

Sydney Metro North West

Design and Construction of Surface and Viaduct Civil Works



Pollution Incident Response Management Plan

NWRLSVC-ISJ-SVC-PM-PLN-120214

Revision 11.0

7 September 2017

Pollution Incident Response Management Plan

Sydney Metro – Surface and Viaduct Civil Works



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|-----------|--|---|--|---------------|--------------|
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| Signature |  |  |  | | |

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ACRONYMS & GLOSSARY

| | |
|------------------------|---|
| BMS | Salini Impreglio– Business Management System |
| CEMF | Construction Environmental Management Framework (Submissions Report, Section 3) |
| CEMP | Construction Environmental Management Plan |
| COA | Minister's Conditions of Approval |
| DP&E | NSW Department of Planning and Environment (formerly DP&I) |
| ECM | Environmental Control Maps |
| EIS | Environmental Impact Statement |
| EM | Environment Manager (ISJV) |
| Emission | A discharge of a substance (e.g. dust) into the environment |
| EPA | NSW Environment Protection Authority |
| EPL | Environment Protection Licence |
| ER | Environmental Representative |
| IC | Independent Certifier |
| Incident | Any unplanned or undesired event which results in or has potential to result in injury, ill health, damage, or loss of property, interruption to operations or environmental impairment. An incident also includes a near miss, breach of procedure, quality failure, injuries to workers or members of the public and any other reportable occurrence. |
| ISJV | Impreglio S.p.A. (Australia) and Salini (Australia) Joint Venture / Principal Contractor |
| OEH | NSW Office of Environment and Heritage |
| PIRMP | Pollution Incident Response Management Plan |
| POEO Act | <i>Protection of the Environment Operations Act 1997</i> |
| POEO Regulation | Protection of the Environment Operations (General) Regulation 2009 |
| Project Deed | Part of the contract between TfNSW and ISJV to carry out the SVC works |
| Pollution | The alteration of air, soil, or water as a result of human activities such that it is less suitable for any purpose for which it could be used in its natural state |
| SMNW | Sydney Metro Northwest |
| SSI | State Significant Infrastructure |
| SVC Works | Surface Viaducts and Civil Works, for the North West Rail Link Project |
| SWTC | Scope of Work and Technical Criteria |
| TfNSW | Transport for New South Wales |

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EMERGENCY CONTACTS

[Personal information not required for publically available plan – in accordance with POEO Reg, 98D (4)].

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1. PURPOSE AND OBJECTIVES

1.1 Pollution Incident Response Management Plan

This Pollution Incident Response Management Plan (PIRMP) has been developed and made publicly available in accordance with Part 3A Clause 98D(2) & 98D(3) of the Protection of the Environment Operations (General) Regulation 2009 for Environmental Protection Licence (EPL) 20454.

This PIRMP sets out the process for managing response, classification, reporting and investigation of environmental incidents during construction of the SVC Project by ISJV and its sub-contractors in accordance with the requirements of Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act).

The objectives of this PIRMP is to ensure comprehensive and timely communication about defined pollution incidents to relevant ISJV staff at the premises, relevant TfNSW staff, the EPA, other authorities specified in the POEO Act and community members who may be impacted by the event.

ISJV will ensure that this PIRMP is properly implemented by trained staff, identify persons responsible for implementing it and ensuring the PIRMP is regularly tested for accuracy, currency and suitability.

This PIRMP applies to all work areas on the SVC Project premises covered by EPL 20454.

A hard copy of this plan will be available at the main office of each work site where licenced activities are taking place so that it is readily available to those responsible for its implementation and to an authorised EPA officer on request.

This Plan will be located in a prominent position on ISJV's project website www.isjv.com.au which will be linked to the overarching TNSW project website www.nwrail.transport.nsw.gov.au.

Key areas which this Plan covers are described in Table 1 below; PIRMP Requirements.

Table 1 PIRMP Requirements and Reference in this document

| Section | Description | Reference |
|----------------------------|--|----------------|
| POEO Act Part 5.7 | | Section |
| 153A | Duty of Licence holder to prepare PIRMP | Whole document |
| 153C | Information to be included and procedures or actions to take after an incident and coordinating with authorities | 3,4,5,7 |
| 153D | Keeping of plan | 8 |
| 153E | Testing of plan | 11.1 |
| 153F | Implementation of plan | 11.2 |
| POEO (Gen) Reg 2009 | | |
| 98C(a) | Hazard Assessment | 3 |
| 98C(b) | Likelihood Assessment | 3 |
| 98C(c) | Pre-emptive Action | 3 |
| 98C(d) | An inventory of potential pollutants on the premises or used in carrying out the relevant activity | 3 |
| 98C(e) | Pollutant Inventory Quantities | 3 |
| 98C(f) | Safety equipment such storage containers, spill kits, and PPE will be located near the source of chemical/fuel for easy access | 3 |

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| Section | Description | Reference |
|--|---|-----------------------|
| 98C(g) | Staff Contacts explanation | Emergency Contacts |
| 98C(h) | Authority Contact | Emergency Contacts, 5 |
| 98C(i) | Early Warnings to Neighbours | 8 |
| 98C(j) | Minimising the risk of harm to any persons will be risk assessed daily as per activity within an area by the site Foreman. Items for consideration may include evacuation point, appropriate PPE requirements, site accessibility, etc. | 3 |
| 98C(k) | Map location of pollutants | 6, Appendix 1 |
| 98C(l) | Early Warnings General | 8 |
| 98C(m) | Training of Staff | 8 |
| 98C(n) | Timing of Testing | 10,11 |
| 98C(o) | Updating of Plan | 10,11 |
| 98C(p) | Plan Testing | 11 |
| 98D(1) | Availability of Plan | 8.3 |
| 98D(2) | Publishing Plan Parts | 8.2, 8.3 |
| 98D(3) | Procedures under the Act | 1.1 |
| 98D(4) | Privacy Protection | 8.4 |
| 98E(1) | Testing of the Plan | 11 |
| 98E(2) | Minimum Testing Requirements | 11 |
| EPA Bunding and Spill Management Guidelines | | |
| 4 | Minimising the risk of spills to the environment | 3 |

2. ROLES AND RESPONSIBILITIES

ISJV's Project Team organizational structure and overall roles and responsibilities are outlined in the CEMP. Specific responsibilities for the implementation of this PIRMP are detailed below.

2.1 Deputy Project Director and Environment Manager / Safety Manager

2.1.1 General Requirements

- Be fully conversant with the requirements of the Plan;
- Ensure the PIRMP is fully implemented, monitored and adjusted to suit the requirements of the operations system and the client's requirements;
- Ensure the requirements of the Management System are fully complied with when administering the PIRMP;
- Ensure all employees are conversant with their responsibilities and duties under the PIRMP; and
- Responsible to notify relevant stakeholders and government authorities.

2.1.2 Communication

- Ensure the spill response flowchart, emergency contact numbers and details and any other bulletin or information pertaining to emergency plans and management is placed on noticeboards.

2.1.3 Training

- Educate supervisory personnel in accordance with plan requirements, statutory obligations, and relevant procedures; and
- Ensure staff and contractors have been inducted into ISJV safety and environmental management systems and procedures.

2.2 Superintendent / Foreman

The Superintendent / Foreman are responsible for the day to day operations of the project, ensuring the project operations comply with all relevant obligations for the period of this Contract. The Superintendent / Foreman will be inducted into ISJV's Integrated Management Systems and Procedures.

2.2.1 General Requirements

- Being familiar with the requirements of this PIRMP;
- Ensuring incidents are managed and strictly supervised in accordance with the PIRMP, company policies and procedures;
- Being familiar with legislation and codes of practice relevant to this role, and ensuring the requirements of the same are brought to the attention of interested parties and implemented as is practicable across the Project Site; and
- Understanding process and location of spill kits.

2.2.2 Communication

- Ensuring the requirements of the PIRMP are communicated to all personnel, subcontractors and where appropriate, visitors to site through the site daily Pre Start meetings, Site Inductions, Toolbox Meetings and Environmental Control Maps (ECMs) review on commencement of new works with the potential to impact personnel and the environment; and

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- Any external contact will be communicated to the client via the Project Director or their delegate.

2.3 Employees, Contractors, Sub Contractors & Visitors

On identification of an occurrence requiring emergency response each employee has the responsibility to immediately notify the site supervisor or delegate. In the event of a serious situation the employee shall utilize this Plan to make direct contact with the closest emergency service required (e.g. spill clean-up service).

3. PREPAREDNESS; RISK ASSESSMENT AND PRE-EMPTIVE ACTIONS TO PREVENT POLLUTION INCIDENT RISKS

The key to effective prevention of incidents is risk assessment, procedure development, monitoring and training. During construction activities, ISJV's inspections and preventive actions will include:

- Risk Register reviewed on a monthly basis and updated, when required;
- Activity specific risk assessments, inclusive of associated environmental risk, safety of workers, and emergency evacuation;
- Development of work procedures and construction method statements in consultation with relevant ISJV staff such as work teams, environmental team members and senior management;
- Daily inspections of active work sites;
- Completion of routine environmental checklists;
- Issues and quick close-out of non-compliance notices;
- Ongoing environmental training; and
- Environmental audits of work sites, subcontractors and compliance issues.

Environmental and safety information on hazardous substances (e.g. SDS) will be available at the main site office and where such substances are stored. Personnel involved in emergency response activities will be provided with specific training. An up-to-date list of emergency response personnel and organisations will be maintained at the main office and compounds.

Additionally, a more detailed assessment of the above issues and more are included in s4.2 and the Project Risk Register.

Spill kits are located in all zones. Spill kit and fire extinguisher locations at the main site compounds are shown in Appendix A. Typical spill kit contents includes:

- 2 x Bags Kitty Litter
- 2 x Safety Goggles
- 2 x Chemical Gloves
- 20 x Absorbent Pads
- 5 x Absorbent Sausages
- 5 x Yellow Contamination Bags and Ties

Safety Work Method Statements provided for each activity and located onsite contain specific safety equipment and MSDS are available at the Commercial Road site compound, Zone 7.

3.1 Summary of Pollution Types

The SVC has by its nature a limited list of typical pollution types which require consideration (see Table 2 below). The Project CEMP and Sub Plans address these in more detail.

Table 2 List of Typical Main Pollutants on the SVC Project

| Description | Comments |
|----------------------------|--|
| Air Based Emissions | |
| Dust | From use of plant and equipment, moving across dry surfaces. Covered under |

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| Description | Comments |
|--|---|
| | the Construction Air Quality Management Plan. |
| Fire | Small bushfires and other fires are covered under the Construction Flora and Fauna Management Plan. Fire is not considered an environmental incident, but the smoke from the fire can be and can affect neighbours. |
| Noise | Emitted by plant and equipment. Covered by the Construction Noise and Vibration Management Plan. Noise is not considered a pollution incident and is not covered under this plan. |
| Odour | Odour is generally associated with laying of asphalt and is managed under the CEMP under complaints and the Air Quality Management Plan. |
| Water Based Emissions | |
| Fuel (diesel and petrol), lubricants, hydraulic oils | For plant and equipment operations. Covered under the Construction Soil & Water Management Plan. |
| Paints and surface coatings, thinners, form oil, epoxy, concrete additives | Surface coatings in many cases must be applied on site. Covered under the Construction Soil & Water Management Plan. |
| Pesticides | Control of weeds and pests. Covered under the Construction Flora and Fauna Management Plan. |
| Concrete wash out | Wash out of concrete vessels. Covered under the Construction Soil & Water Management Plan. |
| Bitumen materials | Application of spray seal and laying of asphalt. |
| Effluent | Effluent at the main site compound is by portable effluent systems and is disposed of as being Liquid Waste, in accordance with the EPA waste Classification Guidelines – Part 1: Classification of Waste. |
| Soil and erosion | General site issue for exposed soils. Covered under the Construction Soil & Water Management Plan. Project is guided by 'General road construction handbook, BLUE Book Managing Urban Stormwater Soils and Construction'. |
| Potential Asbestos Containing Material | Unexpected finds of potential asbestos containing material. Covered under the Construction Soil & Water Management Plan. Works to be undertaken in accordance with The Code of Practice: How to Safely Remove Asbestos prepared by Safe Work Australia and WorkCover's guidelines to managing asbestos. |

3.2 Risk Assessment

Table 3 below sets out the requirements under the POEO (General) Regulation 2009 in assessing the risk of a pollution incident:

Table 3 POEO (General) regulation 2009 Requirements

| Section | Item Heading | Covered by |
|---------|---------------------------------|---|
| 98C(a) | Hazard assessment: | Hazard and Likelihood Risk Assessment and Corrective Control Measures tables. |
| 98C(b) | Likelihood assessment: | Hazard and Likelihood Risk Assessment and Corrective Control Measures tables. |
| 98C(c) | Pre-Emptive Action: | Hazard and Likelihood Risk Assessment and Corrective Control Measures – Control measures and corrective action. |
| 98C(d) | Pollutant Inventory Types: | List of Polluting Substances Storage/Uses at Site Initial Assessment – Name/description, Covered under Hazardous Chemicals. |
| 98C(e) | Pollutant Inventory Quantities: | List of Polluting Substance Storages/Uses At Site Initial Assessment – Amount Stored (maximum or estimated Maximum stored) |

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| | | |
|--------|---------------------------------|--|
| 98C(f) | Safety equipment: | List of Polluting Substance Storages/Uses At Site Initial Assessment – Ref to Safety Coverage |
| 98C(i) | Early Warnings Neighbours: | List of Polluting Substance Storages/Uses At Site Initial Assessment – Need for early warnings to neighbours. |
| 98C(j) | Staff Safety: | List of Polluting Substance Storages/Uses At Site Initial Assessment – Ref to Safety Coverage |
| 98C(k) | Maps of location of pollutants: | List of Polluting Substance Storages/Uses At Site Initial Assessment Location of Storage, Map reference (supports section 7 Maps and maps in Appendix A) |

The controls are covered in the Project Specific Risk Register. If the risk assessment process was found to be unacceptable or review of an incident resulted in changes to the risks, alternative and improved pre-emptive measures will be considered.

4. ENVIRONMENT OR POLLUTION INCIDENT

The definition of a pollution incident I, as defined in the EPA's Environmental guidelines: Preparation of pollution incident response management plans:

An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of noise.

5. DUTY TO REPORT

The requirement to notify a *pollution incident* to regulatory agencies (Section 148) is triggered when there is a risk of 'material harm to the environment', which is defined in Section 147 of the *Protection of the Environment Operations Act 1997* (POEO Act) as:

- a) harm to the environment is material if:
 - i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
 - ii. it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Material harm to the environment from the pollution incident can be within or outside the SVC premises.

If an incident is determined to have caused or threatened material harm to the environment, the Environment Manager will **immediately** contact each authority, as per the **Incident Response Procedure** in Section 12, as outlined below:

| REPORTING AGENCY | PHONE NO |
|---|--------------|
| EPA | 131 555 |
| NSW Ministry of Health | 1300 066 055 |
| NSW FIRE & RESCUE | 1300 729 579 |
| WORKCOVER | 131 050 |
| Depending on the local council area the incident occurs or impacts: | |
| BLACKTOWN CITY COUNCIL | 9839 6000 |
| HILLS SHIRE COUNCIL | 9843 0409 |

All pollution and environmental incidents must also be reported **immediately** to the **SVC Environmental Manager (SVC EM)** on 0402 269 439. The SVC EM then reports to:

- **SVC Environmental Representative (ER)** on 0416 278 323 to determine if a significant off-site impact on people or the environment has occurred and the incident needs to be reported to the DP&E Secretary within 48 hours in accordance with CoA D6; and
- **SMNW Environment Manager** on 0478 195 220; and
- **SMNW SVC Environment Manager** on 0418 294 283

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In the event of a potential fish kill, the **EPA** is the Appropriate Regulatory Authority and is to be notified immediately via EPA's Environment Line (131 555). **Fisheries NSW** should also be advised of any incidents via email to: wollstonecraft.fisheries@dpi.nsw.gov.au.

5.1 Incident Investigation

All incidents will be documented and action plans established to prevent a reoccurrence. All Class 1 and Class 2 Incidents will be investigated as per the Environmental Incident Management Procedure (Appendix B).

Where lessons are learnt from the investigation or current procedures are identified as being ineffective, the CEMP and associated Sub Plans will be revised to include the improved procedures or requirement. An environmental investigation includes the following basic elements:

- Identifying the cause, extent and person responsible for the incident;
- Identifying and implementing the necessary corrective action/s;
- Identifying the personnel responsible for carrying out the corrective action/s;
- Implementing or modifying controls necessary to avoid a repeat occurrence of the incident;
- Recording any required changes in written procedures; and
- Advising the environmental authority (i.e. EPA) if a pollution incident has occurred.

All personnel are required to report all incidents or non-compliance/non-conformances, as it is regarded as a valuable method of addressing shortcomings in procedures, training or equipment, and is an opportunity for improvement.

6. PROJECT MAPS

This section covers the *POEO (General) Regulation s98E(k)* requirements which are:

A detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises.

Appendix A shows the project alignment, surrounding premises that could potentially be affected by a pollution incident and site facilities and location of stormwater drains on the premises. Appendix E shows the location of potential pollutants on the premises.

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7. EMERGENCY RESPONSE PLANNING

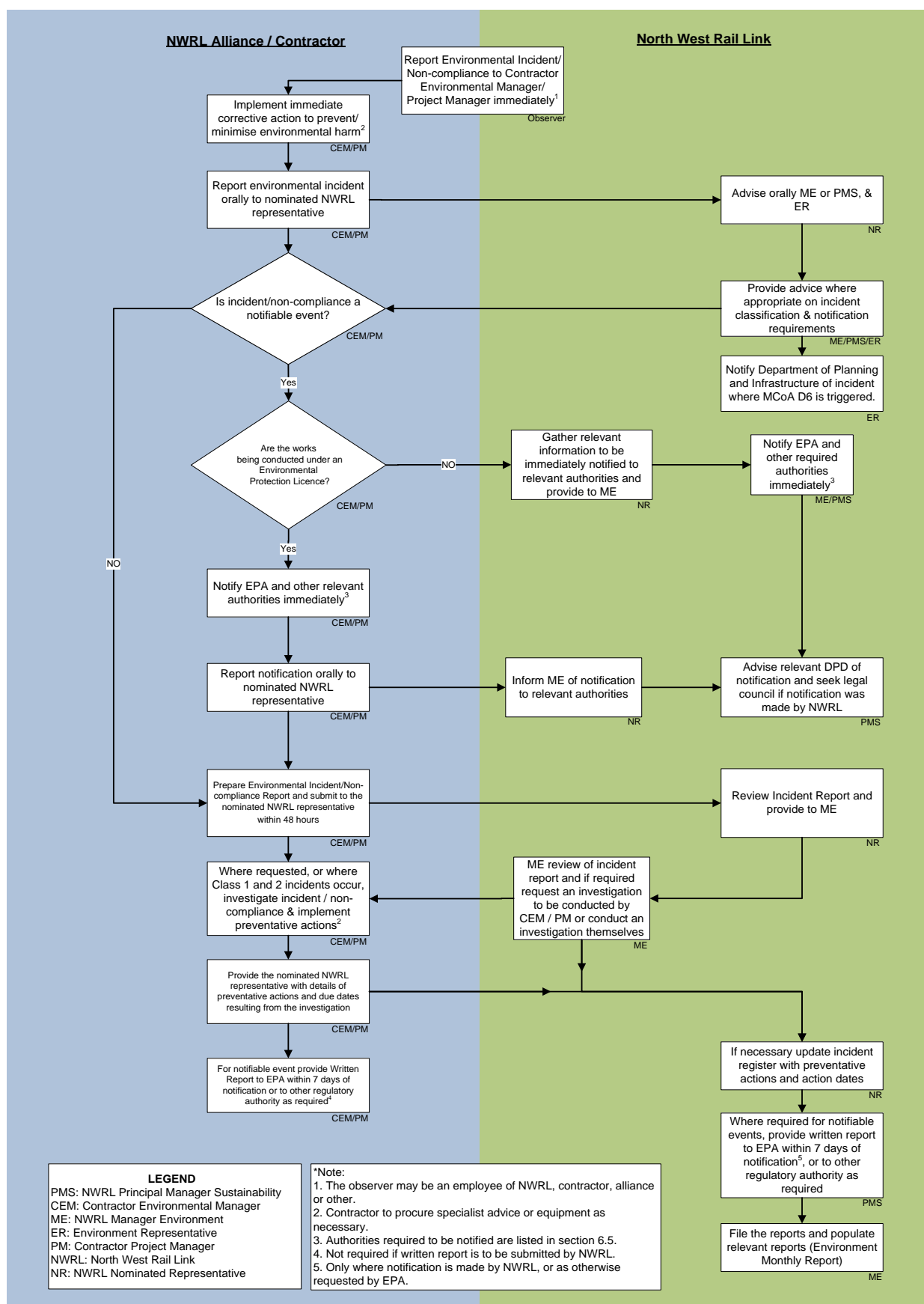
7.1 Spill Response Action Plan

Table 4 Spill Response Action Plan

| | | |
|----|------------------------|--|
| 1 | Safety and Detection | <ul style="list-style-type: none">• Assess safety of situation for yourself and others• If you cannot identify the substance, evacuate immediately and follow step 4• If there is a risk of fire or explosion, evacuate immediately and follow step 4• Shut off ignition source(s) if safe to do so |
| 2 | Trace Source | <ul style="list-style-type: none">• Put on appropriate PPE• Trace the source of the spill• Determine if spill is continuing |
| 3 | Stop or Control | <ul style="list-style-type: none">• Stop or control the leakage by shutting valves, plugging holes, moving mobile equipment – only if it is safe to do so |
| 4 | Emergency Notification | <ul style="list-style-type: none">• Refer to Project Emergency Management Plan for contact details – these will be prominently displayed around the site compound and office |
| 5 | Secure Area | <ul style="list-style-type: none">• Divert traffic and people away from the immediate area• Evacuate if necessary |
| 6 | Contain | <ul style="list-style-type: none">• Contain the leakage using temporary bunds, booms, etc. |
| 7 | Recover Product | <ul style="list-style-type: none">• Recover any free liquid into purpose built tankers if possible• Recover absorbent booms, etc. |
| 8 | Clean Up | <ul style="list-style-type: none">• Clean-up the spill by pumping, absorbing, chemically treating• DO NOT SPREAD OR DILUTE SPILLS WITH DEGREASERS, DETERGENTS OR WATER |
| 9 | Dispose | <ul style="list-style-type: none">• Dispose of the spilt product in an environmentally responsible manner• Contaminated soil should be removed to an appropriate facility following consultation with the Environmental Manager |
| 10 | Report | <ul style="list-style-type: none">• Report the incident to your Supervisor who will then notify the Environmental Manager• The Environmental Manager is responsible for notifying the appropriate agencies and groups |
| 11 | Replace Used Equipment | <ul style="list-style-type: none">• Any equipment or materials consumed in the clean-up operation should be replaced as soon as possible |
| 12 | Monitor | <ul style="list-style-type: none">• Monitor the spill site to validate clean up and impact on the environment. |

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7.2 Soil and Water Incident Response

Table 5 Soil and Water Incidents

| No. | Situation | Response | Responsibility |
|-----|--|--|---|
| 1 | Unauthorised discharge of water that does not meet EPL criteria | <p>Discharge, or relevant part of discharge, to immediately cease and the Environment Manager contacted.</p> <p>Plans, processes and procedures to be reviewed by the Environment Manager and relevant construction personnel to determine the cause of the incident, potential for re-occurrence and appropriate management or mitigation measures to prevent re-occurrence.</p> <p>Plans, processes or procedures are to be updated or modified as required and the workforce advised of the changes or updates via toolbox training or similar.</p> | Environmental Manager |
| 2 | Oil or fuel spill (e.g. hydraulic hose burst) | <p>Machinery or process to cease, if safe to do so. Spill kit to be used to contain and clean up spill. Machinery or process responsible for the spill is not to start operation until a full inspection and necessary repairs / corrective action has been implemented.</p> <p>Plans, processes and procedures to be reviewed by the Environment Manager and relevant construction personnel to determine the cause of the incident, potential for re-occurrence and appropriate management or mitigation measures to prevent re-occurrence.</p> <p>Plans, processes or procedures are to be updated or modified as required and the workforce advised of the changes or updates via toolbox training or similar.</p> | Environmental Manager/Site Superintendent |
| 3 | Temporary erosion and sediment controls are damaged or rendered ineffective | <p>Control to be repaired or replaced within 24 hours of detection or prior to next rainfall (whichever is sooner).</p> <p>Plans, processes or procedures are to be updated or modified as required.</p> <p>If required, toolbox session conducted to reinforce the importance of maintaining and preserving environmental controls.</p> | Environmental Manager |
| 4 | Damage to (or failure of) sediment basin | <p>Water in damaged sediment basin to be pumped to another sediment basin, or discharged if it meets the EPL criteria. Damage to be repaired ASAP.</p> <p>Repairs to be monitored over the next rain event.</p> <p>Plans, processes or procedures are to be updated or modified as required.</p> | Environmental Manager/Site Superintendent |
| 5 | Unanticipated discovery or disturbance of contaminated (or potentially contaminated) soil, water or other material requiring handling and off-site disposal. | <p>Machinery or process to cease, if safe to do so. All personnel to clear the area and medical treatment made available if necessary.</p> <p>Implement Contaminated Materials Contingency Plan (Appendix 5 <i>Soil and Water Management Plan</i>)</p> <p>No work is to occur in the area until it is deemed safe.</p> | Environmental Manager/Site Superintendent |

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| No. | Situation | Response | Responsibility |
|-----|---|---|---|
| | | Plans, processes or procedures are to be updated or modified as required. If required, toolbox training to be provided to relevant personnel regarding contaminated materials. | |
| 6 | Spillage of special, hazardous, liquid or restricted wastes during transport within and to/from site that may affect the local environment. | Stop work and ensure safety of site personnel. Immediately inform the Environmental Manager. Assess zone of contamination, potential nearby receptors. Barricade area and limit spatial spread of contamination/waste materials where safe to do so. Follow ISJV Management System Procedure MSP22X Contaminated Land | Site Superintendent/ Construction Manager / Environmental Manager |
| 7 | Unanticipated discovery of contaminated water requiring handling and off-site disposal. | Stop work and ensure safety of site personnel. Follow process in Appendix 5 (Contaminated Materials Contingency Plan) of <i>Construction Soil and Water Management Plan</i> . | Site Superintendent/ Construction Manager / Environment Co-ordinator / Environmental Manager |
| 8 | Extensive rainfall event or prolonged wet period. | Management of discharges from sedimentation basins and sumps in accordance with <i>Dewatering Procedure</i> (Appendix 7 of <i>Soil and Water Management Plan</i>). Restricting travel on unsealed surfaces. Extension of erosion and sedimentation control measures. | Site Superintendent/ Environment Co-ordinator / Environmental Manager |
| 9 | Fish kill in waterways adjacent to creek crossings or construction sites. | Stop work and ensure safety of site personnel and people who may be in contact with water. Notify Fisheries NSW via email to: wollstonecraft.fisheries@dpi.nsw.gov.au | Site Superintendent / CSM / Environmental Manager |

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7.3 Fauna Incident Response

Table 6 Flora and Fauna Incidents

| No. | Situation | Response | Responsibility |
|-----|------------|--|---|
| 1 | Fish kills | This is a Pollution Incident that must be managed in accordance with the PIRMP. Fisheries NSW should also be advised of any incidents via email to: wollstonecraft.fisheries@dpi.nsw.gov.au Consult Project Ecologist as required by regulatory authorities. | Environmental Manager / Project Ecologist |

7.4 Air Quality Incident Response

Table 7 Air Quality Incidents

| No. | Situation | Response | Responsibility |
|-----|--|--|--|
| 1 | Excessive/visible dust that may impact on traffic or sensitive receivers | Activity causing excessive/visible dust to immediately cease and the Environment Manager contacted. Reassess and review the cause of the excessive/visible dust. Work to resume only when situation rectified. Depending on the nature / extent of the incident the Environment Manager is required to follow the Pollution Incident Response Management Plan | Site Superintendent / Construction Manager / Environmental Manager |
| 2 | Dust emissions exceeding legislative, guidelines or contract requirements. | Any dust related non-conformance (generated from complaints, monitoring, site inspections and internal/external audits) and subsequent corrective actions to be resolved in accordance MSP22R Air Quality Management System Procedure. Depending on the nature / extent of the unauthorised discharge, the Environment Manager is required to follow the Pollution Incident Response Management Plan. | Environmental Manager |
| 3 | Complaints due to excessive dust | All complaints are to be promptly investigated, actioned and recorded in accordance with MSP44A Complaint Management and the <i>Community Liaison Implementation Plan</i> . Dust monitoring would be conducted in response to recurring or major complaints regarding dust emissions. | Environmental Manager / CSM |
| 4 | Dust impacts on Rouse Hill Shopping Centre (sensitive receiver) | Managed through <i>Community Liaison Implementation Plan</i> (CLIP). | Environmental Manager / CSM |
| 5 | Dust impacts to major roads including Windsor Road | Immediate cessation of works. Management through Construction Traffic Management Plan. | Environmental Manager / |

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| No. | Situation | Response | Responsibility |
|-----|--|---|--|
| | | | Construction Manager / CSM |
| 6 | Failure of plant and equipment emission controls | Plant with non-compliant controls to immediately cease activity onsite. Replacement plant to be utilised until controls are rectified. | Construction Manager / Site Superintendent |
| 7 | Inadequate application of dust suppression measures | Activities causing dust to immediately cease until appropriate mitigation measures have been applied. | Construction Manager / Site Superintendent |
| 8 | Excessive deposition of dust in areas containing sensitive vegetation or fauna | Activities causing dust to immediately cease. Remedial measures to be implemented prior to works recommencing. | Environmental Manager / Construction Manager / Site Superintendent |
| 9 | Wind induced dust from exposed areas and/or stockpiles | Exposed areas to be dampened in accordance with <i>Air Quality Management Plan</i> Mitigation Measure AQ9. Exposed stockpiles to be mitigated in accordance with <i>Air Quality Management Plan</i> Mitigation Measures AQ22, AQ23 and AQ24. | Construction Manager / Site Superintendent |
| 10 | Odour detected that has the potential to cause material harm | Activity causing odour ceased or mitigation measures put in place to reduce odour. Advice requested from appropriate authority. | Construction Manager / Site Superintendent |

8. EARLY WARNINGS AND COMMUNICATIONS TO NEIGHBOURS

8.1 Community Communication and Consultation

In the event of a pollution incident occurring that threatens to cause harm to human health or material harm to the environment, the following notification protocol is to be followed:

1. Environmental, Engineering and Community staff will determine the impacted area on a case by case basis, dependent on the nature of the incident, and assess the community catchment requiring notification and/or consultation.
2. Early warnings will be issued by door knocking, phone calls (where contact details are available) and letterbox drops where residents are not at home.
3. Notifications to affected residents will include details of the incident, time frame of the impact, precautions to take and the mitigation measures to put in place, determined in consultation with relevant authorities.
4. Instructions to minimise health impacts specific to the nature of the incident, for example to keep children inside and protect animals, for airborne pollutants to close windows and doors, take extra care if people have respiratory issues, and for water incidents to avoid contact with waterways and use of extracted water.
5. Sensitive receivers such as schools, childcare centres, nursing homes, hospitals are to receive priority notification of pollution incidents.

Ongoing community relations under the CEMP and Community Liaison Implementation Plan (CLIP) will ensure the community is kept up to date on pollution incidents and other matters through letterbox drops to the local community, notices in local papers or via door knocks as required.

Examples where an early warning may be required include:

- Extreme wind conditions where dust, erosion or asbestos threatens to impact on neighbours or waterways;
- If a spill enters a water system and threatens to impact on neighbours or the health of waterways;
- Hazardous chemical spill or leak which threatens to impact on neighbours or waterways; and
- Fire which creates smoke that may impact on neighbours or threatens a neighbouring property.

8.2 Website Information

This Pollution Incident Response Management Plan (PIRMP or Plan) will be uploaded on to the project ISJV website as a requirement under the *Protection of the Environment Operations Act 1997* (POEO Act) and the *Protection of the Environment Operations (General) regulation 2009 s98D*:

(2) A plan is also to be made publicly available in the following manner within 14 days after it is prepared:

(a) in a prominent position on a publicly accessible website of the person who is required to prepare the plan;

(b) if the person does not have such a website—by providing a copy of the plan, without charge, to any person who makes a written request for a copy.

(3) Subclause (2) applies only in relation to that part of a plan that includes the information required under:

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(a) section 153C(a) of the Act, and

(b) clause 98C (1) (h) and (i) or (2) (b) and (c) (as the case requires).

The internet link below is where the PIRMP can be downloaded and viewed by the public.

<http://www.isjv.com.au/environmental-management/environmental-management-plans/>

8.3 Availability and Location of the Plan

The POEO (General) Regulation 2009 s98D(1) states:

- (1) A plan is to be made readily available;*
 - (a) To an authorized officer on request, and*
 - (b) At the premises to which the relevant licence relates, or where the relevant authority takes place, to any person who is responsible for implementing the plan.*

The Plan is located at:

- The ISJV Site Office; and

On the ISJV project webpages (<http://www.isjv.com.au/environmental-management/environmental-management-plans/>)

In any event the availability of this Plan will be made available by locating printed copies in the same locations as the Environment Protection Licence (EPL) is located.

8.4 Privacy Protection

Unlike the EPL this Plan is to only be available to those who are to implement the Plan. This is made clear by the POEO (General) Regulation 2009 s98D(3) which States:

(4) Any personal information within the meaning of the Privacy and Personal Information Protection Act 1998 is not required to be included in a plan that is made available to any person other than a person referred to in subclause (1).

Where components of the Plan are considered to contain sensitive private information then only those cleared should be permitted access to the full Plan. Alternative Plans with such information removed (e.g. contact phone numbers and names) can be more widely distributed. Full plans will be made available to the relevant government agencies, on request or during an incident response activity.



9. INDUCTION/TRAINING

All SVC construction personnel with specific responsibilities under the plan will undergo training which includes:

- Awareness of the PIRMP;
- Where this Plan can be accessed;
- Pollution incident classification and reporting under this Plan;
- Spill response actions under this Plan;
- Other incident response actions under this plan;
- Early warnings internally and to neighbours where appropriate; and
- Specific procedures in dealing with potentially pollution incidents e.g. pump out of sedimentation basins.

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10. UPDATING OF PLAN

EPL Anniversary date: 3 June 2017

PIRMP Review & Testing date: 30 June 2017

This Plan will be updated according to the following:

- 12 months from the last update; or
- Within one month of a pollution incident; or
- As identified after testing of the Plan (see Section 11)

11. TESTING & REVIEW

11.1 Testing of the PIRMP

The POEO (General) Regulation 2009 98E states for testing of the Plan:

- 1) *The testing of a plan is to be carried out in such a manner as to ensure that the information included in the plan is accurate and up to date and the plan is capable of being implemented in a workable and effective manner.*
- 2) *Any such test is to be carried out:*
 - (a) *routinely at least once every 12 months, and*
 - (b) *within 1 month of any pollution incident occurring in the course of an activity to which the licence relates so as to assess, on 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.*

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

The PIRMP will be updated as needed after testing and review.

Records will be maintained as to the dates the PIRMP was tested and the name of staff members who conducted or participated in the testing.

Testing dates

This Plan will be updated according to the following:

- 12 months from the last update, or
- One month after a pollution incident.

Recording of Testing

A detailed recording 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.

This plan was last tested in June 2017. The detailed recording of the testing of this Plan is captured in ISJV's Pollution Incident Response Notification Form, and the PIRMP Training and Drill Report prepared by Enviroease.

11.2 Implementation of the Plan

The POEO Act 1997 s153F requires the Plan be implemented if a pollution incident occurs. A pollution incident is defined under clause 147 of part 5.7 of the POEO Act 1997 as:

Meaning of material harm to the environment

1. For the purpose of this Part:
 - a. Harm to the environment is material if:

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- i. It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
 - ii. It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
 - b. Loss include the reasonable costs and expense that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.
2. For the purpose of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

\$2 million maximum fines apply for failing to implement the Plan.

Hence if a pollution incident occurs:

- It must be responded to according to this Plan and its reference documents.
- An incident response report/audit must be completed.

12. INCIDENT RESPONSE PROCEDURE

1. IMMEDIATE RESPONSE

- Personnel in immediate vicinity of incident stop work immediately and assess the incident
- Consider any safety hazards created by incident, and if safe to proceed, apply immediate controls to minimise further harm to the environment

2. IMMEDIATE INTERNAL NOTIFICATION

- Construction personnel notify incident to relevant Supervisor who will immediately notify the Environment Manager or Coordinator

3. PROTECT ENVIRONMENT & CLASSIFY INCIDENT

- Environment Manager or Coordinator attend incident scene
- Provide advice to construction personnel to ensure further harm to the environment is prevented, and that environmental management plans are followed
- The Environment Manager will notify the ER and any other appropriate TfNSW representative/s
- Environment Manager assesses whether the incident is causing material environmental harm (defined in section 5) using guidance in Appendix B

4. NOTIFY INCIDENT TO AUTHORITIES & COMMUNITY

- If Environment Manager determines material environmental harm has occurred, immediately notify Authorities identified in Section 5 by telephone.
- ISJV site management and/or Community Relations Manager to communicate with the community via personal consultation in the form of doorknocking and/or verbal communication via telephone, or as per procedures in the *Community Liaison Implementation Plan*
- Environment Manager liaise with the ER to determine if a significant off-site impact on people or the environment has occurred, and the need to report to the DP&E Secretary within 48 hours in accordance with CoA D6.

5. REPORT INCIDENT

- Supervisor to complete *Incident Report Form* Section A and submit to Environment Manager
- Site personnel to complete *Incident Report Form*
- Environment Manager to provide written report to ER for submission to the DP&E Secretary within seven days if incident notified in accordance with CoA D6, or if requested by the EPA.

6. INVESTIGATE INCIDENT & RESPONSE

The Environment Manager completes the *Incident Report Form* Section C and ensures that any:

- Necessary preventative and corrective actions are implemented
- Changes to PIRMP, CEMP, risk assessment, and/or environmental management plans in response to the incident are made (if required)
- Incident learnings are communicated through toolbox talks, pre-start briefings, inductions

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Appendix A.1 – Location Maps

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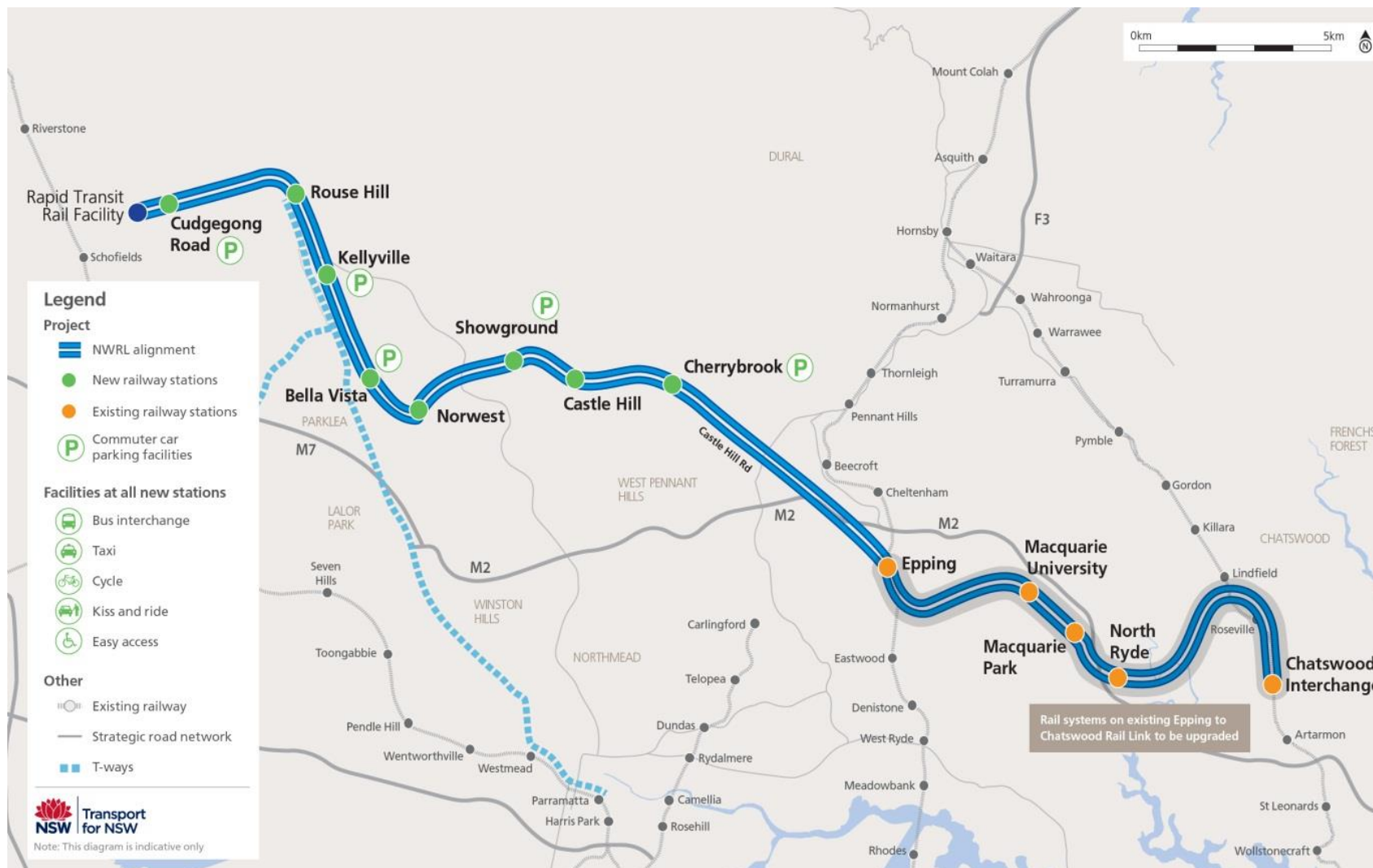


Figure 1: The North West Rail Link service proposed alignment

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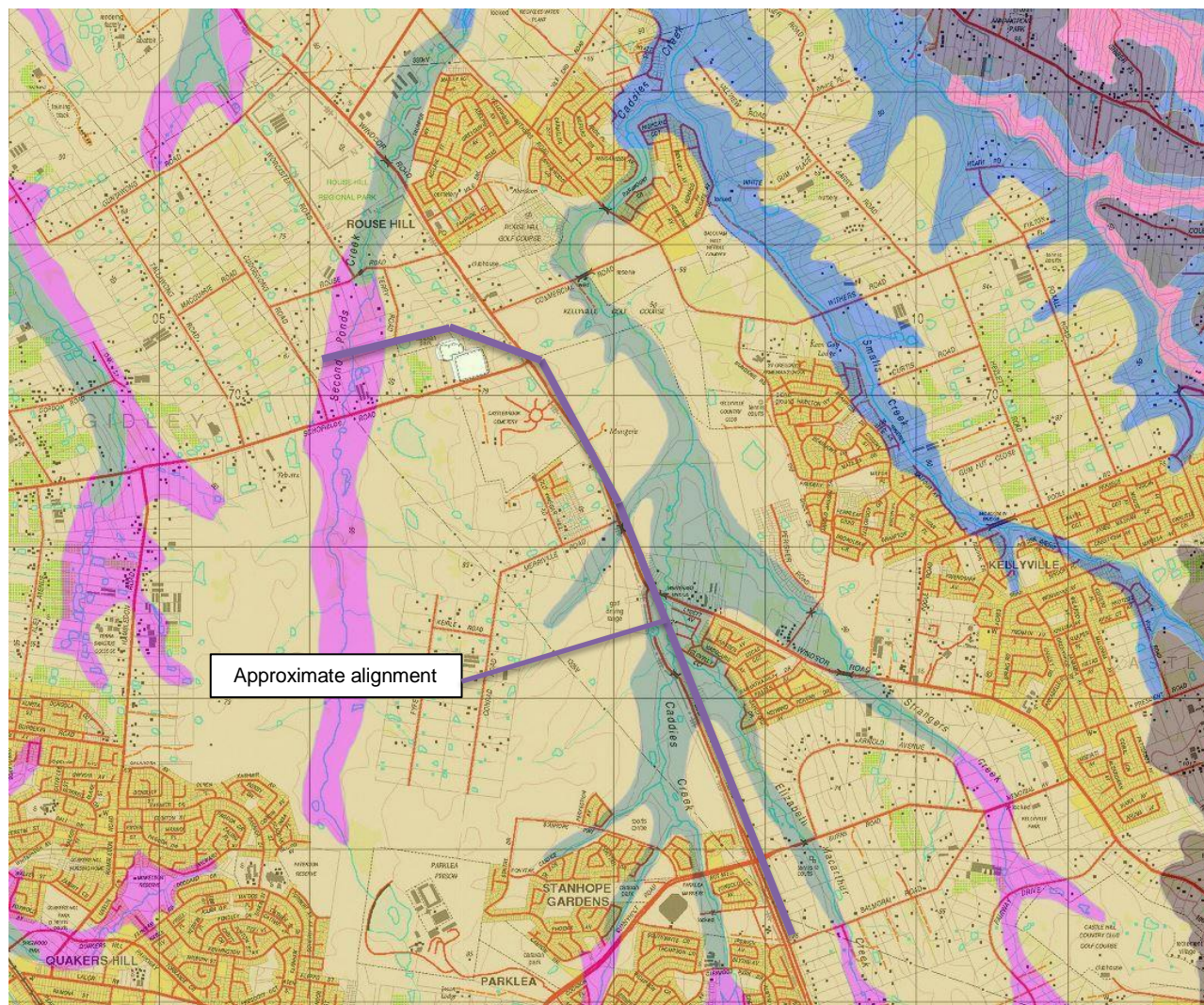


Figure 2 – Major Waterways along the SVC Project Corridor

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Appendix A.2 – Spill Kit and Fire Extinguisher Maps

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Figure 3. Spill Kit & Fire Extinguisher locations at Amber Tiles Zone 5

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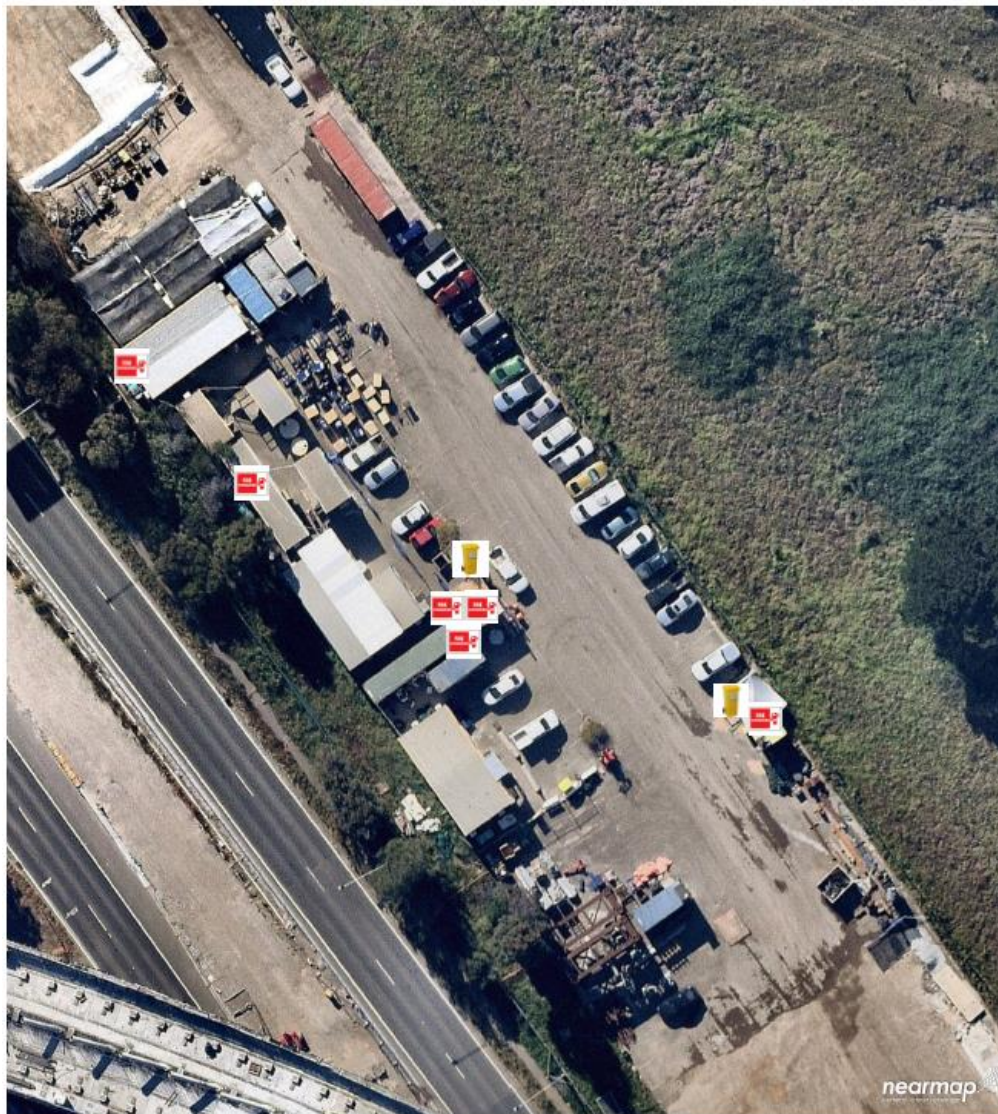


Figure 4. Spill Kit & Fire Extinguisher locations at Commercial Road Zone 7



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Appendix A.3 – Stormwater Pit and Discharge Location Maps



- Stormwater pit
- Waterbody discharge point



Stormwater pit

Waterbody discharge point





Stormwater drain



Waterbody discharge
point is offsite

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Appendix B - Environmental Incident Management

1.0 Purpose & Scope

The purpose of this procedure is to describe the methods & responsibilities for:

- Investigating, responding to, and taking action to minimize any harm caused from, incidents;
- Investigating and responding to system failures; and
- Initiating and completing appropriate corrective and preventive action.

2.0 References (Standards, Guidelines, Legislation)

- ISO AS/NZS 14001:2004 – Clause 4.5.3.
- *Protection of the Environment Operations Act 1997* Part 5.7
- *Protection of the Environment (General) Regulation 2009* Section 101
- *Contaminated Land Management Act 1997* Section 60(1)
- *National Parks and Wildlife Act 1974* Section 91
- *Commonwealth Aboriginal & Torres Strait Islanders Heritage Protection Act 1984* Section 20
- *Heritage Act 1977*
- North West Rail Link Environmental Classification and Reporting Procedure (ECRP) TfNSW 2013
- North West Rail Link Risk Management Standard (RMS) TfNSW 2013

3.0 Definitions

Air Pollution means the emission into the air of any air impurity.

Environmental Control Maps (ECM): a document that describes the Environmental management measures to be implemented by SVC during construction for the duration of the project. The ECMs are developed in accordance with the requirements of the Project CoA and CEMP.

Environmental Incident: means an occurrence or set of circumstances, as consequence of which pollution (air, water, noise or land) or an adverse environmental impact has occurred, or is likely to occur.

Adverse environmental impacts include contamination, harm to flora and fauna (either individual species or communities), damage to heritage items and adverse community impacts.

Environmental Issues: any occurrence or set of circumstances that has the potential to cause or lead to an environmental incident or non-compliance if not rectified

Environmental Non-Compliance: means a non-compliance with any condition of approval, license condition, statutory approval or Deed/SWTC requirements relevant to the activity and/or area where the activity occurs.

EPA: Environment Protection Authority of NSW

Land Pollution: placing in or on, or otherwise introducing into or onto, the land (whether through an act or omission) any matter, whether solid, liquid or gaseous:

- (a) that causes or is likely to cause degradation of the land, resulting in actual or potential harm to the health or safety of human beings, animals or other terrestrial life or ecosystems, or actual or potential loss or property damage, that is not trivial, or

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(b) that is of a prescribed nature, description or class or that does not comply with any standard prescribed in respect of that matter,
but does not include placing in or on, or otherwise introducing into or onto, land any substance excluded from this definition by the POEO regulations.

Material harm to the Environment: Harm to the environment is material if:

- (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- (ii) it results in actual or potential loss or property damage of an amount, or results in an aggregate, exceeding \$10 000 (or other such amount as is prescribed by the regulations).

Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Near Miss: Any unplanned event in the workplace that has the potential to result in an environmental issue.

Noise pollution: The emission of offensive noise. 'Noise' includes sound and vibration

Notifiable Event : Any environmental incident or non-compliance that triggers a specific statutory requirement to notify a regulatory authority. These include Pollution incidents under the *POEO Act 1997 Part 5.7* and *POEO (General) Regulation 2009 Section 101*; land contamination under the *Contaminated Land Management Act 1997 Section 60(1)*; discovery of Aboriginal relics under the *National Parks and Wildlife Act 1974 Section 91*; discovery of Aboriginal remains under the *Commonwealth Aboriginal & Torres Strait Islanders Heritage Protection Act 1984 Section 20*; discovery of non-Aboriginal relics under the *Heritage Act 1977 Section 146*; and out of control fire under the *Rural Fires Act 1997*.

PIRMP: Pollution Incident Response Management Plan

POEO Act: Protection of the Environment Operations Act 1997

Pollution: water pollution, air pollution, noise pollution or land pollution

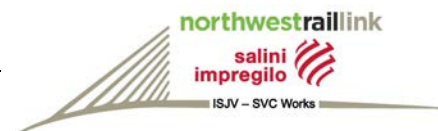
Pollution Incident (PI): An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of noise.

Water Pollution : as defined by the POEO Act

- (a) placing in or on, or otherwise introducing into or onto, waters (whether through an act or omission) any matter, whether solid, liquid or gaseous, so that the physical, chemical or biological condition of the waters is changed, or
- (b) placing in or on, or otherwise introducing into or onto, the waters (whether through an act or omission) any refuse, litter, debris or other matter, whether solid or liquid or gaseous, so that the change in the condition of the waters or the refuse, litter, debris or other matter, either alone or together with any other refuse, litter, debris or matter present in the waters makes, or is likely to make, the waters unclean, noxious, poisonous or impure, detrimental to the health, safety, welfare or property of persons, undrinkable for farm animals, poisonous or harmful to aquatic life, animals, birds or fish in or around the waters or unsuitable for use in irrigation, or obstructs

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or interferes with, or is likely to obstruct or interfere with persons in the exercise or enjoyment of any right in relation to the waters, or

- (c) placing in or on, or otherwise introducing into or onto, the waters (whether through an act or omission) any matter, whether solid, liquid or gaseous, that is of a prescribed nature, description or class or that does not comply with any standard prescribed in respect of that matter,

and, without affecting the generality of the foregoing, includes:

- (d) placing any matter (whether solid, liquid or gaseous) in a position where:
- (i) it falls, descends, is washed, is blown or percolates, or
 - (ii) it is likely to fall, descend, be washed, be blown or percolate,

into any waters, onto the dry bed of any waters, or into any drain, channel or gutter used or designed to receive or pass rainwater, floodwater or any water that is not polluted, or

- (e) placing any such matter on the dry bed of any waters, or in any drain, channel or gutter used or designed to receive or pass rainwater, floodwater or any water that is not polluted,

if the matter would, had it been placed in any waters, have polluted or have been likely to pollute those waters.

Waters: the whole or any part of:

- (a) any river, stream, lake, lagoon, swamp, wetlands, unconfined surface water, natural or artificial watercourse, dam or tidal waters (including the sea), or
- (b) any water stored in artificial works, any water in water mains, water pipes or water channels, or any underground or artesian water.

Supplier: Product and service providers including subcontractors, suppliers, consultants.

Work Method Statement (WMS): a document that identifies the steps, potential hazards, risk ranking, hazard controls and responsibilities for implementation of controls that minimise the occupational health, safety and environmental hazards and risks associated with a specific activity/task.

4.0 Process

| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|--------------------|--|--|
| | 4.1 Incident Response | |
| | For emergencies refer to the Site Specific Emergency Response Plan (SSERP). | SSERP |
| | For Pollution Incidents also refer to Pollution Incident Response Management Plan (PIRMP). | PIRMP |
| | For other environmental incidents refer to WI42B-3. | WI42B-3 Environmental Incident Response |

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| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|--------------------|---|--------------------------------------|
| | <p>4.2 Environmental Incident Types</p> <p>4.2.1 Air and Dust For example odour travelling beyond site boundary, dust exceeding reasonable levels without active management measures in place, operation or maintenance of plant in a manner that causes or is likely to cause air pollution.</p> <p>4.2.2 Traffic, Transport and Access For example issues regarding the management of traffic flow</p> <p>4.2.3 Flora and Fauna For example harm or 'pick' a threatened species, endangered population or endangered ecological community, injure wildlife, damage vegetation or habitat including watercourses, clear beyond approved project footprint</p> <p>4.2.4 Land Contamination For example events where harmful materials escape into soil, such as leaks or spills, deposit material or allow material to be deposited on land in a manner that causes or is likely to cause land pollution.</p> <p>4.2.5 Heritage For example damage, disturb or destroy heritage items/relics, Aboriginal objects or places, not follow unexpected finds procedure</p> <p>4.2.6 Noise and Vibration For example noise traveling beyond the site boundary as a result of poorly maintained or operated plant, not complying with approved work hours, noise complaints</p> <p>4.2.7 Water Pollution For example discharge of water on or off site in a manner that causes or is likely to cause water pollution, not treating and emptying a sediment basin with stipulated timeframe, not maintaining erosion and sediment controls</p> <p>4.2.8 Waste and Hazardous Materials For example dispose of waste in a manner that harms or is likely to harm the environment, not follow requirements of a Resource Recovery Exemption, not properly classify waste.</p> | |

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| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|--------------------|---|--|
| | <p>4.2.9 Unauthorised Works For example work being carried out prior to approval or permits being obtained</p> <p>4.2.10 Systems and Documentation For example a Non-Compliance with project approval, or a CEMP requirement</p> <p>4.2.11 Community For example events causing impacts on community amenity/property.</p> | |
| | <p>4.3 TfNSW Environmental Incident Classification</p> <p>The NWRL Environmental Incident Classification System is based on the environmental consequences from the NWRL Risk Management Standard. This rates consequences into six categories, C1-C6. The categories are then used to classify incidents into 4 classes.</p> <p><u>Class 1 Environmental Incident</u></p> <p>This comprises C1 consequence category and is the most serious class of incident. It is defined as:</p> <ul style="list-style-type: none"> Irreversible large scale environmental impact with loss of valued ecosystems. Prosecution leading to imprisonment. Loss of operating licence. Material harm has occurred <p><u>Class 2 Environmental Incident</u></p> <p>This comprises C2 and C3 consequence categories, defined as:</p> <ul style="list-style-type: none"> Long term environmental impairment in neighbouring or valued ecosystems. Extensive remediation required; OR Impacts external ecosystem and considerable remediation is required. Material harm is likely to have occurred. <p><u>Class 3 Environmental Incident</u></p> <p>This comprises C4, C5, and C6 consequence categories, and is defined as:</p> <ul style="list-style-type: none"> Short term and/or well contained environmental effects. Minor remedial actions probably required; OR Change from normal conditions within environmental regulatory limits and environmental effects are within site; OR | <p>North West Rail Link Environmental Classification and Reporting Procedure</p> |

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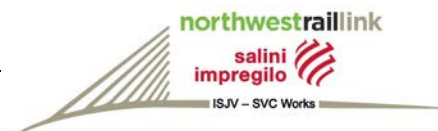
Management System Procedure



| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|---|---|---|
| | <ul style="list-style-type: none"> No appreciable changes to environment and/or highly localised event. It is unlikely that material harm has occurred. <p><u>Non-Compliance Only Environmental Incident</u></p> <p>Defined as all other incidents and /or environmental non-compliances. For example these would include near misses, a formal complaint or correspondence from a regulatory authority, controls not installed as per ECM, or material/water leaving site due to a weather event that exceeds the design capacity of controls, non-compliance with a project approval CEMP requirement.</p> | |
| All | <p>4.4 Environmental Incident Reporting</p> <p><u>4.4.1 Initial Report</u></p> <p>All Salini Impregilo's employees including supplier's personnel and hired labour must <i>verbally report pollution incidents immediately</i> and environmental incidents or environmental non-compliances as soon as possible to their direct Salini Impreglio manager/supervisor.</p> <p>The Salini Impreglio manager/supervisor must immediately notify the Environment Manager.</p> <p><u>4.4.2 Notifiable Events</u></p> <p>If a pollution incident has occurred immediately apply the PIRMP. In the absence of the Project Director the Area Manager or General Manager will resume the responsibility and may delegate it to Department/Functional Manager in charge.</p> <p>A written report must be issued to the EPA within 7 days of a notifiable event.</p> <p>If other notifiable event (not pollution) has occurred seek advice from NWRL if the notification is to be made by NRW or ISJV. If the latter, apply PWI42B-1 Statutory Notifications.</p> <p><u>4.4.3 Internal Notifications</u></p> <p>All environmental incidents will be reported internally in accordance with PWI42B-2 Incident Investigation & Reporting Matrix.</p> | <p>PIRMP Section 3</p> <p>PWI42B-1 Statutory Notifications</p> <p>PWI42B-2 Incident Investigation & Reporting Matrix.</p> |
| Project Director authorised delegate | | |
| Project Director or authorised delegate | | |

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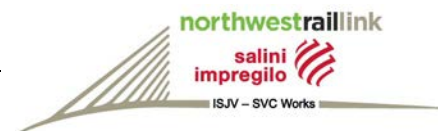
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| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|--|---|---|
| Environment Manager or authorised delegate | <p><u>4.4.4 Client Notifications</u></p> <p>The Environment Manager will report environmental incidents to TfNSW and statutory bodies as per PWI42B-4</p> <p>In the case of incident that has attracted or can be expected to attract the media, the Minister for Transport, a local Member of Parliament, or the broader community, ISJV will notify the Principals Representative within 10 minutes of the incident occurring, or as reasonably practical.</p> <p>For other incidents, ISJV will notify the Principals Representative within one hour of the incident occurring, or as reasonably practical.</p> | PWI42B-4 TfNSW Reporting Requirements |
| | <p><u>4.4.5 Recording & Reporting Incidents</u></p> <p>All environmental incidents and environmental non-compliances must be recorded by completing 'Section A' of PMSF42B-1 Environmental Incident Reporting & Investigation form within 24 hours. If possible, take photographs of the incident and surrounding areas.</p> <p>If a Notifiable environmental incident has occurred also complete 'Section B' of PMSF42B-1 Environmental Incident Reporting & Investigation.</p> <p>If the incident was a Class 1 or 2 incident, complete 'Section C' of PMSF42B-1 Environmental Incident Reporting & Investigation within 5 days. Seek legal advice before issuing to Client or Authorities.</p> <p>If the incident was a Class 1 incident, complete 'Section D' of PMSF42B-1 Environmental Incident Reporting & Investigation within 5 days.</p> <p>If an environmental non-compliance has occurred, complete 'Section E' of PMSF42B-1 Environmental Incident Reporting & Investigation.</p> | <p>PMSF42B -1 Incident Reporting & Investigation</p> <p>PWI42B-1 Statutory Notifications</p> <p>PMSF42B -1 Incident Reporting & Investigation</p> <p>PMSF42B -1 Incident Reporting & Investigation</p> <p>PMSF42B -1 Incident Reporting & Investigation</p> |
| Environmental Co-ordinator | Summary details of all environmental incidents and environmental non-compliances will be entered by the project staff PMSR42B-1 Incident Register. | PMSR42B-1 Incident Register. |

ENVIRONMENTAL INCIDENT MANAGEMENT

Management System Procedure



| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|---|--|---|
| Competent Personnel | <p>4.5 Environmental Incident Investigation</p> <p>Investigations should be performed when there has been a Class 1 or 2 incident, where requested by Client, or if an environmental non-compliance has or had potential to become a Class 1 or 2 environmental incident. Begin the investigation as soon after the incident as practical.</p> <p>The investigation must be carried out by competent personnel in accordance with PWI42B-2 Incident Investigation & Reporting Matrix. Outcomes should be recorded in 'Section C' of PMSF42B-1 Environmental Incident Reporting & Investigation.</p> <p>For actual or potential Class 1 incidents, or if requested by the Environment Manager, Senior Management will complete 'Section D' of PMSF42B-1 Environmental Incident Reporting & Investigation.</p> <p><u>4.5.1 Investigation objectives</u></p> <p>The primary objectives of incident reporting and investigation are to:</p> <ul style="list-style-type: none"> Reconstruct and document the event leading up to the incident as accurately as possible. Identify the root cause and factors that contributed to the incident so that action and control procedures can be implemented to prevent the recurrence of a similar incidents. To determine the cause of incidents, and NOT to place blame on an individual. Compile an accurately documented record of each reported incident or to which reference can be made; Improve the systems of work and procedures; and Determine compliance with legislation. <p><u>4.5.2 Investigation Techniques</u></p> <p>Gather the following data where applicable to the incident:</p> <ul style="list-style-type: none"> Background data concerning the incident derived from Site Supervisor's reports and personal interviews with employees, response personnel, and other parties who were either involved in the incident or witnessed its occurrence. Conduct all interviews one-on-one, in private, and use "open-ended" questions and records statements using PMSF42B-2 Witness Statement or other similar format. | <p>PMSF42B-1 Incident Reporting & Investigation</p> <p>PWI42B-2 Incident Investigation & Reporting Matrix</p> |
| Competent Personnel & Senior Management | | |
| Competent Personnel & Senior Management | | <p>PMSF42B-2 Witness Statement</p> <p>PMSF42-1 Incident Reporting & Investigation</p> |

ENVIRONMENTAL INCIDENT MANAGEMENT

Management System Procedure



| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|---------------------|--|--------------------------------------|
| | <ul style="list-style-type: none"> ▪ The date, time, duration, specific location, operation or equipment involved in the incident, as well as personal information on employee(s) involved. ▪ Activity at the time of the event indicating the general job task being performed (e.g., dewatering sediment basin) and specific activity (e.g. using pump to discharge water). ▪ General preventive measures that were in place at the time of the incident, including: <ul style="list-style-type: none"> - Environmental controls in place e.g. erosion and sediment controls, protective fencing and signage, - Employee training for the task being performed e.g toolbox consultation, work instruction induction, meetings, formal training, etc. and - Supervision present. ▪ Immediate actions taken to reduce severity of the incident ▪ Environmental Control Map for the area ▪ WMS for the activity. ▪ Weather conditions that may have contributed to the incident such as snow, ice, heat, rain, strong winds, etc. ▪ Inspection and audit reports. Photos, video, etc. | |
| Environment Manager | <p>4.6 Review of Systems and Processes</p> <p>An incident requiring investigation will prompt a project review of the project procedures, processes, work instructions, WMS and Risk Management Log which will be undertaken in accordance with MSP22 Risk Management and MSP47 Project Reviews.</p> <p>The Environment Manager will complete the amendments to the project procedures, processes, work instructions, WMS and Preconstruction Risk Management Log if required. If changes to the corporate processes or procedures are warranted then the recommendations will be provided to the Systems Manager for actions.</p> | |
| | <p>4.7 Senior Management Review</p> <p>Incident review will be conducted by senior management in accordance with 'Section D' of PMSF42B-1 Incident Reporting & Investigation subject to completion of Sections A to C to ensure that a full and comprehensive investigation process has been undertaken and that all recommended preventive and corrective actions have been</p> | |

ENVIRONMENTAL INCIDENT MANAGEMENT

Management System Procedure



| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|---|--|--------------------------------------|
| | implemented or are in the process of being implemented. | |
| Senior Management | <p>4.8 Management and Project Reviews of Reported Incidents</p> <p>Upon approval and authorisation, communicate any amendments to staff in accordance with MSP18 Document and Data Control and MSP16 Communication.</p> <p>The incident report, results of the preliminary reviews and draft changes to the corporate processes or procedures will be reported by the Systems Manager to the Business Systems Manager on a monthly basis to management in accordance with MSP49 Management Reporting. Project reviews will be undertaken by the project team in accordance with MSP47 Project Reviews. Furthermore, management reviews will be undertaken by Senior Management on a monthly and/or annual basis in accordance with MSP48 Management Review.</p> | |
| <p>Environment Manager or Systems Manager</p> <p>Senior Management</p> <p>Systems Manager</p> | <p>4.9 Non-conformances, Corrective and Preventive Actions</p> <p>Non-conformances (NCR) or Corrective Action Request (CAR) maybe raised by the Project Team in accordance with MSP44 Non-conformance and MSP45 Improvement Opportunities, Corrective & Preventive Action in response to environmental incidents including proposed corrective/preventive action to be taken to rectify the deficiency. The corrective/preventive action will be reviewed by Project Senior Management prior to implementation.</p> <p>A copy of the non-conformance and/or corrective/preventive action will be raised and managed internally, including any subsequent confirmations of rectified and completed actions.</p> <p>The Systems Manager will implement, record and communicate changes in the Project Management System procedures resulting from incident investigations and corrective and preventive action.</p> | |
| | <p>4.10 Incident Investigation and Reporting Training</p> <p>The investigation and reporting of incidents requires knowledge and understanding of the techniques required to conduct a comprehensive, adequate and</p> | |

ENVIRONMENTAL INCIDENT MANAGEMENT

Management System Procedure



| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|--------------------|--|--------------------------------------|
| | <p>meaningful investigation and reporting.</p> <p>It is essential that all personnel responsible or involved in incident investigation and reporting are competent, experienced and trained on the techniques and methods of investigation and reporting.</p> <p>The required competency of the incident investigation officer will be as follows:</p> <ul style="list-style-type: none"> ▪ 1 days incident investigation training course (such as ICAM training). ▪ Minimum 2 years experience in environmental management including incident investigation. <p>The investigation training will be provided in accordance with MSP15 Training Management primarily to Incident Investigation Officers with the responsibility of investigating major incidents</p> <p>Note: In the event that there are no internal trained or experienced environmental incident investigation officers; Salini Impreglio will engage external incident investigation officer(s).</p> | |
| | <p>4.11 Communication of Lessons Learnt</p> <p>Details of the incident and subsequent corrective actions will be communicated to and may be discussed as part of management review meetings in accordance with MSP48 Management Reviews.</p> <p>For all Class 1 and Class 2 incidents and repeated lower order incidents the Environment Manager shall email details of the incident and subsequent corrective actions the Superintendent who will be responsible for ensuring communication to all workers on site using MSF15-5 Toolbox (Consultation) Records.</p> | |
| | <p>4.12 Incident Records</p> <p>Environmental Incident investigation, reporting and other related records will be maintained in accordance with MSP18 Document & Data Control and MSP50 Control of Records & Archiving.</p> <p>Records will include but not limited to:</p> <ul style="list-style-type: none"> ▪ Incident and investigation reports (including photos, data, inspection reports, etc.); | |

ENVIRONMENTAL INCIDENT MANAGEMENT

Management System Procedure



| Who is Responsible | Sub-Process Description | Reference (Forms, Registers & Doc's) |
|--------------------|---|--------------------------------------|
| | <ul style="list-style-type: none">Incident Register;Internal & external correspondence;Regulatory Authorities notifications & reports;Client notification;Records of management & project reviewsNon-conformances, corrective & preventive actions;Incident Investigation training records. | |

5.0 Documentation

Forms, Registers & Work Instructions

PMSF42B-1 Incident Investigation & Reporting
PMSF42B-2 Witness Statement
PMSR42-1 Incidents Register
PWI42B-1 Statutory Notifications
PWI42B-2 Environmental Incident Reporting Matrix

Associated Documentation

MSP15 Training Management
MSP16 Communication
MSP18 Document & Data Control
MSP20 Risk Management
MSP44 Non-conformance
MSP45 Improvement Opportunities, Corrective & Preventive Action
MSP46 Analysis of Data
MSP47 Project Reviews
MSP48 Management Review
MSP49 Management Reporting
MSP50 Control of Records & Archiving

Pollution Incident Response Management Plan

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Appendix C - Environmental Incident Report (MSF42B-1)

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

Management System Form



When using this form refer to PMSP42A Environmental Incident Management for guidance and clarification of terms

Section A – Complete A-A7 inclusive within 24 hours of all incidents

For non-compliances complete A, A1 and A7 only.

Section B – Complete within 24 hours if incident is a notifiable event

Section C – Complete within 5 days of a Class 1 or 2 incident.

Where notifiable and/or has been notified to the relevant authority only complete after requesting legal privilege.

Section D - Complete following the submission of the incident investigation report (section A & B) for Class 1 incidents.

Section E – Complete for non-compliances only.

SECTION A – INCIDENT REPORTING

| | | |
|---|------------------------------|--------------------|
| Project/Workplace: | | EIR No.: |
| Date of Incident: | Time: | Weather Condition: |
| Date/Time Reported to ISJV: | Reported to (name/position): | |
| Reported by: (Name/contact details): | | |
| Supervisor responsible (Name/company/position): | | |
| NWRL Environment Rep. notified by: | Date: | Time: |
| NWRL Environment Manager notified by: | Date: | Time: |

Section A1 - Incident Classification, Type & Properties

| | | | |
|---|--|-------------------------|--|
| Incident Classification: | <input type="checkbox"/> Non-Compliance Only | Duration: | <input type="checkbox"/> Short Term (Less than 1wk) |
| | <input type="checkbox"/> Class 3 | | <input type="checkbox"/> Medium Term (Less than 3 months) |
| | <input type="checkbox"/> Class 2 | | <input type="checkbox"/> Long Term (Greater than 3 months) |
| | <input type="checkbox"/> Class 1 | | <input type="checkbox"/> Permanent |
| Incident Properties: (tick as many as appropriate, where significant off-site impacts on people or the biophysical environment occurs this incident is also notifiable to DP&I) | <input type="checkbox"/> Notifiable Event | Also complete Section B | |
| | <input type="checkbox"/> Non-Compliance | Go to Section E | |
| Incident Type: (Choose one) | <input type="checkbox"/> Air and Dust (e.g. dust or odour emission, excessive exhaust from plant or equipment) | | <input type="checkbox"/> Community (e.g. events causing impacts on community amenity/property) |
| | <input type="checkbox"/> Flora and Fauna (damage/harm to species /habitat/ecological community) | | <input type="checkbox"/> Heritage (e.g. damage/ disturbance to heritage item/object/place) |
| | <input type="checkbox"/> Land Contamination (e.g. events where harmful materials escape into soil) | | <input type="checkbox"/> Noise and Vibration (e.g. exceedances of noise and vibration limits) |
| | <input type="checkbox"/> Systems and Documentation (e.g. Non-Compliance with project approval, or a CEMP requirement) | | <input type="checkbox"/> Traffic, Transport and Access (e.g. Issues regarding the management of traffic flow) |
| | <input type="checkbox"/> Unauthorised Works (e.g. work being carried out prior to approval or permits being obtained) | | <input type="checkbox"/> Waste and Hazardous Materials (e.g. disposal causing environmental harm) |
| | <input type="checkbox"/> Water Pollution (e.g. discharge to any onsite or offsite waterway) | | <input type="checkbox"/> Other (provide details) |

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

Management System Form



Section A2 - Incident Circumstances and Corrective Actions

Details ((Explain clearly how the incident occurred. This should be brief, in dot point form, providing the facts only and should not contain supposition or hearsay):

Total number of attachments (i.e. additional details, diagrams, statements, photos, etc.):

Exact Location (attach diagrams/drawings. If pollution has occurred ,also describe location and extent):

Who was involved (List of known witnesses to the incident):

| | | | |
|-------|-----------|-------|-----------|
| Name: | Employer: | Name: | Employer: |
| Name: | Employer: | Name: | Employer: |

Section A3 - Immediate Remedial Actions

(Actions taken immediately to prevent or minimise environmental harm)

Section A4 – Corrective/Preventative Actions

Details of what Corrective/Preventive Actions to eliminate, or if not possible minimise, the possibility of a similar incident occurring again.

When determining what corrective action is needed to address the immediate causes of the incident and/or what future preventive action may be appropriate such actions should be considered against the hierarchy of controls (refer to MSP22 Risk Management) as follows to identify the key learning's that can be gained from the incident:

| Action | Responsible Person & Employer | Target Date | Action Completion Date |
|--------|-------------------------------|-------------|------------------------|
| | | | |
| | | | |
| | | | |
| | | | |

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

Management System Form



| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Section A5 – Investigation Requirements

- ☐ Report Only (Non- compliances and Class 3 Incidents)
- ☐ Investigation (Class 1 and 2 Incidents) Complete Section C within 5 days
- ☐ Senior Management Review (Class 1 Incidents)

Section A6 - Review & Authorisation

Report Prepared By:

| Name | Position |
|------|----------|
|------|----------|

| | |
|-----------|-------|
| Signature | Date: |
|-----------|-------|

Report Reviewed By Project Director

| | |
|-----------|-------|
| Signature | Date: |
|-----------|-------|

Section A7 - Distribution (refer to WI42B-2 Incident Investigation & Reporting Matrix)

- | | | |
|---|---|---|
| <input type="checkbox"/> Country Manager | <input type="checkbox"/> Project Director | <input type="checkbox"/> Construction Manager |
| <input type="checkbox"/> Environmental Manager | <input type="checkbox"/> Business Systems Manager | <input type="checkbox"/> Legal Council |
| <input type="checkbox"/> NWRL Env. Representative | <input type="checkbox"/> NWRL Environment Manager | <input type="checkbox"/> |
| <input type="checkbox"/> Other: | | |

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

Management System Form



Section B - AUTHORITY NOTIFICATION (refer to WI42B-2 Statutory Notifications)

Severity Potential: ☐ Infringement Notice ☐ Fine ☐ Prosecution

| | | | |
|---------------------|--|----------------|--|
| Pollutant: | | | |
| Quantity or Volume: | | Concentration: | |

Have the following authorities been notified?

| | Yes | No | Date | Time | By whom? | Reference Number |
|---------------------------------|--------------------------|--------------------------|------|------|----------|------------------|
| Local Authority (Council) | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| EPA (pollution hotline 131 555) | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Ministry of Health | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Work Cover | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Fire and Rescue NSW | <input type="checkbox"/> | <input type="checkbox"/> | | | | |

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

Management System Form



SECTION C – INCIDENT INVESTIGATION

| Persons Involved: | Name | Occupation | Employer |
|------------------------------|-------------|-------------------|-----------------|
| Person(s) directly involved: | | | |
| | | | |
| | | | |
| Person reporting incident: | | | |
| Person incident reported to: | | | |
| Witnesses: | | | |
| | | | |
| | | | |
| Supervisor: | | | |

Section C1 - Investigation Details

Interview those involved – including witnesses – Note Time and Location – Environmental Conditions – Position of people, equipment & materials – Directions Given – Anything moved, turned on/off or taken from the scene – Actions of people prior, during and after.

Record Details – Scene – Diagram and Photos – Statements- Sequence of events – Experience/Training instructions given. Attach additional material as appropriate.

Note: Record statements using MSF42B-2 Witness Statement.

Total number of attachments (i.e. diagrams, witness statements, photos, reports, etc.):

Investigating Officer Name:

Company/Position:

Signature:

Date:

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

Management System Form



Section C2 - Incident Analysis

What were the contributing factors that led to the incident? This may require some conclusions to be reached based on evidence gathered from the investigation.

The following causal factors should be used as a prompt:

| Environmental Factors | Workplace Factors | Human Factors | System Factors |
|--|---|---|--|
| <ul style="list-style-type: none"> Weather Conditions (wind, temperature, etc) Vibration Noise Dust Gas or Fumes Fire and/or Explosion Chemical Emission (i.e. dust, etc.) Uncontrollable discharge Heritage | <ul style="list-style-type: none"> Surface Conditions (gradient, rough, etc) Workplace Layout (access/egress, congested, house keeping, etc) Plant /Equipment/ Tools Materials (conditions available, suitability, failure, etc) Manual Handling Storage, Stacking Non Routine Task | <ul style="list-style-type: none"> Fitness for Work Failure to follow WMS Failure to Follow Instructions Time Pressure, Hurrying, Speed Inexperience, Lack of Competency Complacency, Inattention, Distraction Language Poor or Inadequate Communication Mistake | <ul style="list-style-type: none"> Absence of WMS Incorrect WMS Failure to Detect Hazard(s) Failure to Correct Hazards(s) Lack of or inadequate Supervision Lack of or inadequate Training Lack of or inadequate Planning |
| Identified Root Cause(s): | | | |

Section C3 – Additional Corrective Actions

Details of what Corrective/Preventive Actions must be taken and 'By Whom' to eliminate if not possible minimise the possibility of a similar incident occurring again.

When determining what corrective action is needed to address the immediate causes of the incident and/or what future preventive action may be appropriate such actions should be considered against the hierarchy of controls (refer to MSP22 Risk Management) as follows to identify the key learning's that can be gained from the incident:

| Action | Responsible Person & Employer | Target Date | Action Completion Date |
|--------|-------------------------------|-------------|------------------------|
| | | | |
| | | | |
| | | | |

This investigation will be reviewed by (date): _____

To ensure the corrective actions have been implemented and are effective.

Note: If the corrective action cannot be authorised and/or implemented within the target date of the completion of the investigation, the Environment Manager will raise a MSF45-1 Corrective Action Request on the most appropriate person and enter details in the MSR45-1 Corrective/Preventive Action Register.

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

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Corrective/Preventive Actions completed by the target date: ☐ Yes ☐ No

If not, Corrective Action Request (CAR) raised? CAR No.:

Name: Position:

Signature: Date:

Section C4 - Review & Authorisation

Review by Senior Manager (i.e. Country Manager, Project Director, Construction Manager, Business System Manager, etc :

I am satisfied that all reasonable steps have been taken to – (please tick)

☐ Thoroughly investigate the Incident. ☐ Identify root causes ☐ Identify and implement corrective action.

Name: Position:

Signature: Date:

Distribution (refer to WI42B-2 Incident Investigation & Report Matrix)

☐ Country Manager ☐ Project Director ☐ Construction Manager
☐ Environmental Manager ☐ Business Systems Manager ☐ Legal Council
☐ NWRL Env. Representative ☐ NWRL Environment Manager ☐
☐ Other:

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

Management System Form



SECTION D – SENIOR MANAGEMENT REVIEW & DEBRIEF (for Class 1 Incidents only)

Note: In the event that a Corporate Management Review and Debrief is required, the following items where available must be included and considered as part of the debrief process:

- | | |
|---|--|
| <input type="checkbox"/> Completed copy of the incident investigation report including root cause(s). | <input type="checkbox"/> Relevant training records. |
| <input type="checkbox"/> WMS's & ECM's | <input type="checkbox"/> Statement(s) – Witness, Supervisor & any other involved person. |
| <input type="checkbox"/> Subcontractor WMS's (If applicable). | <input type="checkbox"/> SEA Card |
| <input type="checkbox"/> Plant records (relevant to the incident). | <input type="checkbox"/> Relevant Site inspections and audits records |
| <input type="checkbox"/> Site induction records. | <input type="checkbox"/> Toolbox meeting records |
| <input type="checkbox"/> Photographs & movie clips. | <input type="checkbox"/> Key learning's from the incident and What could have been done differently. |
| <input type="checkbox"/> Details of signs & triggers leading up the incident. | <input type="checkbox"/> Effectiveness of Corrective/Preventive Actions |
| <input type="checkbox"/> Copy of Authorities Notices | <input type="checkbox"/> . |

Date of the debrief:

Time:

| Attendee Name | Position | Signature |
|---------------|----------|-----------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Comments:

ENVIRONMENTAL INCIDENT REPORTING & INVESTIGATION

Management System Form



SECTION E – NON COMPLIANCE

| | | | |
|--------------------------------|--|---------------------|---|
| Description of Non-Compliance: | | | |
| Relevant Approval: | | Relevant Condition: | |
| Action required for closure: | | | |
| Assigned to: | | Status: | <input type="checkbox"/> Open <input type="checkbox"/> Close Immediately |
| Completed by: | | | Position: |
| Signature: | | | Date: |

Pollution Incident Response Management Plan

Sydney Metro Northwest – Surface and Viaduct Civil Works



Appendix D –Inventory of Pollutants

Pollution Incident Response Management Plan

Sydney Metro Northwest – Surface and Viaduct Civil Works



Inventory of Pollutants

Complete the following table in accordance with section 3.3.3 Inventory of pollutants of *EPA Environmental Guidelines: Preparation of pollution incident response management plans (2012)*:

PIRMPs must include an inventory of potential pollutants kept on the premises or used in carrying out activities at the premises, including the maximum quantity of any potential pollutant that is likely to be stored or held at the premises. Pollutants can include, but are not limited to, chemicals used in cleaning or production processes, fuels and lubricants used for equipment or machinery, gas cylinders, waste materials or wastewater, effluents and sediment-contaminated stormwater.

Details of the pollutant storage locations, including underground storage tanks and storage methods, must also be included.

Inventory of Pollutants at or associated with Construction Site

| Substance Name | Maximum Quantity of container | Pollutant Storage Location | Principle use on site |
|-------------------------------|-------------------------------|----------------------------|--|
| Large Bore PVC Primer | 4 ltr | Chemicals Container | Priming PVC Sockets |
| Large Bore PVC Solvent Cement | 4 ltr | Chemicals container | Priming PVC Sockets |
| Chemset 801 | 1 ltr | Chemicals container | Anchoring concrete reinforcement |
| Form Release Agent | 5 ltr | Chemicals container | Pre-coat formwork to aid stripping |
| Concure A99 | 200 ltr | Chemicals container | To aid concrete cure |
| Iplex Priming Fluid red | 2 ltr | Chemicals container | To prime PVC prior to gluing |
| Iplex PVC Cement N Blue | 2 ltr | Chemicals container | Glue PVC PIPES |
| Prepsol | 2 ltr | Chemicals container | Industrial Solvent |
| Curecon AA | 20 ltr | Chemicals container | Concrete Placement Aid |
| Two Stroke Oil | 5 ltr | Chemicals container | Fuel mix for small motors |
| Wheel Bearing Grease | 25 kg | Chemicals container | Lubricating Plant |
| Motor Oil | 200 ltr | Chemicals container | Replenish plant between services |
| Megapoxy part A | 20 ltr | Chemicals container | Adhesive |
| Megapoxy PM part B | 20 ltr | Chemicals container | Adhesive |
| Rugasol 90 | 200 ltr | Chemicals container | Used in concrete works |
| Line Marking Paint | 10 cans | Chemicals container | Marking out survey locations and road markings |
| Antifreeze/Coolant | 120 ltr | Chemicals container | Replenishing plant between services |

Pollution Incident Response Management Plan

Sydney Metro Northwest – Surface and Viaduct Civil Works



| Substance Name | Maximum Quantity of container | Pollutant Storage Location | Principle use on site |
|-----------------------|-------------------------------|-------------------------------|--|
| Expander Foam | 6 cans | Chemicals container | Filling minor gaps in form work |
| Gypsum (liquid) | 1000 ltr | Amber Tiles laydown | Treatment of water |
| Gypsum (solid) | 25 000 kg | Amber Tiles laydown | Treatment of water |
| Hydraulic Oil | 550 ltr | Chemicals container | Replenishing plant between services |
| Hydrochloric Acid | 5 ltr | Chemicals container | Treatment of water |
| Paint Thinner | 15 ltr | Chemicals container | Removal of paint/chemical residue |
| Lanolin Release Agent | 200 ltr | Chemicals container | Release of form from concrete |
| Diesel | 60 ltr | Refueling station | Operate plant |
| Fairing Coat Mortar | 20 kg | Chemicals container | Repair imperfections in concrete |
| Rendergrip A | 20 lt | Chemicals container | Repair imperfections in concrete |
| Water Based Degreaser | 15 ltr | Chemicals container | Plant maintenance |
| Preco Form Creme | 20 lt | Chemicals container | Pre-coat metal and formwork to aid stripping |
| Tackifier | 1000 lt | Amber laydown area | Stabilisation |
| Hanson Concrete | 1000 m ² | Delivery Truck | Laying of Concrete |
| Blue Circle | 1000 m ² | Delivery Truck | Laying of Concrete |
| Hydoseeding | 3000 m ² | Delivery truck | Stabilisation |
| Green Assassin | 50 kg | Chemical Lockers on all sites | Cleaning up Concrete |
| All Purpose Thinner | 5 ltr | Chemicals container | Removal of paint/chemical residue |
| Form Cleaner 240 | 1000 lt | Chemicals container | Cleaning Forms |
| Doka-OptiX | 44 Drum | Chemicals container | Cleaning Forms |

Pollution Incident Response Management Plan

Sydney Metro Northwest – Surface and Viaduct Civil Works



Appendix E –Location of Potential Pollutants

Pollution Incident Response Management Plan

Sydney Metro Northwest – Surface and Viaduct Civil Works



Figure 5: Location of Potential Pollutants – Amber Tiles

Pollution Incident Response Management Plan

Sydney Metro Northwest – Surface and Viaduct Civil Works

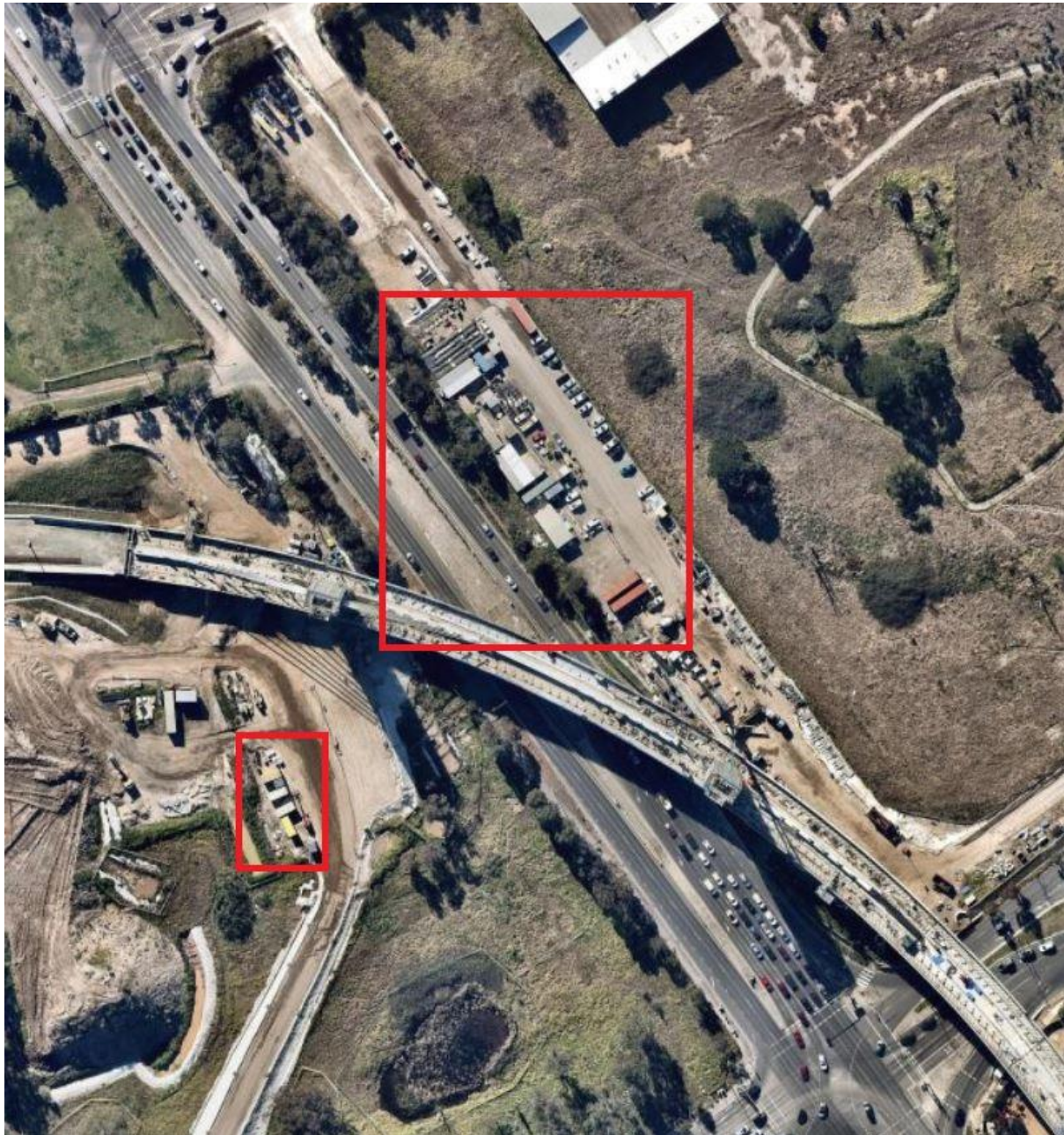


Figure 6: Location of Potential Pollutants – Zone 7 and 8

Pollution Incident Response Management Plan

Sydney Metro Northwest – Surface and Viaduct Civil Works



Figure 7: Location of Potential Pollutants – Schofields Road Site