Pollution Incident Response Management Plan (PIRMP)

Bass Point Quarry

March 2020 (Version 5)

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Record of Revision

Date	Version	Details of changes	Reviewed by	Approved by
Jul. 2013	1	Original document		
Aug. 2014	2	Review – minor changes		
Jul. 2015	2	Review – no changes		
Jul. 2016	3	Review – minor changes	A Creighton	S Butcher
Mar. 2018	4	Review – updates	A Creighton	S Butcher
Jun. 2019	4.1	Review – no changes	C Flood	S Butcher
20.03.2020	5	Review – Updates implemented • Reformat and general refresh • Legislation information added • EPL details added • Notification information amended • Hazardous chemicals manifest and manifest map updated • Site map updated	C Flood	S Butcher

Record of PIRMP testing

Date of last test:	27.05.2019
Tested by:	Chelsea Flood (Compliance Officer)
Details of test:	Minor diesel spill (approx. 20 L) at Hanson refuel station. Was treated as though PIRMP had been triggered
Test findings, including issues identified:	Clarification of pollution incidents, incident notification and reporting requirements necessary
Next scheduled test date:	On or before 27.05.2020

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1. Purpose

Hanson Construction Materials Pty Ltd holds an Environment Protection Licence with the NSW Environment Protection Authority (EPA) for the Bass Point Quarry. In accordance with the Protection of the Environment Operations Act 1997 (the POEO Act), the holder of an Environment Protection Licence must prepare, keep, test and implement a pollution incident response management plan (PIRMP) that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates (see **Appendix A**).

If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of s. 147 of the POEO Act) is caused or threatened, the person carrying on the activity must **immediately** implement this plan in relation to the activity required by Part 5.7A of the POEO Act.

2. Definitions

The POEO Act defines **pollution** as:

"Pollution means—
water pollution, or
air pollution, or
noise pollution, or
land pollution."

The POEO Act defines a **pollution incident** as:

"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."

The POEO Act (s. 147) defines **material harm to the environment** as:

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

Table 1: Requirements of the POEO (G) Regulation, relevant to a Pollution Incident Response Management Plan required to be prepared under Part 5.7A of the POEO Act.

Requirement	Section in PIRMP
98B Form of plan	
(1) A plan is to be in written form.	Entire PIRMP
(2) A plan may form part of another document that is required to be prepared under or in accordance with any other law so long as the information required to be included in the plan is readily identifiable as such in that other document.	Section 6
98C Additional matters to be included in plan	
(1) **General** The matters required under section 153C(d) of the Act to be included in a plan are as follows—	
(a) a description of the hazards to human health or the environment associated with the activity to which the licence relates (the relevant activity),	Section 4
(b) the likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood,	Section 4
(c) details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity,	Section 4
(d) an inventory of potential pollutants on the premises or used in carrying out the relevant activity,	Section 5 Appendix B
(e) the maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates,	Section 5 Appendix B
(f) a description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident,	
(g) the names, positions and 24-hour contact details of those key individuals who—	
(i) are responsible for activating the plan, and	Section 6.2
(ii) are authorised to notify relevant authorities under section 148 of the Act, and	Section 7.2
(iii) are responsible for managing the response to a pollution incident	
(h) the contact details of each relevant authority referred to in section 148 of the Act,	Section 7.3
(i) details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the premises to which the	Section 7.3

Requirement			Section in PIRMP
		licence relates or where the scheduled activity is carried on,	
	(j)	the arrangements for minimising the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on,	Section 4 Section 6
	(k)	a detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises,	Appendix B
	(l)	a detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk,	Section 4 Section 6
	(m)	the nature and objectives of any staff training program in relation to the plan,	Section 9
	(n)	the dates on which the plan has been tested and the name of the person who carried out the test,	Page i Section 10.2
	(o)	the dates on which the plan is updated,	Page i Section 10.2
	(p)	the manner in which the plan is to be tested and maintained.	Section 10.2
98D Availability of plan			
(1)		A plan is to be made readily available—	
	(a)	to an authorised officer on request, and	Noted
	(b)	at the premises to which the relevant licence relates, or where the relevant activity takes place, to any person who is responsible for implementing the plan.	Section 10.1
(2)		A plan is also to be made publicly available in the following manner within 14 days after it is prepared—	
	(a)	in a prominent position on a publicly accessible website of the person who is required to prepare the plan,	Noted
	(b)	if the person does not have such a website—by providing a copy of the plan, without charge, to any person who makes a written request for a copy.	
98E Testing of plan			
(1)		The testing of a plan is to be carried out in such a manner as to ensure that the information included in the plan is accurate	Noted

Requirement		Section in PIRMP
	and up to date and the plan is capable of being implemented in a workable and effective manner.	
(2)	Any such test is to be carried out— (a) routinely at least once every 12 months, and (b) within 1 month of any pollution incident occurring in the course of an activity to which the licence relates so as to assess, in the light of that incident, whether the information included in the plan is accurate and up to date and the plan is still capable of being implemented in a workable and effective manner.	Section 10.2

3. Environment Protection Licence (EPL) details

Name of licensee: (including ABN)	Hanson Construction Materials Pty Ltd Locked Bag 5260 Parramatta NSW 2124 ABN: 90 009 679 734
EPL number*:	2193
EPL anniversary date:	15-June
Premises name and address:	Hanson Construction Materials Pty Ltd Bass Point Quarry Boollwarroo Parade Shellharbour NSW 2529
Website address:	https://www.hanson.com.au/about-us/regulatory-information/bass-point-quarry-project/
Scheduled activity/activities on EPL:	Crushing, grinding or separating Extractive activities
Fee based activity/activities on EPL:	Crushing, grinding or separating: <2000000 T annual processing capacity Land-based extractive activity: <2000000 T annual capacity to extract, process or store

* Listed in the EPA Public Register

4. Hazards to health and the environment

To minimise risk to human health and the environment the site has an **Environmental Impact and 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).

Identified hazards to health and the environment on site:

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

4.1. Risk matrix

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

RISK ASSESSMENT MATRIX

LIKELIHOOD	CONSEQUENCE				
	Insignificant	Minor	Moderate	Serious	Major
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 (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 compliant / 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 / dissension 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 to10 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).

4.2. Risk assessment

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 the fuel cart is subject to safety procedures to minimise the occurrence of spills. Emergency spill kits are available at specified locations on site and resources are on hand for prompt creation of earthen mounds for containment of spills (i.e. mobile bunding). Any water to be discharged from site must occur via a licensed discharge point and must meet the pollutant concentrations identified in **EPL-2193**. Further information about surface water management is available in the **Surface Water Management Plan**.

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 Analyses (JSAs) and Safe Work Method Statements (SWMS) are in place for specific tasks. Areas within the Plant where PPE is mandated have been identified through a risk assessment, and these areas are clearly signposted. Workers are also aware that additional PPE (in excess of mandated PPE) may be required, and that appropriate PPE should always be considered and selected before undertaking a task. The Plant and Laboratory have been fitted with engineered dust extraction systems. Dust suppression using either water or an environmentally friendly chemical, Polo Citrus, is in place at key points of the production process, as well as key operational areas, to minimise the emission of airborne dust. In accordance with **Project Approval 08_0143** and **EPL-2193**, monthly dust monitoring results are recorded, analysed, and the results are displayed on the website. Personal dust and noise monitoring is undertaken on a biennial basis, to ensure that exposure does not exceed the dust and noise exposure standards. Further information is available in the **Air Quality Management Plan** and the **Air Quality, Dust and Airborne Contaminants Management Plan**.

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

To decrease possibility of fly rock and excess dust emission, a professional contractor is hired to survey the blast area, create the blast plan and to conduct the blast. Blasting is also conducted in accordance with the **Noise and Blast Management Plan**, the **Fire and Explosion Management Plan**, and the **Explosives Control Plan**.

Hydraulic Lines: **Risk Score 8**

To prevent hydraulic line ruptures, scheduled inspections and maintenance is carried out, so that hoses are replaced before they fail due to wear. If a rupture does occur, the spill kit is deployed and the area is sealed off by placing or creating bunding around the spill area.

Tyre Storage: **Risk Score 8**

Low likelihood of occurrence because tyres are stored in an open area with no surrounding bushland in close proximity. Therefore, if a bush fire occurred it is unlikely that tyres would become alight. Hot work is not performed around the areas in which they are kept, and there is no need to protect against naked flames.

5. Potential pollutants on the premises

5.1. Pollutant inventory

Refer to the Manifest of Schedule 11 Hazardous Chemicals and accompanying site map, as submitted to SafeWork NSW and available in MSMS Folder 25: Labelling, use and storage of hazardous substances and dangerous goods (**Appendix B**).

5.2. Pollutant locations

The location of all potential pollutants is included in the Manifest of Schedule 11 Hazardous Chemicals and accompanying site map, as submitted to SafeWork NSW and available in MSMS Folder 25: Labelling, use and storage of hazardous substances and dangerous goods (**Appendix B**).

5.3. Safety equipment for pollution response

An inventory of safety equipment for responding to specific emergency scenarios, including pollution incidents, is contained in the **Site Emergency Plan**. This information is listed under the 'Resources available on Site for Emergency' heading for each of the emergency scenarios in the **DARK BLUE 'OTHER EMERGENCIES'** Section of the Site Emergency Plan.

6. Incident response

In the event of a pollution incident that triggers the PIRMP (i.e. the pollution incident *causes or threatens to cause material harm to the environment*):

STOP

6.1. Activate the Bass Point Quarry Site Emergency Plan

Immediately activate the Bass Point Quarry **Site Emergency Plan**.

The alarm will be raised by alerting all personnel via the company radio frequency ***"Emergency, Emergency, Emergency…"***

The Site Emergency Plan is available in printed form at various locations around the site, and it is co-located with the PIRMP so that both documents are accessible during an emergency.

An electronic copy of the Site Emergency Plan is also available on the Bass Point Quarry shared drive.

6.2. Procedural implementation

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 the Site Emergency Plan. The **Communications Officer** will be responsible for contacting the required authorities and relaying all necessary information back to persons at the incident location.

Specific procedures are in place, depending on the type of incident that has occurred. This information is contained within the **Site Emergency Plan** – in the **DARK BLUE 'OTHER EMERGENCIES'** Section.

Table 2: Page numbers in the Site Emergency Plan for emergency response procedures pertaining to identified hazards to health and the environment.

Identified hazard to health and the environment	Page in Site Emergency Plan
Environmental Incident/Spill	33
Hazardous Material Spill	44
Hydraulic Hose Rupture	46
Tyre Fire	63

7. Notification and reporting

7.1. What needs to be notified?

Under s. 148 of the POEO Act, Hanson has a duty to **immediately** notify (i.e. via phone) each relevant authority of a **pollution incident** if there is a risk of **material harm to the environment** (see **Section 2** for definitions).

According to the provisions of s. 150 of the POEO Act:

(1) The relevant information about a pollution incident required under section 148 consists of the following—
- *(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.

7.2. Internal pollution incident reporting

Contact information for liaising managers and site contact information is located in the **CONTACT DETAILS** in the **PINK** section of the **Site Emergency Plan**, and the Contact List in Appendix A of the **Emergency & Crisis Management (ECM) Plan**.

Contact details are also displayed as posters at various locations on site, to improve accessibility during an emergency situation.

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

Owners	Hanson Construction Materials Pty Ltd	(02) 9354 2600
Occupiers	Stephen Butcher (Quarry Manager)	0417 252 300
	Michael Rixon (Production Supervisor)	0439 609 224

If they have not already been otherwise alerted, an Occupier must be contacted immediately following a pollution incident.

7.3. External pollution incident reporting

Under the provisions of cl. 101 of the POEO (G) Regulation:

(1) For the purposes of section 149 of the Act, a pollution incident that is required to be notified under section 148 of the Act—

(a) is to be notified verbally to each relevant authority, and

(b) is to be followed by notification in writing within 7 days of the date on which the incident occurred.

(2) For the purposes of section 149 of the Act, notification of the EPA may be achieved by telephoning the EPA environment line.

***Note.** Section 150(2) of the Act provides that the information contained in a notification is to be the information known when the notification occurs. Therefore, if information becomes known between the immediate notification given verbally and the time when written notification is required to be given, that new information will be required to be notified immediately after it becomes known and to be included in the written notification.*

Pollution incidents must be **notified via phone immediately** in the order listed below:

Environment Protection Authority (EPA)[+] 'Environment Line'	**131 555**
NSW Resources Regulator	**1300 814 609**
Ministry of Health (Wollongong Public Health Unit) *After hours – ask for "Public Health Officer on call"*	**4221 6700** **4222 5000**
SafeWork NSW	**13 10 50**
Shellharbour City Council (the Local Authority)	**4221 6111**

Department of Planning, Industry and Environment (DPIE)	**[redacted for publication]**
Fire and Rescue NSW*	**1300 729 579**

+ The Appropriate Regulatory Authority (ARA) for the Bass Point Quarry is the EPA.

* Note that if the pollution incident required immediate assistance from emergency services (i.e. 000 was called), Fire and Rescue (NSW) do not need to be called again.

The verbal notification must be followed by a **written notification** within 7 days of the date on which the incident occurred. This written notification must contain all of the information required under s. 150 of the POEO Act.

Hanson also has written notification requirements under the provisions of Project Approval 08_0143 and EPL-2193; these requirements are summarised below. Reference the listed regulatory condition for further information about the structure and content that must be included in the written notification.

Notification trigger	Party to be notified	Time period	Regulatory condition
Environmental harm	EPA	Within 7 days of the date on which the incident occurred	EPL-2193 *licence condition R2.2*
Incident #	Secretary of the DPIE	Within 7 days of the incident	MP 08_0143 *Schedule 5 Condition 7*
Monitoring results that indicate an exceedance	Landowners	As soon as practicable, and no longer than 7 days, after obtaining monitoring results	MP 08_0143 *Schedule 4 Condition 1*

Whereby "incident" is defined as a set of circumstances that (i) causes or threatens to cause material harm to the environment; and/or, (ii) breaches or exceeds the limits or performance measures criteria in the consent [MP 08_0143].

For incidents that require the assistance of emergency services, Hanson will consult with the incident controller (i.e. NSW Police Force, Fire and Rescue NSW) about whether community notification should be undertaken. Depending on the nature of community notification that may be required, Hanson may contact Shellharbour City Council for assistance (e.g. to conduct a letterbox drop for affected residents). Note that for incidents that do involve and/or affect landowners/nearby residents, face to face communications may also be appropriate, depending on the situation.

8. Record and review

Following a pollution incident, an investigation will take place following the procedures of the **Mine Safety Management System (Section 10: Accident & Serious Incident Investigation)**. This includes the involvement and review of findings by all relevant parties, including any necessary outside parties.

The incident will be recorded using the central records management system, SAP, by creating an IRIS event. This may also be accompanied by a written investigation report, which can be uploaded to the IRIS event as an attachment.

The PIRMP must then be reviewed within 1 month of the date of the incident (see **Section 10.2**).

9. Staff training

All personnel are trained to respond to emergency scenarios, including pollution incidents. Training is in the form of an annual emergency drill, which may include both safety and environmental components. Typically, each shift will complete their emergency drill separately, for logistical reasons. These drills are designed to ensure that all workers are adequately prepared to respond to pollution incidents. To record staff training in emergency procedures, the Site Emergency Drill Report (HCM-FM-E6-001) and a Training Attendance Record are completed for each emergency drill. The completed forms are uploaded to the central records management system, SAP, as an IRIS meeting document.

All workers are also required to complete an online training module on environmental principles as part of the annual Health, Safety and Environment Charter, as well as a separate module about spill control.

10. PIRMP maintenance

10.1. Availability of the PIRMP

The PIRMP is available in printed form at the premises – it is co-located with the site Emergency Plan. This is because the Emergency Plan contains procedures for responding to specific incidents, including pollution incidents. An electronic copy of the PIRMP is also available on the Bass Point Quarry shared drive.

The PIRMP is publicly available on the company website. It must also be made available at the request of an authorised EPA officer, response agencies during an incident, and members of the public on request.

10.2. Testing of the PIRMP

It is a legal requirement to test the PIRMP **every 12 months**. Two forms of PIRMP testing are used to meet this requirement:

- Desktop simulation – annual desktop simulation completed by a competent person. This test is scheduled in SAP to ensure that it is completed as scheduled.
- Emergency drill – annual mock emergency or emergency drill, involving all workers. The emergency drill typically has both safety and environmental components, although may instead consist of two separate emergency drills to test these components.

Testing will include all components of the PIRMP, including training requirements. The Site Emergency Drill Report is used to record the details of all PIRMP tests, and the completed forms are uploaded to the central records management system, SAP, as an IRIS meeting document.

It is also a legal requirement that the PIRMP be tested **within 1 month of any pollution incident**.

11. References

Hanson documentation

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.

MSMS – Mine Safety Management System:

- 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.

Emergency and Crisis Management Plan:

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

External references

- NSW EPA September 2013, *Environment Compliance Report: Requirements for preparing and implementing Pollution Incident Response Management Plans*
- NSW EPA May 2019, *Guideline: Pollution Incident Response Management Plans* [draft for public consultation]
- NSW EPA June 2019, *Environment Protection Licence 2193 (EPL-2193)*
- NSW Government Department of Planning and Environment January 2019, *Project Approval 08_0143*
- *Protection of the Environment Operations Act 1997* (NSW), Part 3A
- *Protection of the Environment Operations (General) Regulation 2009* (NSW)

Appendices

Appendix A – Relevant requirements of POEO Act Part 5.7A

Table A-1: Relevant requirements of the POEO Act Part 5.7A Duty to prepare and implement pollution incident response management plans.

Requirement	Section in PIRMP
153A Duty of licence holder to prepare pollution incident response management plan The holder of an environment protection licence must prepare a pollution incident response management plan that complies with this Part in relation to the activity to which the licence relates. Maximum penalty— (a) in the case of a corporation—$1,000,000 and, in the case of a continuing offence, a further penalty of $120,000 for each day the offence continues, or (b) in the case of an individual—$250,000 and, in the case of a continuing offence, a further penalty of $60,000 for each day the offence continues. **Note.** An offence against this section committed by a corporation is an executive liability offence attracting executive liability for a director or other person involved in the management of the corporation—see section 169A.	Noted
153C Information to be included in plan	
A pollution incident response management plan must be in the form required by the regulations and must include the following—	Entire PIRMP
(a) the procedures to be followed by the holder of the relevant environment protection licence, or the occupier of the relevant premises, in notifying a pollution incident to—	
(i) the owners or occupiers of premises in the vicinity of the premises to which the environment protection licence or the direction under section 153B relates, and (ii) the local authority for the area in which the premises to which the environment protection licence or the direction under section 153B relates are located and any area affected, or potentially affected, by the pollution, and (iii) any persons or authorities required to be notified by Part 5.7,	Section 7.3
(b) a detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant environment protection licence, or the occupier of the relevant premises, to reduce or control any pollution,	Section 6 (references Emergency Plan)
(c) the procedures to be followed for co-ordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and, in	Section 6 (references Emergency Plan)

Requirement	Section in PIRMP
particular, the persons through whom all communications are to be made,	
(d) any other matter required by the regulations.	Section 2
153D Keeping of plan	
A person who is required to prepare a pollution incident response management plan under this Part must ensure that it is kept at the premises to which the relevant environment protection licence relates, or where the relevant activity takes place, and is made available in accordance with the regulations. Maximum penalty— (a) in the case of a corporation—$1,000,000 and, in the case of a continuing offence, a further penalty of $120,000 for each day the offence continues, or (b) in the case of an individual—$250,000 and, in the case of a continuing offence, a further penalty of $60,000 for each day the offence continues. **Note.** An offence against this section committed by a corporation is an executive liability offence attracting executive liability for a director or other person involved in the management of the corporation—see section 169A.	Section 10.1
153E Testing of plan	
A person who is required to prepare a pollution incident response management plan under this Part must ensure that it is tested in accordance with the regulations. Maximum penalty— (a) in the case of a corporation—$1,000,000 and, in the case of a continuing offence, a further penalty of $120,000 for each day the offence continues, or (b) in the case of an individual—$250,000 and, in the case of a continuing offence, a further penalty of $60,000 for each day the offence continues. **Note.** An offence against this section committed by a corporation is an executive liability offence attracting executive liability for a director or other person involved in the management of the corporation—see section 169A.	Section 10.2
153F Implementation of plan	
If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of section 147) is caused or threatened, the person carrying on the activity must immediately implement any pollution incident response management plan in relation to the activity required by this Part. Maximum penalty—	Section 1 Section 6

Requirement	Section in PIRMP
(a) in the case of a corporation—$2,000,000 and, in the case of a continuing offence, a further penalty of $240,000 for each day the offence continues, or (b) in the case of an individual—$500,000 and, in the case of a continuing offence, a further penalty of $120,000 for each day the offence continues. **Note.** An offence against this section committed by a corporation is an executive liability offence attracting executive liability for a director or other person involved in the management of the corporation—see section 169A.	

Appendix B – Hazardous Chemicals Manifest and Manifest Map

Manifest of Schedule 11 Hazardous Chemicals

Workplace information	
Person conducting the business or undertaking (PCBU)	Hanson Construction Materials Pty Ltd
Address of premises	Bass Point Quarry Road Shell Cove, NSW 2529
Date this manifest was prepared	18th December 2019

Emergency Contacts

Name	Position	Telephone
S Butcher	Quarry Manager	Ph: (02) 4247 3500 Mob: 0417 252 300
M Rixon	Production Supervisor	Ph: (02) 4247 3500 Mob: 0439 609 224

Hazardous Chemicals Stored in Bulk (not in container, e.g. stockpile)

Area	Hazardous chemicals					Storage Area			
	Shipping Name	UN No.	Class	Sub Risk	Packing Group	Type of Area	Design capacity	Diameter	Quantity
N/A	-	-	-	-	-	-	-	-	-

Hazardous Chemicals Stored in Tanks

Area	Hazardous chemicals					Storage Area			
	Shipping Name	UN No.	Class	Sub Risk	Packing Group	Type of Area	Design capacity	Diameter	Typical Quantity
DT01	Abandoned tank	N/A	-	-	-	AGT	55000 L	-	0 L
DT01	Abandoned tank	N/A	-	-	-	AGT	55000 L	-	0 L
DGT1	Combustible liquid	00C1	-	-	-	AGT	69308 L	-	69308 L
DGT2	Combustible liquid	00C1	-	-	-	AGT	67120 L	-	67120 L
WS01	Hydrocarbons	3295	3		III	AGT	6000 L	-	6000 L
WS01	Hydrocarbons	3295	3		III	AGT	3000 L	-	3000 L
WS01	Hydrocarbons	3295	3		III	AGT	3000 L	-	3000 L
WS01	Hydrocarbons (waste)	3295	3		III	AGT	4000 L	-	4000 L

Note: AGT = above ground tank
Note: Tank diameter required for vertical above ground tanks storing fire risk hazardous chemical (does not apply to combustible liquids).

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Hazardous Chemicals Workshop

Area	Hazardous chemicals					Storage Area			
	Shipping Name	UN No.	Class	Sub Risk	Packing Group	Type of Area	Design capacity	Quantity	Typical Quantity
WS01	Hydrocarbons	3295	3		III	SD	205 L	3	615 L
WS01	Hydrocarbons	3295	3		III	SD	205 L	2	410 L
WS01	Kerosene	1223	3	-	III	SD	205 L	2	410 L
WS01	Ethylene Glycol	3082	9	-	III	PD	20 L	1	20 L
WS01	Paint related material	1263	3	-	II	PD	10 L	1	10 L
WS01	Solvent naphta, heavy aromatic mixture	3082	9	-	III	SD	20 L	2	40 L
WS01	Petroleum Distillates	1268	3	-	III	SD	20 L	1	20 L
WS01	Nitrogen	1066	2	2.2	-	PC	7.2 m^3	1	7.2 m^3
WS01	Oxygen	1072	2	2.2	-	PC	8.9 m^3	2	17.8 m^3
WS01	Argon	1956	2	2.2	-	PC	8.7 m^3	2	17.4 m^3
WS01	Acetylene	1001	2	2.1	-	PC	7.0 m^3	2	14.0 m^3

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

Hazardous Chemicals Stored Workshop (exterior)

Area	Hazardous chemicals					Storage Area			
	Shipping Name	UN No.	Class	Sub Risk	Packing Group	Type of Area	Design capacity	Quantity	Typical Quantity
WS02	Oxygen	1072	2	2.2	-	PC	8.9 m^3	10	89.0 m^3
WS02	Argon	1956	2	2.2	-	PC	8.7 m^3	6	52.2 m^3
WS02	Acetylene	1001	2	2.1	-	PC	7.0 m^3	8	56.0 m^3

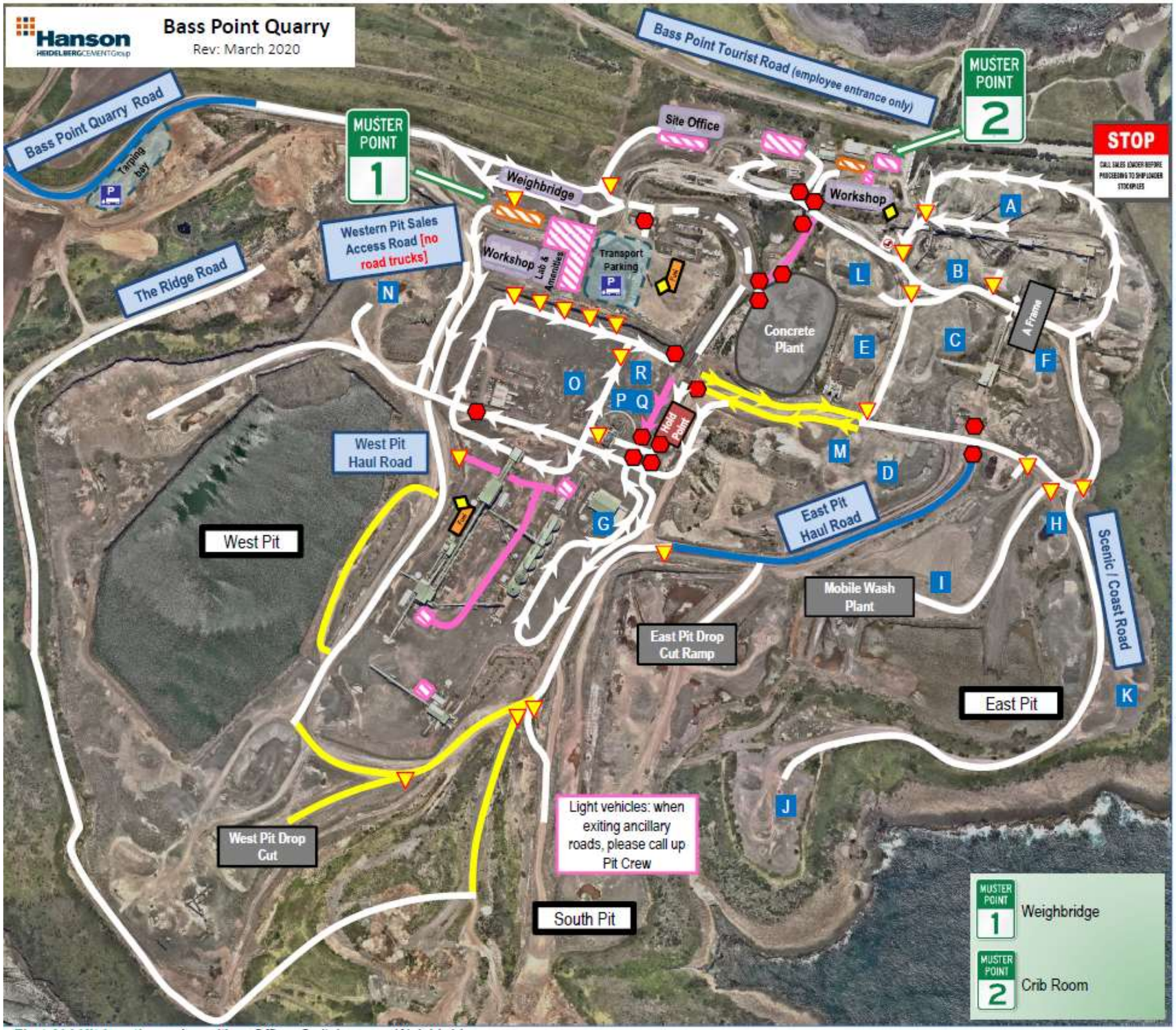
Note: *PC = Pressurised Cylinder*

Hazardous Chemicals Laboratory

Area	Hazardous chemicals					Storage Area			
	Shipping Name	UN No.	Class	Sub Risk	Packing Group	Type of Area	Design capacity	Quantity	Typical Quantity
LB01	Ammonia Solution	2672	8		III	PB	2.5 L	1	2.5 L
LB01	Hydrochloric Acid	1789	8		II	PB	2.5 L	1	2.5 L
LB01	Barium Chloride	1564	6	6.1	III	SB	500 g	2	1 kg
LB01	Sodium Hydroxide	1823	8		II	SB	500 g	2	1 kg
LB01	Copper (II) Sulphate	3077	9		III	SB	500 g	1	500 g
LB01	Ethanol	1170	3		II	PB	500 mL	1	500 mL
LB01	Extran MA03	1824	8		III	PB	5 L	1	5 L

Note: *SB = Sealed Bag, PB = Plastic Bottle*

Appendix C – Site Map



Traffic flow at this site follows RMS road rules. Communicate via:
2-Way CH 1 or UHF CH 11

Coastwide Civil UHF CH 14

40 km/hr
20 km/hr
20 km/hr (concrete plant access)
20 km/hr (LV access only)
15 km/hr
LV parking
Mobile equip. parking
Give way
Spill kit
Stop

NOTE: Parking areas speed reduces to 10km/hr

NOTE: Arrows indicate ONE WAY roads

- Truck Waiting Bay near Weighbridge
- Hanson Only Vehicle Fuelling Area
- Ship Loader Stockpiles
- New Plant stockpiles

NOTE: Access to Ship Loader Stockpiles is down via the A Frame then turn left at end and continue to Hold Point

NOTE: NO LEFT TURN at old plant Bins
(exemption only Bin Truck, Sales Loader, EWP & Bobcat)

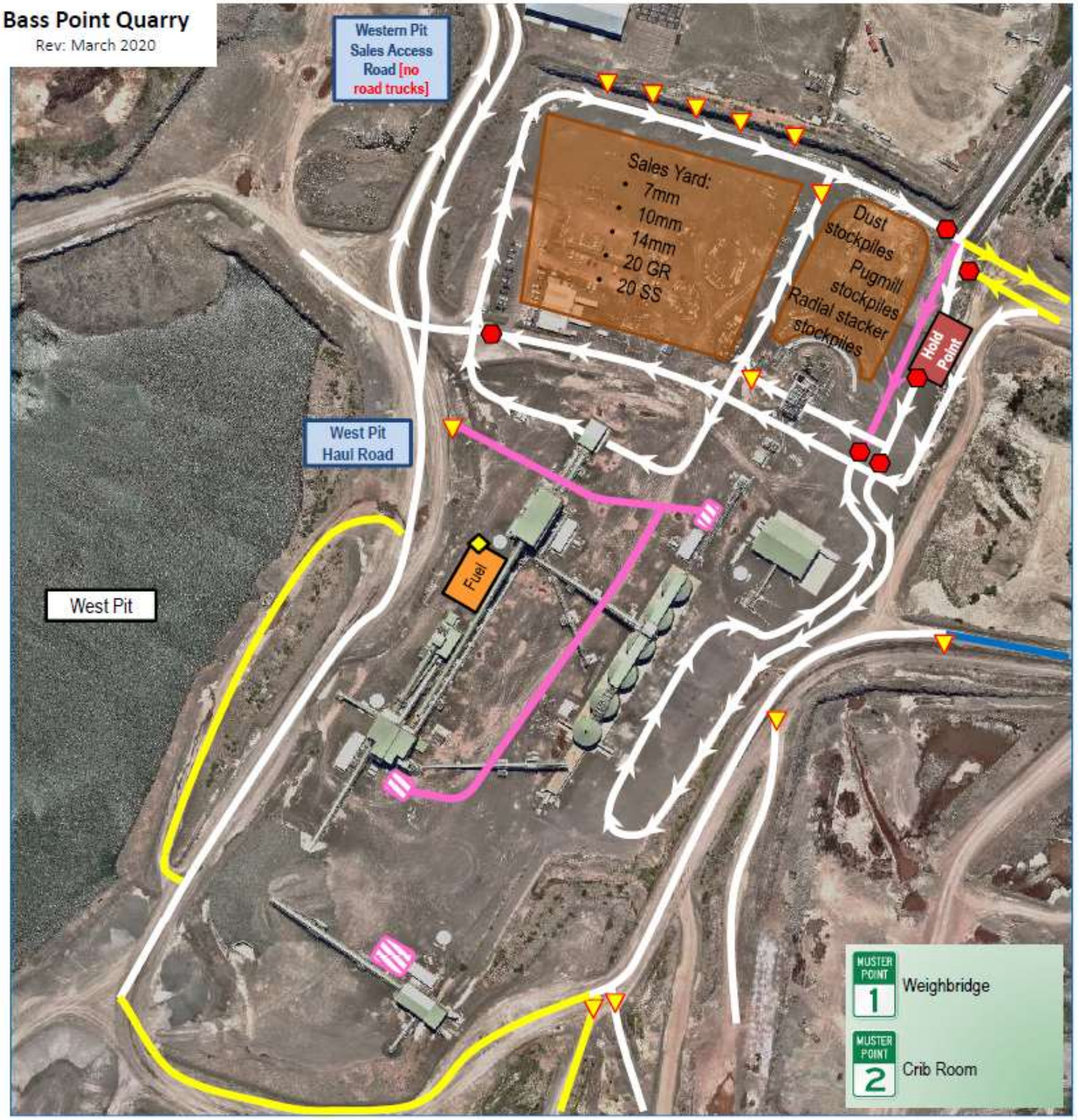
NOTE: CALL UP POINTS
*A Frame *Ship Loader Stockpiles *Ridge Road *East Pit Haul Road *West Pit Haul Road *Scenic/Coast Road *New Sales Area

A. Ship Loader Stockpiles
B. Pugmill Stockpiles
C. 10mm Stockpiles
D. 14mm Stockpiles
E. Stabilising Plant Stockpiles
F. Scalps Stockpiles
G. Precoat Plant
H. Precoat Stockpiles
I. Dust & Mansand Stockpiles
J. Drainage Stockpiles
K. & L. Stockpiles
M. Concrete Waste
N. UZF Stockpiles
O. Sales Yard
P. Radial Stacker Stockpiles
Q. Pugmill Stockpiles
R. Dust Stockpiles

First Aid Kit locations: Amenities, Office, Switchrooms, Weighbridge
Defibrillators: Amenities, Weighbridge

Bass Point Quarry

Rev: March 2020



Traffic flow at this site follows RMS road rules. Communicate via:
2-Way CH 1 or UHF CH 11

Coastwide Civil UHF CH 14

40 km/hr
20 km/hr
20 km/hr (LV access only)
15 km/hr
LV parking

NOTE: Parking areas speed reduces to 10 km/hr

NOTE: Arrows indicate ONE WAY roads

NOTE: There is an exemption for yellow machines in the New Sales Yard only – yellow machines may opt not to follow the one way travel rule if safe to do so

NOTE: Quarry Ramps speed reduces to signposted speed

Give way
Spill Kit
Stop

First Aid Kit locations: Amenities, Office, Switchrooms, Weighbridge
Defibrillators: Amenities, Weighbridge