

APPENDIX B9

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

	Site Details
Client:	NSW Roads and Maritime Services
Site Name:	The Northern Road Upgrade – Between Mersey Road and Eaton Road
Revision Number:	2
ID Code:	

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Revision History

Version	Date	Revision Details	Author	Reviewed by
A	14/09/18	For Georgiou Website	Jude Tan	Glen Bolton
0	5/11/18	Roads and Maritime Review	Jude Tan	W. Carter
1	7/03/19	Update communications, basins, and SOW	Peter Sheehan	Glen Bolton
2	22/11/19	Emergency Contacts	Peter Sheehan	Glen Bolton

Distribution of Controlled Copies

Copy no.	Issued to	Version
1	Roads and Maritime	Rev A
2	Roads and Maritime	Rev 0
3	Roads and Maritime	Rev 1
4	Roads and Maritime	Rev 2

DETAILS OF REVISION AMENDMENTS TO POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

Plan Control

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The latest version of this Plan will be available for all Project personnel, either electronically through the site network or in hard copy in the site files.

The Project Environmental Site Representative (ESR) in conjunction with the Project Manager, will maintain, review and update this plan at least annually.

Amendments

The revision number is noted in the footer of each page.

The document will be allocated a new revision number when any changes are made. When a new revision to the document is created, a notification email will be distributed to all project personnel by the Project Manager or Project Environmental Site Representative advising of the update.

The Project Manager is responsible for the implementation of the plan and will approve all amendments as detailed above.

Revision	Date	Description	Page	Section
A	14/09/18	Transfer of EPL 21121	N/A	All
0	5/11/18	Roads and Maritime Review	N/A	All
1	7/03/19	Review and update communications, basins update and include Figure 2 scope of works	5, 6,11,12	Section 2, 11
2	22/11/19	Supervisor Emergency Response Team Leader, Deputy Emergency Response Team Leader updated UHF Channels updated	12, 13	Section 11

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1. INTRODUCTION

This Plan has been prepared in order to guide and direct the response by The Northern Road Upgrade – Between Mersey and Eaton Road. Georgiou Group Pty Ltd currently holds EPL 21121 for the Project.

This Pollution Incident Response Management Plan must be prepared for all Projects based in NSW that hold an Environment Protection Licence (EPL), or for any project if directed to prepare one by the EPA.

It is a requirement under Clause 98D of the POEO Amendment Regulations 2012 that certain sections of the Plan are made publicly available on the website within 14 days after being prepared and approved for issue. The sections are those that cover procedures for contacting the relevant authorities and communicating with the community.

2. POLLUTION INVENTORY

Road construction has by its nature a limited list of typical pollution types which require consideration. Below is a list of Polluting Substance Storages/Uses for The Northern Road Upgrade – Between Mersey and Eaton Road project with the estimated Maximums stored.

Potential Pollutant	Location on Site	Type of Containment	Maximum Quantity On Site
Sediment laden surface water	All exposed areas	Excavations, sediment basins, sediment traps and bunds	On site there are 11 designed basins average volume 500 m ³
Dust	All exposed areas	excavation	N/A
Chemicals – mixed	Adjacent to Site compound	6m x 3m self bunded chemical storage container. Bunded IBC containers.	10,000L
Concrete wash out	temporary locations, moved with the construction works	Lined bunds or skip bins	As required in relation to culvert and structures head wall construction, FRP (form reo. Pour)

3. SAFETY DEVICES

Spill Kits are located at all chemical storage locations and within the supervisor's vehicles. Fire extinguishers are located at the site compound facility, chemical storage areas and within all heavy mobile plant. Chemical storage areas on the main compound facility (C8) is shown on Figure 1.

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The Northern Road Upgrade - Between Mersey Road and Eaton Road

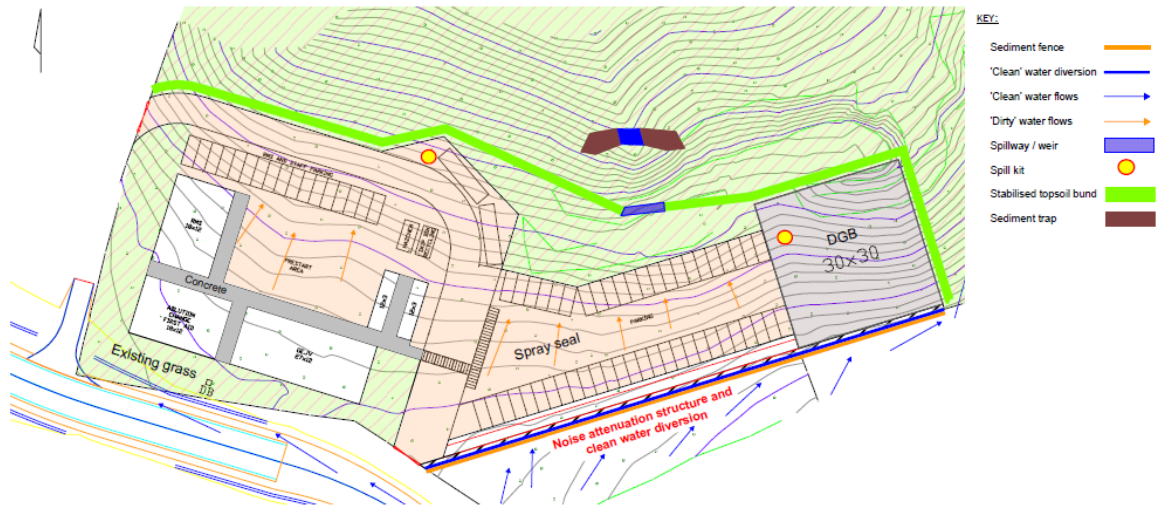


Figure 1: Location of chemical storage on ancillary facility C8

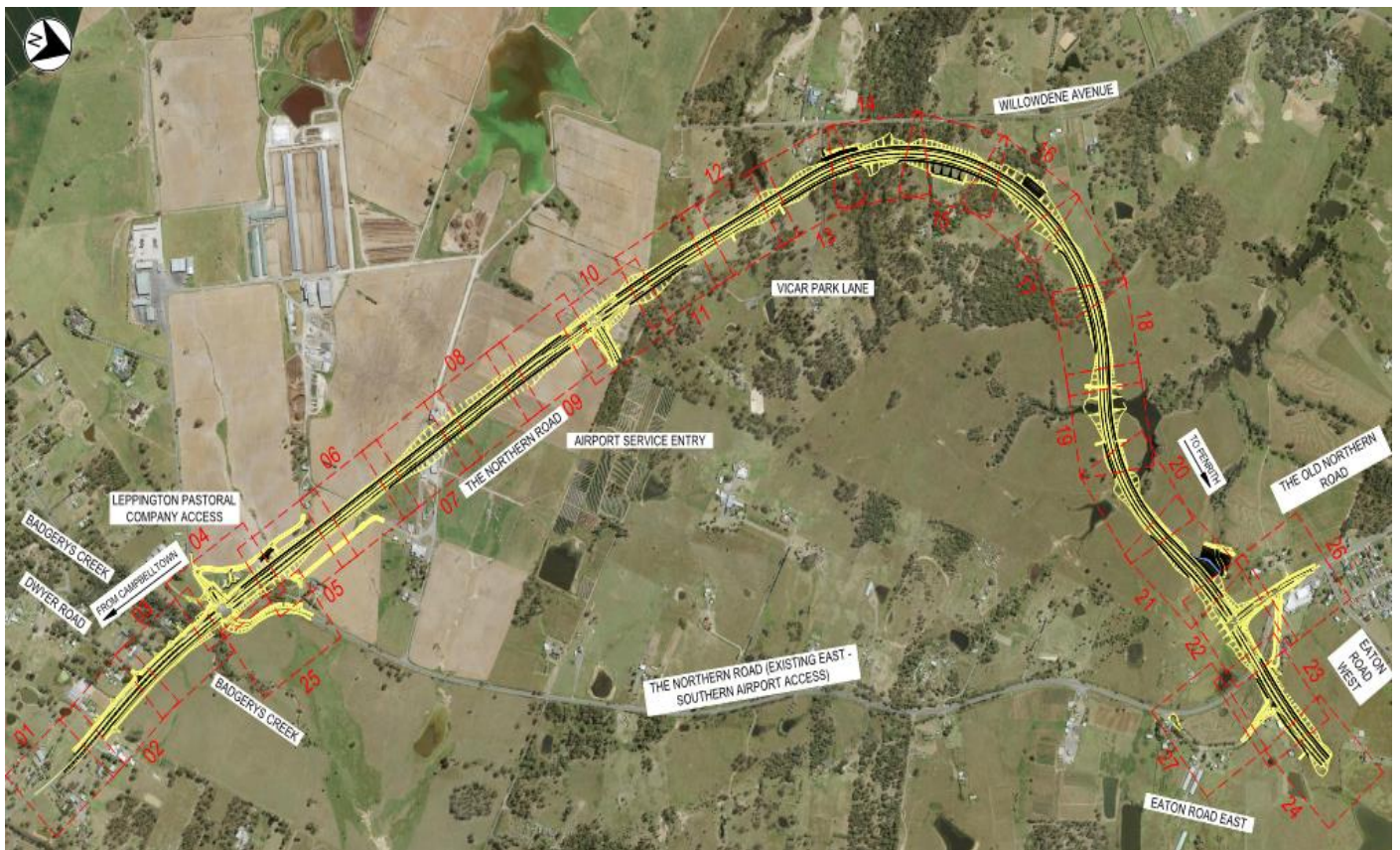


Figure 2 The Northern Road Stage 4 Scope of works

4. RISK ASSESSMENT

The below is a high level risk assessment summarising the hazards associated with road construction that have the potential to cause or threaten material harm to the environment as well as the pre-emptive actions to be taken to minimise or prevent any risk of harm to human health or the environment

HAZARD	Impact (Human Health and/or Environment)	Inherited Risk Level (A, B, C, D or E)	Pre-emptive Actions	Residual Risk Level (A, B, C, D or E)
Sediment laden water off site, including mud tracked onto roadways	Environment	A3	<ul style="list-style-type: none"> -Construction Environmental Management Plan -Soil and Water Management Plan - Environmental Work Method Statements for high risk works - Implement controls identified on ESCPs -procedures for dewatering -Inspections and monitoring completed via OneApp DHI - Environment 	D3
Pollution of land or water from service strike of sewer or water mains	Human Health and/or Environment	A3	<ul style="list-style-type: none"> -Excavation permits utilising dial before you dig drawings - positive field identification of all existing services with suction truck -Identified services clearly marked in field -JHAs include service strike risks and controls 	D3
Pollution of land or water from Hydrocarbon spills from machinery or fuel storage.	Human Health and/or Environment	C3	<ul style="list-style-type: none"> - Plant Hazard Assessments - Daily Plant Checklists; - Environmental Work Method Statements for high risk works - Environmental Management Plan (CEMP) -Inspections and monitoring completed via OneApp DHI - Environment 	D3
Generation of dust from mobile equipment / vehicles and exposed areas	Human Health and/or Environment	A3	<ul style="list-style-type: none"> - traffic movement on soil exposed surfaces to be no greater than 20km/h -Dust suppression to occur - trucks to cover loads -Inspections and monitoring completed via OneApp DHI - Environment 	D3
Impacts to residents due to noise, vibration and visual pollution.	Human Health and/or Environment	A2	<ul style="list-style-type: none"> -Comply with approved hours of operation. Comply with EPL conditions and Construction Noise and Vibration Plan - Communicate with staff and community the approved hours of work - Program high noise activities for standard construction hours and apply required respite periods. -Inspections and monitoring completed via OneApp DHI - Environment - noise monitoring 	C2

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LIKELIHOOD	Almost Certain	A	High	High	Extreme	Extreme	Extreme	<p>Do not proceed, re-evaluate controls – Extreme risk</p> <p>Seek Site Mgt Authorisation – High Risk</p> <p>Manage by routine procedures – Moderate risk</p> <p>Manage by routine procedures – Low risk</p>
	Likely	B	Moderate	High	High	Extreme	Extreme	
	Occasional	C	Low	Moderate	High	Extreme	Extreme	
	Unlikely	D	Low	Low	Moderate	High	Extreme	
	Rare	E	Low	Low	Moderate	High	High	
			1	2	3	4	5	
			Insignificant	Minor	Moderate	Major	Catastrophic	
CONSEQUENCE								

*When assessing risk, maximum reasonable **consequence** should always be established prior to assessing likelihood.

Consequence Rating	Insignificant	Minor	Moderate	Major	Catastrophic
People	Report Only, No Injury	FAI	Recordable Injury (MTI, RWI, Minor LTI)	Severe Lost Time Injury	Fatality/Multiple Fatalities
Environment	No environmental impact / localised	Minimal impact / reversible impacts / onsite	Short term loss / reversible impacts	Medium term loss (years) / reversible impacts	Long term irreversible impacts
Plant/Property	<\$5K	\$5K - \$20K	\$20K – \$100K	\$100K - \$500K	>\$500K
Community	Complaint at once resolved / no media enquiry	Small no. Of Complaints / low cost / local community media attention	Repeated complaints from same area, state/ media interest	Community discontent & impact on viability of business/ National media attention	Complete loss of trust/social unrest/dissention & likely closure of business/ National media attention
Legal Compliance	Minor breach not attracting regulatory body	Issue resulting in notice / fine	Prosecution & penalty or fine	Prosecution, suspension of operating licence/criminal conviction	Prosecution/ loss of operating licence or closure of operations/ imprisonment

Likelihood		Description	Example
Almost Certain	A	Is expected to occur in most circumstances/Common or repeating occurrence	Multiple occurrences within a month
Likely	B	Will occur in most circumstances	Multiple occurrences within a year
Occasional	C	Could occur infrequently	1-10 year event
Unlikely	D	May occur/improbable	10-100 year event
Rare	E	Only in exceptional circumstances, practically impossible	100+ year event

5. POLLUTION SCENARIOS AND COMMUNICATION TO NEIGHBOURS

The following table lists the mechanisms to be followed in the event that a pollution incident has the potential to impact the surrounding community.

Pollution Scenario	Potential impacts	Early Warning Actions
Hydrocarbon and chemical spills	<ul style="list-style-type: none"> Water quality issues if spill enters waterway Community complaints 	In extreme cases contact neighbours via doorknock process and ask them to avoid use of the water until further notice. For larger spills coordinate with Combat agency.
Soils and erosion	<ul style="list-style-type: none"> Water quality issues if spill enters waterway Community complaints 	In extreme cases contact neighbours via doorknock process and ask them to avoid use of the water until further notice
Dust	<ul style="list-style-type: none"> Air quality issues Loss of amenity Community complaints 	In extreme cases contact neighbours via doorknock process and ask them to close windows and doors and stay inside until further notice
Noise	<ul style="list-style-type: none"> Loss of amenity Community complaints 	Not required under PIRMP. Communicate with neighbours on as needs basis as per CNVMP

6. TRAINING

All personnel will be inducted in accordance with the Project requirements and Emergency Response drills will be completed throughout the Construction of the Project.

7. NOTIFICATION

The Environmental Site Representative or Superintendent will make a decision based on RMS Environmental Incident Classification and Reporting Procedure what level of notification and callout is initially required for the incident.

The Environmental Site Representative or Project Manager will immediately notify the authorities listed in the below table of pollution incidents on or adjacent to the site where material harm to the environment is caused or threatened. That is, environmental harm or potential harm to the health or safety of human beings (from environmental hazards) or to ecosystems that is not trivial; or that result in actual or potential loss or property damage of an amount over \$10,000.

EMERGENCY CONTACT / ORGANISATION	CONTACT DETAILS
EPA Pollution Hotline	131 555
NSW Fire and Rescue	000 (EMERGENCY) 1300 729 579 (NOT AN EMERGENCY)
NSW Ministry of Health (Liverpool Public Health Branch)	8778 0855
WorkCover Authority	131 050
Liverpool Council Penrith Council	1300 36 2170 02 4732 7777

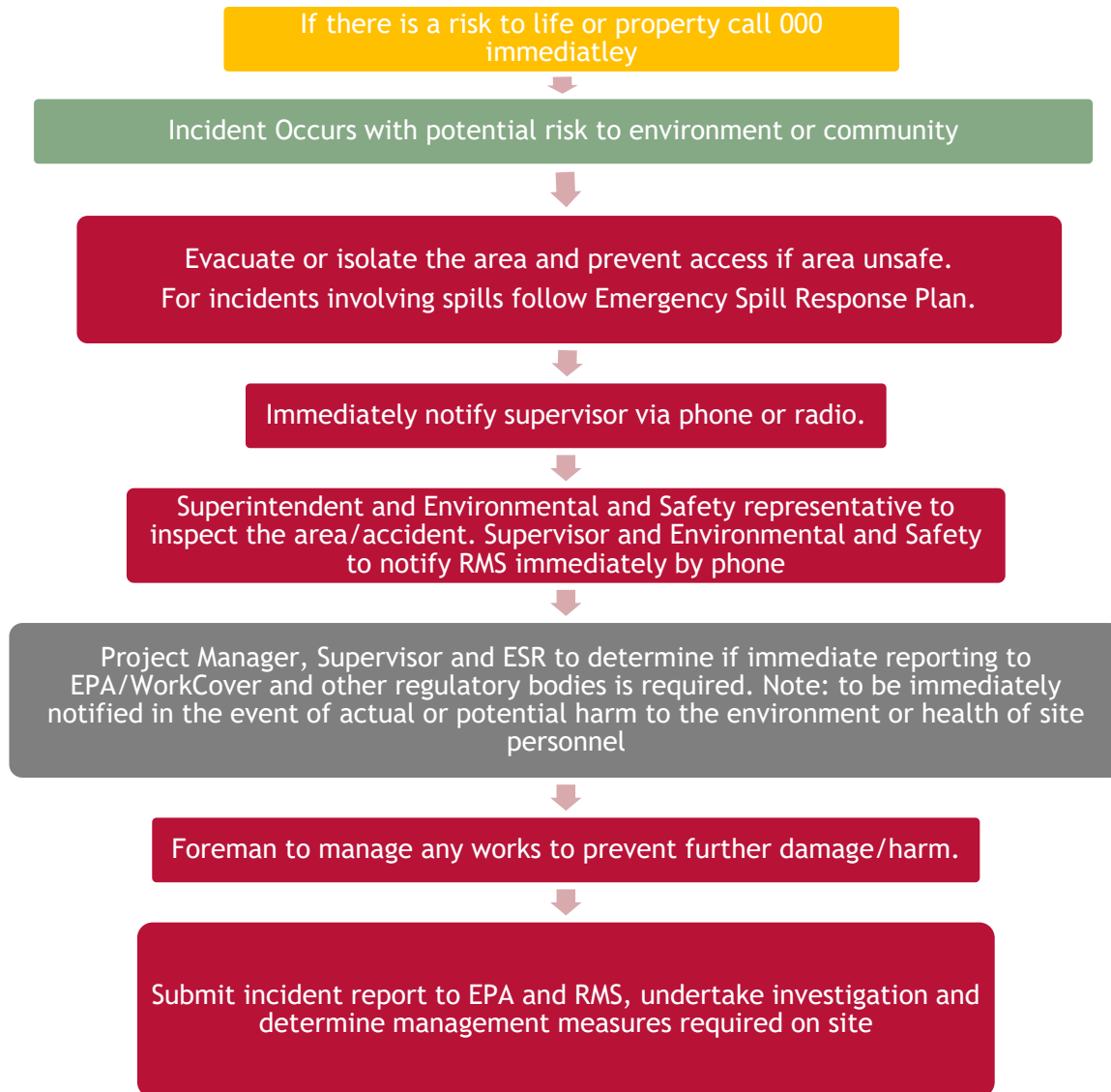
8. INCIDENT INVESTIGATION

In the event of an environmental incident, RMS's Environmental Incident Classification and Reporting Procedure will be implemented. All incident investigations shall include the following basic elements:

- identify the cause of the incident;
- identify the necessary corrective action(s);
- identify personnel responsible for carrying out corrective action(s);
- implement or modifying controls necessary to avoid repetition;
- Record any changes in written procedures required

Advising the environmental authority (i.e. EPA) of the investigation findings and corrective actions associated with any reportable pollution events

9. INCIDENT RESPONSE PROCEDURE FLOWCHART



10. REVIEW AND TESTING

Review and Testing of the Plan will be integrated into other emergency and incident testing and training programs.

A detailed record of the testing of the Plan will be prepared after each testing of the plan is undertaken. If the test identifies any shortcomings in the Plan, especially the implementation of the spill response procedures, the Plan will be corrected or appropriate non-conformance actions will be undertaken. Records of the testing will be retained onsite and be made available to the EPA on request

As required by POEO (General) Regulation 2009 98E this Plan will be tested and updated according to the following:

- routinely at least once every 12 months, and
- within 1 month of any pollution incident occurring in the course of an activity to which the licence relates so as to assess, in the light of that incident, whether the information included in the plan is accurate and up to date and the plan is still capable of being implemented in a workable and effective manner

11. EMERGENCY CONTACTS

EMERGENCY CONTACTS - LOCAL		
	NAME / LOCATION	PHONE NUMBER (S)
NSW Police	St Marys Police Station 38-42 King St, St Marys NSW 2760	000 (02) 9677 7499
Fire & Rescue NSW	Warragamba Fire Station 96 Fourth St, Warragamba NSW 2752	000 (02) 4774 1222
NSW Ambulance	1/668 High St, Penrith NSW 2750	(02) 4731 2167
NSW State Emergency Service		132 500
Environmental Protection Authority	Pollution Reporting / environmental incident reports EPA, Level 14, 59-61 Goulburn St, Sydney	131 555 All other enquiries 02 9995 5555
Emergency contact for client	Easwaran Veeragathipillai	02 8874 7055 0400 561 753
Local hospital	Nepean Hospital Derby St, Kingswood NSW 2747	(02) 4734 2000
SafeWork NSW		13 10 50
EMERGENCY CONTACTS - GEJV		
	NAME	PHONE NUMBER(S)
Project Manager	Adam Boyd	0419 501 731
Construction Manager	Shane Cahill	0418 408 334
Site Supervisor Emergency Response Team Leader Deputy Emergency Response Team Leader	Joel Gregory Adam Snushall	0407936 716 0458 805 007
Senior Project Engineer	Richard Kelly Karl Reusche	0427 802 387 0427 144 520
Environmental Manager	Glen Bolton	0428 949 019

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Environmental Site Representatives	Peter Sheehan Will Carter	0437 397 005 0419 524 427
Safety Manager	Jerry Cockburn	0437 403 821
Matt Setu	WHS Co-ordinator	0458 805 018
Head Office	Level 3, 53 Berry Street, North Sydney	02 8072 3610
Communications Liaison Manager	Robert Parker	0438 654 860
Crisis Management Executive Director	Rob Monaci	0439 735 236
RADIO COMMUNICATION		
Southern Section	UHF 29	
Northern Section	UHF 30	
Cut 1A	UHF 29	
Traffic	UHF 27	
Project Name – 9811-000 The Northern Road Stage 4 (Georgiou/Ertech Joint Venture)		
Physical Address – Northern Road, Luddenham, NSW Site Compound – Eaton Road, Luddenham, NSW		
When speaking to any of the above Emergency contacts tell them <ul style="list-style-type: none">• Nature of the emergency• Address• Your name		

12. SPILL RESPONSE PROCEDURE

Clean-up of Spills/ Leaks Procedure	
Description:	<p>This procedure provides guidance for clean-up of chemical spills and leaks and establishes minimum requirements and performance for employees when responding to spills.</p> <p>A 'Spill/ Leak' is defined as an unintentional release of a chemical/fuel/oil, which does not leave the site. It includes spillages to soil and hard surfaces.</p> <p>This procedure is only to be followed for spills where:</p> <ul style="list-style-type: none"> • the identity of the spilled material is known • sufficient resources (personnel and equipment) are on-site to contain and clean-up the spilled material.
Risks/issues:	Chemical/fuels/oils spills may cause harm to workers health and the environment if not managed and cleaned up appropriately.
Steps To Follow	
1 ASSESS THE SITUATION	
<ul style="list-style-type: none"> • Before clean-up, assess the potential risk to your safety, the safety of those working around you, and the environment. • Depending of the type and quantity of material spilled, determine if it can be deal with by (an) individual(s) or if you need external assistance (i.e. Fire brigade – refer to emergency contact list if needed). • Advise or alert the other personnel so they can assist you if necessary. • STOP the source of the spill if it is SAFE to do so. 	
2 SECURE	
<ul style="list-style-type: none"> • Make the site safe for all personnel and the general public. • Monitor and control access where the spill occur (i.e. tape, barrier) in order to prevent personnel from being contaminated and the contamination from being spread by traffic movement. 	
3 Personal Protective Equipment	
<ul style="list-style-type: none"> • Prior to any clean-up, consult the relevant MSDS for the chemical/fuel/oil to determine the required personal protective equipment. • No clean-up work should occur without the correct personal protective equipment. 	

4 CONTAIN

- Contain the spill using the spill response equipment in the spill kit such as spill booms, drain covers and bunding.

5 CLEAN UP

- Once the spill is contained, convert it to a solid by absorption.
- Use the appropriate absorbing pads or absorbent (according to the type of material spilled) to soak up the spill by placing them over the liquid.
- Remove the saturated pads and replace as necessary. On porous surfaces, sprinkle loose absorbent over the spill and broom through until surface appears dry.
- Recover any free liquid into purpose built tankers if possible

6 DISPOSE

- Place the spent absorbent in the appropriate disposal bags and seal them.
- The contaminated material placed in the disposal bags must not contain free liquids in order to be disposed in a normal bin. If free liquids are observed, additional absorbent materials should be used.
- Refer to the MSDS for appropriate clean-up. Correctly dispose of contaminants off-site using a licensed contaminated waste disposal contractor or place in trade waste, if applicable.
- Contaminated soil should be removed to an appropriate facility following consultation with the ESR.

7 REPORT

- Notified the ESR and Project Manager.
- The ESR is responsible for notifying the appropriate agencies and groups
- Document the incident using the Incident Investigation Report form.

8 RESTOCK

- Order and replace used up personal protective equipment and absorption materials in the spill kits