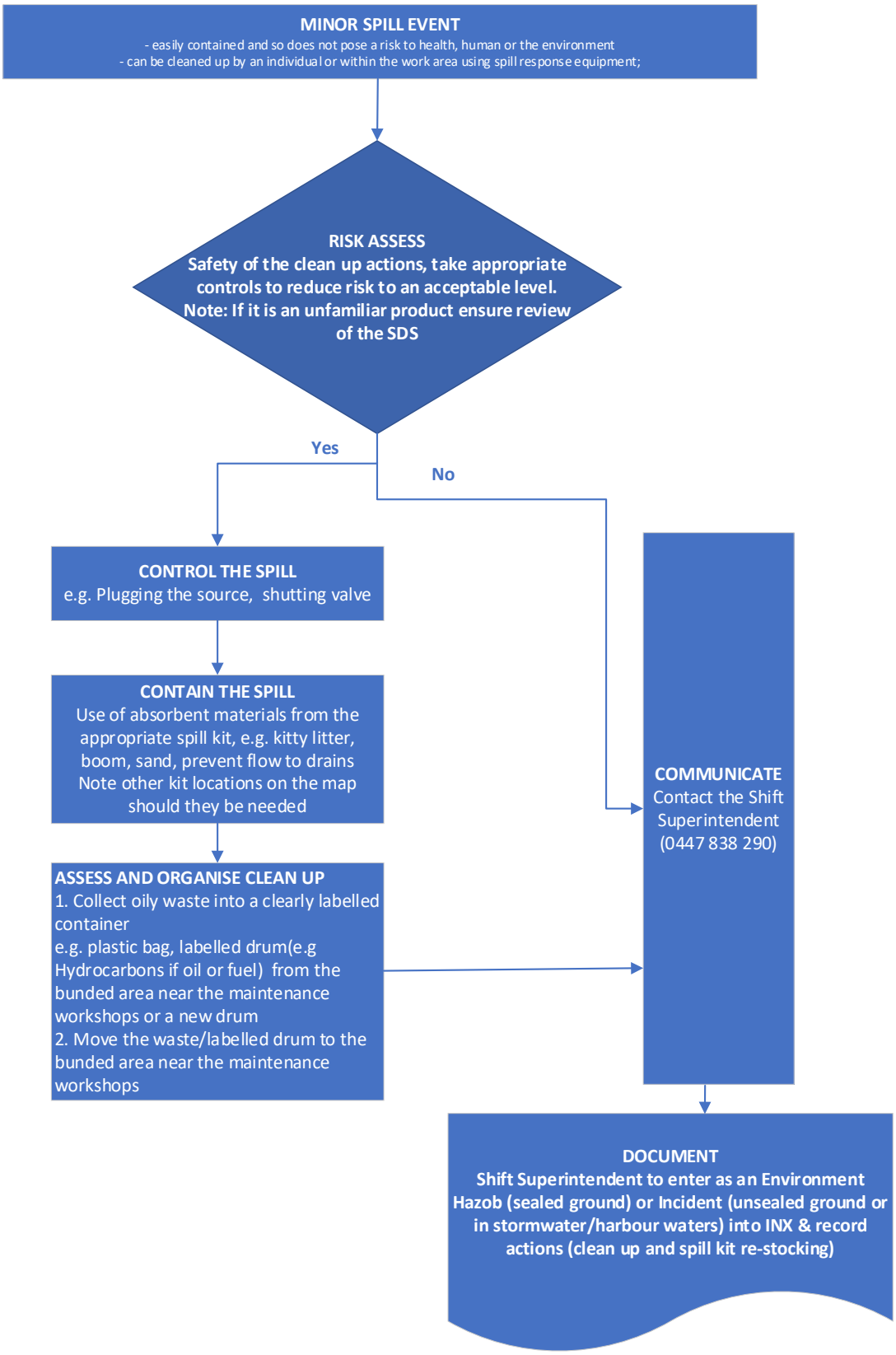
This type of containment is designed to capture spills from secondary containment facilities and prevent material causing environmental harm or exiting lease boundaries.

5. OTHER DOCUMENTS AND PROCEDURES

Reference	Author	Title
D16/3660	Riziliens	Emergency Response Plan
D16/6470	Riziliens	Oil Spill Contingency Plan
D16/1054	SPE	Environmental Management Plan

APPENDICES

APPENDIX 1 - FLOW CHART FOR MINOR SPILLS



APPENDIX 2 - THE SPILL CONTAINER

The spill container is used to contain liquid from a leaking container and can be moved by forklift or skel trailer. The leaking container is stacked on top and there are valves on either side of the container to decant liquid into IBCs or other containment for easier storage and transportation. The spill container is stored near the Biosecurity stand on the northwest corner of the sulphur shed.

APPENDIX 3 - SPILL KIT INFORMATION

Location and Capacity of Oil and Fuel Spill Kits

Spill Kit Bin Size (L)	Description of Location	Max. Absorbent Capacity (L)
120	Fuel Bowser (unleaded) – Reclaim Area	55
240	Fuel Bowser (diesel) – Container Hardstand	235
120	Fuel Bowser (diesel) – Qube Yard	55
120	Waste Oil Tank – near Maintenance Workshop	55
240	Car Dumper - inside	235
120	Shed 1 - Western End	55
240	Shed 2 – Western End	235
120	Shed 3 - Western End	55
120	Shed 4 – Western End	55
120	Shed 5 – Eastern End	55
120	Fitters Workshop – outside side door	55
120	Shed 6 – Western End	55
2x 120	Qube Fuel Truck	110
120	Mechanics Workshop	55
240	Oil Store	235
120	Stores	55
660	Berth 1	770
660	Berth 2	770
660	Berth 3	770

Location and Capacity of Hazardous Chemical Spill Kits

Spill Kit Bin Size (L)	Location	Max. Absorbent Capacity (L)
120	Stores	55
120	Fitters Workshop – outside side door	55

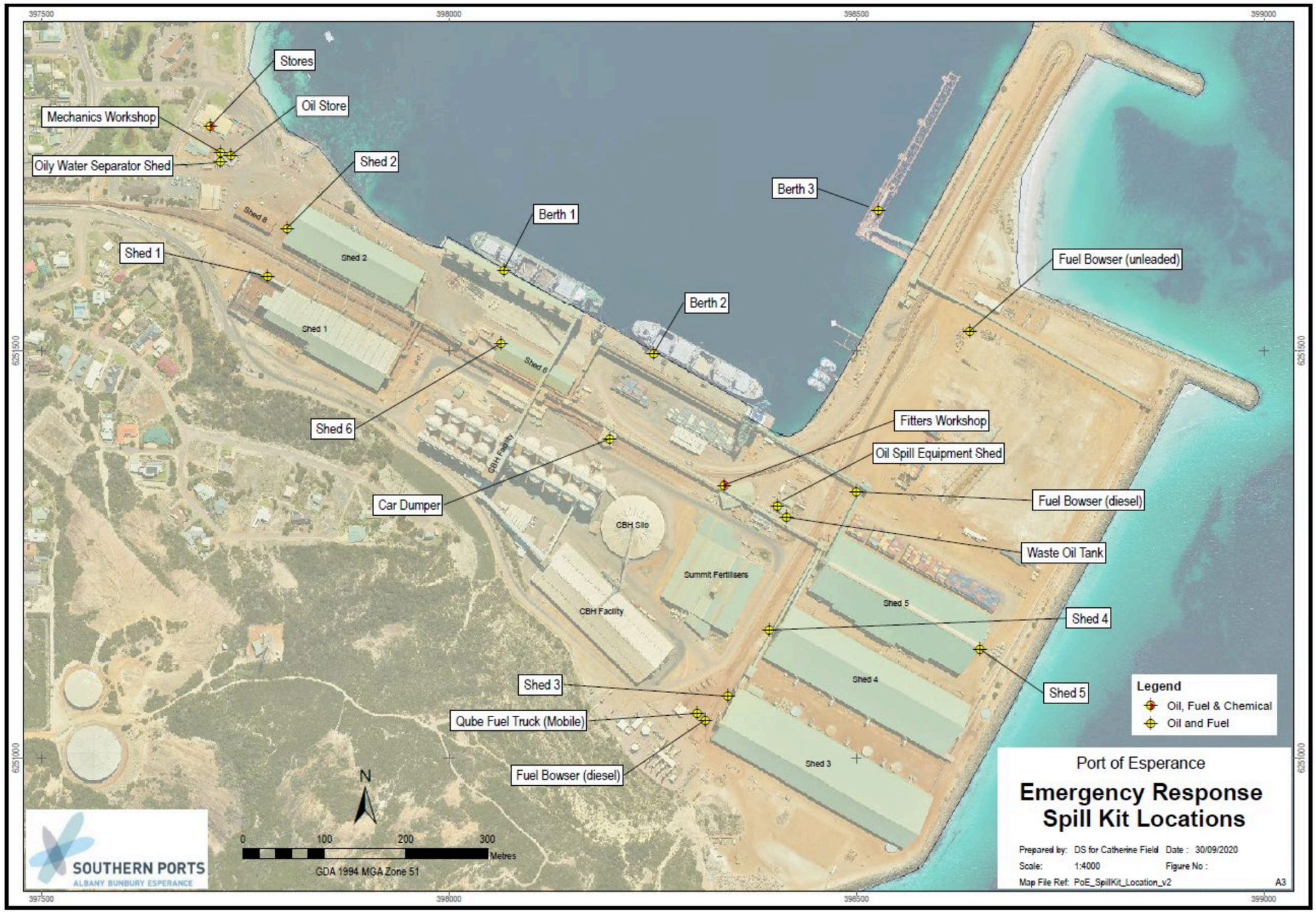


Figure 1: Location of Chemical, Oil & Fuel Spill Kits at Southern Ports - Esperance

APPENDIX 4 - SPILL RESPONSE CONTACTS

Contact Name	Organisation	Phone Number	Address & Email
Shift Superintendent	Southern Ports - Esperance	0447838290	Terminalsupervisors@southernports.com.au
Harbour Master	Southern Ports - Esperance	90723344	pilots@southernports.com.au
Environmental Manager	Southern Ports - Esperance	0429073546	alex.leonard@southernports.com.au
Environmental Advisor	Southern Ports – Esperance	0437884845	natasha.norrish@southernport.com.au
Pollution Response Hotline	Department of Water Environment Regulation (DWER)	1300784782 (24hrs)	
Maritime Environmental Emergency Response	Department of Transport	(08) 9480 9924 (24hrs)	Marine.pollution@transport.wa.gov.au