

APPENDIX A5

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

	Site Details
Client:	Transport for NSW
Site Name:	Mona Vale Road East Upgrade: Manor Road to Foley Street
Revision Number:	9
ID Code:	

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Revision History

Version	Date	Revision Details	Author	Reviewed by
A	20/10/18	For RMS review	Jude Tan	Glen Bolton
0	10/12/18	For Georgiou Website	Jude Tan	Glen Bolton
1	25/07/19	Updated to include drilling muds	Alex Harte	Glen Bolton
2	28/11/19	Review after activation because of the water main strike	Jared Lipton	Glen Bolton
3	26/02/20	230mm rain event	Jared Lipton	Glen Bolton
4	08/09/20	Review after activation	Jared Lipton	Glen Bolton
5	24/11/20	Review after activation and annual testing	Jared Lipton	Glen Bolton
6	27/01/21	Review after activation	Jared Lipton	Chris Sinclair
7	1/04/21	Review after activation	Jared Lipton	Chris Sinclair
8	12/10/21	Test of plan during mock emergency	Jared Lipton	Chris Sinclair
9	16/12/21	Reviewed after incident through ICAM investigation	Jared Lipton	Chris Sinclair

Distribution of Controlled Copies

Copy no.	Issued to	Version
1	RMS	Rev A
1	RMS	Rev 0
1	RMS	Rev 1
1	RMS	Rev 2
1	RMS	Rev 3
1	TfNSW	Rev 4
1	TfNSW	Rev 5
1	TfNSW	Rev 6
1	TfNSW	Rev 7
1	TfNSW	Rev 8
1	TfNSW	Rev 9

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.

Document Revision History:

Revision	Date	Description	Page	Section
A	20-10-18	For RMS review	N/A	All
0	10-12-18	For Georgiou website	N/A	All
1	25-07-19	Updated to include drilling muds	5,6,8,14	2,4,5,11
2	28/11/19	Reviewed after implementation for the water main strike	All	Appendix added
3	26/02/20	Post large rain event of 230mm review	N/A	N/A
4	08/09/20	Review after a dilapidated pipe plug failed after hand digging exposed the pipe	1, 2, 5	3, 5, 11
5	24/11/20	To updated testing history	All	6, 10
6	27/01/21	Reviewed after activation during a large rain event	All	Nil
7	01/04/21	Reviewed after water main strike	All	15
8	12/10/21	Mock emergency conducted for testing of the plan	All	1-4, 15

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9	16/12/21	Reviewed and discussed during ICAM investigation of a dewatering incident at RW5	All	All
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Testing History:

PIRMP Test	Date	Description
1	11/04/19	Training and testing of the PIRMP in a toolbox scenario
2	15/10/19	Mock spill was part of a site wide emergency drill
3	28/11/19	Debrief after water main strike
4	08/09/20	Debrief after dilapidated water main plug failed
5	12/10/20	Mock drill was held where a pump was being used to dewater the basin and a snake bite occurred causing the labourer to not turn the pipe off before it entered the sediment storage zone
6	18/11/20	Debrief after the failure of a 52 year old water pipe due to soil settlement with no works occurring in the area.
7	24/11/20	Debrief after a water main strike of a residential line
8	27/01/21	Debrief after large rain event. Procedures followed well.
9	01/04/21	Incident investigation into the service strike conducted with the Safety Manager
10	12/10/21	Mock plant on plant collision that caused a spill of fuel into the Cut 4 basin
11	16/12/21	PIRMP was tested during a live incident and a debrief occurred during an ICAM investigation

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1. INTRODUCTION

This Plan has been prepared in order to guide and direct the response by Mona Vale Road East Upgrade project. Georgiou Group Pty Ltd currently holds EPL 21037 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.

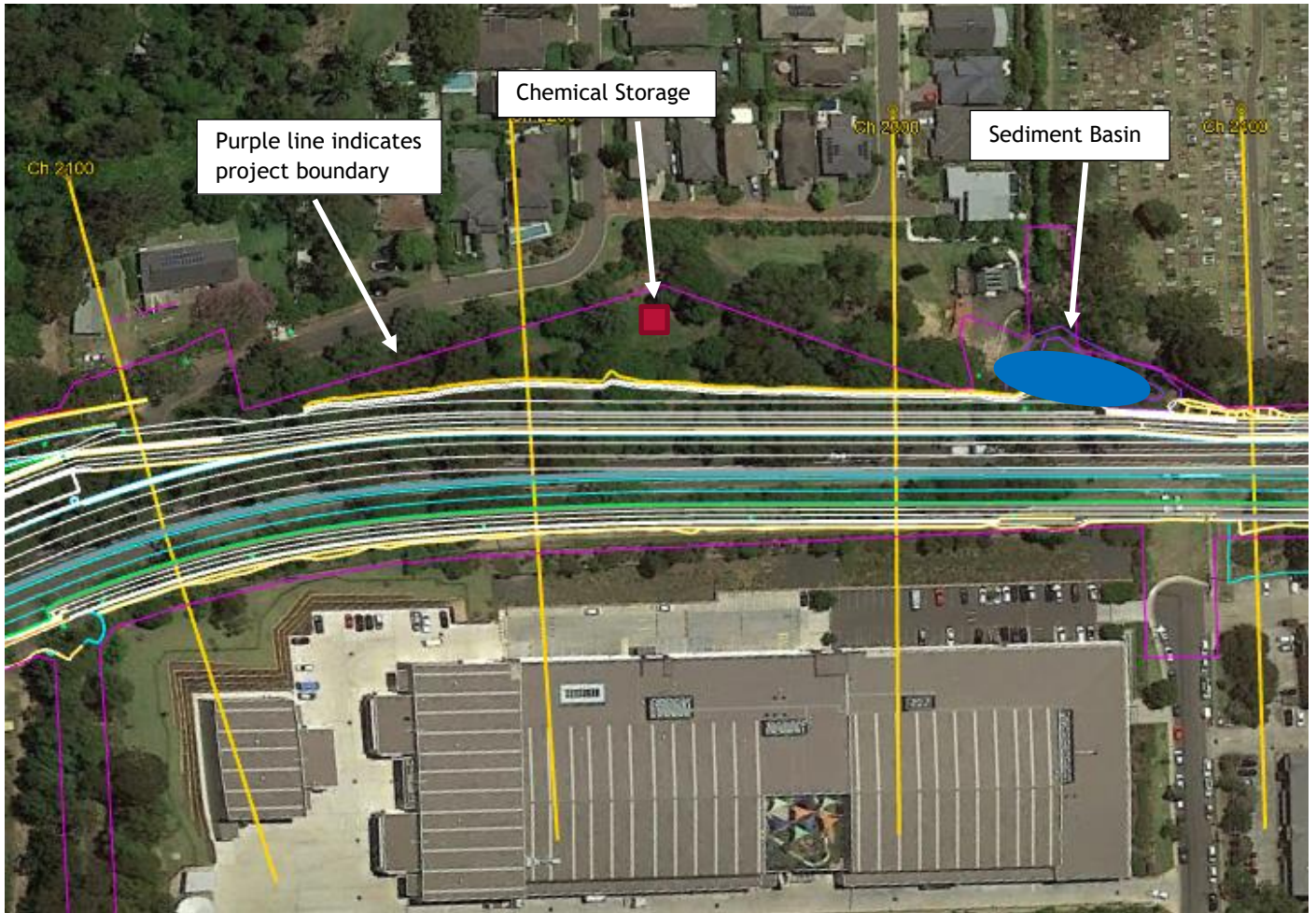
It is a requirement under Clause 98D of the POEO Amendment Regulations 2012 that certain sections of the Plan are made publicly available on the website within 14 days after being prepared and approved for issue. The sections are those that cover procedures for contacting the relevant authorities and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

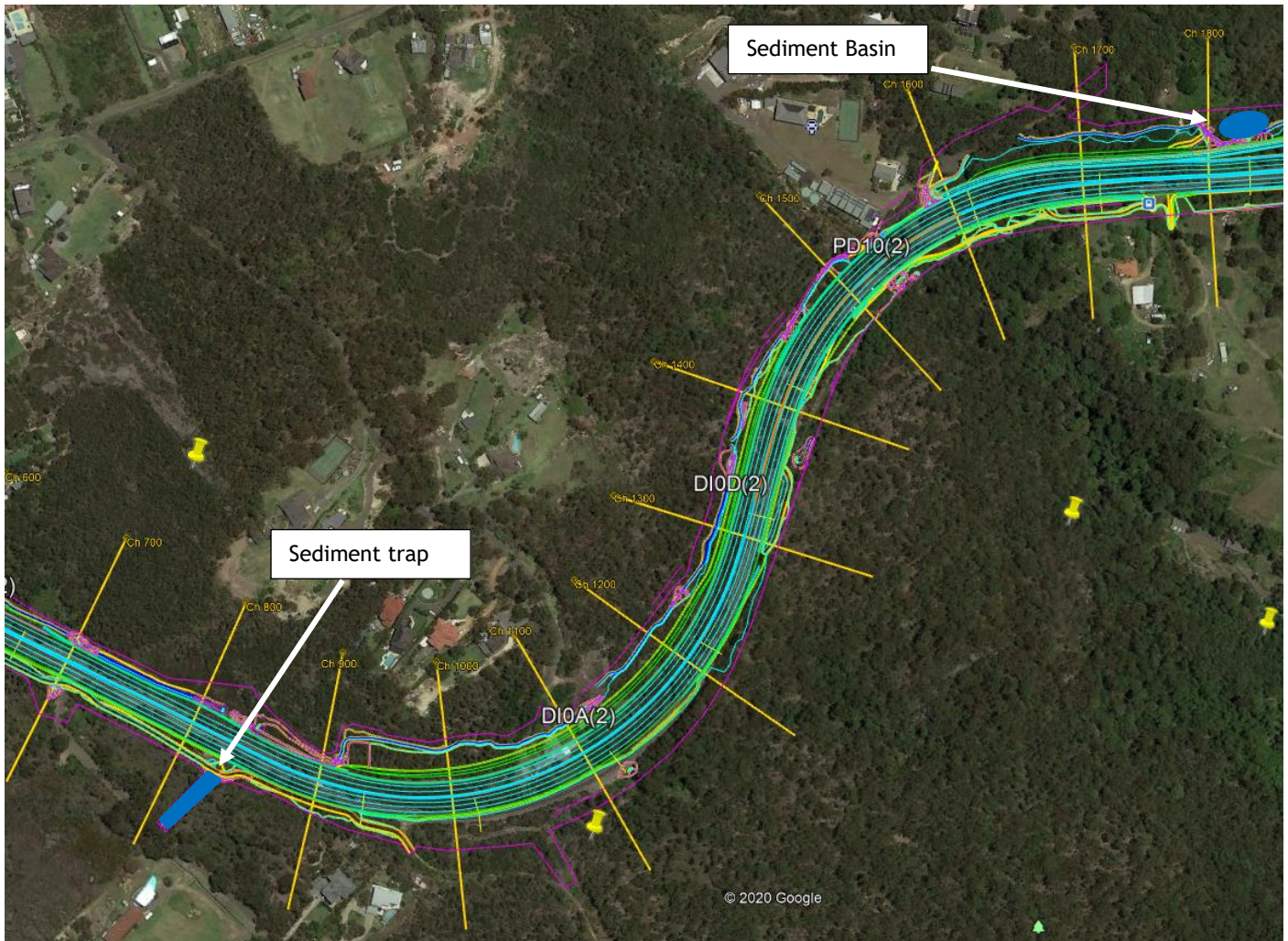
2. POLLUTION INVENTORY

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 Mona Vale Road East Upgrade 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	N/A
Dust	All exposed areas	excavation	N/A
Chemicals - mixed	Adjacent to Site compound	Bunded container	5000L
Concrete wash out	Temporary locations, moved with the construction works	Lined bunds or skip bins	N/A
Drilling muds associated with under boring	Temporary locations, moved with the construction works	Earth sump or tank	N/A

Inventory Map:





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. The chemical storage area will consist of a bunded chemical storage container at the main compound.

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 - examples; basin embankment failure, dewatering pump incident	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 Beakon 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 water from underboring frack out incidents	Human Health and/or Environment	A3	<ul style="list-style-type: none"> Operator to monitor pressure on drill rig, if drop sudden drop in pressure, stop drilling and inspect as potential for frack out. If underboring directly under drainage line, or SW infrastructure, have sand bags available in case a frack out occurs so that you can contain drilling muds. Ensure drilling muds are contained (tank or sump). 	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 Beakon 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 Beakon DHI Environment 	D3

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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 Beakon DHI Environment noise monitoring 	C2
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LIKELIHOOD	Almost Certain	A	High	High	Extreme	Extreme	Extreme	Do not proceed, re-evaluate controls - Extreme risk
	Likely	B	Moderate	High	High	Extreme	Extreme	Seek Site Mgt Authorisation - High Risk
	Occasional	C	Low	Moderate	High	Extreme	Extreme	Manage by routine procedures - Moderate risk
	Unlikely	D	Low	Low	Moderate	High	Extreme	Manage by routine procedures - Low risk
	Rare	E	Low	Low	Moderate	High	High	
			1 Insignificant	2 Minor	3 Moderate	4 Major	5 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
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Likelihood		Description	Example
<i>Almost Certain</i>	A	Is expected to occur in most circumstances/Common or repeating occurrence	Multiple occurrences within a month
<i>Likely</i>	B	Will occur in most circumstances	Multiple occurrences within a year
<i>Occasional</i>	C	Could occur infrequently	1-10 year event
<i>Unlikely</i>	D	May occur/improbable	10-100 year event
<i>Rare</i>	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 	<ul style="list-style-type: none"> 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.
Sediment (includes drilling muds)	<ul style="list-style-type: none"> Water quality issues if spill enters waterway Community complaints 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Not required under PIRMP. Communicate with neighbours on as needs basis as per CNMP

6. PIRMP ACTIVATION AND NOTIFICATION

The Environmental Site Representative and Superintendent are the responsible persons available 24 hours to activate and notify under the PRIMP. The Superintendent is responsible for the initial incident response and the Environmental Site Representative is responsible for the notification requirements. See Emergency contacts section for contact details. The Environmental Site Representative 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 delegate 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 (Northern Sydney Local Health District)	9477 9400
WorkCover Authority	131 050
Northern Beaches Council	1300 434 434

7. 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

8. INCIDENT RESPONSE PROCEDURE FLOWCHART



9. 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.

10. EMERGENCY CONTACTS

EMERGENCY CONTACTS - LOCAL		
	NAME / LOCATION	PHONE NUMBER (S)
NSW Police	Mona Vale Police Station 1707 Pittwater Rd, Mona Vale NSW 2103	000 (02) 9998 0699
Fire & Rescue NSW	Fire and Rescue NSW Mona Vale Fire Station 6 Harkeith St, Mona Vale NSW 2103	000 (02) 9999 1677
NSW Ambulance	8 Stanley St, St. Ives NSW 2075	(02) 9320 7777
NSW State Emergency Service	SES Northern Beaches district	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	Marjorie Yan	0408 261 070
Local hospital	Northern Beaches Hospital 105 Frenchs Forest Rd W, Frenchs Forest	(02) 9105 5000
Safework NSW		13 10 50
AUSGRID		13 13 88
JEMENA (GAS)		13 19 09
TELSTRA		13 22 03
EMERGENCY CONTACTS - Georgiou		
	NAME	PHONE NUMBER(S)
PROJECT MANAGER	Chris Sinclair	0418 182 343
SENIOR PROJECT ENGINEER	Nick Giordano Luke Weller	0499 805 378 0437 805 015

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SITE SUPERINTENDENT/ EMERGENCY RESPONSE TEAM LEADER (responsible for 24 hour activation)	Greg Murdoch Jared Lipton	0409 088 621 0437 805 154
PROJECT ENGINEER	Evan Dalton	0487805028
SITE OFFICE	Melissa Espinosa	0455 937 243
ENVIRONMENTAL SITE REPRESENTATIVE	Jared Lipton	0437 805 154
SAFETY SITE REPRESENTATIVE	Greg Arrell	0499 805 234
HEAD OFFICE	Level 3, 53 Berry Street, North Sydney	02 8072 3610
COMMUNICATIONS LIAISON REPRESENTATIVE	Toni Ford	0427 805 479
CRISIS MANAGEMENT EXECUTIVE DIRECTOR	Gary Georgiou	0409 540 771
RADIO COMMUNICATION		
GENERAL COMMUNICATION	UHF14	
OTHER WORKS COMMUNICATION	UHF14	
EMERGENCY COMMUNICATION	UHF14	
OTHER	UHF14	
Project Name - 6107 Mona Vale Road East Upgrade		
Physical Address - Mona Vale Road between Manor Road to Foley Street Site Compound - 30 Walana Crescent		
<p>When speaking to any of the above Emergency contacts tell them</p> <ul style="list-style-type: none"> • Nature of the emergency • Address • Your name 		

11. 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.
- For larger spills additional containment may be required e.g. earth bunding formed with excavator, sand bagging.
- For spills on water, a containment boom or hydrophobic boom should be deployed.

5 CLEAN UP

- Once the spill is contained, convert it to a solid by absorption or for larger spills engage a suction truck to vacuum the spill.
- 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 (Refer to Waste Management Sub Plan)
- For larger spills removed with suction trucks, the material is to be disposed at a licenced facility as liquid waste.

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