

APPENDIX B8 POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN



Version Details

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1. Introduction

This Plan has been prepared in order to guide and direct the response by Spring Farm Parkway Stage 1 project, refer to Figure 1. Georgiou Group Pty Ltd currently holds Environment Protection Licence (EPL) 21673 for the project.

Table 1 Environment Protection Licence Details

Premises name and address	Spring Farm parkway Stage 1 Upgrade, Campbelltown NSW 2560
Website address	https://www.georgiou.com.au/responsibility/environment/
Scheduled activity/activities on EPL	Road construction (>=50,000T & road to be constructed <10km)

This Pollution Incident Response Management Plan (PIRMP) must be prepared for all Projects based in NSW that hold an 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.



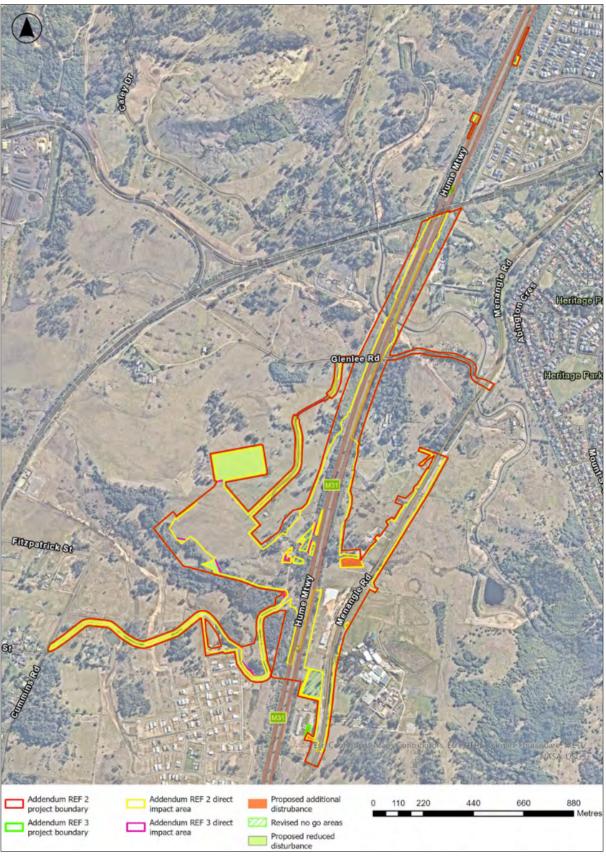


Figure 1 Project Location



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 Spring Farm Parkway Stage 1 with the estimated Maximums stored.

Table 2 Pollution Inventory

Potential Pollutant	Location on Site	Type of Containment	Maximum Quantity On Site
Sediment laden surface water	sediment basins and traps identified on ESCPs	Excavations, sediment basins, sediment traps	N/A
Dust	Entire earthworks footprint	excavation	N/A
Chemicals - Fuel - Oil and grease - Curing compound - Pesticide and herbicide	Adjacent to Site compound	Bunded container	5000L
Concrete wash out	Temporary locations, moved with the construction works	Lined bunds or skip bins	N/A



3. Safety Devices

The following minimum emergency equipment will be available at the construction compound:

- · Clean up Fuel / Oil Absorbent Spill Pads
- Clean up Fuel / Oil Absorbent Water Booms
- Fibreglass Stokes Litter (Stretcher)
- "A" Standard First Aid Kit Portable
- Dry Chemical Powder Fire Extinguishers (number depends on site)
- Bush Fire Fighting Equipment Trailer located at Main Compound.

The following minimum emergency equipment will be available at the office compound:

- Fully Equipped First Aid Room
- Oxy Viva Oxygen Treatment Kit
- Automatic Defibrillator Equipment
- Fibreglass Stokes Litter (Stretcher)
- Portable Trauma Kit
- "A" Standard First Aid Kit Fixed
- 3.5 kg CO2 Fire Extinguishers (number depends on BCA requirements).

The following minimum emergency equipment will be available at each Compound Kitchen:

- "B" Standard First Aid Kit Fixed
- 1 kg Dry Chemical Powder Fire Extinguishers (number depends on BCA requirements)
- Fire Blanket.

The following minimum emergency equipment will be available at each Crib Room:

- 1 kg Dry Chemical Powder Fire Extinguishers (number depends on BCA requirements)
- Fire Blanket.

The chemical storage area will consist of a bunded chemical storage container at the main compound. Fire extinguishers are located at the site compound facility, chemical storage areas and within all heavy mobile plant.



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

Table 3 Risk Assessment

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	 Construction Environmental Management Plan Soil and Water Management Plan Environmental Work Method Statements Implement controls identified on ESCPs procedures for dewatering Inspections and monitoring completed via Beakon DHI Environment 	C3
Pollution of land or water from service strike of sewer or water mains	Human Health and/or Environment	A3	 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	A2	 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	 Reduced speed limits for haulage routes on exposed soils Dust suppression to occur trucks to cover loads Inspections and monitoring completed via Beakon DHI Environment 	D3
Impacts to residents due to noise, vibration and visual pollution.	Human Health and/or Environment	A2	 Comply with approved hours of construction. Comply with EPL conditions and Construction Noise and Vibration Plan 	C2



	 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 Environmental monitoring
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	Almost Certain	A	High	High	Extreme	Extreme	Extreme
00	Likely	В	Moderate	High	High	Extreme	Extreme
LIKELIHOO	Occasional	С	Low	Moderate	High	Extreme	Extreme
_	Unlikely	D	Low	Low	Moderate	High	Extreme
	Rare	Ε	Low	Low	Moderate	High	High
			1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic

Do not proceed, reevaluate controls -Extreme risk Seek Site Mgt Authorisation - High Risk Manage by routine procedures -Moderate risk Manage by routine procedures -Low risk

CONSEQUENCE

 $\hbox{*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	First Aid Injury (FAI)	Recordable Injury (MTI, RWI, LTI < or equal to 10 consecutive shifts off work)	Lost Time Injury (LTI >10 consecutive shifts off work)	Permanent Disabling Injury Fatality/Multiple Fatalities
Environment	Report Only, no evidence of environmental impact	Pollution or degradation confined within the site that has a minor immediate impact and is fully reversible with no residual impact	On-site and/or Off-site Pollution or degradation which has moderate immediate impact and potential residual impacts up to 1 month	On-site and/or Off- site Pollution or degradation which has high immediate impact and potential residual impacts for 1 - 6 months.	On-site and/or Off- site pollution or degradation that has severe and widespread impacts that persist for greater than 6 months
Plant/Property	Damage assessment <\$5K	Damage Assessment \$5K - \$20K	Damage assessment \$20K - \$100K	Damage assessment \$100K - \$500K	Damage assessment >\$500K

Likelihood		Description	Example
Almost	Λ	Is expected to occur in most circumstances/Common or repeating	Multiple occurrences within a month
Certain	A	occurrence	

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Likely	В	Will occur in most circumstances	Multiple occurrences within a year
Occasional	С	Could occur infrequently	1-10 year event
Unlikely	D	May occur/improbable	10-100 year event
Rare	Ε	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.

Table 4 Control Measures

Pollution Scenario	Potential impacts	Early Warning Actions
Hydrocarbon and chemical spills	 Water quality issues if spill enters waterway Land contamination 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.
Sediment	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	 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	Loss of amenity Community complaints	Not required under PIRMP. Communicate with neighbours on as needs basis as per CNMP

Note:

- Extreme cases meaning where the pollution source will potentially cause environmental harm



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 TfNSW Environmental Incident 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.

Table 5 Emergency Contact

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 (South Western Local Health District)	02 8738 6000
SafeWork NSW	131 050
Campbelltown CityCouncil Camden Council	02 4645 4000 02 4654 7777



7. Incident response Procedure flowchart

Incident Occurs with potential risk to environment or community

Evacuate or isolate the area and prevent access if area unsafe.
For incidents involving spills follow Spill Response Procedure.

Immediately notify supervisor via phone or radio.

Superintendent and Environmental and Safety representative to inspect the area/accident. Environmental and Safety representative to notify TfNSW immediately by phone

Project Manager, Supervisor and ESR to determine if immediate reporting to EPA/SafeWork NSW and other regulatory bodies is required. Note: to be immediately notified in the event of actual or potential harm to the environment or health of site personnel (see section 6 of PIRMP)

Supervisor to manage any works to prevent further damage/harm.

Submit incident report to EPA and TfNSW, undertake investigation and determine management measures required on site



8. Incident Investigation

In the event of an environmental incident, TfNSWs Environmental Incident 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. 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

9.1. Training of emergency response personnel

The Project Manager, in consultation with the ESR, WHS Manager and Superintendent include Supervisor, will determine the specific competencies required to respond to an emergency situation on each site and the training required to achieve the level of expertise required. An example of the kinds of environmental incident response competencies (training requirements) required of key personnel is provided at Table 2.

Training will be provided to:

- Provide (or refresh) specific skills such as emergency response drills, evacuations, fire wardens, first aid, etc.
- Enable the proficient use of specialised equipment
- Ensure detailed familiarity with the provisions of this plan and supporting procedures
- Ensure learnings from mock evacuation and other emergency management exercises are communicated
- Ensure knowledge of legislative and statutory requirements.

All project personnel and subcontractors will also receive some training to ensure that they are fully aware of their roles and responsibilities in the event of an emergency situation arising. This training will generally be provided through:

- Site Inductions:
 - Provided to all employees and subcontractors prior to commencement on site
 - Content includes basic emergency procedures and incident reporting.
- Toolbox Meetings:
 - Mainly covers safety issues but can be used as refresher training on response procedures, dealing with the public, locations and use of response equipment.

Specific training will also be provided to Emergency Response Teams to ensure their roles and responsibilities in relation to construction site significant incidents / emergencies are understood and they are fully trained in responding to construction site emergencies.



Table 6 Example of environmental incident response competencies

Position	Incident Response	Storage and Handling of Chemicals	Oil Spill Clean Up	Concrete Washdown Management
Project Manager	Х	X	Х	Х
WHS Manager	Х	X	X	
Environmental Site Representative	Х	Х	×	х
Engineers	Х	X	Х	X
Emergency Response Teams	Х	X	Х	X
Subcontractor	X	X	Χ	X



11. Spill Response Procedure

Clean-up of Spills/ Leaks Procedure			
Description:	This procedure provides guidance for clean-up of chemical spills and leaks and establishes minimum requirements and performance for employees when responding to spills.		
	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.		
	This procedure is only to be followed for spills where:		
	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

- 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

- 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

- 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.

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4 CONTAIN

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- 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



Appendix A – EPL Premises Maps