

Pollution Incident Response Management Plan



Contents

1. PREVENTATIVE MECHANISMS:

1(a) Hazards to health and the environment	Page 3
1(b) Pollutant Inventory	Page 4
1(c) Pollutant Locations	Page 5
1(d) Early Warning Systems	Page 5
1(e) Risk Minimisation	Page 5
1(f) Plan Implementation and Testing	Page 5

2. INCIDENT RESPONSE:

2(a) STOP	Page 6
2(b) Procedural Implementation	Page 6
2(c) Contact List	Page 7

3. RECORD AND REVIEW:

3(a) Reporting	Page 8
3(b) Investigation and Review	Page 8

4. APPENDIX A:

4(a) Referenced Material	Page 9
--------------------------	--------

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

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

Consequence Rating	Insignificant	Minor	Moderate	Serious	Major
People	Report only. No injury	FAI	Reasonable injury (MTI, RWI, 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 EMP	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 / disension and likely closure of business / National media attention
Legal Compliance	Minor breach not attracting regulatory body	Issue resulting in notice / fine	Prosecution 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

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	Medium 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 4**

Molong Quarry is a self-contained quarry using only captured rain water in the containment sump located in the quarry floor, this is used for dust suppression at the crushing plant and water truck dust control. Storm water runoff at the stockpile area is controlled by 4 sediment control dams with rock check dams before leaving the property and inspected after each rainfall event as per environmental plan. To prevent discharge into the water system, all hazardous liquid materials including; diesel, petroleum, emulsion and lubricants, are stored in bunded areas. These bunds are routinely inspected and are cleared after any major rain event so as to maintain efficient capture levels. For diesel carried on mobile plant, fuel cart and delivery vehicles safety procedures are in place for minimising spill occurrence. Including emergency shut off procedures and spill kit and mobile bunding procedures (Emergency Site Plan). Pages 5, 11, 12

Dust: **Risk Score 4**

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 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 water.

Drill and Blast Operations: **Risk Score 5**

Airblast and Ground vibration, nearest neighbour 2 kilometres away with nil complaints received since Hanson ownership.

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 DII.

Hydraulic Lines: **Risk Score 4**

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 2**

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 ignite, no hot work is performed around the area in which they are kept, and there is no need to protect against naked flames.

.

(1b) Pollutant Quantities:

Diesel	-	1 X 27,000 L self bunded Tank stored above ground
	-	1 x 4,000L Tank self bunded stored above ground
	-	1 x 10,000 L Tank on mobile diesel truck
	-	1 x 400 L Tank in each mobile FEL (2 FEL on site)
	-	1 x 550 L Tank in 30t Dump Truck
	-	
Petroleum	-	1 x 20L stored in workshop hazardous cupboard lockable.
Lubricants	-	2 x 20 L Meropa 150 in workshop bunded area.
	-	2 x 205L Torque Fluid 434 in workshop bunded area.
	-	2 x 205L Delo 40 15-40W in workshop bunded area.
	-	2 x 205L Engine Coolant in workshop bunded area.
	-	2 x 205L Gear Oil 85-140W in workshop bunded area.
	-	2 x 205L Rando Hydraulic fluid in workshop bunded area
Emulsion	-	1 x 27,000L Tank stored above ground

(1c) Pollutant Locations

All pollutants and spill kits are located on the site map of the Site Emergency Plan.

(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 MOLONG 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 **Site Emergency Plan** on page “3”, where the communications officer 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:

- Environmental Incident/Spill Page 5
- Hazardous Material Spill Page 11
- Hydraulic Hose Rupture Page 12

2(c) Contact List:

Notify relevant persons or departments of pollution incident as soon as practicable (within 24hrs).

- | | |
|--|---------------------|
| ➤ Appropriate Regulatory Authority (ARA) | EPA |
| ➤ The Environment Protection Authority (EPA) | 13 15 55 |
| ➤ The Ministry of Health | 93919000 |
| ➤ The Workcover Authority | 13 10 50 |
| ➤ The Local Authority (local council) | 63953200 |
| ➤ Fire and Rescue (NSW) | 1300 729 579 |

The ARA for “MOLONG QUARRY is the “EPA”

For information relating to plan implementation and contact information for liaising managers and site contact information refer to the **Site Emergency Plan “page ??”** and the **Crisis Management Contact list** (located in the **Red Crisis Management Folder**).

Contact Details for the Owners and Occupiers (Residents and Caretakers) are as follows:

Owners –Hanson Construction Materials 02 9354 2600

Occupiers – Chris Cooke (Manager) 0409 907 043

These persons are to be contacted immediately following the incident.

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**.

Checks if DII Incident report must be completed and if required 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 A

Referenced Material:

IRMS-Integrated risk management System:

- This contains policies, work methods, forms and checklists. These are written to comply with AS9001, AS14001, AS4801, state based WHS and environmental legislation.
- It covers an overview of emergency process control.
- This is intranet based.
-

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

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

Consequence Rating	Insignificant	Minor	Moderate	Serious	Major
People	Report only. No injury	FAI	Recordable injury (MTI, RWI, 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 EStP	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 \$20K and \$100K	Rework costs greater than \$100K

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)

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 in **RED FOLDER** on each site.

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.