

INTRODUCTION

This Pollution Incident Response Management Plan (PIRMP) has been developed to outline Pacific Blue Metal's (PBM) response to pollution incidents. It has been prepared in accordance with the *Protection of the Environment Operations Act 1997 (POEO Act)* and the *Protection of the Environment Operations (General) Regulation 2009*.

The EPA defines a pollution incident as: *“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”* (Dictionary of the POEO Act).

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

- (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.

Notification is required even when harm to the environment is caused only in the premises where the pollution incident occurs, as specified in Section 147(2) of the POEO Act.

LINKS TO OTHER EMERGENCY PLANS

This document is tailored to meet the requirements under Part 5.7A of the *Protection of the Environment Operations Act 1997 (POEO Act)* to prepare, keep, test and implement a pollution incident response management plan. However, this document is not a stand-alone document, and should be read in conjunction with the PBM Emergency Plan which contains further and more detailed documentation on emergency planning and response procedures.

PBM Pollution Incident Response Management Plan

POTENTIAL POLLUTION HAZARDS [Clause 98C (1) (a) and (b)]

Potential pollution hazards identified at Pacific Blue Metal include:

- Air Pollution Incident – excessive dust emissions, uncontrolled release of gas to atmosphere, smoke.
- Water Pollution Incident – discharge of sediment, discharge of chemicals or fuel, failure of effluent containment system.
- Land Pollution Incident - discharge of chemicals or fuel, failure of effluent containment system.
- Fire – endangering environment, human health and/or property.

Table 8 of the Emergency Plan further identifies the potential pollution hazards, applies a risk assessment rating (likelihood versus consequence) and identifies control measures.

PRE-EMPTIVE ACTIONS TO BE TAKEN [Clause 98C (1) (c)]

PBM undertakes numerous measures to reduce the likelihood and consequence of the potential of pollution incidents on site. The pre-emptive actions listed below reduce the likelihood of pollution incidents to Low. These actions include the following:

- Planning tools - Safety Management Plan, Emergency Plan, Electrical Engineering Control Plan, Mechanical Engineering Control Plan, Dust Management Plan, Quality Control Plan, Health Control Plan and Environmental Management Strategy and associated management plans for Water, Air, Noise, Blasting, Transport and Rehabilitation & Landscape.
- Development and implementation of Standards Operating Procedures including Safety Procedures, Quality Procedures and Safe Work Method Statements.
- Internal and external (independent) audits of system implementation.
- Training - site inductions, use of spill containment and firefighting equipment, mock incident response exercises, hazard identification and risk management.
- Bunding - all fuels and chemicals stored on site are contained within bunded areas
- Inspections -regular workplace inspections, monitoring and auditing of site environmental controls.
- Pollution incident response equipment - spill kits, water carts, emergency response equipment.
- Preventative Maintenance Program on all plant and equipment.
- Regular removal of waste from site - general waste, effluent, waste oils, tyres, scrap steel and batteries all removed by contractors, waste laboratory chemicals sent back to supplier.

PBM Pollution Incident Response Management Plan

- Structural controls – water drainage channels, rock lined dams, bunding, sediment basins, earth banks, vegetation buffer / infiltration areas.
- 24 hour CCTV for site security.
- Monthly swipe test of Troxler Sealed Source Device Dosimeters.
- Vehicle placarding when carrying Dosimeters.
- License to carry Dosimeters.

INVENTORY OF POLLUTANTS [Clause 98C (d) and (e)]

Below is a summary of the main chemicals held onsite.

Product Name	Maximum Quantity	Storage Location	Method of Storage
Diesel	55000L	SA1 Diesel SA4 Asphalt. SA5 Pugmill	Tanks / IBC in bunded area
LPG	98000L	SA2 LPG SA3 Lab SA6 Workshop	LPG Gas tank / chained to shed / trolley
10w30	5L	SA3 Laboratory	Chemical storage cabinet
Absolute Alcohol	20L	SA3 Laboratory	Chemical storage cabinet
Barium Chloride	500g	SA3 Laboratory	Chemical storage containers
Cloudy Ammonia	1L	SA3 Laboratory	Chemical storage cabinet
Hydrochloric Acid	25L	SA3 Laboratory	Chemical storage containers
Kerosene	1L	SA3 Laboratory	Chemical storage cabinet
Sodium Hexametaphosphate	5kg	SA3 Laboratory	Chemical storage containers
Sodium Hydroxide	500g	SA3 Laboratory	Chemical storage containers
Sodium Sulphate	50kg	SA3 Laboratory	Chemical storage containers
Sulphur (capping sulphur)	40kg	SA3 Laboratory	Chemical storage containers
Tannic Acid	500g	SA3 Laboratory	Chemical storage containers
WD-40 Silicone	200g	SA3 Laboratory	Chemical storage cabinet
Zinc Chloride Anhydrous	4kg	SA3 Laboratory	Chemical storage containers
Asphaltic Concrete (AC)	Varies	SA4 Asphalt	Asphalt Hopper
Aviation Fuel	205L	SA4 Asphalt	Drums in bunded area
Bio Active Absorbent	10kg	SA4 Asphalt	Spill Kit in bunded area
Bitumen AR450	60000t	SA4 Asphalt	Within Plant & tanks in bunded area
Enviroslip	800L	SA4 Asphalt	Drums on IBC Pallet Bund
Ethanol - denatured	1000L	SA4 Asphalt	Drums in bunded area
Heat Transfer Oil B	1000L	SA4 Asphalt	Drums in bunded area
Polypropylene White Oil		SA4 Asphalt	Spill Kit in bunded area
Toluene	1000L	SA4 Asphalt	Drums in bunded area
Lime - slag 85/15	25t	SA5 Pugmill	Silo
2 Stroke Greenkeepers Engine Oil	5L	SA6 Workshop	Drums in bunded area
285 S T Epoxy Part A	100L	SA6 Workshop	Drums in bunded area
390 Enamel	4 x 20L	SA6 Workshop	Drums in bunded area

PBM Pollution Incident Response Management Plan

Product Name	Maximum Quantity	Storage Location	Method of Storage
AC55 Solvent	80L	SA6 Workshop	Drums in bunded area
Acetylene	2 x 50L (G Size)	SA6 Workshop	Chained to wall/ trolleys
Agritrans UTTF	20L	SA6 Workshop	Drums in bunded area
Argon	2 x 50L (G size)	SA6 Workshop	Gas storage area chained to workshop
Argoshield	2 x 50L (G Size)	SA6 Workshop	Chained to wall/ trolleys
Clytech 70	2 x 205L	SA6 Workshop	Drums in bunded area
Conseal touch up	2 x 20L	SA6 Workshop	Drums in bunded area
Decorative Concrete Sealer	20L	SA6 Workshop	Drums in bunded area
Envirodye (Marking Dye)	5L	SA6 Workshop	Drums in bunded area
Gear Lube 85w40	2 x 20L	SA6 Workshop	Drums in bunded area
Gear Oil 75w90 Low VIS	2 x 20L	SA6 Workshop	Drums in bunded area
Glyphosate 360	20L	SA6 Workshop	Drums in bunded area
Hardtop AS-HB-Ultra-FC	1L	SA6 Workshop	Drums in bunded area
Hardtop Ultra Comp A	4 X 5L	SA6 Workshop	Drums in bunded area
Hydrochloric Acid	5L	SA6 Workshop	Drums in bunded area
Industrial Gear Oil 150	2 x 205L	SA6 Workshop	Drums in bunded area
Industrial Gear Oil 220	2 x 205L	SA6 Workshop	Drums in bunded area
Jotacote 605 Fast Cure	10 x 20L	SA6 Workshop	Drums in bunded area
Metsulfuron-methyl	500g	SA6 Workshop	Drums in bunded area
Oxygen	2 x 50L (G size)	SA6 Workshop	Gas storage area chained to workshop
Petrol	205L	SA6 Workshop	Drums in bunded area
Q Wash	1000L	SA6 Workshop	IBC in bunded area
R134A Refrigerant	20kg	SA6 Workshop	Gas storage cylinder
Red Rubber Grease GRR(B)	500g	SA6 Workshop	Drums in bunded area
Roadranger SAE 50		SA6 Workshop	Drums in bunded area
Spraying Enamel Quick Dry 480	24 x 300g	SA6 Workshop	Drums in bunded area
Stoody 965-G	4 x 16kg	SA6 Workshop	Boxes in bunded area
Superdraulic 68	1000L	SA6 Workshop	IBC in bunded area
Syn Torque 50	20L	SA6 Workshop	Drums in bunded area
Thinner No. 7	2 x 20L	SA6 Workshop	Drums in bunded area
Trans-hydraulic Fluid	20L	SA6 Workshop	Drums in bunded area
Turboil 40	2 x 20L	SA6 Workshop	Drums in bunded area
Valplex EP Grease	180kg	SA6 Workshop	Drums in bunded area
WD-40 Aerosol	20L	SA6 Workshop	Drums in bunded area
Yellow Olive 390 Enamel	4 x 20L	SA6 Workshop	Drums in bunded area
Zinc Free Superdraulic	2 x 205L	SA6 Workshop	Drums in bunded area
Flyash	1000t	SA7 Wetmix	Silo
Lime - hydrated	100t	SA7 Wetmix	Silo

Table 1: Summary of hazardous substances on site.

PBM Pollution Incident Response Management Plan

SAFETY EQUIPMENT [Clause 98C (1) (f)]

Safety Data Sheets (SDS) for all hazardous chemicals are held in the crib room. The laboratory hosts an additional folder of SDS specific to the hazardous chemicals used in the laboratory area. An electronic and hard copy of each SDS is held in the Head Office.

Spill kits are available throughout the site at the point of storage for hazardous substances and fuels (see Appendix 2 – Maps - Emergency Site Plan.)

Personal Protective Equipment (PPE) including gloves, safety glasses and hearing protection is freely available in the workshop and in the laboratory for the handling of hazardous chemicals where required by the SDS.

Plant and equipment are available to create additional bunding in the event of significant sediment runoff or a fuel spill using material available on site.

Control systems for the Crushing Plant, Wetmix Plant, Asphalt Plant and Laboratory have alarms installed to provide alerts of system malfunctions.

Firefighting equipment is available throughout the site (see Appendix 2 – Maps - Emergency Site Plan.)

CONTACT DETAILS AND RESPONSIBILITIES (Clause 98C(1)(g) & (h))

Name / Position	24 hour contact number	Authority
Charlie Kennett General Manager	0428 684 115	Is authorised to notify all the relevant authorities or delegate such authority where appropriate
Steve Shearman PBM Site Supervisor	0428 684 011	Is responsible for activating the plan and managing the response to a pollution incident.
Stacey Tyack QSE Manager	0428 684 547	Is authorised to notify the relevant authorities and is responsible for reviewing and testing the PIRMP.
All personnel	n/a	Are responsible for notifying the General Manager of any pollution incidents as defined in "Introduction"

Table 2: Emergency Contact Details

PBM Pollution Incident Response Management Plan

DUTY TO NOTIFY RELEVANT AUTHORITIES [Section 148 of POEO Act 1997]

Industry is now required to report pollution incidents *immediately* to **all** relevant authorities listed below. 'Immediately' has its ordinary dictionary meaning of promptly and without delay.

The General Manager or delegate is responsible for notifying incidents immediately to the required relevant authorities. This notification shall include:

- Time, date, nature, duration and location of the incident.
- The circumstances in which the incident occurred (including the cause if known).
- Any actual or likely effect(s) of the incident on health or environment.
- Actions taken to contain or mitigate the outcome of the incident.
- Long term actions to prevent a re-occurrence.

As per the EPA Protocol for Industry Notification of Pollution Incidents, the following authorities must be notified in the order presented below:

In the event of immediate threat to human life, human health or property:

1	Emergency Services	000
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Following a call to “000” or where a call is not required:

2	NSW EPA	131 555
3	MidCoast Council	02 6591 7222
4	Ministry of Health via Newcastle Public Health Unit (ask for Public Health Officer)	02 4924 6477
5	Safework NSW	13 10 50
6	Fire and Rescue NSW (unless “000” was the first call made)	1300 729 579

Table 3: Notification of External Authorities

Complying with these notification requirements does not remove the need to comply with any other obligations for incident notification, for example, those that apply under other environment protection legislation or WHS legislation.

Where requested by an external authority, in writing, Pacific Blue Metal will provide a written Incident Investigation report to the extent required by law.

COMMUNICATING WITH NEIGHBOURS & THE LOCAL COMMUNITY

[Clause 98C(1) (i)]

Each incident will be assessed for its potential to have a direct impact on surrounding neighbours and the local community.

At present, there are no sensitive premises such as schools or hospitals, in close proximity to the Quarry, which would require notification of a pollution incident.

For major pollution incidents, where external assistance is required, the General Manager (or delegate) will be advised by the attending Emergency Services of the manner and extent to which neighbours are to be notified. A database of known neighbour contact details is held at the Head Office to aid this process. Where necessary, PBM staff will undertake door knocking to notify affected neighbours.

When the incident has been contained, the General Manager will provide a final update to all affected residents and community members. This will include the following information:

- Time, date and location of the incident.
- The circumstances in which the incident occurred (including the cause if known).
- Any actual or likely effect(s) of the incident on health or environment.
- Actions taken to contain or mitigate the outcome of the incident.
- Long term actions to prevent a re-occurrence.

For minor pollution incidents, neighbours and local community will be notified by email or through the next Community Consultative Meeting.

If there is an uncontrolled discharge to the watercourse, GLA will notify affected downstream neighbours.

MINIMISING HARM TO PERSONS ON THE PREMISES [Clause 98C (1) (j)]

In the event of a pollution incident, the General Manager, Site Supervisor or their delegate, will initiate the Emergency Evacuation Plan, using UHF Channel 12 and the following phrase:

“EMERGENCY EMERGENCY EMERGENCY” then state the **type of emergency, location, any injuries, type of help required and if an emergency evacuation is required.**

On hearing this call the entire quarry will cease operation and trained PBM staff will assume their Emergency Response duties.

PBM Pollution Incident Response Management Plan

In the event an evacuation is required, all site personnel will make their way to the Emergency Assembly point located near the weighbridge site office (see Appendix 2 – Maps - Emergency Site Plan.)

Full details of the emergency response are found in SP03 Emergency Response Procedure and SP04 Evacuation Procedure.

Should the need for expert opinions arise, the following professionals are available:

Medical

Dr Nael Hessain, Nabiac Street Nabiac (02 6554 1150)

Environmental

Stacey Tyack, PBMG Environmental Manager (0428 684 547)

Rob Corkery, R.W. Corkery & Company Pty Limited (02 6362 5411)

MAPS [Clause 98C (1) (k)]

Appendix 2 – Maps - Area Likely to be affected by a pollution incident, shows this area in relation to the location of the quarry.

Appendix 2 – Maps - Emergency Site Plan details the location of potential pollutants on site, as well as the location of pollution incident response equipment. There are no stormwater drains on site however the location of dams and potential stormwater run off direction is indicated on the map.

ACTIONS TO BE TAKEN DURING OR IMMEDIATELY AFTER A POLLUTION INCIDENT [Clause 98C (1) (l)]

During a pollution incident response, priority will be given to preservation of human life and health. Following which, containment of the incident is the next priority. Concurrently the duty to notify relevant authorities will take effect.

The following are examples of actions that will be taken in response to a pollution incident. This list is not exhaustive and other actions will be taken as and when necessary:

- Notify neighbours and community.
- Spills – deploy spill containment equipment, shut down any affected equipment, evacuate as required.
- Fire –shut down equipment and deploy fire fighting equipment, evacuate as required.
- Air pollution – shut down any equipment involved, evacuate as required.

PBM Pollution Incident Response Management Plan

- Follow the direction of any attending emergency services.
- Seek advice when required on pollution incident clean up.
- Use trained contractors for cleanup and disposal of contaminated waste.
- Investigate the incident and implement future preventative actions accordingly.

STAFF TRAINING [Clause 98C (1)(m)]

All personnel are trained in emergency response procedures. Initial training takes place as part of the Site Induction for new personnel, subcontractors and visitors, this includes reference to the prevention of noise, dust, water, waste and hydrocarbon pollution as well as and hazard reporting and risk management. Follow up training is provided which includes toolbox talks for specific site issues, review of any pollution incidents, emergency response updates and task specific pollution risks and controls.

TESTING OF THE PIRMP [Clause 98C (1) (n), (o) and (p), 98C(2)(f) and (g), 98E(1) and 98E(2)]

The PIRMP is tested at least annually and a record of the test kept in Appendix 1 - Revision and Testing. This record shows the date of testing, method of testing, the results and who was involved in the process. Testing shall be by practical exercises, such as a mock pollution incident, or by desktop simulation and/or review.

REVIEW OF PIRMP

The PIRMP will be reviewed and updated annually following the testing mentioned above. Other events which may trigger an earlier review are in the case of a significant operational change, legislative changes or following activation of the PIRMP in response to a pollution incident.

AVAILABILITY OF PIRMP

A hardcopy of the PIRMP is kept on file at the relevant site and is also made available on the company's server.

PBM Pollution Incident Response Management Plan

APPENDIX 1 – REVISION AND TESTING OF THE PIRMP

REVISION TABLE

Version Nbr.	Date	Description of amendments	Reviewed By	Approved By
1.00	30/7/2013	Initial Release	Alison Burgess	Charlie Kennett
2.00	28/11/2013	Amended to comply with EPA Audit results	Lisa Lyle	Charlie Kennett
3.00	04/06/2015	Review prompted by PBM Laboratory Fire. Updated Inventory of Pollutants.	Stacey Tyack	Charlie Kennett
4.00	16/08/2016	Updated names and phone numbers of relevant Authorities. Updated the Inventory of Pollutants and Emergency Site Plan to include the identity of new storage areas areas as defined in Hazardous Substances Manifest.	Stacey Tyack	Charlie Kennett
5.00	08/08/2017	Updated pre-emptive actions to include a reference to new Environmental Management Strategy and management plans for Water, Air, Noise, Transport, Blasting and Rehabilitation & Landscape.	Stacey Tyack	Charlie Kennett
6.00	15/08/2018	Amendments as per Testing Record date 15/08/18.	Stacey Tyack	Charlie Kennett
7.00	16/08/2019	Amendments as per Testing Record date 16/08/19.	Stacey Tyack	Charlie Kennett
8.00	13/08/2020	Amendments as per Testing Record date 13/08/20	Stacey Tyack	Charlie Kennett

TESTING RECORD

Test Date	Method of Testing	Results of Test (including amendments to PIRMP)	Person(s) Who Tested the PIRMP	Approved By
22/11/13	Desktop simulation	Simulated desktop event included fire, spill including community notification, checking contact numbers for relevant authorities and neighbours. Audited PIRMP against criteria in EPA "Environment Compliance Report: Requirements for Preparing and Implementing Pollution Incident Response Management Plans" Dated September 2013.	Lisa Lyle	Charlie Kennett
18/03/2015	Pollution incident	18/03/15 Successful activation and implementation of PIRMP in response to the PBM Laboratory Fire. 10/07/15 PIRMP amended as follows: Duty to Notify clarified; Inventory of Pollutants updated; for major pollution incidents, the attending Emergency Services will determine the manner and extent to which neighbours are notified	Incident: Roger Albans Paul Curran Rob McCabe Jason Fardell Miguel Saunders Steve Shearman Review: Stacey Tyack	Charlie Kennett
16/08/2016	Desktop Simulation	Simulated desktop emergency event of large hydrocarbon spill. Assessed Emergency Response Procedures, Emergency Services Listings and contact names/numbers for relevant authorities. Checked contents and location of spill kits as well as staff members' knowledge on use of spill kits. Checked other hazardous chemicals in the vicinity of the hydrocarbon storage area. Checked EPA website for PIRMP updates.	Stacey Tyack	Charlie Kennett

PBM Pollution Incident Response Management Plan

08/08/2017	Desktop Review	<p>Reviewed entire plan for currency and adequacy for forth coming year, including:</p> <ul style="list-style-type: none"> • Listing of main chemicals on site • Emergency response contact details • Potential Pollution hazards • Preemptive actions • Checked EPA website including PIRMP FAQ page (last updated 13 October 2016) for amendments / changes that may be required. 	Stacey Tyack	Charlie Kennett
15/08/18	Mock Pollution Incident & Desktop Review	<p>Review of outcomes from mock pollution incident held 14/08/18 (amendments made to Emergency Plan V1.02)</p> <p>Full review of plan contents. Amended as follows:</p> <ul style="list-style-type: none"> • Added new section 'Link to Other Emergency Plans'. • Added additional 24hr emergency contact. • Updated Table 1: Summary of hazardous substances on site. • Updated emergency map to include most recent aerial imagery. • Checked EPA website including PIRMP FAQ page (last updated 30 August 2017) for amendments / changes that may be required. 	Stacey Tyack	Charlie Kennett
16/08/19	Emergency Drill & Desktop Review	<p>Emergency Drill of encroaching bushfire – assessed staff response, duties, emergency firefighting equipment, evacuation procedure.</p> <p>Full review of plan contents. Amended as follows:</p> <ul style="list-style-type: none"> • Added additional waste removal streams and Emergency Management Plan to Pre-emptive Actions. • General editing. • Checked EPA website including PIRMP FAQ page (last updated 30 August 2017) for amendments / changes that may be required 	Stacey Tyack	Charlie Kennett
13/08/2020	Desktop Review	<p>Full review and amendment of plan contents as per EPA Guideline: Pollution Incident Response Management Plans (March 2020), including:</p> <ul style="list-style-type: none"> • Reference to POEO (General) Reg. 2009 • Addition of risk assessment and Reference to Emergency Plan. • Additional pre-emptive actions included • Updated Hazardous Chemical list • Updated external authority contacts • Reference to SP03 and SP04 • Added Environmental contact • General editing • Checked EPA website including PIRMP FAQ page (last updated 20 March 2020) for amendments / changes required. 	Stacey Tyack	Charlie Kennett

PBM Pollution Incident Response Management Plan

APPENDIX 2 - MAPS

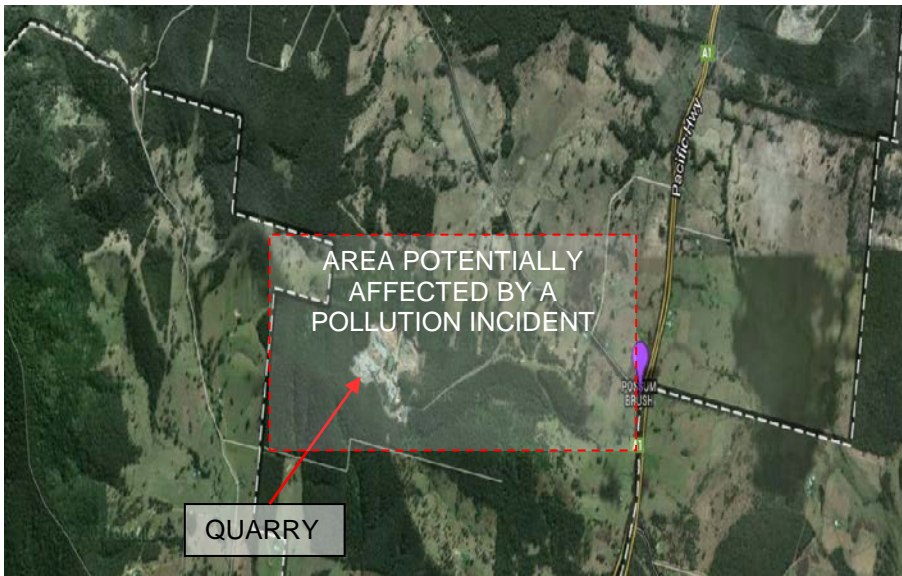



Figure 1: Area likely to be affected by a pollution incident





Emergency Site Plan

Name of premises: Pacific Blue Metal
 Address: 113 Possum Brush Rd
 POSSUM BRUSH NSW 2430
 Date of plan drawing: 8 March 2016
 Date of last revision: 4 September 2018



EMERGENCY ASSEMBLY POINT



Fire Extinguisher



FIRST AID



DANGER
FUEL STORAGE



EMERGENCY PHONE



CAUTION
CHEMICAL STORAGE AREA

**HAZARDOUS CHEMICAL
 MANIFEST STORED IN
 HAZMAT CYLINDER
 AT FRONT GATE**

Figure 2: Emergency Site Plan