



(PIRMP) Blakebrook Quarry

2024



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DOCUMENT HISTORY

Date	Prepared By (Name)	Reviewed By (Name)	Change Remarks (Include Section, Page & Details)
March 2021	Compliance Team (LL)	Compliance Manager (EW)	
July 2022	Compliance Team (LL/FM)	Compliance Manager (EW) Quarry Operations Coordinator (JL)	Review and update maps
November 2022	Compliance Team (LL/FM)	Quarry Operations Coordinator (JL)	Update emergency contact after hours number, update maps
January 2024	Compliance Team (LL/PG)	Quarry Operations Coordinator (JL) Head of Roads and Quarry (JS)	Review and document update



1.0 INTRODUCTION

Lismore City Council holds an Environment Protection Licence (EPL) with the NSW Environment Protection Authority (EPA) for Blakebrook Quarry. As per 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.

If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of section 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.

1.1 PURPOSE

The purpose of this PIRMP is to set out the response to a potential pollution incident situation at the Quarry.

The PIRMP will:

- Control or limit any effect that a pollution incident may have on or off site.
- Facilitate a response and to provide such assistance on site as is appropriate to the situation.
- Ensure that all vital information is communicated to relevant and external authorities as soon as possible. This may also include all owners and occupiers of premises (including private residences) near the Quarry.
- Facilitate the reorganisation and recovery operations so that normal operations can be resumed as soon as practicable.
- Provide relevant training so that a high level of preparedness can be continually maintained.
- Provide a basis for the revision of pollution procedures.

A written copy of this plan is kept at the Quarry and is available on request by an authorised NSW EPA Officer and to any person who is responsible for implementing this plan.

This plan is available either on a publicly accessible website or by providing a copy of the plan to any person who makes a written request. The sections of the plan that are required to be publicly available are set out in clause 98D of the *Protection of the Environment Operations (General) Regulation 2022.*

This plan has been developed in accordance with the POEO Act and the Protection of the Environment Operations (General) Regulation 2022.

1.2 ROLES & RESPONSIBILITIES

The Quarry Operations Coordinator is responsible for:

- The effectiveness and accuracy of the PIRMP, procedures and relevant emergency documentation.
- Staff training in emergency preparedness relating to pollution incidents.
- Co-ordination of evacuation exercises.
- Post-emergency/exercise review.
- Immediately responding to any pollution incident situation.
- Ascertaining the nature of the incident and determining appropriate actions.
- Ensuring the appropriate Emergency services have been notified.
- Co-ordinating the deployment of staff and any internal specialist resources.
- Where safe to do so take steps to contain or control the hazard.
- Ensuring that appropriate senior management are kept updated on the situation.
- Co-ordinating post-incident recovery strategies.
- Maintenance of staff training, emergency information lists and related plant and equipment necessary for evacuation compliance.



Staff/Employees are responsible for:

- Attendance of any pollution incident training.
- · Following instructions given in the event of a pollution incident,
- Co-operating with Management/Emergency personnel in the event of a pollution incident.
- When safe to do so take steps to contain or control the hazard.
- Report all pollution incidents to either Quarry Operations Coordinator and/or Workplace Health and Safety Officer.

2.0 SITE DETAILS

2.1 Environment Protection Licence (EPL3384)

Licensee:	Lismore City Council ABN: 60 080 932 837 www.lismore.nsw.gov.au
Activity Details:	Scheduled activity on EPL 3384 – Extractive activities Fee based activity on EPL 3384 – Land based extractive activities
Premises Name & Address:	Blakebrook Quarry 550 Nimbin Road Lot 53 DP 1254990 Blakebrook NSW 2480
	Area: 128.40 ha Latitude: -28.764940 Longitude: 153.241090
Business Contact:	Quarry Operations Coordinator 0448 545 882 and/or
	Head of Roads and Quarry 0427 017 162
Licence Contact:	Manager Operational Compliance 0427 828 315



2.2 SITE DESCRIPTION

Blakebrook Quarry (the Quarry) is operated by Northern Rivers Quarry (NRQ) which is a commercial entity owned by Lismore City Council. The Quarry is located at 550 Nimbin Road, Blakebrook, approximately seven (7) kilometres northwest of Lismore on Lot 53 DP 1254990 for Extraction Areas and Lot 54 DP 1254990 for Asphalt Plant an ancillary activity.

The site is situated on a ridge between Booerie Creek to the east and Terania Creek to the west, occupying an area of approximately 128 ha (incorporating 45ha rezoned to C2 Environmental Conservation), providing long term security for the biodiversity offset area. Surrounding land is used for agricultural and rural purposes.

The Quarry is identified as a State Significant Development (SSD) under MP07_0020 through Department of Planning & Environment (DPE) and holds an EPA licence for extractive industries (EPL 3384), providing a range of products to northern NSW on behalf of Council including:

- Aggregates
- Drainage rock
- Road base
- Basalt products
- Metal dust
- Fill material
- Bituminous products including hot mix and cold mix blended according to mix design

There are currently seven (7) FTE employees on site on a normal working day and up to 4 contractors as part of normal operations. Other contractors may be on site depending on operational activities e.g. blasting, electrical, asphalt production. There are a number of residences within close proximity to the Quarry, with the closest dwelling approximately 650 metres to the south-west of the Quarry. The location of the Quarry is as shown in *Figure 1*.

Figure 1: Blakebrook Quarry Locality and Zone map

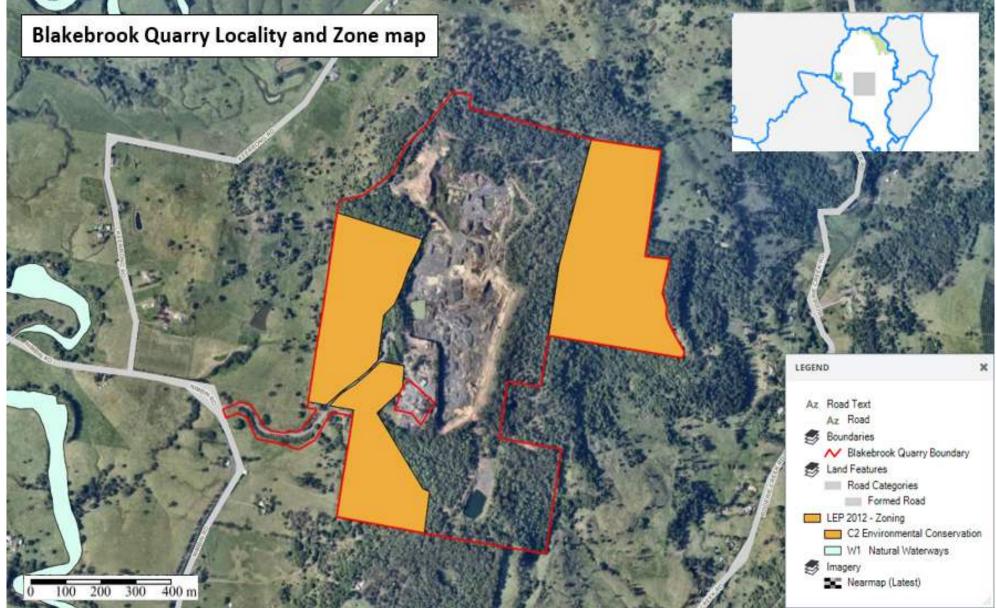




Figure 2: Emergency Assembly Areas

In the event of an evacuation, persons should assemble at the nearest safe Emergency Assembly Area.





2.4 EMERGENCY & FIRST AID OFFICERS

If First Aid assistance is required contact the relevant First Aid Attendant – also on UHF 15. Any injured people who can be moved safely should be taken to the nearest assembly area (whichever is more appropriate) for treatment. Those people who are trapped or unable to be removed immediately must be protected and given first aid on the spot (providing this does not expose first aiders to personal risk).

Emergency Warden/First Aid Officer contact information is kept onsite and is displayed in the Quarry's main administrative office and staff room.



2.5 EMERGENCY & FIRST AID EQUIPMENT

The listed equipment shall comply with the relevant Australian Standards and be appropriately signposted and maintained. Relevant employees shall be trained in the use of the equipment. This training shall be both by verbal instruction and practical demonstration. The training is compulsory and shall be conducted for all relevant employees as required.

All fire-fighting equipment shall be regularly checked and serviced. This will involve both internal inspections as well as external tests conducted by approved experts. Fire-fighting equipment will not be used for any purpose other than the one it was intended for. Abuse of the equipment will lead to disciplinary procedures.

Table 1: Emergency Equipment Locations

Fire Equipment			
Fire Fytinguishere	1 x Outside Lunchroom 1 x Outside back door Weighbridge Office		
Fire Extinguishers	1 x Outside Quarry Lab 1 x Inside Quarry Workshop		
Fire Blanket	• 1 x Inside Weighbridge Office		
Water Truck (17,600L)	• 1 x Onsite (also utilized for dust suppression)		
First Aid Equipment			
Eye Wash Station	• 1 x Downer asphalt laboratory • 1 x Downer asphalt plant		
First Aid Kit	On all plant items In all buildings		
PPE Equipment			
Chemical Gloves	• 3 x Storeroom		
Rigger Gloves	• 20 x Storeroom		
Eye Protection	• 20 x Storeroom		
Dust Mask	• 40 x Storeroom		
Ventilator Mask	• 3 x Storeroom		
Disposable Overalls	• 12 x Storeroom		
Pollution Management	Equipment		
Spill Kit	1 x Fuel bowser		
Hard copy – Weighbridge, Lab & Asphalt plant, Dangerous Goods Package Store ChemAlert			
Water Truck (17,600L)	• 1 x Onsite (dust suppression)		



2.6 WARNING & COMMUNICATION SYSTEM

Radios are to be available in all plant, vehicles and in the weighbridge at all times for open communication via **UHF CHANNEL 15.**

Noting that any communication or warning messages relating to the **Asphalt** operation will be via **UHF Channel 12**, or on mobile to 0429 776 687 as the primary contact, then 0499 831 910.

In the event of a failure of the radio (UHF) system, communication and warning messages are to be relayed via the mobile or telephone network.

2.7 POLLUTANT INVENTORY

The Blakebrook Quarry operations involve extraction, processing, precoating and asphalt production activities. As a result, a variety of substances are stored and used onsite on a regular basis. A full inventory list of substances has been provided below.

2.8 PORTABLE DENSITY MOISTURE GAUGE (PDMG)

The PDMG is located in the radioactive storage area on-site at Blakebrook Quarry. All aspects of safety, storage, transportation, operation, maintenance and emergency response are referred to in the Radiation Management Plan.



Table 2: Site Chemical Product Inventory

Chemical	Product Inventory (Maximum Quantities at Peak Times)				
Relevant H	lealth and Environmental Properties are available from Chem	alert SDS located in site	office		
Stock Number	Trade Name/Substance	Solid, Liquid, Gas or Powder	Maximum Amount	Location Marked on Map	Type of Containment
804	DINGO GENERAL PURPOSE CEMENT	Powder	5Kg	Laboratory	Bag
805	DINGO HYDRATED LIME	Powder	5Kg	Laboratory	Bag
1130	SODA ASH LIGHT	Powder	5Kg	Laboratory	Bag
1120	SODIUM HEXAMETAPHOSPHATE	Powder	5Kg	Laboratory	Bag
1117	ALCOHOL LIQUID HAND & SURFACE SANITISER	Liquid	15L	Office and Admin	Bottle
1115	APPLE INDUSTRIAL HAND CLEANER	Liquid	5 x 5L	Office and Admin	Bottle
17	DY-MARK SPRAY & MARK STD ALL COLOURS	Aerosol	350g	Office and Admin	Cans
599	GLEN 20 ALL IN ONE SPRAY DISINFECTANT – ALL SCENTS	Aerosol	5 x 175g	Office and Admin	Cans
53	GO GETTER	Liquid	5L	Office and Admin	Bottle
1279	HASTEN SPRAY ADJUVANT	Liquid	20L	Office and Admin	Bottle
802	HSP 1400 ANTI SEIZE SPRAY	Aerosol	12 x 300mL	Office and Admin	Cans
1119	HYGIENE HAND SOAP	Liquid	3 x 5L	Office and Admin	Bottle
245	QUARTET WHITEBOARD CLEANER	Liquid	5 x 500mL	Office and Admin	Bottle
803	ROST OFF PLUS 300ML	Aerosol	24 x 300mL	Office and Admin	Cans
843	SEPTONE NATURE CLEANER	Liquid	20L	Office and Admin	Bottle
799	SPEEDY TESTER CALCIUM CARBIDE MOISTURE REAGENT	Liquid	500g	Office and Admin	Cans
1116	TASKFORCE CLEANER DISINFECTANT (DIVERSEY SOLUTIONS)	Liquid	5 x 5L	Office and Admin	Bottle
313	TASKI VIEW QUICK	Liquid	2 x 5L	Office and Admin	Bottle
1111	1161990 VOLVO COOLANT (VOLVO READY-MIXED COOLANT)	Liquid	20L	DG Package store	Bottle
397	ALPHA SP 220	Liquid	20L	DG Package store	Bottle

Controlled copy available electronically



Stock Number	Trade Name/Substance	Solid, Liquid, Gas or Powder	Maximum Amount	Location Marked on Map	Type of Containment
347	CASTROL PREMIUM HEAVY DUTY	Liquid	5 x 20Kg	DG Package store	Can
279	CASTROL RADICOOL	LIQUID	20L	DG Package store	Bottle
838	EPG 220	Liquid	2 x 20L	DG Package store	Bottle
1280	GEAR LUBE 80W-90	Liquid	20L	DG Package store	Bottle
482	GREENLUBE EP-2	Liquid	20L	DG Package store	Bottle
418	HYSPIN AWH 100	Liquid	20L	DG package store	Bottle
428	HYSPIN AWH 46	Liquid	2 x 20L	DG Package store	Bottle

Stock Number	Trade Name/Substance	Solid, Liquid, Gas or Powder	Maximum Amount	Location Marked on Map	Type of Containment
580	INDUSTRIAL METHYLATED SPIRITS 95% OR 100%	Liquid	6 x 20L	DG Package store	Bottle
837	SPHEEROL HTB 2	Solid	20L	DG Package store	Can
488	SUPERDRAULIC HVI 46	Liquid	4 x 20L	DG Package store	Bottle
489	TOP DOG XDO 15W-40	Liquid	2 x 20L	DG Package store	Bottle
797	UNLEADED PETROL 95	Liquid	2 x 20L	DG Package store	Bottle
76	WEEDMASTER DUO DUAL SALT TECHNOLOGY HERBICIDE	Liquid	2 x 20L	DG package store	Bottle
1110	WHEEL BEARING GREASE	Solid	2 x 20L	DG Package store	Can
506	PRECOAT SUPA 30	Liquid	30000L	Pre Coat Area	Tank
871	DUST BIND	Powder	1000L	Quarry Floor	Hardstand
1197	GROUND GRANULATED BLAST FURNACE SLAG	Powder	30000Kg	Quarry Floor	Hardstand
1198	HYDRATED LIME	Powder	30000Kg	Quarry Floor	Hardstand
510	DIESEL	Liquid	10000L	Refuelling & Wash-down Area	Bulk tank
447	213 FOAMING CLEANER DEGREASER	Liquid	20L	Workshop	Bottle
274	ACETYLENE	Gas	50L	Workshop	Gas cylinder
1283	CHEMTECH CT18 SUPERWASH	Liquid	5L	Workshop	Bottle
1282	CONQUEROR HERBICIDE	Liquid	20L	Workshop	Bottle



ĺ	1281	MOUNTAIN GOLD MAGIC	Liquid	20L	Workshop	Bottle
	316	OXYGEN, COMPRESSED	Gas	2 x 100L	Workshop	Gas Cylinder
	76	WEEDMASTER DUO DUAL SALT TECHNOLOGY HERBICIDE	Liquid	1 x 20L	Workshop	Bottle

Downer As	sphalt Plant – Chemical Product Inventory				
Relevant H	lealth and Environmental Properties are available from Chema	alert SDS located in site	office		
Stock Number	Trade Name/Substance	Solid, Liquid, Gas or Powder	Maximum Amount	Location Marked on Map	Type of Containment
828	CECABASE RT945	Liquid	1000L	Asphalt	IBC
831	COLDMIX	Solid	50000Kg	Asphalt	Hardstand
791	DY-MARK PROTECH BRAKE & PARTS CLEANER NON CHLORINATED	Aerosol	6 x 450mL	Asphalt	Cans
218	DY-MARK SPRAY & MARK - FLUORESCENT ALL COLOURS	Aerosol	2 x 400mL	Asphalt	Cans
830	GRAYMONT MOLE CREEK HYDRATED LIME PRODUCTS	Powder	18000Kg	Asphalt	Bag
869	HOT MIX ASPHALT	Liquid	4000L	Asphalt	Tank
503	INOX-MX3 AEROSOL	Aerosol	10 x 300mL	Asphalt	Cans
346	LIQUEFIED PETROLEUM GAS (LPG)	Gas	2 x 9Kg	Asphalt	Gas cylinder
865	RECOSOL 175	Liquid	2 x 1000L	Asphalt	Tank
829	SEPTONE HEAVY DUTY DEGREASER	Liquid	500mL	Asphalt	Bottle
832	SEPTONE PROTECTA PINK HAND CLEANER	Liquid	1L	Asphalt	Bottle
833	SHELL GADUS S2 A320 2	Liquid	12 x 450g	Asphalt	Cans
577	TOLUENE	Liquid	200L	Asphalt	Drum
489	TOP DOG XDO 15W-40	Liquid	20L	Asphalt	Bottles
507	VIVA BITUMEN EME BINDER	Liquid	40000L	Asphalt	Tank
764	VIVA ENERGY DIESEL	Liquid	18000L	Asphalt	Bulk tank



3.0 POLLUTION MANAGEMENT

3.1 PREVENTATIVE ACTIONS

Several pre-emptive actions have been put into place to assist in preventing pollution incidents from occurring and to assist in the management of pollution incidents. These include:

- Implementation and maintenance of an accredited Environmental Management System.
- Comprehensive operational environmental management plans (Air, Noise, Water etc).
- Extensive risk assessment for quality, safety and environmental management and controls.
- Dedicated environmental compliance and safety resources.
- Compliance with relevant environmental licences and approvals to monitor and prevent pollution e.g. dust monitoring.
- Adequate and maintained infrastructure and equipment to prevent potential pollution incidents e.g. chemical storage bunding.
- Implemented and accredited mine safety management system including SWMS, SOPS and control plans to prevent incidents.
- Ensuring all staff have been issued and wear appropriate personal protective equipment.
- Ensuring all staff are trained in operational procedures relevant to their work area and that they are familiar with the PIRMP in the event of it being executed.

3.2 STAFF TRAINING

All staff are to be trained and competent in key functional areas. The currency of training is to be monitored and maintained by Quarry Management (Quarry Coordinator and/or Head of Roads and Quarry).

Records of training completion and currency are to be maintained by Quarry Coordinator and/or Council's HR department. Training programs will be undertaken as required to address expired training certificates and to address identified knowledge gaps.

Specific site related training includes:

- Chemical users and handling certificates.
- First aid.
- Fire extinguisher use.
- Spill kits.

All staff are trained in general and site-specific Safe Work Method Statements, Standard Work Procedures and staff are required to participate in daily toolbox meetings.

All Blakebrook Quarry employees will be trained in regard to the Pollution Incident Response Plan and its application.

The PIRMP will be tested annually. This event will be utilised to demonstrate readiness and refine response to a specific scenario with test details being recorded. De-briefing after the training event will allow for further staff consultation, procedural refinement, response improvements and required PIRMP revision/updates.

3.3 POLLUTION HAZARD ASSESSMENT

Types of pollution incidents and environmental hazards that could arise at the Blakebrook Quarry include but are not limited to water pollution, air pollution and pollution as a result of unexpected chemical spill onsite. Some of the foreseeable hazards include:

- Fire.
- Airborne contaminants (dust, fumes and gas).
- Fuel/chemical spills.
- Sediment laden stormwater runoff.
- Natural disaster events e.g. earthquake, flood, dust storm, bushfire.



The likelihood of some of the above pollution incidents occurring is extremely low due to compliance with obligatory conditions relating to the Environment Protection Licence (EPL) and DPE conditions imposed on the premises.

Based on the activities that occur onsite the severity of any pollution incident should be ranked on the extent to which a pollution hazard poses to humans and the environment. *Table 3* is used to rank the risk associated with any particular hazard.

Table 3: Ranking of Incidents - Safety

	Consequences					
Likelihood	Minor (A)	Moderate (B)	Major (C)	Critical (D)	Catastrophic (E)	
Almost certain (5)	L (A5)	M (B5)	H (C5)	VH (D5)	VH (E5)	
Probable (4)	L (A4)	M (B4)	H (C4)	H (D4)	VH (E4)	
Occasional (3)	VL (A3)	L (B3)	M (C3)	H (D3)	H (E3)	
Improbable (2)	VL (A2)	VL (B2)	L (C2)	M (D2)	M (E2)	
Rare (1)	VL (A1)	VL (B1)	VL (C1)	L (D1)	L (E1)	
Eliminated (0)			E0			
Risk Level VL	Very Low	L Low	M Medium	H High	VH Very High	

Likelihood	Descriptor for System Context:	Descriptor for Activity Context:
Almost Certain (5)	Expected to occur several times a year or often during the system life cycle. Is known to occur frequently in similar systems being used in the same role and operating environment.	Expected to occur during the planned activity. Is known to occur frequently in similar activities.
Probable (4)	Expected to occur one or more times per year or several times in the system life cycle. Is known to occur previously but is not certain to occur.	Expected to occur in most circumstances but is not certain. Is known to have occurred previously in similar activities.
Occasional (3)	Expected to occur less than once per year or infrequently during system life cycle.	Not expected to occur during the planned activity. Sporadic but not uncommon.
Improbable (2)	Not expected to occur but possible to experience one or more events during the system life cycle.	Not expected to occur during the planned activity. Occurrence conceivable but considered uncommon.
Rare (1)	Only expected to occur in rare of exceptional discumstance or no more than once during the system life cycle.	Not expected to occur during the planned activity. Occurrence conceivable but not expected to occur.

Minor (A)	Moderate (B)	Major (C)	Critical (D)	Catastrophic (E)
injury or liness not requiring immediate medical treatment	Minor injury or litness that is treatable in the workplace (first aid)	Injury or liness causing no permanent disability, which requires non-emergency medical attention by a registered health practitioner OR 10 or more injuries Attenses categorised as Minor	Serious injury or liness requiring immediate admission to hospital as an inpatient and/or permanent partial disability OR 10 or more injuries/illnesses categorised as 'Moderate'	Fatality and/or permanent total disability or 10 or more injuries classified as 'Ortical



Table 4: Ranking of Pollution Incidents - Pollution

Incident Severity	Description of Pollution Event	Actions
1 - Low	Localised low risk incident. Pollution could affect only the immediate vicinity	The site supervisor/Quarry Operations Coordinator is to manage response. Assign appropriately trained staff or contractors to combat the incident. If considered necessary, the area is to be cordoned off with hi-visibility markers and signage.
2 - Medium	Incident requires localised evacuation of the affected area. Pollution could affect the environment and others within the site.	
3 - High	Incident requires site evacuation and stakeholder consultation: Pollution could affect the surrounding environment and surrounding neighbours.	The Quarry Operations Coordinator is to initiate the evacuation procedure on site. All staff on site must follow the evacuation procedure and direct any contractors or visitors to the Emergency Assembly area at the front gate. Emergency services/relevant stakeholders to be engaged. On directions of the site supervisor, Emergency Services or a staff member will be directed to contact all residences with the potential to be exposed to the pollution incident. Where safe to do so the site supervisor may direct the weighbridge operator to return to the weighbridge to restrict entry to the site and to provide information to any queries. The Quarry Operations Coordinator or appropriate Council representative is to notify Relevant Authorities within 24 hours.



Table 5: Specific Hazards & Mitigation Measures Risk Ratings

Site Hazard	Initial Safety Risk rating	Initial Pollution Severity rating	Mitigating Measures	Residual Risk Rating
Fire				
Chemical or Fuel Fire or Explosion	M(E2)	3	 Regular maintenance and constant monitoring of potential hazards. Training in correct chemical storage and chemical handling techniques (including PPE). Standard Operating Procedures. Use of ChemAlert. Evacuate site and work with Emergency Service. 	L(E1)
Gas Leak/Rupture & Ignition	M(E2)	1	 Regular maintenance and constant monitoring of potential hazards. Training in correct storage and manual handling techniques (including PPE). Standard Operating Procedures. Correct location of fire extinguishers and equipment. Staff training on use of Fire Extinguishers. 	L(E1)
Mobile Plant	H(D3)	 Regular maintenance on plant and machinery. Completion of Pre-start Checklists. Standard Operating Procedures and VOCs. Fire extinguishers and emergency stops on all mobile plant. Staff training on use of fire extinguishers. 		L(D1)
Bushfire	H(D4)	1	 Regular inspections and surrounding vegetation management. Slashing of boundaries. Adequate water supply on site. Assist Emergency Services if relevant. 	M(D2)
Airborne Contaminants & Dust				
Diesel Emissions & Particulate Matter	H(D4)	1	 Regular maintenance on plant and machinery. Environmental considerations (Tier 4) on hire and purchase of plant and machinery. Air conditioned and sealed cabs. Health Control Plan. 	L(D1)



Site Hazard	Initial Safety Risk rating	Initial Pollution Severity rating	Mitigating Measures	Residual Risk Rating
Gas Leak/Rupture	H(E3)	1	 Regular maintenance and constant monitoring of potential hazards. Training in correct storage and manual handling techniques (including PPE). Standard Operating Procedures. Correct location of fire extinguishers and equipment. Staff training on use of fire extinguisher. 	L(E1)
Excessive Dust from Activities or Weather Conditions	VH(D5)	1	 Daily dust suppression. Site inspections and monitoring of activities and potential hazards. Monitor weather forecasts. Maintain appropriate vehicle speed limits and plant operation to minimise dust generation. Risk assessments and staff PPE. Establishment of vegetation/grass cover where feasible. 	M(D2)
Lime Dust/Rupture of Silo	L(C2)	2	 Maintenance and inspection of silo. Subcontractor Management, including delivery. Training in correct storage and handing techniques, including PPE. Standard Operating Procedures. 	VL(C1)
Fuel/Chemical Spil	l			
Fuel Spill from Refilling Station/ Tank Rupture	H(D4)	1	 Self-bunded fuel storage areas. Training in correct storage and manual handling techniques, including PPE. Correct location of spill kits. Training in use of spill kits. 	L(D1)
Chemical Spill from Shed	H(D4)	1	 Training in correct chemical storage and handling techniques, including PPE. Correct location of spill kits. Self-bunded chemical storage areas. Training in use of spill kits. ChemAlert. 	L(D1)
Oils/Grease	H(C4)	1	 Self-bunded chemical storage areas. Training in correct chemical storage and handling techniques, including PPE. Correct location of spill kits. Training in use of spill kits. ChemAlert 	VL(C1)



Site Hazard	Initial Safety Risk rating	Initial Pollution Severity rating	Mitigating Measures	Residual Risk Rating
Surface Water Run	off			
Failure of Containment Dam Near the Weighbridge	ainment Dam the M(E2) 2 • Regular inspections of level markers. • Management of water and sediment levels within the dam. • Daves water service for dust suppression.		L(E1)	
Overflow of Dam Near the Weighbridge – Flooding	H(C5)	2	 Regular inspections of level markers. Management of water and sediment levels within the dam. Reuse water onsite for dust suppression. Maintenance of pump truck and portable pumps. Undertaking permitted sampling and controlled discharge as permitted under the EPL to maintain freeboards. 	L(C2)



4.0 POLLUTION INCIDENT RESPONSE

4.1 **RESPONSE & EVACUATION PLAN STEPS**

- Survey the scene for additional dangers before entering the area.
- Move persons away from danger.
- Contact the Quarry Operations Coordinator.
- Quarry Operations Coordinator to contact relevant Emergency Services if required (i.e. Ambulance, Fire, Police) and relevant Council divisions Compliance Unit and WHS unit (if required).
- Contain the incident (fire, spill, contaminant) if safe and practical to do so.
- Announce evacuation and contact neighbours if the situation is dangerous, based on the severity (radio/ verbal message in light vehicle around site).
- Administer First Aid if required and safe to do so.
- Preserve the scene if required until Emergency Services arrive.
- In consultation with relevant Council divisions ensure required incident reporting to the EPA and any other relevant authorities is completed within 24 hours of the incident.

In the event of a pollution incident or on discovery of a dangerous situation, reporting is to be done by the Quarry Operations Coordinator:

4.1.1 Evacuation Signal

Verbal instructions by calling '*EMERGENCY*, *EMERGENCY*, *EMERGENCY*' to evacuate over the radio system or directive issued by the Quarry Operations Coordinator or appropriate personnel will constitute an evacuation signal.

In the event of a pollution incident the Quarry Operations Coordinator is to be contacted and will assess the situation, decide if emergency services need to attend the site, provide instructions for staff and the public. The Weighbridge will be the point of contact to liaise with the incoming traffic on the status of the situation. Mobile phones will be the method of contact.

Where a pollution event has the potential to have significant offsite impacts, communication with surrounding neighbours will be undertaken.

The Quarry Operations Coordinator or appropriate Council representative will:

- Conduct a risk assessment / inspection of the affected area to determine if immediate threat to human health or environment.
- Identify any residual hazards.
- Remove staff and the public away from potential danger to the weighbridge.
- Contact Emergency Services if required.
- Initiate and manage the response onsite including incident reporting.
- Initiate spill containment measures or firefighting equipment.
- Investigate any structural process weaknesses caused by the original event.
- Identify the need to preserve the scene if there is a subsequent investigation (Resource Regulator incident requirements).
- Monitor occupant safety including members of the public.
- Provide regular updates to staff and surrounding community.
- Signage on entry to site displaying open/closed to be considered.

If Emergency Services attend the site once they have concluded their involvement, control of the affected area will be handed back to the Quarry Operations Coordinator (via document sign off).

4.1.2 **Preservation of the Scene**

In any pollution incident the Quarry Operations Coordinator must ensure that all evidence relating to the incident is preserved and not interfered with and that any cleaning up, movement, repairs and so on are necessary to bring the site under control.

Prior approval by Emergency Services (and other regulatory agencies as identified) is required before disturbing the scene.



4.1.3 Clean Up Procedures

When a pollution incident has been stabilised and any immediate threat to human health and the environment has been alleviated, clean-up of the polluting material will be required. The SDS that are available for some of the chemicals stored on site provides clean-up instructions.

The site will be cleaned up in a timely manner in consultation with the NSW EPA.

4.2 SPECIFIC INCIDENT RESPONSE PLANS

4.2.1 Fires

Fires can cause impact on local air quality through odour and hazardous smoke. Fire prevention is as important as the development of efficient means of fighting it.

Action To Be Taken in The Event of a Fire

In the event of a fire, the safety of persons in the area is of primary importance and should be assessed prior to combating the incident. Emergency Services should be contacted where there is any risk to the health and safety of workers.

Evacuation and incident procedures should be followed:

- The site supervisor will immediately contact the Emergency Services and local fire brigade if deemed necessary.
- Firefighting shall be undertaken in association with the NSW Fire Brigade.
- Telephone Emergency 000 and ask for NSW Rural Fire Brigade.
- Secure the area involved in the fire.
- The source of the fire should be determined.
- Check the surrounding area for hazards such as fuel or other flammable substances. Where safe to do so, remove these away from the area.
- Treat smoke as toxic. Monitor the smoke plume and weather/wind changes.
- The fire should always be approached from the upwind side to prevent exposure to smoke and potentially hazardous fumes.
- Larger fires will be controlled using water and soil as appropriate. Regularly saturate the area to ensure that fire does not flare up.
- Notify and report to relevant stakeholders and authorities.
- Monitor area for two days to ensure fire does not re-establish.

4.2.2 Airborne Contaminants & Dust

There is a potential for airborne contaminants and dust to arise on site.

Action To Be Taken in The Event of Identified Airborne Contaminants or Dust Exceedances

In the event of identified Air borne contaminants (e.g. diesel emissions, lime silo rupture) the safety of persons in the area is of primary importance and should be assessed prior to combating the incident.

Emergency Services should be contacted where there is any risk to the health and safety of workers. Evacuation and incident procedures should be followed if the release is high risk and unable to be contained and resolved by site staff.

In the event of a low risk airborne contaminant incident the Quarry Operations Coordinator must:

- Secure the area and protect staff safety.
- Undertake a risk assessment to determine potential impacts/risks from airborne contaminants.
- Direct staff to isolate the source and shut down associated plant if suitable.
- Ensure staff are capable and equipped to manage the incident response.
- Notify relevant Council divisions.
- Ensure incidents are reported as required to regulatory authorities (in consultation with Council Divisions).



<u>Staff are to notify the Compliance Unit proactively on any foreseen dust issues</u> Refer to the *Air Quality Management Plan* (Trigger Action Response Plan - TARP) for additional information.

Non-compliant deposited dust results are be reported to the Regulator and corrective actions taken to mitigate any impacts, including review of:

- The area and operations to determine potential cause.
- Frequency of water truck use.
- Vehicle speed limits and plant operations.
- Staff PPE and risk assessments.
- Wetting down of uncovered stockpiles.
- Weather conditions.

4.2.3 Significant Fuel/Chemical Spills

There is a potential for a fuel/chemical spill to occur on site. These points should only be conducted if the area is safe to do so.

Action To Be Taken in The Event of a Fuel or Chemical Spill

- Risk assessment to be undertaken to determine high risk fuel or chemical spill to determine response. If deemed high risk - First responder shall call 'EMERGENCY, EMERGENCY, EMERGENCY' on UHF radio and immediately notify the Quarry Operations Coordinator.
- If considered low risk identify the type of incident and fuel/chemical involved. This is a visual inspection. Only approach if safe to do so. The chemical may be detailed on the chemical product and Chemical Inventory on site.
- Staff are to wear appropriate PPE: the spill may not only be liquid but emit a gas or powder.
- Determine if the spill can be safely contained by staff on site and that it will not enter any waterways.
- Where no immediate safety hazard exists read the Safety Data Sheet (SDS) for the spill clean-up information.
- Where safe to do so isolate spilled material with spill kit, place material into hazardous waste storage bags located in spill kit using a square mouth shovel and clean all equipment used.
- For larger spills, where safe to do so, utilise on site machinery to clean up spill and place sand/dust to prevent liquid going into waterways.
- If the spill occurs on an unsealed surface, the initial response will be to stop the leak. The SDS should be read for safe handling of the chemical and no open sources of ignition should be in the area:
 - Use machinery to move contaminated soil into a bunded stockpile and where practical move to a sealed surface.
 - Send soil samples to laboratory for testing to determine if the material is suitable for disposal on site or at another site.
 - o A hazardous waste contractor may be called to dispose of the chemical waste.
- Quarry Operations Coordinator in consultation with relevant Council division to notify EPA and other Relevant Authorities (as required) within 24 hours.
- Quarry Operations Coordinator to notify and report to relevant Council divisions Incident Reporting Line on 02 6625 0500 and Councils Incident portal (Vault) as soon as practicable.

Where The Spill Is Too Dangerous to Contain

- Potential hazards include fire, explosion, toxic fumes, contact with hazardous chemicals.
- Evacuation and incident procedures should be followed.
- Emergency Services should be contacted where there is any risk to the health and safety of workers.
- Keep all staff and public away from spill.

Where Toxic Fumes from Spill Are Drifting Over Neighbouring Properties

- Evacuation and incident procedures should be followed.
- Emergency Services should be contacted where there is any risk to the health and safety of workers.
- All staff on site must follow the evacuation procedure and direct any contractors or visitors to the Emergency Assembly area point.



• On direction from the Quarry Operations Coordinator or delegate, neighbouring residences with the potential to be exposed to the pollution incident will be notified.

Action To Be Taken in The Event of An Oil Spill

- Determine the nature, amount and location of the oil spill.
- Determine if the oil spill can be safely contained by staff on site and that it will not enter any waterways.
- Cease plant operation in the spill area.
- Arrange and install traffic control if required.
- Where safe to do so isolate spilled oil with spill kit, place material into hazardous waste storage bags located in spill kits using a square mouth shovel and clean all equipment used.
- For larger spills, where safe to do so, utilise on site machinery to place sand/dust to prevent liquid migration into waterways and to clean up spilled oil.

Possible Groundwater Contamination

In the event of any identified contamination of groundwater the following steps will be taken:

- The EPA and Relevant Authorities will be informed within 24 hours of receipt of result of exceedance.
- Review results to determine if an adverse trend is developing, or whether the initial exceedance was an isolated incident.
- If a trend has been established which indicates deteriorating groundwater quality, then a suitable groundwater remediation action plan will be developed.
- Refer to the Soil & Water Management Plan for additional information

Surface Water Run Off

- Determine source of contamination and take action to control the containment.
- Refer to the Soil & Water Management Plan for additional information



5.0 NOTIFICATION OF RELEVANT AUTHORITIES

The Quarry Operations Coordinator is responsible for contacting the authorities and reporting pollution incidents.

Table 6: Relevant Authorities Contact List

Fire & Rescue NSW	000 or 6621 5660
Rural Fire Service	6663 0000
Environment Protection Authority	131 555
Department of Planning Resources Regulator	1300 814 609
	(24 hours/7 days)
Department of Planning & Environment	1300 305 695
	Lismore Base Hospital
	6624 0200
	(After Hours 0428 882 805)
Public Health NSW	Infectious Disease
	0439 882 752 (After Hours)
	Environmental Health
	0428 882 805 (After Hours)
SafeWork NSW	131 050
Lismore City Council	02 6625 0500
	Incident Reporting Line
Rous Water	6623 3800
	(After Hours 6626 6955)
Lismore Police	6626 0599
Local Land Services	6623 3900
	13 22 13 or 6620 7821
Transport for NSW	(7am-7pm Mon-Fri)
	0427 896 163
	(Local Office –
Essential Energy	13 20 80
Head of Roads and Quarry	0427 017 162
Quarry Operations Coordinator	0448 545 882
Weighbridge Office	6629 3236
Quarry Lab	0429 835 365
Commercial Services Compliance	0427 828 315
UHF	Channel 15 Quarry
	Channel 12 Asphalt



6.0 NOTIFICATION OF NEIGHBOURS & LOCAL COMMUNITY

Notification to local residents (when required) will only be done after consultation with relevant Council divisions (unless an immediate directive has been received from Emergency Services).

When an incident occurs, site management will use the following methods to communicate to the on-site staff, neighbours and the local community. These include early warning signs and regular updates to owners and occupiers of neighbouring properties who may be affected by a pollution incident.

The notification shall provide specific information to the neighbouring properties and local community so it can minimise the risk of harm. Information could include instructions to close windows and doors and remain inside for emissions of certain types of air pollutants, avoid the use of water in creeks or rivers affected, or likely to be affected by a pollutant discharge.

The severity of the incident and the topographic area will depend on what methods of communication are used:

- Strategic phone calls and/or door knock neighbours.
- Lismore City Council Local Matters online and hard copy.
- Lismore City Council website www.lismore.nsw.gov.au and social media pages.
- Local newspapers, radio and television.

Table 7: Quarry Neighbours Contact List

Quarry Neighbours contact list is kept in Councils electronic records management system and updated as required.

The extent of communication will depend on:

- Air Emissions Type of pollutant, prevailing winds, height and magnitude of emission, location of any fallout or off-site impacts, likelihood of pollutant reaching ground level and possible impacts to sensitive receptors.
- Water Discharge Discharge location, amount of rainfall that has caused discharge to occur, water quality, likelihood of environmental harm or impacts to neighbouring properties, creeks or rivers.

In the event of a pollution incident the following templates may be used to communicate directly with the neighbours and the community in general. See example templates below.



Figure 3: Template – Notification of Air Pollutant

WARNING

Emission of Air Pollutant – POTENTIAL RISK

An emission of [POLLUTANT] has occurred at Blakebrook Quarry

[POLLUTANT NAME] was found in the air around Blakebrook Quarry at [TIME/DATE]. This pollutant can make you sick.

What should I do?

[DELETE IRRELEVANT]

- Close windows and doors and remain indoors until otherwise notified.
- Wash down outdoor areas that children might come into contact with.
- Wash hands with soap and running water for at least 10 seconds after working outside, before eating and before smoking.
- Restrict outside exposures, particularly for children.
- Do not consume home grown leafy vegetables.
- Root vegetables should be thoroughly washed and cooked.
- Do not drink water from rainwater tanks.
- Drain water from water tanks and containers around the yard.

[POLLUTANT NAME] causes [SYMPTOMS/ISSUES].

If you or someone you know exhibits any of these symptoms, immediately contact your health care provider.

In addition, please notify the Public Health Department on 6624 0200 After hours (Environmental Health 0428 882 805).

What happened? What is being done?

The air above the Blakebrook Quarry along Nimbin Road, west of Lismore was contaminated with [POLLUTANT NAME] following an incident. We are working with law enforcement and the public health department to investigate/resolve this issue. We have tested the air in various parts of local area to verify the extent of the contamination. We have implemented additional procedures to protect the system against further contamination. Additional information will be provided 24 hours/day Lismore City Council's website www.lismore.nsw.gov.au.

For more information, please contact [NAME] at 02 6625 0500.

Please share this information with all the other people especially those who may not have received this notice directly (for example, people in schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand.

This notice is being sent to you by Lismore City Council. Date distributed: [DATE]



Figure 4: Template - Notification of Discharge of Pollutant into Waterway or Stormwater

WARNING

DO NOT USE THE WATER IN [CREEK/RIVER]

[CREEK/RIVER] water is contaminated with [POLLUTANT NAME]

[POLLUTANT NAME] was found in the [CREEK/RIVER] on [DATE]. This pollutant can make you sick and may result in death.

What should I do?

- DO NOT USE THE WATER.
- Do not use the water for recreation or drinking or livestock or fishing.
- [POLLUTANT NAME] causes [SYMPTOMS / ISSUES].
- If you or someone you know exhibits any of these symptoms, immediately contact your health care provider.

In addition, please notify the Public Health Department on 6624 0200 After hours (Environmental Health 0428 882 805).

What happened? What is being done?

The [CREEK/RIVER] was contaminated with [POLLUTANT NAME]. We are working with law enforcement and the public health department to investigate/resolve this issue. We have tested the water in various parts of the [CREEK/RIVER] system to verify the extent of the contamination. We have implemented additional procedures to protect the system against further contamination. Additional information will be provided 24 hours/day Lismore City Council's website www.lismore.nsw.gov.au.

For more information, please contact [NAME] at 02 6625 0500

Please share this information with all the other people who use [CREEK/RIVER], especially those who may not have received this notice directly (for example, people in schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand.

This notice is being sent to you by Lismore City Council. Date distributed: [DATE]



7.0 REPORTING A POLLUTION INCIDENT

7.1 INFORMATION TO REPORT

When reporting a pollution incident, refer to EPA license and Project Approval Conditions for direction. An example of the following information should be included:

- Name of organisation.
- Exact nature of the incident (any casualties?).
- Exact location.
- Name of person reporting.
- Contact number (where applicable).
- Reporting is to be done by the Quarry Operations Coordinator or appropriate Council representative.

A non compliance of Project Approval Conditions and/or EPL conditions and/or reportable incident shall have details recorded in the Quarry Non conformance and Improvement Register.

No other person other than Head of Roads and Quarry through the Media Coordinator can divulge information to the media. Should any staff be approached by media representatives for comment, express the following authorised comment:

'I am sorry, but I cannot make any statement at this time. The appropriate personnel are currently being briefed on the situation and a spokesperson will be available to talk to you shortly.'

7.2 **REPORTING TIMEFRAMES**

The EPA and Relevant Authorities will be informed within 24 hours of an incident or exceedance of licence conditions. Refer to EPA license and Project Approval Conditions for direction. A detailed report must be submitted within 7 days of the incident, with a copy being provided to Councils executive management.

Where monitoring values exceed guidelines the monitoring data will be available on Council's website.

7.3 WHS INCIDENT & ACCIDENT REPORTING

Blakebrook Quarry has the highest commitment to the provision of a safe and healthy workplace. However, if an injury is sustained to an employee, contactor or visitor as a result of a pollution incident, the following contingencies have been put into place.

- Trained and accredited First Aid Officers will be in the workplace. They shall be present on every shift. Names of the FAO are displayed in office, weighbridge, and staff lunch room.
- First aid kits shall also be readily available in the main office, weighbridge, staff lunch room, plant and vehicles.
- All injuries shall be reported to your supervisor immediately and phoned in to Lismore City Council on 6625 0500 and Councils Incident portal (Vault) as soon as practicable.
- Reportable incidents shall be reported to the relevant authorities immediately, with an incident report following within 7 days.
- All injuries will also be investigated immediately, and corrective actions instigated in accordance with the *Incident Reporting & Investigation Procedure.*

7.4 REPORTING OF FIRE INCIDENTS

Whilst reporting fires is not a condition under EPL 3384, Blakebrook Quarry DPE operating conditions requires managing bushfire risk. A bushfire should be extinguished as soon as possible unless a conscious decision is made not to extinguish the fire immediately and resources are available to manage the event to the desired end point (such as to burn safely out to formed containment lines).

Refer to *Biodiversity & Rehabilitation Management Plan* for further information. Incidents caused by fire are reportable to Department of Planning Resources Regulator (Mines).



8.0 TESTING OF THE BLAKEBROOK QUARRY PIRMP

8.1 **TESTING & UPDATING THE PIRMP**

The PIRMP will be tested every twelve (12) months and within one (1) month of any pollution incident.

Table 8: Example of PIRMP Testing & Updating Details

	PIRMP Testing Details				
Date	Date Tested By Details of Test		Findings of Test (including issues identified)	Next Testing Date (within 12 months)	
24/02/2018	Joan Smith, Environment Manager	Desktop simulation – chemical spill	Contact details, map and pollutant inventory out of date	24/02/2019	

	PIRMP Update Details				
Date	Reason for Update	Details of Update	Date Uploaded to Website (if applicable)	Date Completed	
24/02/2018	Outdated items identified in annual testing	Contact details, map and pollutant inventory updated	26/02/2018	26/02/2018	



Table 9: Template - Testing of the Blakebrook Quarry PIRMP

TEMPLATE – Testing of the Blakebrook Quarry PIRMP		
Date & Time:		
Coordinated By:		
Attendees:		
Details (Scenario): e.g. nature of test Testing must cover all components of the plan		
Findings: Including issues identified		
Next Testing Date: (within 12 months)		
Name:	Position:	
Signature:	Date:	