



# Northern Beaches Hospital Connectivity and Network Enhancement Project

## Pollution Incident Response Management Plan

Document No: NBHRDC-EN-EPL-PLN\_3

Revision	Revision Date	Prepared by (Name and Title)	Reviewed by (Name and Title)	Authorisation (Name and Title)	Authorisation Signature
0	Oct 15	Mark Turner Environmental Manager	Mark Turner Environmental Manager	Mark Turner Environmental Manager	
1	April 16	Tim Faiz Environmental Coordinator	Mark Turner Environmental Manager	Alvario Garcia Project Director	
2	May 16	Tim Faiz Environmental Co-ordinator	Mark Turner Environmental Manager	Ignacio Chicharro Project Director	
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## ACRONYMS AND ABBREVIATIONS

ARA	Appropriate Regulatory Authority
CEMP	Construction Environmental Management Plan
DP&E	(NSW) Department of Planning and Environment
EIS	Environmental Impact Statement
EEC	Endangered Ecological Community – as defined under relevant law applying to the proposal
EMS	Environmental Management System
EPA	Environmental Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EPL	Environmental Protection Licence
ER	Environmental Representative
EWMS	Environmental Work Method Statement
FYJV	Ferrovial York Joint Venture
Hazardous Substance	Any substance or product that has the potential, through being used on site, to harm the health and safety of people in the workplace, or the environment.
IPIECA	The International Petroleum Industry Environmental Conservation Association
MSDS	Material Safety Data Sheet. A document produced by the supplier or manufacturer of a chemical product describing the properties and safe use of the substance or product
OEH	Office of Environment and Heritage
PIRMP	Pollution Incident Response Management Plan
PMP	Project Management Plan
PPE	Personal Protection Equipment
POEO Act	Protection of the Environment Operations Act
Spill	Any uncontrolled release of materials

## ENVIRONMENTAL INCIDENT: PERSONNEL CONTACT DETAILS

Position	Responsibility	Name	Phone Number
Environment Manager	24hr contact for activating PIRMP. Notification of agencies, ER and RMS	Mark Sabolch	0404 018 178
Safety Manager	Occupational Health and Safety matters	Brad Lewis	0431 482 775
Project Director	Notification of agencies and JV Partners, RMS	Manuel De Miguel	0448 956 114
Construction Manager	Notification of RMS and resources	Steve Glover	0417 936 779
General Superintendent	Notifying Foreman and managing incident as per PIRMP.	Clint Shandley	0439 745 559
Environmental Representative	-	Maurice Pignatelli	0407 493 176
Client Representative	-	Mike Tansey	
Assistant Client Representative	-	Boon Tan	0467 770 050
Ferrovial HSQE Director	-	Ash Tawfik	0421 837 902
York Environmental Manager	-	Rebecca Giles	0414 333 482

Contact Details if section 147 of the POEO Act is triggered

ORGANISATION	PHONE NUMBER
NSW Police	000
NSW Fire and Rescue	000
NSW Ambulance Service	000
Environmental Protection Authority	131 555
Northern Sydney Public Health Unit	02 9477 9400
Northern Beaches Council	(02) 9942 2111
WorkCover NSW	131 050

## 1. PROJECT

The Northern Beaches Hospital – Connectivity and Network Enhancements Project (the Project) comprises road upgrades to enhance connectivity of the existing road network surrounding the Northern Beaches Hospital at Frenchs Forest, within the Northern Beaches local government area (LGA) on Sydney's Northern Beaches

Roads and Maritime Services (RMS) is planning and delivering the road upgrades in two stages:

- The Stage 1 Project Hospital Connectivity Works which aim to enhance the existing road network to facilitate the opening of the proposed Northern Beaches Hospital by 2018.
- Stage 2 Project Network Enhancement Works which are directed towards broader network capacity enhancement particularly along Warringah Road.

An Environmental Protection Licence (20673) has been issued for the Project.

## 2. SUMMARY

The *Northern Beaches Connectivity and Network Enhancement Environmental Impact Statement* (RMS 2014), assessed the Project's construction and operational hazards and risks, this included contamination of soils, groundwater and surface waters from accidental pollution spills.

The EIS also identified standard safeguards and management measures that could be implemented to minimise the impact the operational hazards and risk of spills associated with the Project. These measures have formed part of the Project design where appropriate.

Notwithstanding, under Part 5.7 of the *Protection of the Environment Operations Act 1997* there is a duty to notify each relevant authority (identified below) of a pollution incident where material harm to the environment is caused or threatened. Material harm is broadly defined as actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial or that result in actual or potential loss or property damage of an amount over \$10,000. Whilst the Project Environmental Protection Licence specifies a premises, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.

## 3. RELEVANT LEGISLATION AND GUIDELINES

### 3.1. Legislation

Legislation relevant to this management plan includes:

- Protection of Environment Operations (General) Regulation 2009.
- *Protection of the Environment Operations Act 1997* (POEO Act).
- *Protection of the Environment Operations (Waste) Regulation 2005*
- *Waste Avoidance and Resource Recovery Act 2001*
- *Work Health and Safety Act 2011*

Relevant provisions of the above legislation are explained in the register of legal and other requirements included in Appendix A2 of the CEMP.

### 3.2 Guidelines and standards

The main guidelines, specifications and policy documents relevant to this Plan include:

- EPA *Bunding and Spill Management Guidelines* contained within EPA *Environmental Protection Manual for Authorised Officers*
- Roads and Maritime Services *Code of Practice for Water Management*

## 4. PREVENTION & CONTAINMENT

### 4.1 Standard Procedures

The Project has developed and will implement procedures to carry out activities in a planned and controlled manner including but not limited to:

- Refuelling, maintenance and cleaning of plant and equipment.
- Mixing of bitumen with cutting oil and additives.
- Application of liquid membranes.
- Bulk fuel and chemical delivery.
- Decanting for fuel, chemicals and bitumen.

In addition, the Project also would undertake construction planning, including environmental risk assessments and implementation of identified control measures.

### 4.2 Storage

The Project will ensure that all liquid hazardous substances are stored in a bunded structure that is locked with an impermeable floor to minimise the impact of any spillage or contamination of the Site and adjoining areas. The bunded area must be able to contain 120% of the total volume of the largest container of the stored materials.

Hazardous substance storage areas will not be located within 50 metres of natural drainage lines, flood prone areas, or on slopes steeper than 1:10.

Adequate quantities of suitable substance to counteract a spillage will be kept readily available at all times.

Where this is not practical, the unbunded and unattended drums will be managed in a way that minimises the risk of spillage. Hazardous substance containers will be transported back to the bunded storage area when conditions change to create a risk to the environment.

### 4.3 Plant & Equipment Maintenance

The Project will ensure there is appropriate spill kits or bunding available when refuelling or maintaining plant and equipment, mixing cutting oil with bitumen, or carrying out any other activity which may result in spillage of a chemical, fuel or lubricant on any location with direct drainage to a waterway or environmental sensitive areas.

Subcontractors who will undertake bitumen cutting work will have spill procedure on hand. They will also have "on board" systems to deal with spills. Refuelling will not be undertaken within 50 metres of built or natural drainage lines.

Refuelling operations will not be left unattended and refuelling of plant and equipment outside the compound would be avoided wherever practical. A 'refuelling plant and equipment' EWMS will be prepared and all refuelling operators will be trained on the EWMS. Adequately stocked spill kits will be kept on site at all times. Spills will be cleaned up immediately, if safe to do so.

All plant and equipment will be inspected daily for leakages of fuel, oil or hydraulic fluid. Any leaks will be repaired before using the item of plant or equipment. Records of plant inspections will be maintained.

### 4.4 Risk Assessment

The full project environment risk register is attached to the CEMP. However, below is an extract of the risk register which guides management of risk associated with pollution aspects. The risk assessment can be found on the following pages and involves:

- Identification of the risk;
- Analysing the risk (and determining likelihood and consequence);
- Evaluating the risk.
- Treating the risk.

**Table 1: Project Risk Register Rating Template**

		Low Residual Risk	Medium Residual Risk	High Residual Risk	
		TOLERABLE	ALARP	INTOLERABLE	
Risk Quantification (Likelihood X Severity)		No environmental impact	Minor environmental impact	Major environmental impact	catastrophic environmental impact
		<b>SEVERITY</b>			
<b>LIKELIHOOD</b>		0	1	2	3
Almost no likelihood	0	L(0)	L(0)	L(0)	L(0)
A small likelihood	1	L(0)	L(1)	M(2)	H(3)
A high likelihood	2	L(0)	M(2)	H(4)	H(6)
Almost certain	3	L(0)	H(3)	H(6)	H(9)

**Low Residual Risk** = Risk is **TOLERABLE**. No further preventative action required, consider cost effective solutions or improvements that impose no additional cost.

**Medium Residual Risk** = Work may only start if the risk has been reduced to As Low as Reasonably Practicable (**ALARP**). Consider additional control measures that reduce the risk without significantly increasing cost.

**High Residual Risk** = Risk is **INTOLERABLE**. Do not start work or continue until risk level is reduced to (ALARP) as above, using suitable control measures.

**Control measures** are to ensure that residual risks are reduced to as low as reasonably practicable. Where controls fail to reduce to a TOLERABLE or ALARP level the assessment must be referred to the Line Manager.

If the operations are likely to affect the public or the safe operation of a public transport system, the control measures must reduce the likelihood of significant harm to the level that existed before work is commenced.

**Table 2: Risk Register extract**

Issue	General construction activities / aspects	Potential Construction Impact	Post-mitigation Risk analysis
		Potential adverse health effects.	Low
		Degradation of water quality and other aspects of the natural environment.	Low
		Health risks to neighbours and members of the public from release of gases and/or smoke (in the event of a fire)	Low
		Erosion and movement of soils.	Medium
		Captured dirty water discharge from basins.	Medium
		Dirty water not captured and leaves site.	High
		Contamination of sediment basins and /or waterways from spills.	Low
		Disturbance of unidentified contaminated land	Low
		Excessive waste being directed to landfill.	
		Incorrect disposal of contaminated waste. Meeting POEO VENM, ENM and mulch requirements.	
		ERSED issues from cuts/batters/stockpiles	Medium
		Disturbance of unidentified contaminated land	Medium



## 5. SPILL RESPONSE AND NOTIFICATION

### 5.1 Pollution Incidents

Under the EPA document *Environmental Guidelines: Preparation of pollution incident response management plans*, pollution incidents are defined as:

*Pollution incidents means an incident set of circumstances during or as a consequence of which there is or 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 does not include an incident or set of circumstances involving only the emission of any noise.*

### 5.2 Types of Incidents

Pollution incidents which may occur and fall under the requirements of this plan includes:

- Hazards to human health or the environment: Fluid spill and/or leak can lead to soil and water contamination as well as air pollution. Some spills or releases are not hazardous to humans but are harmful to the natural environment. Even if a spill doesn't require evacuation of people, the substance should still be contained and cleaned up in accordance with the applicable Safety Data Sheet (also known as SDS).
- Discharge to waters not in accordance with the Environmental Protection Licence.
- Materials which travel further than the project boundary which has, or potential of causing adverse impact.

Minor spills that result in no material harm or residual environmental impacts are unlikely to require notification. These incidents would be managed and reported however, as per the *RMS Environmental Incident and Classification Procedure*

### 5.3 Notification

A pollution incident is required to be notified to the EPA Environmental Line and other appropriate agencies of any environmental incidents or pollution incidents on or around the site in accordance with Part 5.7 of the *Protection of Environment Operations Act 1997* (NSW) (POEO Act), in the following circumstances:

- a) If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial
- b) If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000

Each of the following response agencies need to be informed of pollution incidents without delay to co-ordinate further action in order to minimise further impact. This includes:

ORGANISATION	PHONE NUMBER
NSW Police	000
NSW Fire and Rescue	000
NSW Ambulance Service	000
Environmental Protection Authority	131 555
Northern Sydney Public Health Unit	02 9477 9400
Northern Beaches Council	(02) 9942 2111
WorkCover NSW	131 050

The information reported verbally (and records kept) includes:

- Time, date, location and likely duration of incident.
- Location/place where pollution is occurring/likely to occur;
- Type of incident.
- Extent of incident.
- Action taken or proposed to be taken to deal with the incident.

#### 5.4 Incident Procedure

<b>1. SAFETY, DETECTION AND RESPONSE</b>	<ul style="list-style-type: none"> <li>• Assess safety of the situation to yourself and others</li> <li>• If you cannot identify the substance, evacuate immediately</li> <li>• If there is a risk of fire or explosion, evacuate immediately</li> <li>• Shut off ignition source(s) if safe to do so</li> <li>• Put on appropriate PPE (personal protective equipment)</li> <li>• Trace the source and determine if it is continuing</li> <li>• Use controls to attempt to further minimise harm (includes spill kits for example).</li> </ul>
<b>2. SITE NOTIFICATION</b>	<ul style="list-style-type: none"> <li>• Personnel to immediately contact their supervisor who will notify the Environmental Manager.</li> </ul>
<b>3. CLASSIFY AND ACTIVATE</b>	<ul style="list-style-type: none"> <li>• Determine if the incident has or is likely to cause harm in accordance with Section 147 of the POEO Act.</li> <li>• Activate the PIRMP.</li> </ul>
<b>4. SECURE AREA AND CLEAN UP</b>	<ul style="list-style-type: none"> <li>• Divert traffic and people away from the immediate area</li> <li>• Evacuate if necessary</li> <li>• Contain the leakage using temporary bunds, booms etc.</li> <li>• Recover any free liquid into purpose built tankers if possible</li> <li>• Recover absorbent booms etc.</li> <li>• Clean-up the spill by pumping, absorbing, chemically treating as per the SDS</li> <li>• DO NOT SPREAD OR DILUTE SPILLS WITH DEGREASERS, DETERGENTS OR WATER</li> <li>• Dispose of the spilt product in an environmentally responsible manner as per the SDS</li> <li>• Contaminated soil should be removed to an appropriate area</li> </ul>
<b>5. REPORT</b>	<ul style="list-style-type: none"> <li>• The Environmental Manager in consultation with the Project Director will advise the following organisations if the incident “causes or threatens to cause material harm” as soon as practical in accordance with the POEO Act:             <ul style="list-style-type: none"> <li>○ EPA;</li> <li>○ Northern Sydney Public Health Unit;</li> <li>○ Warringah Council;</li> <li>○ WorkCover; and</li> <li>○ Fire and Rescue NSW.</li> </ul> </li> </ul>
<b>6. REPLACE USED EQUIPMENT</b>	<ul style="list-style-type: none"> <li>• Any equipment or materials consumed in the clean-up operation should be replaced as soon as possible</li> </ul>
<b>7. INVESTIGATE</b>	<ul style="list-style-type: none"> <li>• Incident investigation to be undertaken.</li> </ul>

## 5.5 Safety equipment / devices to minimise risks to human health or environment

- Spill kits are located in each construction zone and will be identified during the construction zone induction process.
- Spills kits shall be fully stocked with “absorbent” materials to contain and soak up spilled liquid. Plastic garbage bags shall be made available in which to dispose residual used spill material.
- Each construction zone must have a working communication device such as telephones, radios or other communication devices available so that people may contact services or be contacted in the case of an emergency.

Once the emergency is eliminated, offending material shall be removed and disposed of in accordance with the following procedure:

- Follow instructions in relevant SDS
- Any contaminated clean-up materials (absorbents, rags, etc.) shall be placed into plastic garbage bags- segregate or identify as appropriate
- If the material requires special disposal, arrangements for removal by a licensed EPA waste contractor will be made
- If storm water has been contaminated, the material shall be promptly pumped out (contact ‘Transpacific’ or equivalent.)
- If soil has become (or is suspected to be) contaminated, the affected area shall be cordoned off and assessment, removal and clean-up initiated as soon as possible.

A chemical register has been prepared by the Safety team, and is located on the share drive at:  
\\FY001\HHS - Health and Safety\10. Occupational Health\10.2 Hazardous Substance DG Register

In the event of a chemical spill the following actions should be taken, consistent with maintaining your personal safety:

- If safe, attend to human life in immediate danger (If possible stay “up wind” to avoid toxic fumes);
- Identify the chemical(s), or substance(s); determine if hazardous to humans or the environment;
- Select appropriate Personal Protective Equipment (PPE) from information on chemical containers and / or from Materials Safety Data Sheets (SDS);
- If safe, stop chemical leaking;
- Contain any spilt or loose chemicals by using spill kit material, sand, earth or similar;
- If required, block or barricade off the area;
- Remove all ignition sources in the area; and
- Get appropriate fire extinguishers ready for use if needed

## 5.6 Community Notifications

Early warnings for affected or potentially affected community members for any pollution incident will be communicated to those members in consultation with relevant authorities. The means of communication will vary based on the size and severity of the pollution incident.

In the event that community notification is required the following actions, in consultation with relevant authorities, would be carried out where appropriate and safe to do so by the Community team:

- Provide notification either via:
  - Telephone;
  - Email,
  - Letterbox drop, and/or via door knocks;
  - Radio, and road/motorway variable message signage as required in consultation with relevant authorities;

- The notification may also include recommended actions that members of the community can take to prevent or minimise harm as required in consultation with relevant authorities such as closing windows and doors;
- Providing protective fencing and barricading to prevent community stakeholders from entering into a polluted area; and
- Follow up notifications:
  - Face to face or telephone advice;
  - Email updates;
  - Project website updates;
  - Variable message signage on roadways and radio communications as required in consultation with relevant authorities.

In such an event the Project Director and Construction Manager will provide all the necessary assistance to the incident controller including the provision of access to the Projects community notification tools

## 6. COMPLIANCE MANAGEMENT

### 6.1 Roles and responsibilities

The Project Team's organisational structure and overall roles and responsibilities are outlined in the CEMP. Specific responsibilities for the implementation of this plan are detailed below.

#### 6.1.1 Environmental Manager and Co-ordinators

- Being familiar with the requirements of this plan.
- Ensuring the requirements of the PIRMP are communicated to all personnel, subcontractors and where appropriate, visitors to site through on site and their responsibilities.
- Co-ordinate and implement training.
- Ensuring incidents are managed and strictly supervised in accordance with the plan, company policies and procedures
- Understanding process and location of spill kits and development of additional controls as appropriate.
- Ensure any 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
- Update and revise the plan, as required.

#### 6.1.2 General Superintendent

- Ensure all employees are conversant with their responsibilities and duties under the PIRMP.
- Ensure construction sites are prepared for unforeseen incidents as per requirements in this plan.
- Educate supervisory personnel in accordance with plan requirements, statutory obligations, and relevant procedures
- Ensure staff and contractors report incidents in a timely manner.
- Assist in any environmental investigation.

#### 6.1.3 Community and Stakeholder Manager

- Responsible for preparation and implementation of information to communicate with the community with regard to any incidents that may affect owners and occupiers of surrounding properties.

- Ensure community engagement are in place and maintained to keep the community informed.

#### *6.1.4 All site personnel*

- Includes all subcontractors, workers and engineers.
- Attend training and toolboxes which go through the procedure.
- Staff and contractors report incidents in a timely manner.
- Assist in any environmental investigation.

## **6.2 Training**

All Personnel shall be provided with general Emergency Management Training as part of the induction process, and such training shall cover as a minimum:

- The locations of all emergency equipment and the correct method for its use.
- Spill risk awareness to encourage awareness of the dangers presented by spills and the means for preventing it.
- Notification requirements and key personnel.

Personnel who have assigned responsibilities in an emergency situation shall be provided with additional training. Records of personnel who have undertaken the training will be kept.

Further details regarding staff induction and training are outlined in Section 5 of the CEMP.

## **7. REVIEW AND IMPROVEMENT**

### **7.1 Monitoring & Review**

At a minimum, this document shall be reviewed annually and the spill response process reviewed within one month of any major spill or in line with changing business needs, changing environment, and emergency risks (whichever is sooner).

### **7.2 Continuous improvement**

Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance.
- Determine the cause or causes of the spill.
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies.
- Verify the effectiveness of the corrective and preventative actions.
- Document any changes in procedures resulting from process improvement.
- Make comparisons with objectives and targets.

### **7.3 Update and amendment**

As described in the CEMP, between the scheduled audits and reviews, a register of issues will be maintained to ensure that any issues are recorded for future action.

Changes to this plan will be approved by the Environmental Manager and the Project Director and documented in the document control section for each revision.

A copy of the updated plan and changes will be distributed to all relevant stakeholders.

## **APPENDIX A – EPL BOUNDARY**

Note: Current Premises found at <http://www.faaunz.com.au/en/Projects/Descarga-Documentos&iddocumento=92>