

# Pollution Incident Response Management Plan 2017 / 2018



# Contents

## 1. PREVENTATIVE MECHANISMS:

1(a) Hazards to health and the environment	Page 3
1(b) Pollutant Inventory	Page 5
1(c) Pollutant Locations	Page 5
1(d) Early Warning Systems	Page 5
1(e) Plan Implementation and Testing	Page 5

## 2. INCIDENT RESPONSE:

2(a) STOP	Page 5
2(b) Procedural Implementation	Page 6
2(c) Contact List	Page 6

## 3. RECORD AND REVIEW:

3(a) Reporting	Page 7
3(b) Investigation and Review	Page 7

## 4. APPENDIX:

4(a) Hazardous Chemicals Manifest & Map	Page 7 & 8
4(b) Referenced Material	Page 9
4(c) Site Emergency / Traffic Management Map	Page 10

## RECORD OF REVISIONS

DATE	VERSION	DETAILS
July 2013	1	
August 2014	2	Review – minor changes
July 2015	2	Review – no changes
July 2016	3	Review – changes as part of review S Butcher & A Creighton Ref 16/17
Mar 2018	4	Review – Updates due to review S Butcher & A Creighton

# 1. PREVENTATIVE MECHANISMS

## 1(a) Hazards to Health and the Environment:

To minimise risk to human health and the environment the site has an **Environmental Aspect Register** which includes pre-empted hazards, sources for those hazards, risk assessments and controls. This can be found in the **Environmental Management Plan**. For all work methods when performing a task refer to the IRMS (Integrated Risk Management System).

Hazardous areas on site:

- Water Contamination
- Dust
- Drill and Blast Operations
- Hydraulic Lines
- Tyre Storage

### RISK MATRIX:

A risk score was assigned to each of the list hazards using the follow risk matrix.

RISK ASSESSMENT MATRIX						
		CONSEQUENCE				
		Insignificant	Minor	Moderate	Serious	Major
LIKELIHOOD	Almost Certain	11	16	20	23	25
	Likely	7	12	17	21	24
	Occasional	4	8	13	18	22
	Unlikely	2	5	9	14	19
	Rare	1	3	6	10	15

  

Consequence Rating	Insignificant	Minor	Moderate	Serious	Major
People	Report only. No injury	FAI	Recordable injury (MTL, RW, Minor LTI)	Severe lost time injury	Fatality / Multiple Fatalities
Environment	Degradation confined within the work area with impacts readily addressed & reversible detrimental effects	Degradation confined within the work area with impacts readily addressed & reversible detrimental effects and breach of project of site E&P	On-site / Off-Site degradation which has persistent (<3 weeks) but reversible impact. Non-compliance with legal & contractual requirements requiring reporting to authorities	An incident resulting in prosecution under environmental laws	On-Site / Off-site degradation which may have irreversible effects and an accident resulting in prosecution under environmental laws.
Plant / Property	<\$5K	<\$5K - \$20K	<\$20K - \$100K	>\$100K - \$500K	>\$500K
Community	One off complaint / no media attention	Small number of complaints / low cost / local community media attention	Repeated complaints from same area, state / media attention	Community discontent and impact on viability of business / National media attention	Complete loss of trust / social unrest / cessation and likely closure of business / National media attention
Legal Compliance	Minor breach not attracting regulatory body	Issue resulting in notice / fine	Prosecution & penalty or fine	Prosecution suspension of operating licence / criminal conviction	Prosecution / loss of operating licence or closure of operations / imprisonment
Quality	Rework costs less than \$5K	Rework costs between \$5K and \$10K	Rework costs between \$10K and \$50K	Rework costs between \$50K and \$100K	Rework costs greater than \$100K

  

LIKELIHOOD	DESCRIPTION	EXAMPLE
Almost Certain	Is expected to occur in most circumstances / common or repeating occurrence	Multiple occurrences within a month
Likely	Will occur in most circumstances	Multiple occurrences within a year
Occasional	Could occur infrequently	1 to 10 year event
Unlikely	May occur / improbable	10 to 100 year event
Rare	Only in exceptional circumstances, practically impossible	100+ year event

  

RISK SCORE	RISK LEVEL	REQUIRED LEVEL OF ACTION AND TIME FRAME FOR ACTIONS
1-6	Low Risk	Check current controls for adequacy and communicate hazards identified and their controls to the work group. No further actions / controls necessary (possibly consider new controls)
7-15	Moderate Risk	Some action required. Action may be administrative and / or PPE if higher levels of controls are not practicable
16-19	High Risk	Immediate action required above Admin and PPE to control the hazard where possible. Look for longer term solutions to reduce risk on an ongoing basis
20-25	Extreme Risk	Activity must not commence / activity must stop immediately until actions have been implemented so far as to control the hazards to an acceptable level (below 20)

### **Water Contamination Risk Score 17**

Bass point is self-contained, with the runoff water flowing into a series of settlement dams/ponds located around the site. Water from these ponds/dams is then utilised for dust suppression in the production process and on disturbed areas of the site. To prevent contamination into the settlement dams, all hazardous liquid materials including; diesel, petroleum, emulsion and lubricants, are stored in bunded areas. These bunds are inspected regularly and are cleared after any major rain event so as to maintain efficient capture levels. Oil waste is removed from site by a licensed contractor. Diesel carried on mobile plant and fuel cart is subject to safety procedures for minimising spill occurrence. Including emergency spill kit and mobile bunding procedures

### **Dust: Risk Score 17**

Dust can be an issue to human health dependant on the amount of exposure and composition of the dust. To protect all persons working on site, site specific Job Safety Analysis's / Safe Work Method Statements are in place for specific areas within the quarry/plant where PPE is mandated dependant on the work which includes wearing dust protection. Dust suppression is in place at key points to minimise the dust using either water or an environmentally friendly chemical, Polo Citrus. Monthly dust readings are recorded and placed on our website as well as annual personal dust and noise monitoring in place as well.

### **Drill and Blasting Operations: Risk Score 12**

To decrease possibility of fly rock a professional contractor is hired to survey the blast area, create the blast plan and to conduct the blast. If fly rock does occur, the incident is recorded following the requirements of the Division of Resources & Energy.

### **Hydraulic Lines: Risk Score 8**

To maintain hydraulic line ruptures regimented inspections are carried out and hoses are replaced before they fail due to wear. If a rupture does take place, the implementation of the spill kit occurs and area is sealed off by placing or creating bunding around spill area.

### **Tyre Storage: Risk Score 8**

Highly unlikely as tyres are stored in an open area with no surrounding bushland within close vicinity so even if a bush fire occurred they would not be able to become a light, no hot work is performed around the area in which they are kept, and there is no need to protect against naked flames.

Refer also to the following documentation:

- BPQ Emergency Plan – Dark Blue Section “Other Emergencies”
- Inundation & Inrush Hazard Management Plan
- Explosive Control Plan

## **(1b) Pollutant Quantities:**

Refer Manifest as submitted to WorkCover. Copy located Appendix 4(a) and MSMP Folder 25

## **(1c) Pollutant Locations**

All pollutants and spill kits are located in the Workshop and Secondary Plant (Canica oil Shed). They are also clearly identified on the Site Emergency Plan/Map. Copy of current Plan/Map also located in Appendix 4(c)

## **(1d) Early Warning Systems**

Complete any early warning systems that have been put in place is N/A

## **(1e) Plan Implementation and Testing**

Site emergency drills are conducted on an annual basis, these involve both areas of safety and environmental incidents; these are recorded and filed.

This plan is to be used in conjunction with the Site Emergency Plan when conducting Emergency Drills.

## **2. INCIDENT RESPONSE**

---

### **2(a)**

# **STOP**

**Instigate the “Bass Point Quarry” Site Emergency Plan**

**(Located at multiple locations around the quarry)**

## 2(b) Procedural Implementation:

As soon as the alarm is raised “Emergency, Emergency, Emergency” implement the Site Specific Emergency Plan.

When coordinating procedures to combat any pollution caused by the incident this will follow the **SITE EMERGENCY TEAM PROTOCOL** located in the **BLUE** section of **Site Emergency Plan**, where the Chief Warden will be responsible for contacting the required authorities and relay all necessary information back to persons at the incident location.

**Specific processes are in place dependant on the type of incident that has occurred within the Site Emergency Plan – located in DARK BLUE Section**

- **Environmental Incident/Spill**      **Page 5**
- **Hazardous Material Spill**      **Page 11**
- **Hydraulic Hose Rupture**      **Page 12**
- **Tyre Fire**      **Page 24**

## 2(c) Contact List:

**Notify relevant Appropriate Regulatory Authority (ARA) or departments of pollution incident as soon as practicable (within 24hrs).**

- |  |                     |
|--|---------------------|
| ▪ The Environment Protection Authority (EPA) | <b>13 15 55</b>     |
| ▪ The NSW Resources Regulator                | <b>1300 814 609</b> |
| ▪ The WorkCover Authority                    | <b>13 10 50</b>     |
| ▪ The Local Authority (Shellharbour Council) | <b>4221 6111</b>    |
| ▪ Fire and Rescue (NSW)                      | <b>000</b>          |

For information relating to plan implementation and contact information for liaising managers and site contact information refer to the **Site Emergency Plan** in the **PINK** section and the **Emergency & Crisis Management (ECM) Plan including Contact list**. These documents are located at the Front Office, Weighbridge and Secondary Control Room.

In an Emergency situation, Response Contact details and Site Contacts as displayed on site at various locations and within Appendix A of the ECM Plan.

If incident breaches boundaries surrounding neighbours are to be contacted through face to face or information left at place of residence by Hanson representative to notify of the situation, convey any possible impacts and procedures in place to rectify the situation.

## 3. RECORD AND REVIEW

---



### 3(a) Reporting Incidents

Incidents are to be reported in process with section 2 (b) **Contact List of this documents**.

Complete the **Appropriate Regulatory Authority** Incident report as required and submit.

### 3(b) Investigation and Review

Following an incident an investigation will take place following the procedures of the **Mine Safety Management Plan (Accident & Serious Incident Investigation)** where the findings will be reviewed by all relevant parties including any necessary outside parties. Another drill testing the plan must be completed within one month of any incident requiring implementation of the plan occurring.

## 4. APPENDIX

### 4(a) Hazardous Chemicals Manifest & Map



### Manifest of Schedule 11 Hazardous Chemicals

PCBU	Hanson Construction Materials Pty Ltd
Address of premises	Boollwarroo Parade, Shellharbour, NSW 2000
Date of preparation	15 <sup>th</sup> November 2015

### Emergency Contacts

Name	Position	Telephone
S Butcher	Quarry Manager	P: 02 4295 1352 M: 0417 252 300
M Rixon	Production Supervisor	P: 02 4295 1352 M: 0439 609 224

### Hazardous Chemicals Stored in Bulk (not in container eg stockpile)

Storage Area	Proper Shipping Name	UN No.	Class	PG	Type	Design Capacity	Diameter	Typical Quantity
N/A	-	-	-	-	-	-	-	-

### Hazardous Chemicals Stored in Tanks

Storage Area	Proper Shipping Name	UN No.	Class	PG	Type	Design Capacity	Diameter	Typical Quantity
DT01	Diesel Fuel	3082	9	III	AGT	55000L	-	55000L
DT01	Diesel Fuel	3082	9	III	AGT	55000L	-	55000L
WS01	Hydrocarbons	3295	3	III	AGT	6000L	-	6000L
WS01	Hydrocarbons	3295	3	III	AGT	3000L	-	3000L
WS01	Hydrocarbons	3295	3	III	AGT	3000L	-	3000L
WS01	Hydrocarbons (Waste)	3295	3	III	AGT	4000L	-	4000L

Note: AGT = Above Ground Tank

### Hazardous Chemicals Workshop

Storage Area	Proper Shipping Name	UN No.	Class	PG	Type	Design Capacity	Quantity	Typical Quantity
WS01	Hydrocarbons	3295	3	III	SD	205L	3	615L
WS01	Hydrocarbons	3295	3	III	SD	205L	2	410L
WS01	kerosene	1223	3	III	SD	205L	2	410L
WS01	Ethylene Glycol	3082	9	III	PD	20L	1	20L
WS01	Paint related material	1263	3	II	PD	10L	1	10L
WS01	Solvent naphta, heavy arom. mixture	3082	9	III	SD	20L	2	40L
WS01	Petroleum Distillates	1268	3	III	SD	20L	1	20L
WS01	Nitrogen	1066	2.2	-	PC	7.2 sm <sup>3</sup>	1	7.2 sm <sup>3</sup>
WS01	Oxygen	1072	2.2	-	PC	8.9 sm <sup>3</sup>	2	17.8 sm <sup>3</sup>
WS01	Argon	1956	2.2	-	PC	8.7 sm <sup>3</sup>	2	17.4 sm <sup>3</sup>
WS01	Acetylene	1001	2.1	-	PC	7.0 sm <sup>3</sup>	2	14.0 sm <sup>3</sup>

Note: SD = Steel Drum PD = Plastic Drum PC = Pressurised Cylinder

### Hazardous Chemicals Workshop (exterior)

Storage Area	Proper Shipping Name	UN No.	Class	PG	Type	Design Capacity	Quantity	Typical Quantity
WS02	Oxygen	1072	2.2	-	PC	8.9 sm <sup>3</sup>	10	89.0 sm <sup>3</sup>
WS02	Argon	1956	2.2	-	PC	8.7 sm <sup>3</sup>	6	52.2 sm <sup>3</sup>
WS02	Acetylene	1001	2.1	-	PC	7.0 sm <sup>3</sup>	8	56.0 sm <sup>3</sup>

Note: PC = Pressurised Cylinder

Documentation also located in MSMP Section 25 "Storage & Use of Hazardous Substances / dangerous goods"



## 4(b) Referenced Materials

IRMS-Integrated risk management System:

- This contains policies, work methods, forms and checklists. These are written to comply with ISO 9001, ISO 14001, AS4801, state based WHS and environmental legislation.
- It covers an overview of emergency process control.
- This is intranet based.

MSMP- Mine safety management Plan:

- This is procedural manual based on the IRMS and quarry safety legislation.
- Copies of the manual are available as a hard copy on site or on the Hanson intranet site.

Site Emergency Plan:

- This contains actions required to deal with minor potential safety and environmental incidents. It outlines site emergency teams and site maps. It addresses material spills, hydraulic hose ruptures, etc...
- An annual emergency drill is carried out to assess the emergency plan.
- Multiple hard copies are available on each site.

Crisis Management Manual:

- This is used for significant safety and environmental incidents.
- It covers what needs to be done if there is major oil/fuel spill, major Vehicle accident, Fire, etc...
- It also includes a crisis contact list covering contact details for internal employees and external emergency resources
- Available on each site – located with Site Emergency Plan

EMP-Environmental Management plan:

- This is document detailing the overall environmental management of site. It forms part of the IRMS.
- It includes an impact and aspect register. The register environmental risks and how these are eliminated/controlled on site.

# 4(c) Site Emergency / Traffic Management Map

