Pollution Incident Response Management Plan
Hill End Gold Mine Prepared for
Vertex Minerals Limited
6 Bowen Street, Hill End NSW 2850

IEMA Ref: VER01-003003

Version No: 4

8 August 2025

DOCUMENT VERIFICATION

Project Title:	Hill End Gold Mine Pollution Incident Response Management Plan
Project Number:	VER01-003 - 4
Project File Name:	VER01-003_PIRMP_EPL12008_v1

Version	Comment	Date	Prepared	Authorised
4	First Version – New Document	8 August 2025	K. McMahon L. Papanis	A. Hutton

DISCLAIMER

This report has been prepared by Integrated Environmental Management Australia (IEMA) with all reasonable skill, care, and diligence, and taking account of the timescale and resources allocated to it by agreement the Client. Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from IEMA.

IEMA disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

Integrated Environmental Management Australia Pty LTD

ABN 32 622 237 870

PO Box 3161, MEREWETHER NSW 2291 AUSTRALIA

E: admin@iema.com.au

T: 0409 288 909 | W: www.iema.com.au

CONTENTS

TABLES

FIGURES

APENDICES

1. INTRODUCTION

1.1. Context

In accordance with the requirements of the *Protection of the Environment Operation Act* 1997 (POEO Act), holders of Environment Protection Licences (EPL) must develop, maintain, and implement a Pollution Incident Response Management Plan (PIRMP) adhering to Part 5.7A of the Act governing licensed activities. This PIRMP, satisfying the obligations outlined in Part 3A of the Protection of the Environment Operations (General) Regulation 2009 & 2012 Amendment, as well as Part 5.7A of the POEO Act, has been developed for Vertex Minerals Limited.

Vertex, holds EPL 12008 for Hill End Gold Mine under the New South Wales (NSW) Environment Protection Authority (EPA), developed in alignment with the EPA's Guideline: *Pollution Incident Response Management Plans* (March 2020). Hill End Gold Mine is located approximately 200km WNW of Sydney, in the central west of NSW.

1.2. Purpose

This management plan has been developed to describe Hill End Gold Mine's response to a potential pollution incident and to meet requirements of the POEO Act.

The purpose of this PIRMP is to:

- Minimise the chance of a pollution incident taking place at Hill End Gold Mine and minimise environmental impact.
- Outline the key management and reporting strategies in case of a pollution incident occurring.
- Ensure efficient communication and assist in the training of staff so that this plan is implemented correctly, and the procedures are followed to minimise risk to employees and the environment.

1.3. Availability of the PIRMP

A hard copy of this plan must be kept at the licensed premises and shall be made readily available on request by an authorised EPA officer and to any person who is responsible for implementing this plan. Parts of the plan must be 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 section 74 of the *Protection of the Environment Operations* (General) Regulation 2022 and will be made readily available on the Vertex Hill End website.

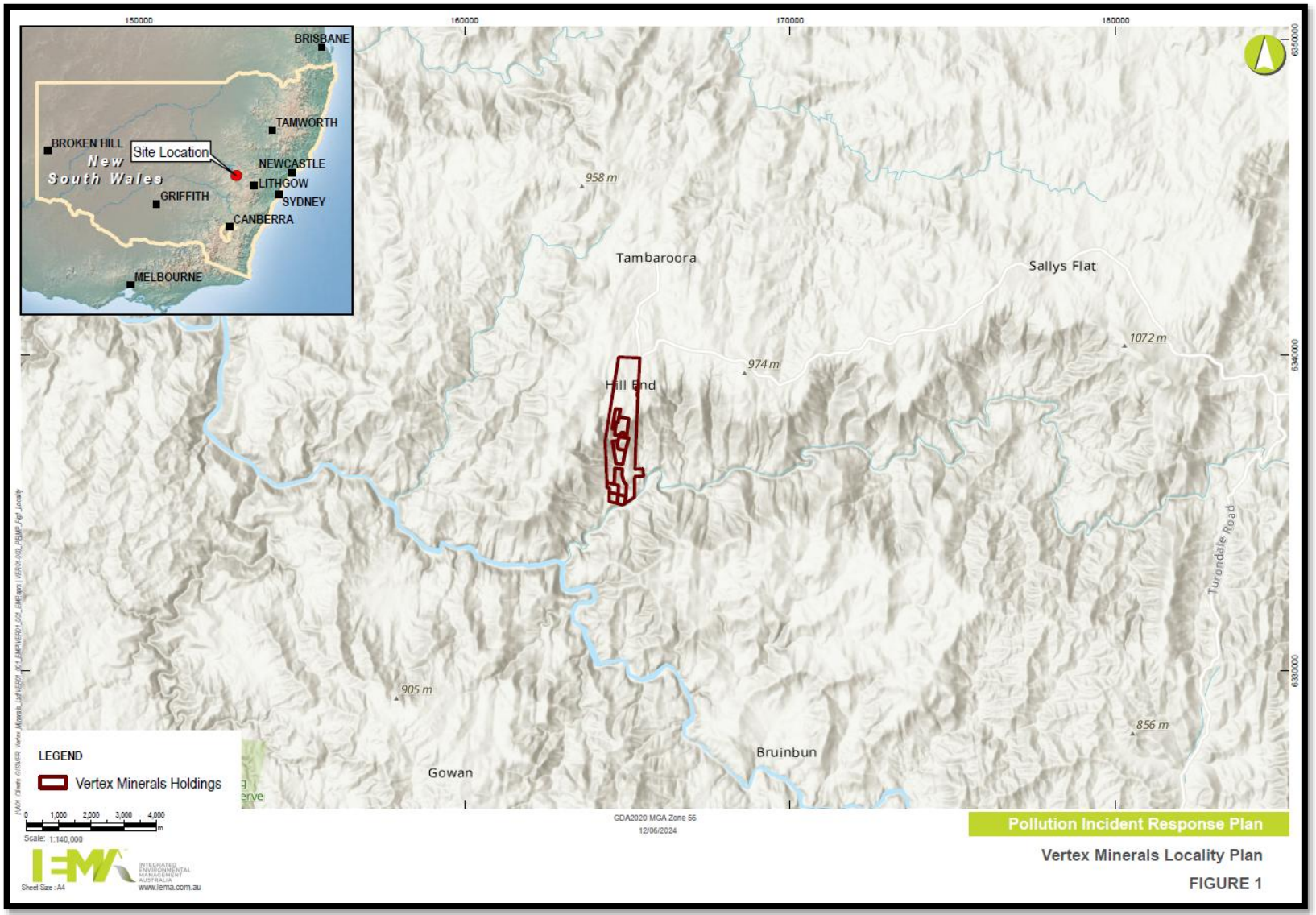

Figure 1 Locality Plan

1.4. Responsibility for Implementing the PIRMP

If a pollution incident arises or is likely to arise from activities at Hill End Gold Mine, the individual involved must promptly inform the Supervisor. The Supervisor will then either initiate the response plan or designate an authorised contact listed in **Table 1** below to handle the situation.

The person responsible for activating the PIRMP will also hold responsibility for notifying the relevant authorities and managing the response and/or investigation to the pollution incident, this can also be delegated from a supervisor to an alternative person/s.

Table 1 Responsibility for Implementing the PIRMP

Responsible for PIRMP Activation	
Primary	**Name and Contact**
Technical Director	
Alternative Contact	

Note: *Whilst personal contact details are listed in the controlled version of the PIRMP maintained onsite, they do not appear in the public document under provision of the Privacy and Personal Information Protection Act 1998.*

1.5. Definition of a Pollution Incident

The *POEO* Act defines a pollution incident as:

> *"Pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise".*

A licensee is required to notify the relevant regulatory authorities of a pollution incident 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.*

Harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution.

2. ENVIRONMENTAL PROTECTION LICENCE

Vertex Minerals Limited holds EPL 12008 for Hill End Gold Mine. Details of the EPL covered in this PIRMP are detailed in **Table 2** below.

Table 2 Environment Protection Licence

EPL Details	
Name of Licensee:	Vertex Minerals Limited
EPL Number	12008
Premises Name and Address	Hill End Gold Mine, Off Bridle Track, HILL END NSW 2850
Company or business contact details	Name: Position or title: Business hours contact number/s: +61 2 7229 4849 Email: info@vertexminerals.com.au
Website address:	https://vertexminerals.com/hill-end-hargraves-nsw/
Scheduled activity/activities on EPL:	Mining for Minerals
Fee-based activity/activities on EPL:	Mining for Minerals 0-30000 T annual production capacity

Note: *Whilst personal contact details are listed in the controlled version of the PIRMP maintained onsite, they do not appear in the public document under provision of the Privacy and Personal Information Protection Act 1998.*

3. NOTIFICATION OF POLLUTION EVENTS

3.1. Internal Notification

If a pollution incident occurs (or threatens to occur) arising from activities on the Hill End site, the person carrying out the activity must immediately notify the person/s authorised to implement this plan (**Table 1**).

3.2. Notification to Authorities

If there is an immediate threat to human health or the environment, the first notification to authorities is warranted for contact and direction. First notification (Fire and Rescue, Police, Ambulance) call 000.

In the case of a pollution incident that causes or threatens to cause material harm to the environment, authorities are to be advised of the incident in accordance with Part 5.7A of the POEO Act. The authorities listed in **Table 3** are to be notified immediately after becoming aware that an incident has arisen. Re-notification may be required as more information regarding the incident emerges.

The PIRMP Incident Notification Record Sheet and / or a Neighbour Notification (**Appendix A** & **Appendix B)** are to be completed accordingly when notifying relevant agencies, stakeholders, and immediate neighbours on the details of externally reportable incidents. Dependant on the nature of the incident, authorities in **Table 4** may be contacted.

Table 3 External Authorities Notification

Authority	Contact Details
Bathurst Regional Council After Hours	Ph: 02 6333 6111 Ph: 02 6334 2795
Environment Protection Authority (EPA)	Environment Line: Ph: 131 555 (For Incidents) info@epa.nsw.gov.au
NSW Resources Regulator	1300 814 609
Bathurst RFS Regional Office	Ph: 1300 258 737
Bathurst NSW Public Health Unit – Local District	Phone: (02) 6330 5880 After hours mobile: 0428 400 526
SafeWork NSW	Incident Hotline Ph: 131 050
Department of Planning, Housing and Infrastructure (DPHI)	Ph: 1300 420 596 information@planning.nsw.gov.au Non-Compliance and Incident Notification/Reports to: compliance@planning.nsw.gov.au
Department of Primary Industries (DPI) (Disease watch hotline)	Ph: 1800 675 888 Email: nsw.agriculture@dpi.nsw.gov.au
DPI + Regional Development	1300 679 673

Other agencies and/or authorities to be contacted include.

Table 4 Other External Authorities Notification

Authority	Contact Details
State Emergency Services (SES)	138 737
NSW Poisons Information Centre	131 126

3.3. Notification to Stakeholders / Immediate Neighbours

Communication with stakeholders, immediate neighbours and the local community may be undertaken depending on the circumstances of the pollution incident. In case of a necessary public announcement, local community groups will be informed via letters, emails, phone calls, public notices, and/or public meetings.

In the event that the incident is being coordinated by emergency services, communications would be under the control of those services. If deemed necessary, Vertex would assist the governing authorities and consider the following options for providing warning and ongoing information to the community on pollution incidents:

- Communication with the community
- Public notifications / notices / meetings
- Letter Box drops of incident information and site contacts to stakeholders and immediate neighbours impacted by the pollution incident; and
- Direct phone contact with any immediate neighbours directly impacted by the pollution incident.
- Website update.

3.4. Minimising Harm to Persons & Environment

Vertex is committed to minimising the harm in the event of a pollution incident. Key measures to minimise harm to persons on the premises include (but are not limited to):

- Personal Protective Equipment (PPE)
- Conducting risk assessments when appropriate
- Immediate response strategy including emergency assemblage points, relevant contact details, stop work instructions and evacuation strategies
- Employee pollution incident training and procedures
- Environmental and employee health monitoring
- Reduction of pollutants on site
- Regular assessment of potential pollutants on site (location, amount, potential risk, mitigation measures)
- Establishing exclusion zones / perimeters to limit exposure of employees to pollutants.
- Advise relevant regulatory authorities if spill is considered to be significant or threatening material harm and adhere to any instructions issued.
- Recover materials if feasible.

- Where possible, contain spillage in designated containers/areas
- Remove contaminated soil and or/absorption material to an approved disposal site as advised by the EPA or Council.
- Regular site inspections.

4. DESCRIPTION AND LIKELIHOOD OF HAZARDS

The potential major hazards at Hill End include but are not limited to:

- Emissions (such as hazardous chemicals) resulting in air contamination.
- Spills/leaks (such as hazardous goods and hydrocarbons) resulting in ground and surface water contamination.
- Spills/leaks (such as hazardous goods and hydrocarbons) resulting in land contamination; and
- Unplanned contaminates of water from failure of dry stacked tailings.

4.1. Tailings Storage Facility (TSF)

The environmental hazard / risk associated with the Tailings Storage Facility (TSF) is considered low, and potential incidents are highly unlikely, particularly while the mine is in care and maintenance and not in operation. However, the following will occur:

- The primary hazard is the potential structural failure of the TSF bund wall. The likelihood of such an incident is minimal due to rigorous inspection and maintenance protocols.
- During periods of heavy or prolonged rainfall, there is a risk of the erosion of tailing material. Although this risk is low, additional inspections and pre-emptive actions are taken to manage this possibility, including ensuring adequate functional drainage systems.
- In the event of an earthquake or significant seismic activity, the structural integrity of the dry stacked tailing material could be compromised. While the mine is not located in a high-risk seismic area, this potential hazard is considered.
- Human error during operational activities, such as improper handling or maintenance of the TSF. The likelihood is minimised through stringent operational procedures and regular training for all personnel involved.

5. INVENTORY OF POTENTIAL POLLUTANTS

Hill End maintains a comprehensive inventory of hazardous substances and dangerous goods stored and utilised on-site. This inventory is recorded and regularly updated in the Vertex internal database.

Appendix C provides a Chemical Register detailing the potential pollutants on-site.

5.1. TSF

The TSF at site contains tailings material, primarily consisting of stockpiled crushed rock, this material is considered benign. However, managing and monitoring this material will be maintained.

6. SAFETY EQUIPMENT

To effectively respond to potential environmental incidents and ensure the safety of both the mine and its surrounding areas, Vertex Minerals maintains a comprehensive array of emergency equipment and resources shown in **Figure 2** below. This equipment is designed to address a wide range of scenarios, ensuring preparedness for any situation that may arise. The safety equipment and procedures include, but are not limited to, the following:

- Emergency spill kits
- Safety Equipment
- Earthen bunds below stockpiled material.
- Earthworks equipment.
- Local Bureau of Meteorology weather station data
- Smoke alarms
- First Aid Station
- Firefighting equipment
- Environmental monitoring devices
- Emergency evacuation assembly areas

6.1. TSF

- Earthen Bunds situated below the stockpiled material to contain any potential spill.
- Earthworks are the primary method for managing any potential incidents involving tailings spills.
- All applicable PPE

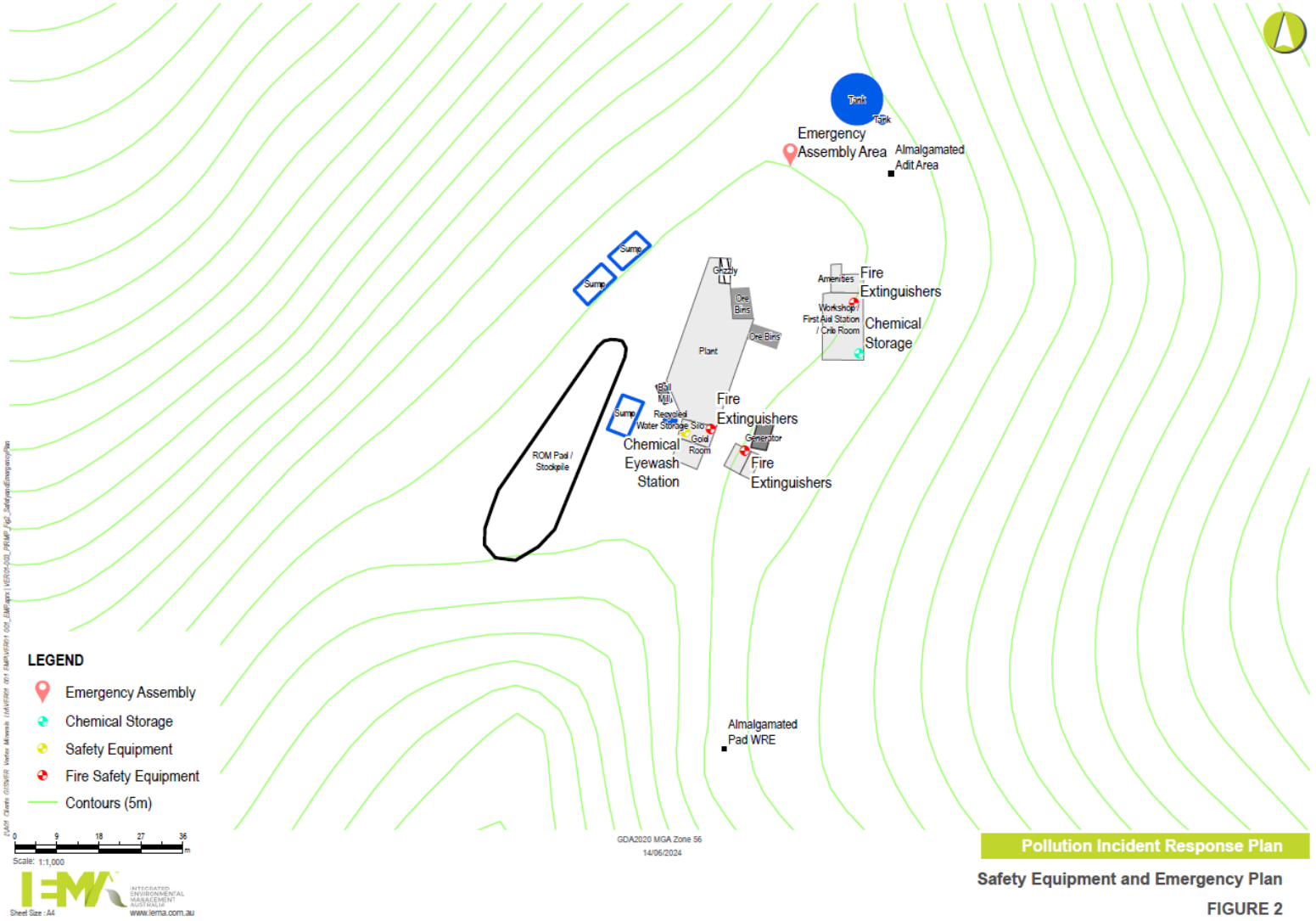

Figure 2 Safety Equipment and Emergency Plan

7. ACTIONS TO BE TAKEN

7.1. Pre-Emptive Actions to be Taken.

Ensuring safety in both the mine and its surroundings is a top priority. Proactive measures include the actions listed in **Table 5**, with further mitigation strategies detailed will be in the Vertex Environmental Management Plan, once operational.

Table 5 Pre-emptive Actions

Aspect	Action
General	Inductions and training of site and contractors. Standard operating procedures. Risk framework. Clear communication between management, operators, contractor, and community.
Air Quality	Air quality monitoring and reporting once operational. Regular inspection and maintenance of monitoring, construction, and operational equipment. Dust mitigation measures such as watering of roads and speed limits when required.
Water	Planned drainage around site. Regular inspection and maintenance of water infrastructure/potentially affected infrastructure (e.g., dams, drainage, discharge points) Waste water and water management assessments in the initial phases of construction / operation. Water quality monitoring.
Noise	Noise assessments in the initial phases of operation. Noise monitoring and reporting once operational.
Blast	Blast assessments in the initial phases of operation. Blast monitoring and reporting once operational.
Fire Management	Smoke detection systems. Fire extinguishing equipment is located at the mine office, workshop and around the various locations around the mine site including the site processing area. Regular site slashing and mowing of grass in and around site.
Training	Mine managers are encouraged to complete an authorised chemical certification course. Employees to be trained on the job for specific hazardous substances, including their safe use, handling, and storage.
Safety Equipment	All PPE and safety equipment is to be maintained, inspected, and stored on site. Fire safety equipment is regularly inspected.

Aspect	Action
Storage	Limited quantities of dangerous materials stored onsite (as documented in the Chemical Register). A spill kit onsite tailored to accommodate the quantity and nature of stored chemicals. Regular inspections are conducted in hazardous substance storage areas. Proper containment of chemicals and potential pollutants ensured.
TSF Area	Regular assessments of the TSF area Quality and consistent monitoring and maintenance (including weather, water, erosion) Clear planning and management Training of site personal around risks and contributors Trained and qualified personnel conduct construction and operation activities. Rain-Event Inspections Additional inspections conducted before and after periods of heavy rain to assess any impacts on the TSF structure. The TSF area is to be inspected and / or assessed monthly and/or when activities are being carried out in the vicinity. Additional inspections are to be carried out before and after periods of heavy rain. All construction, maintenance and rehabilitation earthworks are to be carried out by appropriately experienced, qualified employees or contractors. All employees or contractors who are required to undertake the above duties will conduct Pollution Incident Response Management Plan Tests.

7.2. During or Immediately After a Pollution Incident

In the case of a pollution incident:

- Call 000 if the incident presents an immediate threat to human health or property. Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are the first responders.
- Follow the Site Evacuation Procedure for pollution incidents requiring site evacuation. Staff are aware of Emergency Assembly Areas due to signage.
- Take immediate, safe action to contain and minimise environmental impact. Assess the situation visually and initiate emergency response if necessary.
- Assess and document each environmental incident promptly to prevent recurrence. Use Vertex's Incident Notification Record Sheet (**Appendix A**) and keep a copy for at least four years. Staff must report incidents to Management and act immediately to minimise human and environmental impact. Investigate and take remedial action promptly.

7.3. Immediate Notification of a Pollution Incident

Section 148 of the *POEO* Act requires holders of an EPL to report pollution incidents “immediately” instead of "as soon as practicable" This means that licensees must report pollution incidents without delay to the authorities mentioned in **Table 3**.

7.4. TSF

Immediate response actions with consideration to steps in **Section 7.2**.

- Deploy barriers, absorbents, and booms to quickly contain and isolate the spill, preventing the spread of contaminants to unaffected areas. Spill kits are strategically located throughout the site to ensure rapid deployment.
- Engage an earthmover modify the terrain as necessary to control the flow of spilled materials, reducing the risk of further spread and facilitating cleanup efforts.
- Implement measures to prevent further contamination of soil and water bodies, including preventative measures, monitoring and decontamination measures to reduce risk.

7.5. Post-Incident Actions and Clean-Up

- Hire specialised contractors for clean-up operations if needed.
- Coordination with all relevant personnel and authorities
- Maintain detailed records of the incident, including the nature of the spill, response actions taken, and any environmental impact.
- Conduct a post-incident review to assess the effectiveness of the response and update the PIRMP accordingly.

7.6. Coordinating with Persons

Unless there's an immediate need for an emergency response, the site of significant or catastrophic incidents must remain untouched or unchanged until explicit permission is given by the individual in charge of executing the PIRMP.

8. TRAINING, TESTING & REVIEW

8.1. Training and Awareness

Vertex ensures personnel and contractors are well-trained for pollution response and environmental management through various methods. Site Management coordinates the PIRMP procedure and ensures staff receive appropriate training. All on-site personnel undergo site induction covering environmental management strategies. Specific PIRMP training is provided to everyone, with details outlined in Table 8. Vertex maintains records of all training.

Table 6 Training and Awareness

Training	Frequency	Personnel
Notification of PIRMP training	12 months	Personnel responsible for PIRMP (Supervisors/Management)
MOCK PIRMP event feedback training	12 months	Personnel responsible for PIRMP (Supervisors/Management)
Spill Response Training	12 months	All employees and contractors
Periodic Toolbox Talks for Pollution Incident Response, desktop exercises and incident drills.	As required	All employees and contractors
Toolbox Talk following incident investigation to communicate lessons learned	As required	All employees and contractors
Toolbox Talk following revision of PIRMP to highlight changes	As required	All employees and contractors
Environmental Inductions	As required	All employees and contractors
Documentation records for incidents	As required	All employees and contractors

8.2. Testing the Plan

It is a legal requirement to test this plan every 12 months and within 1 month of any pollution incident.

Following the completion of the Pollution Incident Response Management Plan (PIRMP), it will undergo testing through a simulated pollution incident to verify that personnel understand their roles and responsibilities on-site. All evaluations of the management plan, including any adjustments, will be recorded and kept for EPA access upon request.

The PIRMP will undergo regular review and maintenance to uphold the accuracy and currency of the information contained within the plan.

Possible updates include:

- Contact details
- Roles and responsibilities of personal
- Potential new and or updated risks
- Mitigation measures
- Reporting information
- Procedures changes/updates
- Training assessments/improvements

The name of the person who carries out the test and the date on which the plan is tested will be recorded in a PIRMP Test Register and included in EPL annual reporting.

8.3. Procedure

Designated staff or contractors at the TSF should conduct a site assessment and risk evaluation, simulating a pollution incident for testing purposes while ensuring they are in a safe location. They must then contact via radio or mobile to report the simulated incident. Key questions to address include: the safety of the staff member/contractor, the need to contact emergency services, the status of the bund wall, movement of waste material, feasibility of spill kit deployment, need for an earth mover, and the necessity to notify relevant authorities like the EPA or SafeWork NSW. Staff should photograph the TSF for records, maintain safe communication during their return to the office, and document all details of the test. Contact lists should be reviewed and updated as part of the PIRMP test.

8.4. Review and Update

An Environmental Manager/Supervisor will oversee PIRMP revisions.

The review aims to uphold compliance with legal mandates and pinpoint areas for enhancing the PIRMP and minimising risks to human health and the environment. In the event of PIRMP testing or routine review leading to updates, significant modifications will be documented in the PIRMP update register and shared with Vertex staff and contractors.

Table 7 Version Summary

Version	Date	Change Summary
1.0	June 2024	New document
2.0	August 2024	PIRMP Test update
3.0	October 2024	Assessment update
4.0	August 2025	PIRMP Test update

8.5. Previous Version Summary

- 04 June 2020
- 05 February 2021
- 19 November 2021
- 17 March 2022
- 27 April 2022
- 15 May 2022
- 10 August 2022
- 22 August 2022
- 18 September 2022
- 25 September 2022
- 6 October 2023
- 24 October 2022
- 12 October 2023
- 07 December 2023
- 21 February 2024

- 04 April 2024
- 19 August 2024
- 24 October 2024
- 08 August 2025

9. REFERENCE LIST

NSW Environmental Protection Authority (2022) *Guideline: Pollution Incident Response Management Plans*

https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/licensing/pirmp/22p3985-pollution-incident-response-management-plans-guideline.pdf

APPENDIX A. INCIDENT NOTIFICATION RECORD SHEET

APPENDIX B. ENVIRONMENTAL INCIDENT REPORT FORM

APPENDIX C. CHEMICAL REGISTER