The Northern Road Upgrade - Stage 1



APPENDIX 3 POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

| | Site Details | | | | |
|---------------------|--|--|--|--|--|
| Client: | NSW Roads and Maritime Services | | | | |
| Site Name: | The Northern Road, Upgrade between Old Northern Road and Peter Brock Drive | | | | |
| File Name | 6101 Northern Road Stage 1 PIRMP | | | | |
| RMS Contract Number | 6101 | | | | |
| Revision Number: | 5 | | | | |
| ID Code: | 6101-HSE-PLN-002.1 | | | | |

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Revision History

| Version | Date | Revision Details | Author | Reviewed by |
|---------|------------|---------------------|-------------|----------------|
| Α | 1/12/2016 | Initial for review | Glen Bolton | Adam Boyd |
| 0 | 4/02/2016 | For Construction | Glen Bolton | Adam Boyd |
| 1 | 11/05/2016 | basin/ contacts | Glen Bolton | Adam Boyd |
| 2 | 23/05/2016 | Dept Health contact | Glen Bolton | Adam Boyd |
| 3 | 15/12/2016 | Service Strikes | Glen Bolton | James Donnelly |
| 4 | 16/06/2017 | Site Maps | Glen Bolton | James Donnelly |
| 5 | 30/08/2017 | Post incident | Glen Bolton | James Donnelly |

The Northern Road Upgrade - Stage 1



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The Northern Road Upgrade - Stage 1



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 | Clause |
|----------|------------|--------------------------------------|--------------|------------|
| Α | 1/12/2015 | Initial submission | All | All |
| 0 | 3/02/2015 | For Construction | All | All |
| 1 | 11/05/2015 | New basin & contacts review | 12,14 | 9,10 |
| 2 | 23/05/2016 | Dept Health contact | 12 | 9 |
| 3 | 15/12/2016 | Service strikes, contacts and map | 6,8,10,11,14 | 3,4,7,9,10 |
| 4 | 16/06/2017 | Site Maps | 14 | 10 |
| 5 | 30/08/2017 | Post incident - pollutant map change | 15 | All |

The Northern Road Upgrade - Stage 1



TABLE OF CONTENTS

| 1. INTRODUCTION | 5 |
|--|----|
| 2. POLLUTION INVENTORY | |
| 3. RISK ASSESSMENT | |
| 4. POLLUTION SCENARIOS AND COMMUNICATION TO NEIGHBOURS | 8 |
| 5. NOTIFICATION | 9 |
| 6. INCIDENT INVESTIGATION | 9 |
| 7. INCIDENT RESPONSE PROCEDURE FLOWCHART | 10 |
| 8. REVIEW AND TESTING | 10 |
| 9. EMERGENCY CONTACTS | 11 |
| 10. SITE MAPS (LOCATION OF POLLUTANTS) | 14 |
| 11. SPILL RESPONSE PROCEDURE | 15 |

The Northern Road Upgrade - Stage 1



1. INTRODUCTION

This Plan has been prepared in order to guide and direct the response by the Northern Road Upgrade - Stage 1 project. Georgiou Group Pty Ltd currently holds EPL 20561 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 Stage 1 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 | 1000L |
| Concrete wash out | Temporary locations, move with the construction works | Lined bunds or skip bins | N/A |

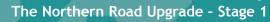
The Northern Road Upgrade - Stage 1



3. 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 | -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 | -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 | - 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 | - 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 | -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 periodsInspections and monitoring completed via OneApp DHI - Environment - noise monitoring | C2 |





| | Almost Certain | A | High | High | Extreme | Extreme | Extreme |
|------------|-------------------|---|---------------------------|-------------------|----------------------|-------------------|--------------------------|
| 00 | Likely | В | Moderate | High | High | Extreme | Extreme |
| LIKELIHOOD | Occasional | С | Low | Moderate | High | Extreme | Extreme |
| _ | Unlikely | D | Low | Low | Moderate | High | Extreme |
| | Rare | Е | Low | Low | Moderate | High | High |
| | | | 1 Insignificant | 2 Minor | 3 Moderate | 4 Major | 5 Catastrophic |

proceed, reevaluate controls Extreme risk Seek Site Mgt Authorisation - High Risk Manage by routine procedures -Moderate risk Manage by routine procedures -Low risk

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 |

The Northern Road Upgrade - Stage 1



| Likelihood | | Description | Example |
|------------|---|--|-------------------------------------|
| Almost | Α | Is expected to occur in most circumstances/Common or repeating | Multiple occurrences within a month |
| Certain | ζ | occurrence | |
| 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 |

4. 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 | 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 waterways until further notice. For larger spills coordinate with combat agency. |
| Soils and erosion | 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 waterways until further notice |
| Service strike of sewer main or water main | Water quality issues if sediment laden water or sewage enters waterway Community complaints relating to inconvenience of no water | Immediately contact the service provider to isolate and carry out emergency repairs In extreme cases contact neighbours via doorknock process and ask them to avoid use of the waterways 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 CNVMP |

The Northern Road Upgrade - Stage 1



5. 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 |
| Camden Council | 4654 7777 |

6. 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

The Northern Road Upgrade - Stage 1



7. INCIDENT RESPONSE PROCEDURE FLOWCHART

If there is a risk to life or property call 000 immediatley

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 Emergency Spill Response Plan.

Immediately notify supervisor via phone or radio.

Superintendent and Environmental and Safety representative to inspect the area/accident.

Project Manager, ESR and Safety Manager to determine if immediate reporting to EPA/WorkCover 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 4)

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

submit incident report to EPA and RMS, undertake investigation and determine management measures required on site

8. 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:

The Northern Road Upgrade - Stage 1



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.

4 CONTAIN

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

The Northern Road Upgrade - Stage 1



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 (Refer to WMP)

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