

Pollution Incident Response Management Plan

for Wattle Vale Quarry - 1323 Gwydir Highway – Glen Innes

Glen Innes Severn Council 265 Grey Street GLEN INNES NSW 2370

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About this release

Title: Pollution Incident Response Management Plan

Author: Pramod Lamsal Review By: Mark Gallagher

Issue	Date	Revision Description	Approved by
Draft	30/07/2020	New plan for compliance with POEO Act 1997	Mark Gallagher
1	29/07/2021	Annual Revision	Mark Gallagher
2	30/06/2022	Annual Revision	Mark Gallagher
3	08/06/2023	Annual Revision	Mark Gallagher
4	09/05/2024	Annual Revision	Mark Gallagher

Management Review

This Plan will be reviewed in accordance with Section 98(c)

Planned Review Date	Scope	Review By	Review Record Ref no. Date		
01/05/2025	Annual revision	Mark Gallagher Quarry Manager	Signed		
			Date		

Endorsement of PIRMP

10 May 2024

Director Infrastructure Services Date

Pollution Incident Response Management Plan

1 Purpose, Scope & Objectives

This Pollution Incident Response Management Plan (PIRMP) has been developed to describe Glen Innes Severn Council's response to a potential pollution incident and to meet the requirements in accordance with section 153A of the Protection of the Environment Operations Act (POEO Act 1997) and complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates.

The PIRMP covers the facility with an Environment Protection Licence (20891) controlled by Glen Innes Severn Council and situated at Wattle Vale (South) Quarry, Gwydir Highway, Glen Innes.

The plan covers description of potential hazards, actions to be taken to prevent additional environmental harm and details of communication required in the event of an incident. The plan is based on a thorough risk assessment for the site. This PIRMP must be followed by employees, contractors and visitors of Wattle Vale (South) Quarry, to assist in the early response to, and reporting of, a pollution incident. The objectives of the plan are to

- maintain a high level of preparedness
- to respond quickly and efficiently to limit the impacts of an emergency
- to manage an emergency until the emergency services, arrive and take
- to support emergency services with information, knowledge, skills and equipment
- to protect emergency responders, personnel and the community from harm
- to ensure the correct regulatory notification and other requirements are satisfactorily completed in the event of potential or actual environmental harm

2 Project Site (Facility) Specific Information

The overall project site sits on undulating pastureland on the edge of the Waterloo Range, a low lying north-south belt of hills to the west of Glen Innes town. The site is fully owned by Glen Innes Severn Council, has access from the Gwydir Highway and is located within Lot 113 of DP 753319 and is approximately six hectares in total area.

The closest residence lies approximately 1.2Km to the east of the site. The nearest population centre is Glen Innes which is around 13km to the east. A small hamlet lies 1.3km to the north on Malboona Road along with some individual farm properties in the vicinity to the quarry site. While the quarry remains approved, there have been no quarrying activities in the last two years. To mitigate the possible environmental effects from the quarry activities, 16 hectares of environmental offset area has been established to the east of quarry site.

An unnamed tributary of Blackplain Creek runs through the site. Blackplain Creek is a tributary of the Wellingrove Creek that flows into Severn River. There are also number of small farm dams located throughout the site.

Some details on potential hazard to human and environmental health associated with particular emergency conditions is given in the sub-section 3.2 below.

3 Process

In the event of a pollution incident:

- Step 1: Emergency Response: Ensure personnel are safe.
- Step 2: Emergency Response: Contain the incident where possible.
- Step 3: Notify the Site Manager or Production Co-ordinator
- Step 4: The Site Manager or Production Co-ordinator to complete the notification required in section 2.6.2 if the pollution incident meets the definition in section 3.1.

3.1 Definition of Pollution Incident

A pollution incident means an incident or a 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.

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 1997 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.

3.2. Description and Likelihood of hazards

Potential pollution incidents identified include:

Air Pollution Incident: Escape of significant dust or smoke to atmosphere from either accidental or onsite bush fire. This could impact visual amenity of the area as well as fauna species especially bird's habitat. Toxic smoke inhalation could have adverse health effects on workers, staff and highway motorists.

Water Pollution Incident: Escape of significant sediment, leachate or fuel off site to a water course. Fuel could reach ground the water aquifer, and a nearby creek is equally susceptible for pollution affecting aquatic life.

Land Pollution Incident: Escape of significant sediment or fuel off site to land.

The licenced site covered by this plan has been assessed in an individual risk assessment. The controlled nature and permitted operation under the licence at the site, storage of waste product, gravel, mulch etc might pose a low risk when operation recommence.

3.3. Pre-emptive actions to be taken

For air pollution due to fire, the primary risk mitigation is to retain a fire break of bared earth around any flammable equipment or materials at the site. Machinery is to be equipped with fire extinguishers in accordance with the NSW Mines Safety Act provisions.

Dust and sediment runoff are obvious risks in a quarry site and are managed in accordance with relevant EPA licence conditions.

Due consideration given to maintain the noise level while operating the quarry. Operation will occur only during daylight hours from 7am-5pm on weekdays and 8am-4pm on Saturday so as to have minimum disturbance to nearby locality.

All stormwater runoff within the site will be directed through the sediment control pond before discharging towards nearby creeks. Vegetative ground cover with local indigenous species is maintained wherever possible to offset runoff and assist in percolation underneath. Ground water monitoring points exist on the site which will be used in regular monitoring of ground water level and quality.

All fuelling of plant and equipment is carried out on site in accordance with generally accepted procedures. All fuel stored on site will be kept in bunded areas or stored in self bunded containers.

3.4. Inventory of Pollutants

The project site will be run as a crush and screen campaign site and will not have permanent storage facilities. Fuels and oils will be transported in approved fuel transport pods and removed from site each night. Spill kits, PPE and MSDS will be available on site.

Chemicals/pollutants stored at the site

Minimal chemicals and/or potential pollutants are kept on the site

From time to time, chemicals used for weed control and minor maintenance of plant will be kept on the site. An exact measure of chemicals and other pollutants at any point in time is minimal.

In general, it is considered that chemicals and other pollutants stored at the quarry include:

- Oils (20 Litre container) and Fuels (plant fuel tanks and transportable pods Diesel).
- · Small quantities of herbicide for weed control practices around buildings; and
- Minor Household chemicals (e.g. cleaning products, pesticides, laundry detergents).

3.5. Safety Equipment

All the essential safety equipment such as spill kit, fire extinguishers will be supplied when the quarry site is in the operational stage. Plant and equipment will be used to create bunding in the event of significant fuel spill using raw materials available on site.

All workers will be issued with PPE or have available

3.6 Contact Details

Title	Name	Contact Number		
Director of Infrastructure	Keith Appleby	02 6730 2407 0408 144 251		
Quarry Manager	Mark Gallagher	02 6732 1484 0418 612 494		
Production Co-ordinator	Glenn Lee	02 6732 1484 0400 174 340		
Council Incident Line	Varies	02 6730 2300		

3.6.1. Notification of External Parties

The following table outlines the contact details and correct sequence for notification in the event of a notifiable pollution incident. The Quarry Manager will, after notifying the Director of Infrastructure of the incident, carry out the notifications required by the table below.

3.6.2. External Notification is required if:

- 1. The spill or leak is a dangerous good and exceeds 100L.
- 2. Has entered a water course
- 3. Must be disposed of off site
- 4. Has impacted neighbouring properties
- 5. If external agencies are engaged to help clean up.

Emergency Services	Police			
(If dealing with an	Fire	000		
emergency)	Ambulance			
EPA	Environment Line	131555		
Ministry of Health	Public Health -	(02) 6764-8000		
	Tamworth			
SafeWork NSW		131050		
Glen Innes Severn	Administration Desk	(02) 6730-2300		
Council				
Fire & Rescue NSW	(To be notified of an	000		
and/or Rural Fire	incident that is not an			
Service as applicable	emergency)			
Mines Inspector -		(02) 6738-8500		
Angus McDouall				
Ross Fuller	LLS	0429909827		
		Ross.fuller@lls.nsw.gov.au		

3.7. Communicating with neighbours and local community

The site will have no direct contact with the general public. However, every effort will be geared towards maintaining timely communication to make them well informed of any incident. In the event of a notifiable incident, neighbouring properties will be phoned to be advised of the situation.

Blasting is a common operation carried out in the quarry for extraction of materials.

When a blast is planned, the Director of Infrastructure will be advised. The media officer will also be advised so that a notice can be placed in the Council section of the local newspaper advising of an impending blast and approximate date.

When the approximate time of the blast is known, neighbouring properties will be advised by telephone of the approximate time of the blast.

3.8. Minimising harm to persons on the premises

Please refer to the emergency response plan for the site contained in the Mine Safety Management Plan. At all-time minimising harm to persons shall be a priority.

3.9. Training, Testing and Review

The objective of this PIRMP is to provide a description of the hazards and operations associated with the Environmental Protection Licence on site and the procedures and actions in place to mitigate any pollution event that may arise for them. Therefore, it is a working document that is designed to ensure any changes that could affect pollution incidents are timely captured. Council will review the document in the following context:

- Annually from the date of the first version of the document
- If there is any significant change in process or operation on the site
- If any change in the legislation or the requirements of the Environmental Protection Licence
- Where the testing of the plan reveals a failure or inefficiency
- Within 30 days of a pollution incident on site

Testing of the plan will be carried out at the time of review or whenever required during its operation. Furthermore, regular discussion on the plan will be carried out during toolbox meetings.

All staff and contractors at the quarry site will be provided with training to ensure they can safely clean up and dispose of any pollutants such as chemical spills that may occur. Induction training will equip staff on how to report any hazardous situation and fill up incident report and investigation form. Refresher training will be in place annually to ensure staff continue to observe safe work practices. All the training records will be maintained in the Councils data management system. Quarry Manager will conduct a training needs analysis on an annual basis to determine training requirements and will be discussed with the Director of Infrastructure Services.

The following information should be taken in the event of a pollution incident at quarry site.

- The nature of the incident
- Time and date of the incident
- Location of incident
- Number of persons involved (if any)
- Description of injuries (if any)
- Name and contact details of the person in charge at the incident site
- Potential hazard
- Dangerous goods

Pollutant and clean up

Fuel - Diesel and Petrol

Storage Location: Mobile Plant fuel tanks and transportable fuel pods.

Safety Data Sheets: Quarry Office

Personal Protective Equipment: PVC gloves, safety glasses, goggles

Assess

Quickly assess the spill:

- Decide whether to handle the situation by yourself or if you require help.
- Advise others of the hazard
- Post a guard or barricade
- Can you stop the source of the spill? Ensure Personal Safety
- Priority is to ensure safety of yourself and others in the area.
- Consider evacuation and isolation.
- Do you or others require PPE
- Check Safety Data Sheet

Secure

Secure the spill

If hazardous to public or other staff exists

- Post a guard immediately
- Enter barricades or lock gates to prevent unintended access

Contain

- Contain the spill quickly by surrounding with the booms (small spills) which should be firmly secured in place.
- Find the source of the leak and stop it
- Emergency stop, cap, plug, move, adjust
- Move other containers from that area to a bunded area
- In the case of spillage on water, prevent the spread of product using suitable barrier equipment.

Prevent

Prevent spillage from entering stormwater and water courses.

Absorb

- Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation.
- Recover product from the surface.
- Use spark-proof tools and explosive proof equipment.
- Dispose of via a licensed waste disposal contractor

Disposal

- Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation.
- Use spark-proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor.
- Contaminated absorbent material may pose the same hazard as the spilt product.

Monitor its disposal.

• The spill soiled bags need to be labelled and ear marked and placed in a leak proof container which is locked. SDS should be made available.

Reporting

• Incident and Corrective and Preventative action should be captured on the beSafe council reporting system and if required to the EPA.

A copy of this plan will be uploaded to the Council website and kept within the site folder.

Site map



Fig.1 Site location

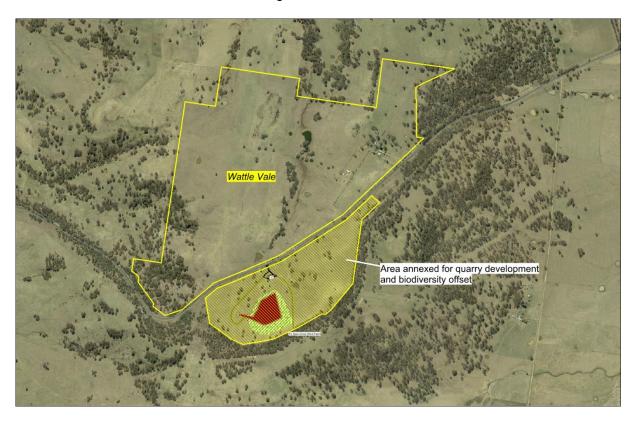


Fig.2 Detailed site location.

Scenario of pollution incident

Date of scenario	Type of incident	Incident
29.03.2023	Water Pollution Incident:	Sediment control dam failure
	Desktop	
01.05.2024	Fuel pod diesel spill	Contractor fuel trailer overturned
	Desktop	

Likelihood					
	Disaster	Severe	Serious	Significant	Minor
Certain	High	High	High	Medium	Medium
Likely	High	High	Medium	Medium	Low
Possible	High	Medium	Medium	Low	Low
Unlikely	Medium	Medium	Low	Low	Low
Rare	Medium	Low	Low	Low	Low

Impact and Hazard Register

Wattle Vale Quarry Risk assessment

	HASARD				Control			
	Groundwater	L	С	R		L	С	R
1	Groundwater contamination	U	S	L	 Implement Monitoring and response plan Review monitoring results quarterly & action as necessary Ensure storage, handling and transport of dangerous goods are conducted in accordance with Australian Standards (explosives) Identify, classify, quantify & appropriately store hazardous waste Develop & implement oil & fuel spillage controls Ensure hazardous waste is minimised Licenced contractors to remove hazardous waste from site Keep records of all hazardous waste movements Implement bunding to appropriate areas Ensure adequate spill kits are available on site including adequate training 	R	S	Low
2	Lowering of groundwater table	R	S	L	 Monitor & report on ground water levels Comply with Water Management Plan water balance 	R	ST	Low
3	Acid-sulphate soils	L	S	M	Acid sulphate status (Not Present)	U	S	Low

	HAZARD				Control			
	Surface Water	L	С	R		L	С	R
1	Discharge of sediment	P	S	M	 Develop & implement Water Management Plan Implement Monitoring Program Review monitoring results quarterly & action as necessary Develop & implement Surface & Groundwater Response Plan Develop & implement Erosion & Sediment Control Plan Implement dust control procedures as per AIR 	U	S	Low
2	Discharge of hazardous materials	P	S	M	 As per Surface Water (1) Ensure storage, handling and transport of dangerous goods are conducted in accordance with relevant Australian Standard Review monitoring results quarterly & action as necessary Identify classify, quantify & appropriately store hazardous waste Develop & implement oil & fuel spillage controls Implement bunding to appropriate areas Ensure adequate spill kits are available on site including adequate training for effective use Minimise hazardous waste storage quantities on site Appropriate location of hazardous materials storage areas to prevent off-site discharges 	R	S	Low
3	Damage to local flora	P	S	M	 Develop & implement Biodiversity Action Plan Put in adequate physical protection measures including signage Monitor & report on site flora health regularly Suitable training re flora protection Removal of stock from sensitive areas (lock out area) Implement bushfire hazard reduction tasks Removal of feral animals from sensitive areas Noxious weed control in sensitive areas 	U	St	Low

	HAZARD				Control			
	Ecology	L	С	R		L	С	R
1	Damage to site fauna	U	S	L	As per (1)Information re local WIRES for distressed or injured fauna	U	St	Low
2	Dust pollution onto site sensitive ecological areas	U		M	 As per Air Quality (1) Comply with site Management Plans Regular review of riparian areas (as per Management Plans) 	U	St	Low
3	Spill of liquid fuel whilst in storage	Р	S	M	 Fuels stored according to bunding requirements. Measures in place to ensure spills do not leave site boundaries ie diverting flow away from boundaries, stormwater drains. Bunding subject to regular inspection and maintenance Controlled discharge points 	U	St	Low
	HAZARD				Control			
	Land	L	С	R		L	С	R
1	Spill during delivery of fuel to mobile equipment	P	S	M	 Breakaway couplings installed on mobile fuel delivery vehicles. Drivers stay with vehicle during refuelling Emergency spill kits located on fuel delivery vehicles. Spill response equipment is regularly inspected and maintained Mobile refuelling takes place in the pit Drivers trained in spill response procedures. Refuelling takes place in designated refuelling areas. 	U	St	Low
2	Land contamination	L	St	M	Minimal amounts stored on site and removed on completion of work.land contamination strategy	U	St	Low
3	Spill of liquid fuel whilst in storage pods	P	S	M	 Fuels stored according to GISC bunding requirements. Measures in place to ensure spills do not leave site boundaries ie diverting flow away from boundaries, stormwater drains. Bunding subject to regular inspection and maintenance 	U	St	Low

	Hazard	R		S	Control			
	AIR	L	С	R	Mitigation Measures	L	С	R
1	Excessive dust emissions	P	S	M	 Complete monitoring & assess results quarterly Review results & monitoring program quarterly Minimise disturbed areas Stop dust generating activities as necessary Progressively rehabilitate disturbed areas Restrict works during periods of high wind Dust minimisation training Maintenance of dust control equipment 	U	St	Low
2	Health issues off site	R	S	L	 As per (1) Excessive Dust Emissions Complaints hot line Issue monitoring results Communicate construction activities to neighbours plus potential for dust 	R	S	Low
3	Equipment exhaust emissions exceed limits	U	St	L	 Inspect equipment engine emissions regularly All equipment is serviced and maintained to OEM requirements Excessive equipment emissions to trigger out of service procedure 	R	St	Low

Names	Position	Signature	Date
Glenn Lee	Production Coordinator		
Mick Ward	Sales & Delivery Operator		
Philip Williamson	Heavy Combination Truck Driver		
Col Davis	Heavy Plant Operator		
Sean Wilson	Administration Officer		
Luke Taylor	Contract Crush & Screen		
Richard Smith	Mechanic		
Matt O'Brien	Operator		
Dave Marshall	Operator		
Jamie Yarnold	Operator		
Grant Quirk	Operator		