



# Pollution Incident Response Management Plan

<b>Project Name:</b>	RMS – Mitchell Highway Realignment, Guanna Hill
<b>Project Code:</b>	16025

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# 1 GLOSSARY / DEFINITIONS

CEMP	Construction Environmental Management Plan
Duty to Report	SWC must notify EPA and any other relevant authority of incidents causing or threatening material harm to the environment immediately after the person/entity becomes aware of the incident in accordance with the requirements of Part 5.7 of the POEO Act.
ESP	Environmental Management Sub-Plan
ESR	Environmental Site Representative
EMS	Environmental Management System
ESCP	Erosion and Sediment Control Plan
EPA	NSW Environmental Protection Authority
EPL	Environmental Protection Licence (20779)
EWMS	Environmental Work Method Statement
Material Harm	<p>a) Harm to the environment is material if:</p> <ul style="list-style-type: none"> <li>• it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or</li> <li>• 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</li> </ul> <p>b) loss includes the reasonable costs and expenses that would be incurred in taking all</p>
PIRMP	<p>Pollution Incident Response Management Plan</p> <p>A plan detailing how a project will minimise the potential for pollution. The plan is prepared in accordance with the requirements set out in Part 5.7A of the POEO Act.</p>
PM	Project Manager
PE	Project Engineer
PoEO Act	Protection of the Environment Operations Act 1997
Pollution Incident	A 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 set of circumstances in which a substance has been placed or disposed of on premises, but it does not include a set of circumstances involving only the emission of noise
The Project	Mitchell Highway Guanna Hill Realignment
REF	Review of Environmental Factors
Relevant Authority	<p>Under section 148 of the POEO Act, relevant authority means any of the following:</p> <ol style="list-style-type: none"> <li>(a) the appropriate regulatory authority,</li> <li>(b) if the EPA is not the appropriate regulatory authority -the EPA,</li> <li>(c) if the EPA is the appropriate regulatory authority -the local authority for the area in which the pollution incident occurs,</li> <li>(d) the Ministry of Health,</li> <li>(e) the Work Cover Authority,</li> </ol>

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(f) Fire and Rescue NSW.

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The relevant information about a pollution incident required under section 150 of the POEO Act consists of the following:

- (1)
  - a) The time, date, nature, duration and location of the incident,
  - b) the location of the place where pollution is occurring or is likely to occur,
  - c) the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,
  - d) the circumstances in which the incident occurred (including the cause of the incident, if known,
  - e) the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known,
  - f) Other information prescribed by the regulations.
  
- (2) The information required by this section is the information known to the person notifying the incident when the notification is required to be given.
  
- (3) If the information required to be included in a notice of a pollution incident by subsection (1) (c), (d) or (e) is not known to that person when the initial notification is made but becomes known afterwards, that information must be notified in accordance with section 148 immediately after it becomes known.

Relevant Information about a Pollution Incident Required under the POEO Act

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RMS	Roads and Maritime Services
SR	Safety Representative
SS	Site Supervisor
FKG	FKG Contractors
SWMS	Safe Work Method Statement

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## 2 DOCUMENTATION AND CONTROL REGISTER

Date	Template Revision	Issue	Section	Details	Prepared By
26/04/2016	A	1	All	Plan developed for EPA approval	Andrew Jones
28/04/2016	A	2	All	Plan reviewed and changes made in accordance with Client requirements	Andrew Jones
09/11/2016	A	3	All	Plan reviewed and tested as required by POEO Reg.	Brendan Stuart

## 3 INTRODUCTION

### 3.1 Background

This Pollution Incident Response Management Plan (PIRMP) has been prepared to identify and manage the risk of pollution incidents and facilitate a coordinated management response to pollution incidents during the realignment of the Mitchell Highway between the Orange and Molong.

A PIRMP is required for all projects that hold an Environment Protection Licence (EPL). The requirements were introduced through amendments to the Protection of the Environment Operations Act 1997 (POEO Act) and the Protection of the Environment Operations (General) Regulation 2009, (POEO(G) Regulation).

The requirement is to prepare, keep, test and implement a pollution incident response management plan.

### 3.2 Purpose

The primary purpose of the plan is to identify and manage the risk of pollution incidents, plan the project response to pollution incidents and to facilitate coordination with the relevant response agencies.

The objectives of the plan are to:

- Minimise and control the risk of a pollution incident on the Guanna Hill realignment project (Mitchell Highway) between chainages 20600 to 28000 from Orange to Molong ('the Project') through the early identification of risks and the development of planned actions to minimise and manage those risks;
- Ensure timely communication about pollution incidents to construction personnel, Environment Protection Authority (EPA), relevant response agencies/authorities and the community who may be affected by the impacts of a pollution incident; and
- Ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

### 3.3 Scope

This PIRMP for the Guanna Hill realignment project covers pollution incidents that cause actual or potential material harm to the environment and/or human health. This PIRMP applies to the 'scheduled activity' to which the Environment Protection Licence (EPL) relates. See **Error! Reference source not found.** which shows the premise boundary map and Appendix 3 for site compound details.

The site office will act as the Incident Control Centre and potential pollutant storage will be located within the site compound.

## **3.4 Legislative and Regulatory Requirements**

### **3.4.1 Relevant Legislation**

Key environmental legislation relating to pollution incident response management includes:

- Protection of the Environment Operations Act 1997 (POEO Act);
- Protection of the Environment Operations (General) Regulation 2009; and
- Protection of the Environment Operations (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012.

### **3.4.2 Guidelines and Standards**

- Environmental guidelines: Preparation of pollution incident response management plans, 2012.

### **3.4.3 Legislative Requirements**

The specific requirements for pollution incident response management plans are set out in Part 5 .7A of the POEO Act and the POEO (G) Regulation. A summary of the key requirements are:

- Holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act);
- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B);
- Licensees must keep the plan at the premises to which the environment protection licence relates or, in the case of trackable waste transporters and mobile plant, where the relevant activity takes place (section 153D, POEO Act);
- Licensees must test the plan annually in accordance with the POEO(G) Regulation (clause 98E); and
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the plan (section 153F, POEO Act).

## 4 POLLUTION INCIDENTS

Pollution is known to exist in many forms and broadly relates to water, land, air and noise. This plan applies only to those pollution incidents as defined in the Environmental guidelines: Preparation of pollution incident response management plans. The guidelines provide the following definition of a pollution incident to be:

*"pollution incident means 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 any noise."*

### 4.1 Pollution Incidents That Are to Be Notified

A pollution incident is required to be notified to the EPA and appropriate regulatory authorities (ARA) if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

- harm to the environment is material if:
  - it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
  - 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
- 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.

Each of the following response agencies needs to be informed of pollution incidents quickly, so action can be coordinated to prevent or limit harm to the environment and human health generally:

- Environment Protection Authority (EPA);
- NSW Ministry of Health, local Public Health Unit;
- WorkCover NSW;
- Cabonne Council; and
- Fire and Rescue NSW.

### 4.2 Types of Pollution Incidents

Pollution incidents that could potentially occur at a construction site and are covered by this plan include: material, such as waste materials, fuel etc, that travel beyond the site boundary causing or potentially causing adverse impact to the environment or community; and discharge of waters from site not in accordance with the project Environment Protection Licence condition.

Small spills that do not leave the site boundary and are cleaned up without material environmental harm or residual environmental impact are most likely not required to be notified to the EPA or other authorities, however all such incidents are to be recorded and reported in accordance with FKG requirements.

An environmental incident may include a major spillage or leak, failure of a pollution control device such as a bund or basin, major settlement, collapse of bank or embankment, or catastrophic events i.e. flood or fires.

Three levels of classification are adopted and described in this plan which is in line with the RMS Environmental Incident Reporting and Classification Procedure (Feb 2016).

#### 4.2.1 Class One Incidents – Permanent

Class One Incidents are the most serious environmental incidents and they will generally have a permanent effect on the environment or community and are reportable to the EPA. Class One Incidents include:

- Pollution or degradation, which has or may have irreversible detrimental effects on the environment

and/or community

- Destruction or irreparable damage to highly valued structures I items I locations of cultural or heritage significance or value
- Major breach of regulation identified and I or serious incident notification
- Investigation by regulatory authority with actual or potential prosecution and I or significant financial penalties against company and I or individuals

#### **4.2.2 Class Two Incidents – Temporary**

Class Two Incidents are those incidents which have a temporary impact or impacts can be reversed and are reportable to the EPA. Class two incidents include:

- Pollution or degradation, which has moderate impact and/or persistent but reversible detrimental effects on the environment and/or community
- Damage to structures I items of cultural I heritage significance, or significant infringement of cultural value/sacred locations
- Possible or potential serious breach of regulation or licence conditions with on-the-spot fine and /or regulatory authority notification with possible prosecution

#### **4.2.3 Class Three Incidents – Minor**

Class three incidents are of a minor nature and are generally not reportable to the EPA. Class three incidents include:

- Pollution or degradation, which is low impact and/or reversible detrimental effects on the environment and/or community
- Minor repairable damage to commonplace structures, or minor infringement of cultural values
- Minor licence non-compliance or non-conformance

The Site Environmental Representative and the Project Manager in consultation with RMS are responsible for classifying the level of incident.

## 5 IDENTIFICATION AND RISK ASSESSMENT

FKG approaches construction activities in a planned and controlled manner, taking into account potential environmental risks, to prevent pollution incidents from occurring on the Project.

Preventive measures include:

- Construction planning including environmental risk assessment;
- Implementation and maintenance of identified control measures;
- Compliance with legislative and regulatory requirements, including the project Environment Protection Licence (EPL);
- Implementation of, and compliance with, requirements of the Construction Environmental Management Plan and associated sub-plans; and
- Implementation and compliance with the requirements of this plan.

### 5.1 Risk Assessment

The risk management style of assessment has been utilised to identify and assess environmental aspects associated with the activity relative to the EPL, and to implement appropriate mitigation strategies to minimise the likelihood of environmental risks or incidents associated with each aspect. This process involves:

- Identifying the risk/aspect
- Analysing the risk/aspect (determining likelihood and consequence)
- Evaluating the risk/aspect
- Treating the risk

All identified aspects are assessed based on the risk assessment matrix displayed in *Table 1* is based on (1) the likelihood of an impact occurring as a result of the aspect; and (2) the consequences of the impact if the event occurred. The FKG definition of likelihood and consequence is detailed in *Table 3* and *Table 4*.

Following this assessment, each impact is assigned a risk category from *Table 1* which ranges from Low to extreme.

More detailed risk assessments are within the relevant sub-plans of the CEMP and include specific control measures that must be implemented.

**Table 1 - Risk Assessment Matrix**

LIKELIHOOD	CONSEQUENCES				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
A (Almost Certain)	M	H	H	E	E
B (Likely)	M	M	H	H	E
C (Possible)	L	M	M	H	H
D (Unlikely)	L	L	M	M	H
E (Rare)	L	L	L	M	M

Table 2 - Risk Assessment

ASPECT	POTENTIAL IMPACT	RISK CATEGORY			
		Low	Mod	High	Extre
Vegetation clearing	Surface Water Pollution			X	
Topsoil stripping	Surface Water Pollution			X	
Bulk Earthworks	Surface Water Pollution				X
	Dust Emissions causing a notifiable incident			X	
	Surface Water Pollution – Acid Sulphate Rock	X			
	Soil / land pollution – Acid Sulphate Rock	X			
Drainage Works	Surface Water Pollution				X
Ground disturbance of unexpected contamination	Exposure to construction workers		X		
	Surface Water Pollution			X	
	Exposure to Community		X		
	Groundwater Pollution		X		
Paving/Asphalting	Surface Water Pollution			X	
	Groundwater Pollution			X	
	Soil / Land Pollution			X	
Fuel and Chemical storage areas	Surface Water Pollution				X
	Groundwater Pollution		X		
	Explosion / fires			X	
	Soil / Land Pollution				X
Rock breaking / blasting	Surface Water Pollution		X		
	Dust Emissions causing a notifiable incident			X	
	Noise or Vibration Emissions causing a notifiable event				X
Sewerage treatment/ storage facilities	Surface Water Pollution			X	
	Groundwater Pollution			X	
	Soil / Land Pollution			X	

<b>Fuel Deliveries</b>	Fuel spills causing water pollution				X
	Fuel spills causing soil/land pollution				X
<b>Motorway Traffic Incidents</b>	Surface Water Pollution				X

**Table 3 - Environmental Risk Likelihood Guide**

Description	Definition of Event	How Often it Occurs
<b>Almost Certain</b>	Continuously Experienced	Daily – 1/Week
<b>Likely</b>	Likely to Occur Frequently	Weekly – 1/Month
<b>Possible</b>	Likely to Occur Infrequently	Monthly – 1/Year
<b>Unlikely</b>	Occurrence not Expected, But Possible	Annually – 1/Decade
<b>Rare</b>	Exceptional Cases	Decade – 1/Century

**Table 4 - Environmental Risk Consequence Guide**

Description	Environmental Impact Indicator
<b>Catastrophic</b>	Major Environmental Damage, Uncontrolled / Off-Site Release, Unknown Substance, Detrimental Effects
<b>Major</b>	Significant Environmental Damage, Uncontrolled / Off-Site Release Unknown Substances, No Detrimental Effect
<b>Moderate</b>	Serious Environmental Damage, Onsite Release, Known Substance Contained with External Assistance
<b>Minor</b>	Minor Environmental Damage, Onsite Release/ Immediately Controlled, Known Substance Contained with No External Assistance
<b>Insignificant</b>	Negligible Environmental Damage, Small Onsite Loss/ Easily Contained, Known Substance. Contained with No External Assistance

## 5.2 Control Measures

Pre-emptive control measures rest with thorough planning of construction activities and the involvement of key personnel in that planning process. The project CEMP requires that Environmental Work Method Statements (EWMS) are prepared for all activities that carry a high level of environmental risk or community interest. All method statements will be prepared to identify risks, ensure sound environmental practices are implemented, and to minimise the risk of environmental incidents or system failures. They will specify actions to be undertaken to ensure compliance with the CEMP and will draw on the mitigation measures detailed in the specific sub plans of the CEMP.

Incident control measures such as spill kits, sand bags, sediment fence and flagging tape will be stored at the site compound however smaller supplies and resources may also be available within material stockpiles located along the project corridor.

## 6 PREPAREDNESS

FKG acknowledges that the key to effective incident prevention on site is via ongoing monitoring, surveillance and training. During the course of construction the following preventative strategies will be implemented onsite:

- Daily inspections of active work sites;
- Completion of Environmental Inspection Checklist;
- Issue and quick close-out of non-compliance notices (as required);
- Prompt maintenance and repairs;
- Ongoing environmental training;
- Environmental audits of worksites, sub-contractors and general compliance; and
- Environmental and safety information on hazardous substances will be available at the main site office and where such substances are to be stored.

Testing of environmental response procedures will be conducted annually in accordance with the POEO Act. Additional testing will be carried out in areas where a pollution risk is present, such as in workshops and work areas in close proximity to water courses. Personnel involved in emergency response activities will be provided with specific training.

An up-to-date list of emergency response personnel and relevant organisations (emergency services, EPA, etc) will be maintained at the main office and site compound notice boards. A copy of this emergency contact list is provided in *Table 5*.

### 6.1 Responsibilities

The details of how this sub plan will be implemented and the responsibilities for implementing each mitigation measure are detailed below. These responsibilities will be issued to all relevant personnel on appointment to the Project and/or as part of their site induction programme.

The personnel detailed in *Table 5* would be responsible for activating the plans and managing the response on a 24 hour basis. The Project Manager and/or the Site Environmental Representative have responsibility for enacting the Pollution Incident Response Management Plan. The Emergency Controller (i.e. Superintendent) has the responsibility for implementing/coordinating management measures detailed within this plan.

Specific responsibilities for the implementation of the management measures identified in this plan are identified in the following tables.

**Table 5 - 24 hour contact details**

Name	Position Title	24 Hour Contact Details
Grant Goodale	Superintendent (Emergency Controller)	0477 765 619
Anthony Jones	Project Manager	0467 758 755
Brendan Stuart	Site Environmental Representative	0418 607 830
Brett Edwards	Safety Advisor	0439 212 538
Various	Community Relations Hotline	0439 212 546

**Table 6 - Superintendent (Emergency Controller)**

Action	Timing
Responsible for the overall onsite implementation of management strategies detailed within this PIRMP	As required
Contact emergency services, such as NSW Fire & Rescue, HAZMAT and/or Police for immediate response actions	As required
Maintain communications with emergency services	At all times
Coordinate the response to the incident, including working to ensure the safety of others in the first instance	At all times

**Table 7 - Project Manager**

Action	Timing
Responsible for enacting the PIRMP as required	As required
Ensure appropriate resources are available to implement the PIRMP	At all times

**Table 8 - Site Environmental Representative**

Action	Timing
In the event of an environmental incident, such as a spill, investigations of the mitigation measures and determine the potential for improved mitigation measures	As required
Reporting of environmental incidents to the relevant authorities in accordance with CEMP	As required
Ensure the plan is tested	Every 6 months
Provide training to project personnel about this plan and responsibilities	As required
Amend this plan as necessary	As required

**Table 9 - Community Liaison (Site Environmental Representative)**

Action	Timing
Coordinating the notification of the effected community in response to the incident	As required
Assist the Environmental Site Representative in the testing of the plan	Every 6 months
Maintain contacts lists for community notifications	As required
Review and revise the Community Strategy Plan	As required / 6 months

All site personnel, staff and sub-contractors have a role and responsibility in minimising the risk of a spill and controlling the impact if one occurs. This will be reinforced through the project induction and on-site training. Further details are provided in the CEMP.

## 6.2 Training

All employees and sub-contractor staff working on site will undergo site induction training and environmental training with the objective of improving awareness and practice of positive environmental management including minimising the potential for pollution incidents and pollution incident response. Environmental training and induction will address:

- This plan;
- Individual responsibilities;
- Notification requirements;
- Pollution incident response personnel; and
- Spill minimisation measures and spill response.

Records shall be kept of all personnel undertaking the site induction and training, including the contents of the training, date and name of trainer/s.

Key staff (detailed in Section 6) will undertake more comprehensive training relevant to their position and/or responsibility. This training may be provided as "toolbox" training or at a more advanced level by the Environmental Site Representative. Records will be kept of all personnel undertaking the site induction and training, including the contents of the training, date and name of trainer/s.

Records shall be kept of all personnel undertaking the PIRMP training, including the contents of the training, date and name of trainer/s. Key staff will undertake more comprehensive training relevant to their position and/or responsibility. This training may be provided as "toolbox" training or at a more advanced level by the Site Environmental Representative.

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

# 7 RESPONSE

The following framework is provided to support incident response.

## 7.1 Incident Response

### 7.1.1 Define the problem

Establish the details of the immediate problem to facilitate the identification of short term response options.

### 7.1.2 Manage the situation

- the safety of any person, including neighbours, workers and others potentially impacted, e.g. downstream water users, is the priority;
- minimise environmental damage as quickly as possible. In a spill situation, use sandbags, absorbent material, soil, an excavation or barrier to prevent the pollutant from reaching a watercourse;
- advise the Project Manager and Site Environmental Representative of the incident/emergency as soon as possible;
- Project and/or Site Environmental Representative will immediately advise the client and relevant stakeholders (i.e. EPA) verbally and in writing within 48 hours;
- the Site Environmental Representative, in consultation with the Project Manager will advise the following organisations if the incident 'causes or threatens to cause material harm to the environment immediately in accordance with the POEO Act requirements:
  - EPA;
  - Ministry of Health (via the Public Health Unit)
  - Work Cover Authority;
  - Local Authority (i.e. council) if the EPA is not the appropriate authority; and
  - Fire and Rescue NSW
- clean up the problem.

*"Pollution incidents causing or threatening material harm to the environment must be notified to EPA. A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur. Material harm to the environment includes on site harm, as well as harm to the environment beyond the premises where the pollution incident occurred. An incident is considered to be notifiable to EPA if the actual or potential harm to the health or safety of human beings or ecosystems is not trivial OR if actual or potential loss or property damage (including clean-up costs) associated with a pollution incident exceeds \$10,000. In accordance with the POEO Act 1997, it is an offence not to report incidents to the EPA where actual or potential harm to the health or safety of human beings or ecosystems is not trivial OR if actual or potential loss or property damage (including clean-up costs) associated with a pollution incident exceeds \$10,000."*

### 7.1.3 After the event

- Develop an action plan to prevent a similar incident occurring again; and
- Prepare a report on the incident

A list of key contacts, phone (business and after hours) will be maintained and displayed (*Table 10*).

**Table 10 - Emergency Contacts**

Organisation	Name	Position	Phone Number
FKG	Grant Goodale	Superintendent Emergency Controller	0477 765 619
	Anthony Jones	Project Manager	0467 758 755
	Brendan Stuart	Environmental Site Representative	0418 607 830
	Brett Edwards	Safety Advisor	0439 212 538
	Brendan Stuart	Community Liaison	0418 607 830
RMS	Jonathan Blizzard	Senior Environment Officer	0476 836 490

Organisation	Name	Position	Phone Number
OEH/EPA Hotline	-	-	131 555
OEH/EPA Representative	Nino Di Falco	EPA Representative	0417 042 216
NSW Public Health (Infectious Disease)	-	-	02 6330 5880
WorkCover Authority	-	-	13 10 50 or 02 6392 7600
Cabonne Shire Council	-	-	02 6392 3200
Orange Health Service	-	-	02 6369 3000
Bushfire Information Line	-	-	1800 679 737
Police, Fire, Ambulance	-	-	Call first if incident presents immediate threat to human health or property 000
Police (Orange Police Station)	-	-	02 6363 6399
Fire and Rescue (in cases where there is no immediate threat to human health or the environment)	-	-	02 6361 2205
State Emergency Service NSW (Orange Unit)	-	-	132 500
Poisons Information	-	-	131 126
WIRES	Jan Bradley (Orange)	-	1300 094 737 or 0402 999 632
Electricity	Essential Energy	-	02 5524 0414 or 132 080

## 7.2 Notifications

The Site Environmental Representative, following consultation with the Project Manager will advise the following organisations if the incident causes or threatens to cause material harm to the environment immediately in accordance with the POEO Act requirements:

- EPA;
- Ministry of Health (via the Public Health Unit);
- Work Cover Authority;
- Local Authority (i.e. council) if the EPA is not the appropriate authority; and
- Fire and Rescue NSW

The Site Environmental Representative will notify the Project Manager of all environmental incidents and the FKG Environmental Manager of any incidents which may require agency I regulator notification.

In addition, the Environmental Site Representative will notify the Client in accordance with the CEMP and contract requirements.

The information that needs to be reported is:

- Time, date, location and likely duration of incident;
- location of place where pollution is occurring or likely to occur;
- type of incident (e.g. chemical spill, water pollution etc.);
- extent of incident (e.g. magnitude of spill, area covered etc.); and
- action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution.

Notifications to authorities must be verbal communication (i.e. - via telephone call.)

### **7.3 Community Notification**

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.

For air pollution incidents that may affect community members, those community members may be asked to either close their doors and windows and stay indoors until further notice or to vacate the premises. For water pollution incidents that may affect community members, those community members may be asked to avoid use of the water until further notice.

FKG will provide regular updates of any pollution incidents either via letterbox drop, notices in local papers and/or via door knocks as required in consultation with relevant authorities.

## 8 REVIEW AND IMPROVEMENT

### 8.1 Continuous Improvement

This plan will be tested in accordance with the requirements of the POEO Regulation 2009 as follows:

1. 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; and
2. Any such test is to be carried out:
  - a. At least once every 6 months; and
  - b. Within 1 month of any pollution incident occurring on site.

The plan will be tested undertaking desktop simulations and practical exercises. Practical exercises in environmental incident response will include, but not be limited to:

- Spills;
- Release of hazardous materials used on site (including airborne releases);
- Fires;
- Explosions;
- Locations and types of emergency response equipment;
- MSDS and chemical use;
- Evacuation routes and exits;
- Arrangements with local emergency support;
- Assembly points; and
- Reporting requirements and organisational responsibilities.

In the plan the following details will be recorded:

- Review date and who carried out the review; and
- The date which the plan is updated and the person responsible.

### 8.2 Training

The general project induction will include a component on incident management to ensure that personnel understand the potential impacts from construction and method by which to respond to an environmental incident. Further training will also be conducted for specific staff including engineers, foreman and leading hands and will include, but not be limited to, the following:

- Employee responsibilities and legal obligations in relation to environmental incidents and reporting requirements;
- Identification of site issues that may lead to an environmental incident;
- Identification of an environmental incident; and
- Appropriate immediate action to control and contain an incident.

Training will be undertaken at least annually or within one month after an environmental incident. A training register will be maintained to keep a record of all personnel that have received training including names and date that training was undertaken.

Toolbox and prestart meetings will be used, as required, to highlight any specific issues that arise on-site and posters will be used to further educate employees and sub-contractors, particularly immediately after an environmental incident.

## Appendix 1 – Inventory of Polluting Substances

LIST OF POLLUTING SUBSTANCE STORAGES/ USES AT SITE INITIAL ASSESSMENT								
Name / description	Covered under Haz Chemicals?	Amount stored	Location of storage	Map reference	Need for early warning	Pre-emptive action ref	Ref to safety coverage	Ref to Hazard and likelihood assessment
<b>CHEMICALS (raw materials and products which can cause pollution)</b>								
Unleaded Fuel	Yes	60L	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
Diesel Fuel	Yes	60L	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
Engine Oil	Yes	50L	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
Marker Spray Paint	Yes	60 bottles	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
Grease	Yes	50L	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
Hydraulic Oil	Yes	50L	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
Add Blu	Yes	40L	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
Emulsion	Yes	20L	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
Solvent	Yes	20L	Compound Container	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 2
<b>MATERIALS (eg. Stockpiles, silos, bulk solids etc)</b>								
Grout (HP40)	No	200Kg	Site Compound	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 1
Hydrated Lime	No	6 silos (9 tonne each)	Site Compound	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 1
Via Bon Matt	No	2,000L	Site Compound	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 1
Powdered Gypsum	No	2,000kg	Site Compound	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 4
DamClear (Calcium Chloride)	No	2,000L	Site Compound	Chainage 21750	No	Substance maintained in bund	SDS register	See Item 4
<b>AQUEOUS (eg. Dams, wastewater tanks, other water storage area)</b>								
Sediment Basin 1	No	119 m <sup>3</sup>	Sediment Basin	Ch. 22100	No	Licensed Discharge Point	N/A	See Item 5
Sediment Basin 2	No	310 m <sup>3</sup>	Sediment Basin	Ch. 22400	No	Licensed Discharge Point	N/A	See Item 5
Sediment Basin 3	No	241 m <sup>3</sup>	Sediment Basin	Ch. 25600	No	Licensed Discharge Point	N/A	See Item 5
Sediment Basin 4	No	210 m <sup>3</sup>	Sediment Basin	Ch. 26600	No	Licensed Discharge Point	N/A	See Item 5
Sediment Basin 5	No	70 m <sup>3</sup>	Sediment Basin	Ch. 26900	No	Licensed Discharge Point	N/A	See Item 5

**SUBSTANCES IN PROCESSES (substances which could be emitted)**

Topsoil Stockpiles	No	Variable	Onsite	Various	No	Visual dust monitoring, water cart dust suppression and stabilisation	N/A	See Item 6
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**Appendix 2 – Hazard and Likelihood Risk Assessment for Inventory of Polluting Substances**

## HAZARD AND LIKELIHOOD RISK ASSESSMENT AND CORRECT CONTROL MEASURES

Name / ref of pollutant/ chemicals	Description of Hazard / Incident leading to hazard	Risk Level	Likelihood	Priority	Impact on neighbours	Control Measures Corrective Action Coverage under other Plans
Compound solid storage	Substance may become airborne due to high winds if packages left open	Minor	Unlikely	Low	N	Solids to be in undercover location or covered
	Contamination of waterways if solid mobilised	Minor	Unlikely	Low	N	Solids to be in undercover location or covered
	Mobilisation of fallen substance on ground when loading/ unloading	Minor	Unlikely	Low	N	Any spills to be swept up and disposed of following occurrence
Compound liquid storage	Release of spill from container during loading and/or unloading and storage	Minor	Moderate	Medium	N	<ul style="list-style-type: none"> <li>• Containers to be stored on sealed ground away from watercourse.</li> <li>• Following each use, checks on valves and caps to be undertaken</li> </ul>
General liquid storage	Release of spill from container during use or storage	Insignificant	Unlikely	Low	N	<ul style="list-style-type: none"> <li>• Storage of chemicals in small volumes not expected to cause pollution</li> <li>• All of these chemicals are Stored within bunds and/or undercover</li> </ul>
Storage of Gypsum	Substance may become airborne due to high winds if packages left open	Minor	Unlikely	Low	N	<ul style="list-style-type: none"> <li>• Substance is unlikely to cause environmental harm.</li> <li>• Solids to be in covered or bagged</li> </ul>
	Contamination of waterways if solids mobilised	Minor	Unlikely	Low	N	Solids to be in covered or bagged

	Mobilisation of fallen substance on ground when loading/ unloading	Minor	Unlikely	Low	N	<ul style="list-style-type: none"> <li>Any spills to be swept up and disposed of following occurrence</li> </ul>
Sediment basins and storage dams	Unauthorised discharge of "dirty water" from sediment basins and storage dams	Moderate	Moderate	Significant	N	<ul style="list-style-type: none"> <li>Sediment basins to be designed to capture nominated rainfall in EPL</li> <li>Sediment basins to be added to licence</li> <li>Storage dams designed to have no inflow</li> <li>No pumping into sediment basins and storage dams when capacity high</li> <li>Approval to be sought from environmental team when pumping into sediment basins and storage dams</li> </ul>
Dust	Generation of dust from site	Moderate	Moderate	Significant	N	<ul style="list-style-type: none"> <li>Dust controlled by water carts on site</li> <li>Community complaint line established and advertised to community</li> <li>Dust monitoring to be undertaken in response to community complaints</li> </ul>
Diesel fumes	Generation of diesel fumes from site	Minor	Unlikely	Low	N	<ul style="list-style-type: none"> <li>Plants and machinery to be regularly serviced</li> <li>Plant and machinery to be checked at the commencement of each day to identify issues</li> </ul>

**Appendix 3 – Site Compound Layout**

