23A. Pollution Incident Response Management Plan (PIRMP)

A Pollution Incident Response Management Plan (PIRMP) is a document that outlines what procedures are in place to minimise the risk of a pollution incident on a premises.

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1.0 Introduction

Valla Quarry (formally known as Marriotts Quarry) is a hard rock quarry on "Valley Rose Farm", Valla, in the Nambucca Shire Council District of NSW (the "Site").
The Site is located on Valla Road approximately 7 km north-west of Nambucca Heads and 3 km west of the intersection of Valla Road and Deep Creek Road (refer to Figure 1 – Location Plan).

This Pollution Incident Response Management Plan (PIRMP) has been produced in response to changes to the Protection of the Environment Operations Act 1997 (POEO Act) requiring all holders of environment protection licences to have a PIRMP in place.
This report will form an addendum to the Quarry Environmental Management Plan (QEMP) prepared by Groundwork Plus dated November 2015 and revised annually by Bayrange management.

Valla Quarry

2.0 Purpose

The management and notification of pollution incidences will be conducted in accordance with this PIRMP. Contingency plans provide a guide to the formalisation of incident procedures so that in the event of a pollution incident, personnel are familiar with the correct action to take.

3.0 Description and Likelihood of Hazards

Pollution hazards on-site include chemical and fuel spills, dust emissions and water contamination. These are shown in **Table 1** with the likelihood of the incidence and the pre-emptive actions taken by the Site to reduce the risk or prevent an incidence from occurring.
Shown in **Table 1 – Pollution Hazard Identification, Likelihood and Pre-emptive Actions**

Table 1 – Pollution Hazard Identification, Likelihood and Pre-emptive Actions

Hazard	Likelihood	Pre-emptive Actions Taken
Hydrocarbon spills during maintenance and refuelling	Low	• No permanent fuel installation is to be onsite. Fuel for quarry equipment is to be provided by drums or a fuel tank carried on the site truck. • Fuel or hazardous material is used for its intended use only (as specified on the Material Safety Data Sheets (MSDS)) • MSDS are reviewed and available for reference for the correct clean up procedures • Maintenance activities are undertaken on a concrete slab, where practicable • Supervision is given when refuelling to ensure that overfilling does not occur • Vehicles are maintained in good condition and as per manufactures' specifications • Prestart checks are completed on plant and equipment daily which include inspection for oil leaks • Good housekeeping and tidy work areas are kept to help prevent accidents and spills
Stored chemicals leakage and/or spillage causing contamination (see **Table 2** for list of chemicals stored on-site)	Low	• Hazardous materials are stored in an undercover area and on appropriate drip trays where practicable • Fuel or hazardous material is used for its intended use only (as specified on the MSDS) • MSDS are reviewed and available for reference for the correct clean up procedures • Good housekeeping and tidy work areas are kept to help prevent accidents and spills
Fire	Low	• Store flammable materials in an undercover area on appropriate drip trays • Fuel is not to be stored by permanent installations on-site • Refuelling is undertaken in designated areas

		• Provision of appropriate spill kits and staff trained in their use • MSDS are reviewed and available for reference for the correct fire prevention and fighting procedures • Good housekeeping and tidy work areas are kept to help prevent accidents and spills • Fire extinguishers are provided and staff are trained in their use • Staff and visitors to site are instructed of the emergency procedures and evacuation points
Discharge of water with elevated suspended solid levels or low pH	Low	• Settling time is provided for waters within the settlement ponds prior to discharge • Clean and contaminated runoff is segregated • Sediment control measures are implemented and maintained • Refer to **Figures 6 to 11** of the QEMP for stormwater drains and discharge points for all stages of the quarry development • Monitoring of pH within Sediment Dam A is undertaken regularly and treatment with lime is performed when necessary • Water monitoring is undertaken in accordance with licence conditions and the QEMP, November 2015.
Dust emissions from operations	Low	• Hardstand areas and roads are kept in a damp state with the use of a water truck • Crushing and screening plant is enclosed with water sprays operating at transfer points • All loads are covered during transport
General waste generated on-site incorrectly managed and entering the surrounding environment	Low	• General waste and recycle bins are provided at the office and lunch room • General waste is taken to Nambucca Heads Council Landfill as soon as necessary • Waste oil from machinery maintenance is stored correctly and disposed of at an oil recycler • Unserviceable machinery parts are reused or recycled where possible or waste metal sold to scrap metal merchant • Wastewater from the on-site septic tank is managed in accordance with the Sewage Management System.

A Hazardous Substance Storage register is kept on-site and updated as necessary.
The current hazardous substances stored on-site are shown in **Table 2 – Hazardous Substance Inventory**

Table 2 – Hazardous Substance Inventory

Chemical Name	Use	Approximate Amount
Thinner Spirit	Thin paint	20L
Thinner PPG	Thin paint	20L
Body platinum	Light weight filler	4L
G80 Primer (body)	Paint	4L
Binder LIL	Paint	4L
Styralux	Paint	40L
Primer Pyne	Paint	10L
Paint Wattyl	Paint	8L
Paint Galmet	Paint	4L
Engine oil	Machine maintenance	400L
Hydraulic oil	Machine maintenance	600L
Transmission oil	Machine maintenance	800L
Gear oil	Machine maintenance	600L
Grease	Machine/plant maintenance	80kg

4.0 Operational Policy

Valla Quarry seeks to minimise environmental harm through the preparedness of appropriate response(s) in the event of a pollution incident.

5.0 Performance Targets

Valla Quarry aims to provide adequate training, plant and equipment to effectively manage pollution incidents by on-site personnel and the correct implementation of this pollution incident response plan.

6.0 Implementation Strategy/Mitigation Measures

The definition of a pollution incident and duty to notify will be documented and communicated to personnel working for, or on behalf of, Valla Quarry.
A pollution incident is defined by the **POEO Act** 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.

POEO Act Protection of the Environment Operations Act 1997

Under the POEO Act the duty to notify the appropriate regulatory authority (ARA) of a pollution incident that causes or threatens material harm to the environment is the duty of the following:

- The person carrying on the activity;
- An employee or agent carrying on the activity;
- An employer carrying on the activity; and the occupier of the premises where the incident occurs.

Notification must be given immediately, i.e. as soon as possible, after the person becomes aware of the incident.

6.1 Spill Response

When preventative controls have been implemented and an accidental spill which is not posing an immediate threat to persons, equipment or the environment occurs, the following steps should be followed to prevent further spillage and to contain and clean up the spill:

- **Stop** the spill (shutdown equipment or push emergency stop). Do not move the equipment until it is safe to do so.
- **Identify** the spilled substance (distillate, oil, grease, solvent, paints, cleaning agents).
- Contain the spill (use clay, rags or other suitable material to contain/bund the spill).
- **Secure** the spill area (evacuate persons, extinguish all smoking or flame producing materials, shutdown operating equipment in proximity to the spill).
- **Notify** the Quarry Manager (report all spills to management, irrespective of the size of the spill).
- **Contain** spill; place absorbent material over the spill to minimise infiltration to the underlying soil/strata.

DO NOT USE WATER OR OTHER LIQUIDS TO WASH THE SPILL AREA UNTIL THE SPILL HAS BEEN REMOVED.

DILUTION IS NOT THE SOLUTION TO POLLUTION

- Repair equipment at spill location, if possible, if mobile plant/equipment is the source of the spill. The movement of plant/equipment has the potential to spread the spill and contaminate other areas.
- Move equipment to allow the removal of the spill.
- Remove the spill by shovels and/or earthmoving equipment.
- Dispose of the spill in an acceptable manner off the Site at an approved and licensed waste disposal facility (under no circumstances should materials containing the spill be disposed of on the Site).
- Ensure reporting as per this PIRMP.

6.2 Immediate Emergency Incident Response

- Stop work.
- Shut down equipment, plant, power and vehicles as required.
- Assist anyone in need of help.
- Consider evacuating the area.
- Contact the Supervisor and/or Quarry Manager to report:
    - The location and time of the spill/incident/threat;
    - Nature and extent of the spill/incident/threat;
    - If spill/incident has been contained or not;
    - If any persons, installations or property could be in immediate danger;

- Quickest and safest way for emergency services to approach the spill/incident site; and
- Any other information that will assist to quickly contain the spill/incident/threat or minimise further release of contaminant and environmental damage.

- If the incident is out of operational hours, contact the General Manager 0417 556 860.
- Follow emergency telephone procedures (Section 6.2.1)

6.2.1 Emergency Telephone Procedures

Fire Emergency:

- Telephone Fire and Rescue NSW – Dial 000 and when connected advise the Fire Brigade:
  - organisation name;
  - exact address;
  - point of entry;
  - type of fire if known;
  - company contact; and
  - let them hang up first.
- Then do the following:
  - Dispatch responsible person to point of entry to direct Fire and Rescue Service;
  - Disconnect all outside calls;
  - Report fire to company management; and
  - Initiate evacuation if necessary.

Environmental Spill:

- If the spill is hazardous or posses a risk to personnel or plant/equipment, call Fire and Rescue NSW or NSW Ambulance as necessary – Dial 000 and when connected advise of the situation.
- If the incident does not require emergency service or once the 000 call has been made; notify Appropriate Regulatory Authority (ARA) by telephone in the following order:

1. Telephone Environmental Protection Agency (EPA) – Dial 131 555 and then advise:

- organisation name;
- exact address;
- point of entry;
- nature of spill; and

- let them hang up first.

2. The Ministry of Health via the Port Macquarie Office – (02) 6588 2750

3. WorkCover Authority – 13 10 50

4. Nambucca Shire Council – (02) 6568 2555

6.3 Subsequent Response

After taking the initial actions, subsequent response actions to assess the situation, organisation of the pollution clean-up/fire-fighting operations and co-ordination of the response with involved parties shall be undertaken.

Actions that may be taken include:

Response That May Be Taken In the Event of a Solid Spill:

· Contact the emergency services or ARA, if applicable.

· Contain the spilled material and isolate the area as per Section 6.1.

· Clean and reload material, if possible.

· Dispose of remaining material as appropriate.

Response to Unauthorised Releases of Solids or other Contaminants

· Determine cause and attempt to contain release of contaminant/s to waters.

· Contact additional personnel to assist with containment.

· Contact EPA – (02) 9995 5555 or 131 555

· Notify downstream receivers and other water users that may be affected i.e. Marriot Residence (refer to **Figure 2** – Pollution Control Plan).

· Engage consultant to undertake an environmental assessment to determine the level and impact of environmental harm.

· Recover any contaminants for treatment or disposal, where practical.

· Engage consultant for site assessment, remediation and validation.

Response to Release of Water with a pH below 6.5 or above 8.5 and Total Suspended Solids (TSS) greater than 50mg/L measured during monitoring

· Contact EPA – (02) 9995 5555 or 131 555

· Attempt to prevent further water being released

· Notify downstream receivers and other water users that may be affected i.e. Marriot Residence (refer to **Figure 2** – Pollution Control Plan).

· Ensure water is within the pH range by treatment with lime (or other suitable material) or acid

· Ensure TSS concentration is below 50mg/L by allowing for sufficient settling time or treatment with flocculants/ coagulants.

Response That May Be Taken if Fire Incidents Have Been Detected:

· Activate Fire Protection System and Emergency Shut-Down devices, where applicable.

· Notify neighbouring residents and others that may be affected.

· Evacuate non-essential personnel from scene of incident.

· Clear access to scene for emergency fire-fighting vehicles and assign a person to direct fire-fighters to the scene and prevent entry by unauthorised persons.

· Conduct a head count at the emergency assembly point to ensure no one is missing.

· Establish communications by use of portable radios, phones or other means of communication to field personnel and emergency responders.

· Assemble available fire-fighting materials/pollution control equipment and stand by to advise and/or assist Fire and Rescue Service to prevent any fuel storage rupture by cooling.

· Make sure emergency exit routes are kept open/ unobstructed at all times.

· Cover any dangerous goods spill (i.e. diesel) with foam to prevent fumes from travelling to an ignition source.

· Maintain safe distance and monitor area to prevent anyone other than Emergency Personnel from entering emergency area.

· Disposal of any contaminated material shall be handled by Fire and Rescue Service personnel.

· Engage consultants for Site remediation and validation, if required.

Response that may be taken should the pollution be predicted to affect neighbours and the local community

· Telephone/door-knocking notification should be given as soon as possible to any directly affected sensitive receivers (residents, schools, hospitals etc).

· Written notification in the form of letters, letter box drops or emails may be provided should the incident indirectly affect a large group of surrounding receivers.

· Notification should include details of the type of pollution and actions that should be taken to minimise harm or impact to the receiver.

7.0 Monitoring

- Employee(s) involved with the incident will complete an incident report with the Quarry Supervisor/ WHSE Advisor and issue to management and the ARA, if applicable.
- The Quarry manager/ WHSE Advisor will investigate the cause of the incident and:

    - identify any problems in the response plan or actions
    - identify any environmental damage and, where necessary, ensure relevant environmental monitoring and remediation is undertaken as soon as practicable
    - determine any action(s) to prevent incident recurrence

8.0 Auditing, Review and Testing

This PIRMP shall be routinely tested, at least once every 12 months and within 1 month of any pollution incident occurring on site, to ensure information is accurate and up to date and updated as necessary. Testing will include a review of all contacts and contact numbers included and a simulation to ensure staff are trained in the correct responses and the responses are up to date and practical.

9.0 Reporting and Responsibility

Reporting to the following ARA or emergency services may be necessary depending on the incident:

- EPA if there is risk of environmental harm
- Fire and Rescue Service if there is danger of fire to persons and/or property
- Police if there is danger to persons and/or property
- Ambulance if there are persons sick or injured

An initial incident report will be prepared including a written list of facts and circumstances concerning the incident.

An Incident Register shall be maintained on-site to record any incidents or events likely to have adversely affected the environmental performance of the Site and will be made available on request

to any Authorised Person. The Incident Register will include, but not be limited to, the following details:

- Time, date, nature and extent of the incident
- Response and investigation undertaken to deal with the incident
- Name of the person(s) responsible for investigating the incident
- Actions taken as a result of the emergency/incident investigation and signature of responsible person at completion

All incidents will be reported to the Quarry Manager, in the event of environmental harm, will in turn notify the ARA within 14 days (or 10 working days), following the initial notification.

The following information should be included in the notification:

- Holder of the environment protection licence and development consent
- Location of the incident
- Name and telephone number of the designated contact person
- Time of the incident
- Time the licence holder became aware of the incident
- Suspected cause of the incident
- Actions taken to prevent further release and mitigate any environmental harm and/or nuisance caused by the incident

Any results of environmental monitoring performed in relation to the incident that pose environmental harm will be reported to the ARA.

Post incident debriefs shall be conducted to include a review of the effectiveness of the plan, its implementation, and the need for revisions.

10.0 Identification of Incident or Failure to Comply

Incorrect responses to an incident which may include but are not limited to:

- Incident not reported internally

- Incident not documented
- Incident not investigated or followed up with corrective measures
- ARA not notified of an incident
- Affected neighbours and sensitive receivers not notified of an incident directly affecting them and details of actions to be taken not provided
- Written notification and/or follow up not supplied to ARA
- Re-occurrence of similar emergency/incidents

11.0 Corrective Action

Corrective action may include:

- Re-training of staff on pollution incident reporting procedures
- Reviewing incident procedures
- Review and implementing relevant remedial actions
- Providing information required to the regulatory authority as soon as practicable
- Initiating review of procedures at similar facilities to prevent event/issue recurrence at other sites

Figure 1: Pollution Control Plan shows the locations of the likely hazards and the surrounding environment.

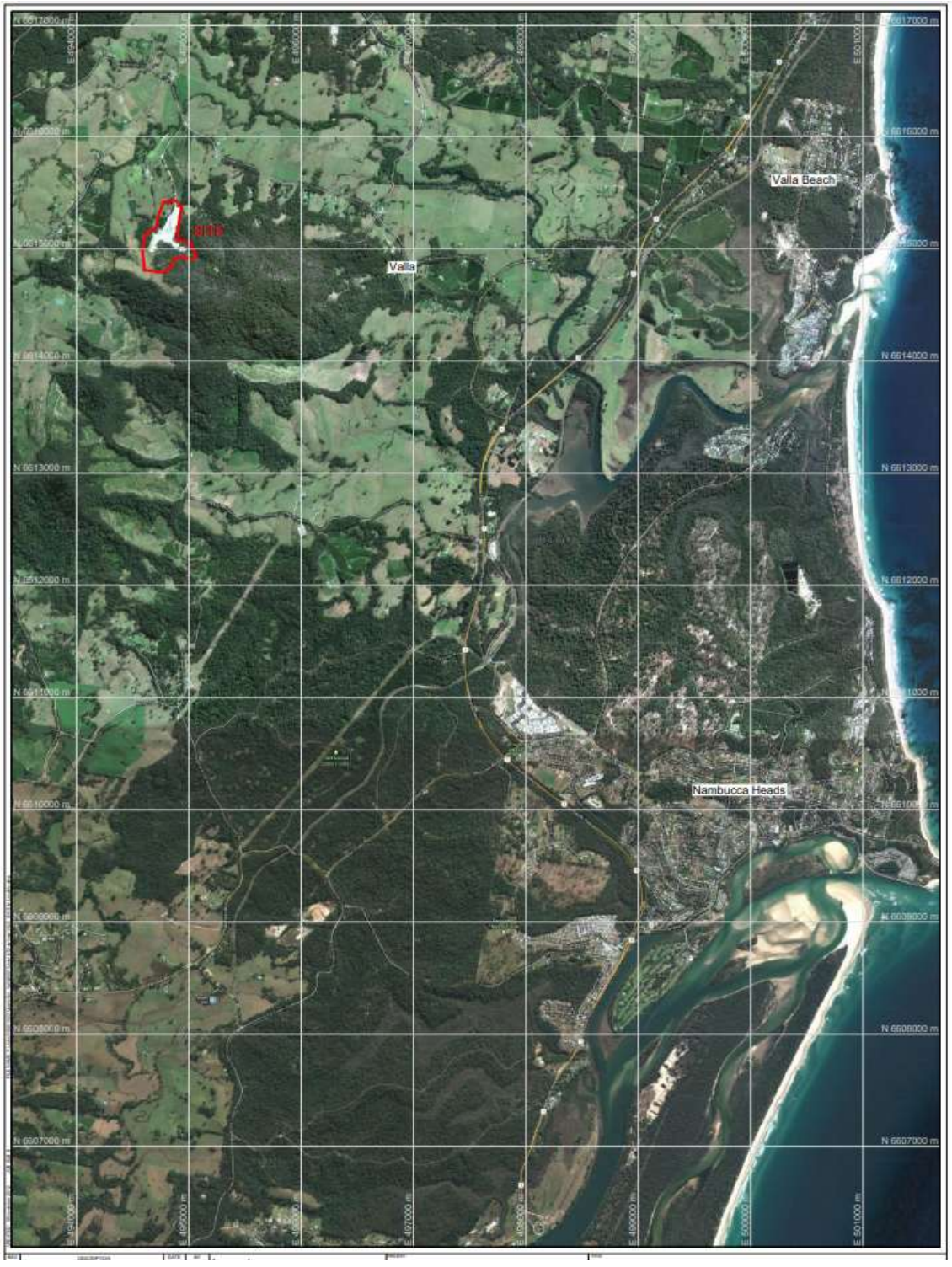

Figure 2: Downstream receivers and other water users that may be affected i.e. Marriot Residence

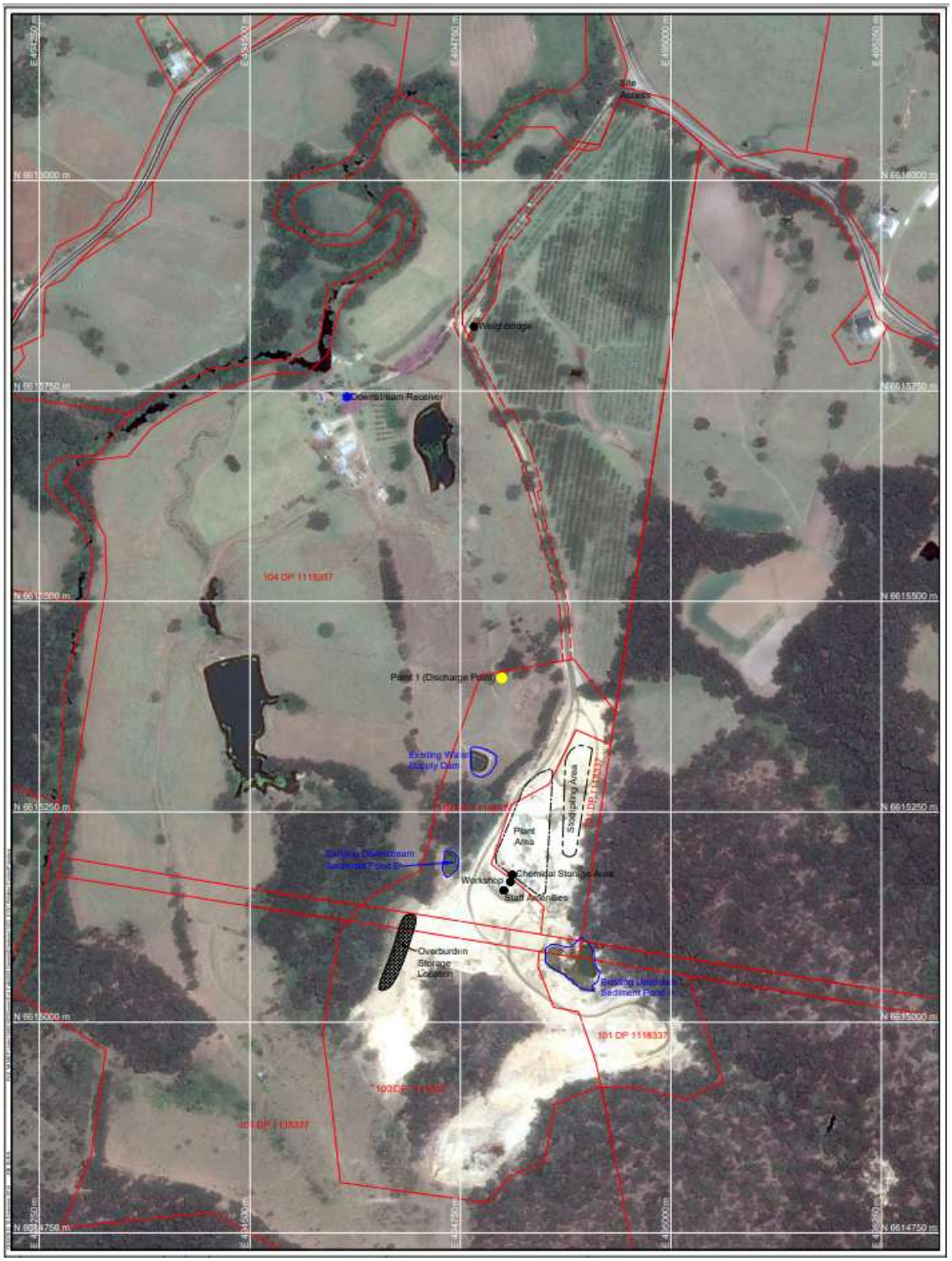

Figure 3 Emergency services & Bayrange Group Contacts

SERVICE	TELEPHONE	CONTACT	LOCATION
Emergency	000		
Ambulance	66 522 350		
Police	65 985 399		
Fire	65 686 346		
LOCAL EMERGENCY SERVICES			
Hospital- Macksville	65 580 666		Boundary St, Macksville
Medical Centre Nambucca	65 686 188		Estuary Lane, Nambucca
GOVERNMENT AGENCIES			
Resource Regulator	1300 814 609		Maitland
EPA	66 515 946		Moonee Street, Coffs Harbour
NSW Department of WHS	1300 814 609		
LOCAL SERVICES			
Nambucca City Council	65 682 555		Duke Street, Coffs Harbour
SES	132 500		29 Park Ave, Coffs Harbour
Poison Information Centre	131 126		
Essential Energy	132 080		Port Macquarie regional office
Origin Energy	1300 791 468		
Concept engineering	0400 616 156	Jayden Carter	
National security Hotline	1800 123 400		
BAYRANGE CONTACTS			
Company Director	0418 792 654	Raymond Smith	Coramba road
Bayrange General Manager	0417 556 860	Jason Williams	
Quarry Operations Manager	0459 858 518	Nathan Noone	
Valla Quarry Supervisor	0457 901 118	Hunter Smith	491 Valla Road
Valla / Jung's weighbridge	02 66 528 410		531 Coramba Road