



Pollution Incident Response Management Plan 2024

MANAGEMENT PLAN			
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Endeavor Operations Pty Ltd
Pollution Incident Response Management Plan
END-PLN-ENV-001

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1. INTRODUCTION

1.1. Site Details

Site and Environmental Protection Licence details are described in **Table 1-1**.

Table 1-1 Site details

Company:	<i>Endeavor Operations Pty Ltd</i>
Environmental Protection Licence Number:	<i>1301</i>
Scheduled Activities:	<i>Crushing, Grinding or Separating Chemical Production Chemical Storage Extractive Activities Mining for Minerals</i>
Facility Name and Address:	<i>Endeavor Mine Via Louth Road Cobar NSW 2835</i>

1.2. Overview of Operations

The Endeavor Mine is an underground zinc/lead mining operation in Central New South Wales located approximately 47 kilometres northwest of Cobar (**Figure 1-1**).

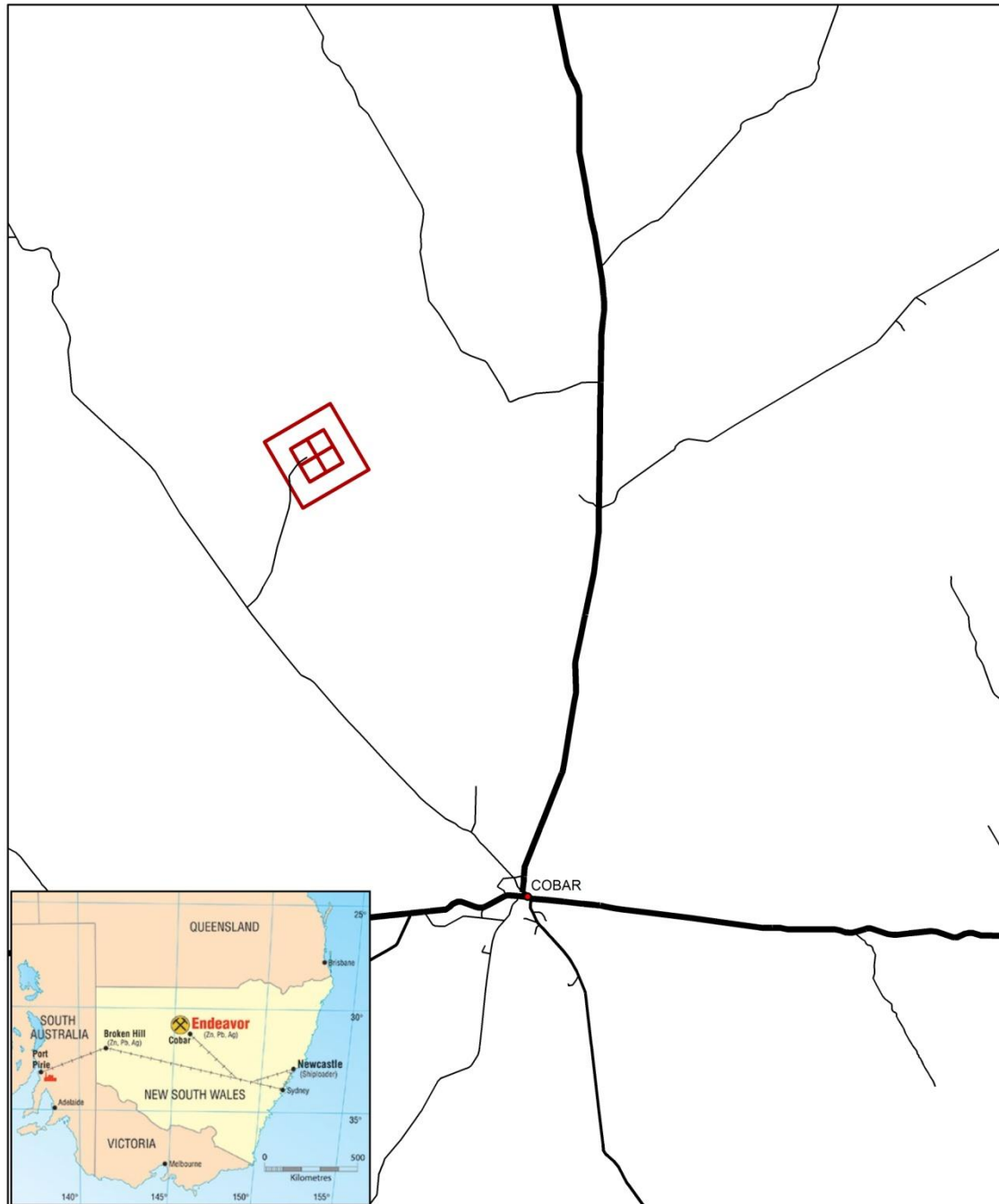
Operations include:

- an underground mining operation accessed by decline and shaft;
- a mill and concentrator with drying, storage and rail facilities;
- waste material storage facilities and associated infrastructure;
- a Paste Fill Plant for producing paste fill used for backfilling underground voids;
- surface infrastructure including workshops, administration buildings, water storages, power and water stations, electrical substations, concrete batch plant and a railway line.

From the 1st of January 2020 the mine has entered into care and maintenance and this plan has been updated accordingly. During this stage no operations will be carried out. Endeavor will be considering different alternatives for the future of the mine, such as resuming operating to develop the deep zinc lode, tailings reprocessing, sale process or continuing surface exploration. During this stage low amounts of chemical and other materials will be kept on the depots while the future of the mine is determined.



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Legend

- Populated places
- Roads**
- CLASS**
- Principal Road
- Secondary Road
- Minor Road
- Mining Lease Boundary

Scale 1:422,076
0 3 6 9 12
Kilometres
Grid: SUTM55
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Endeavor_Ortho_10cmGSD_with transparency.tif



CBH Resources Pty Ltd
Endeavor Mine, Cobar NSW

Project locality (State and Local)

Revision date: 2/07/2020
Prepared by: EOPL

Plan 2

Figure 1-1 Location Map: Endeavor Mine



2. PURPOSE

The purpose of this Pollution Incident Response Management Plan (PIRMP) is to describe the systems and processes engaged by EOPL to ensure efficient and effective response to pollution incidents in line with the requirements described in the Protection of the Environment Operations (General) Regulation 2009.

2.1. Objectives

The objectives of the PIRMP are to:

- Ensure the prompt communication of a pollution incident firstly to site management and site emergency response personnel and if required will notify without delay emergency response organisations such as Fire and Rescue NSW, Local Council, Ambulance (if required), the NSW Environment Protection Authority (EPA), NSW Resource Regulator, other relevant statutory authorities and members of the community who could be potentially impacted by the incident;
- Identify potential pollution risks and describe the pre-emptive and post incident control strategies to minimise the impact of a pollution incident.
- Ensure the response plan is maintained, tested and communicated to all EOPL employees and contractors.

3. SCOPE

This management plan applies to all EOPL employees and contractors conducting activities in all areas encompassed by Mining Leases ML 158, 159, 160, 161 and ML 930 which are controlled by Environment Protection Licence 1301.

4. KEY REFERENCES

4.1. Legislation

- NSW Protection of the Environment Operations Act 1997 (POEO Act 1997)
- NSW Protection of the Environment Operations (General) Regulation 2009 (POEO (General) Regulation 2009)
- NSW EPA, *Environmental guidelines: Pollution Incident Response Management Plans*.

4.2. EOPL References

- END-STD-SAF-001 Risk Management Standard
- END-PLN-ERS-006 Emergency Response Plan
- END-PLN-ENV-009 CTD-TSF and Sector 5 TSF Operations and Maintenance Management Plan
- END-PLN-ERS-006.2 Endeavor Mine Emergency Response Plan - Appendix B Emergency Plans
- END-PLN-ERS-006.3 Endeavor Mine – Emergency Response Plan -Appendix C Evacuation Procedure
- END-PRO-SAF-087 Notification of Incident or Injury to Regulator Procedure
- END-PLN-ERS-006.5 Emergency Response Plan – Appendix E Emergency Services and Egress Surface maps



5. LEGAL REQUIREMENTS

The following **Table 5-1** describes the legislation referred to in this Plan. **Table 5-2** refers to the relevant regulations.

Table 5-1 Legal Requirements Summary

Document	Requirement
Protection of the Environment Operations Act 1997	Section 153A - F Details the duty of licence holder to prepare pollution incident response management plan, information to be included in the plan, how the plan is to be kept, testing of the plan and implementation of the plan.
Protection of the Environment Operations (General) Regulation 2009	Clauses 98A – E Describes the requirements of the plan including: form, inclusions, availability and testing.

Table 5-2 POEO (General) Regulation 2009, PIRMP requirements and how addressed by EOPL

Clause Number	Requirement	Section in PIRMP
98C(1)(a)	A description of the hazards to human health or the environment associated with the activity to which the licence relates (the relevant activity).	Section 9
98C(1)(b)	The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood.	Section 9
98C(1)(c)	Details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity.	Section 9
98C(1)(d)	An inventory of potential pollutants on the premises or used in carrying out the relevant activity.	Section 9 and 11
98C(1)(e)	The maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates.	Section 11
98C(1)(f)	A description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident.	Section 12
98C(1)(g)	The names, positions and 24-hour contact details of those key individuals who: (i) are responsible for activating the plan; (ii) are authorised to notify relevant authorities under section 148 of the Act; and (iii) are responsible for managing the response to a pollution incident.	Section 13
98C(1)(h)	The contact details of each relevant authority referred to in section 148 of the Act.	Section 14
98C(1)(i)	Details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the premises to which the licence relates or where the scheduled activity is carried on.	Section 7 and 10
98C(1)(j)	The arrangements for minimising the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on.	Section 10
98C(1)(k)	A detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises.	Figure 1-1 to Figure 11-4
98C(1)(l)	A detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk.	Section 9 and 12



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Clause Number	Requirement	Section in PIRMP
98C(1)(m)	The nature and objectives of any staff training program in relation to the plan.	Section 15
98C(1)(n)	The dates on which the plan has been tested and the name of the person who carried out the test.	Section 16
98C(1)(o)	The dates on which the plan is updated.	Document Control System and document footer
98C(1)(p)	The manner in which the plan is to be tested and maintained.	Section 16



6. DEFINITIONS

Table 6-1 Definitions

Term	Definition
A pollution incident	<i>“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”.</i>
Material harm to the environment	<ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> 1. harm to the environment is material if: 2. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or 3. 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 • 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	<i>“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”.</i>



7. ACCOUNTABILITIES

Table 7-1 details the EOPL roles with specific duties under this plan, as well as the level of responsibility. This table has been updated to fit the current care and maintenance staff and personnel on site.

Table 7-1 Accountabilities and Responsibilities of EOPL Officers

Role	Responsibility
Site Manager Site Coordinator	<ul style="list-style-type: none"> • Ensure compliance with the requirements of this management plan; • Ensure adequate resources are provided to meet requirements of this plan; • Ensure communications processes are established to communicate relevant information with internal and external stakeholders; • Manage the emergency situation as Leader of Emergency Response (LER); and • Notify external stakeholders of incident
Environmental Officer	<ul style="list-style-type: none"> • Assess materiality of incident and activate response system; • Assess potential for off-site impacts and notify the General Manager as required; and • Conduct an annual review and test of the plan.
Site Coordinator Environmental Officer	<ul style="list-style-type: none"> • Ensure compliance with the requirements of this plan within site; • Ensure adequate resources are provided to meet the requirements as identified in this plan; and • Assumes the role of Incident Controller (IC).
All site personnel and contractors	<ul style="list-style-type: none"> • Report actual or potential pollution incidents immediately.

8. REVIEW

Pollution Incident Response Management Plan shall be reviewed 12 months after the Implementation of the plan and at least every 2 years thereafter.

9. HAZARDS AND RISK MANAGEMENT

END-STD-SAF-001 Risk Management Standard describes the minimum requirements for managing risk at EOPL, including: identifying and assessing hazards, determining and implementing controls, and auditing the effectiveness of risk controls. EOPL have identified aspects of its operation with the potential to cause a pollution incident. These scenarios are provided in **Table 9-1** along with a risk assessment for each aspect and pre-emptive and post incident control measures, the potential pollution incident risks have been reassessed for the care and maintenance stage of the mine, by maintaining the applicable hazards identified in operation and assessing them during the care and maintenance stage.



Table 9-1 Pollution Incident Risks

Hazard	Potential Pollution Incident and conditions influencing likelihood of occurrence	Likelihood of incident occurring	Consequence of incident	Proposed Actions <ul style="list-style-type: none">Pre –emptive actions (i.e. controls)Control Actions (i.e. incident actions)
		RISK		
Bulk Chemical and Hydrocarbon Transport	<p><i>Polluting Incident</i></p> <ul style="list-style-type: none">Chemical and/or hydrocarbon spill to land within Endeavor’s mining leases from external delivery trucks.During the care and maintenance stage the probability of this happening is very low near null. No bulk chemicals or hydrocarbon are expected to arrive to site through truck tanks. Hydrocarbons or chemicals will arrive in small batches if required. <p><i>Influencing Conditions (i.e. potential incident causes)</i></p> <ul style="list-style-type: none">Impact/damage to vehicle releasing hydrocarbons and/or chemicalsFailure of part of the vehicle, such as a one way valve, releasing hydrocarbons and/or chemicals.Hydrocarbons and/or chemicals not stored correctly	Rare	Major	<p><i>Pre-emptive Actions (i.e. controls)</i></p> <ul style="list-style-type: none">Only suppliers that have adequate controls in place and hold a licence for the goods that they are transporting, such as a dangerous goods licence, are engaged. Ensure SDS is availableSpeed limits are implemented along the mine’s access road. <p><i>Incident control actions (i.e. post-incident actions)</i></p> <ul style="list-style-type: none">For small spills (i.e. spills that can be contained with a spill kit) or spills that pose a limited hazard:<ul style="list-style-type: none">Stop release at sourceContain release using spill kitsRemediate areaFollow END-PLN-ERS-006 Emergency Response Plan for spills that cannot be contained using spill kits or for spills of a hazardous nature.Report the incident to the Environmental Department.
		Medium (10)		
Hydrocarbon Storage	<p><i>Polluting Incident</i></p> <ul style="list-style-type: none">Hydrocarbon spill to land from bulk tanks and storage areas <p><i>Influencing Conditions (i.e. potential incident causes)</i></p> <ul style="list-style-type: none">Breakage of pipe or fittingImpact/damage to tank/racks or bunding releasing diesel or oilHydrocarbons not stored correctly	Rare	Significant	<p><i>Pre-emptive Actions (i.e. controls)</i></p> <ul style="list-style-type: none">Appropriately designed and constructed bunding for all bulk tanks and drum storages (see END-PRO-ENV-023 Hydrocarbon Storage Handling and Disposal Procedure)Follow the designated procedure when storing Hydrocarbon in the Hydrocarbon Waste Depot (see END-PRO-ENV-025 Waste Hydrocarbon Depot Procedure).
		Medium (6)		



Table 9-1 Pollution Incident Risks				
Hazard	Potential Pollution Incident and conditions influencing likelihood of occurrence	Likelihood of incident occurring	Consequence of incident	<div>Proposed Actions<ul style="list-style-type: none">Pre –emptive actions (i.e. controls)Control Actions (i.e. incident actions)</div>
		RISK		
				<div><ul style="list-style-type: none">Spill kits located on siteRegular inspections and maintenanceContinuing education through toolbox meetingsCompliant refuelling systems used supply contractorSite induction for all employees and contractors<p><i>Incident control actions (i.e. post-incident actions)</i></p><ul style="list-style-type: none">Follow END-PRO-ENV-009 Hydrocarbon Spill Response Procedure for small spills (i.e. spills that can be contained using a spill kit)<ul style="list-style-type: none">Stop release at source/s if safe to do soContain release using spill kit contentsRemediate areaReport the incident to the Environmental Officer, who will assess if any environmental harm was caused, and notify (if required) to the Regulators.Follow END-PLN-ERS-006 Emergency Response Plan for spills that cannot be contained using a spill kit.</div>
Chemical Storage	<p><i>Polluting Incident</i></p> <ul style="list-style-type: none">Chemical spill to land from bulk tanks and storage areas <p><i>Influencing Conditions (i.e. potential incident causes)</i></p> <ul style="list-style-type: none">Breakage of pipes or fittingsImpact/damage to tank/racks or bunding releasing chemicalRelease of chemicals during transportation from storage area to workshops or other locationsChemicals not stored correctly	Rare	Significant	<p><i>Pre-emptive Actions (i.e. controls)</i></p> <ul style="list-style-type: none">END-STD-ENV-002 Dangerous Goods Standard and END-STD-SAF-002 Chemical Management Standard are implemented.Appropriately designed and constructed bunding for all bulk tanks and drum storagesRegular inspections and maintenanceContinuing education through toolbox meetingsCompliant refuelling systems used supply contractorSite induction for all employees and contractors <p><i>Incident control actions (i.e. post-incident actions)</i></p>
		Medium (6)		



Table 9-1 Pollution Incident Risks

Hazard	Potential Pollution Incident and conditions influencing likelihood of occurrence	Likelihood of incident occurring	Consequence of incident	Proposed Actions <ul style="list-style-type: none">Pre –emptive actions (i.e. controls)Control Actions (i.e. incident actions)
		RISK		
				<ul style="list-style-type: none">For small spills (i.e. spills that can be contained with a spill kit) or spills that pose a limited hazard:<ul style="list-style-type: none">Stop release at sourceContain release using spill kitsRemediate areaReport the incident to the Environmental Officer.Follow END-PLN-ERS-006 Emergency Response Plan for spills that cannot be contained using spill kits or for spills of a hazardous nature.
Central Thickened Discharge Tailings Storage Facility (TSF)	<p><i>Polluting Incident</i></p> <ul style="list-style-type: none">Dam wall collapse releasing tailings or contaminated water on to landDam wall overtopping releasing tailings or contaminated water to land.During the care and maintenance stage there would not be additional deposition of tailings to the TSF. <p><i>Influencing Conditions (i.e. potential incident causes)</i></p> <ul style="list-style-type: none">Poor maintenance of dam wallsNot following dam management procedureMajor rainfall/storm event	Rare	Catastrophic	<p><i>Pre-emptive Actions (i.e. controls)</i></p> <ul style="list-style-type: none">TSF designed and construction supervised by suitably qualified engineerTSF operated in accordance with the CTD TSF Operations and Maintenance Manual, which prescribes a Maximum Operating Level and is approved by Dam Safety NSWDaily and monthly routine inspections carried out during operations; during care and maintenance monthly dam inspections are carried out. <p><i>Incident control actions (i.e. post-incident actions)</i></p> <ul style="list-style-type: none">Cease pumping of tailings into TSF or divert flow to alternate area of TSF, if operatingControl release of tailings or water by installing temporary earth bunding down slope of releaseFollow END-PLN-ERS-006 Emergency Response PlanCarryout repairs to TSF walls where necessaryRemediate area that maybe impacted upon by release.Report incident to relevant stakeholders and regulators.



Table 9-1 Pollution Incident Risks				
Hazard	Potential Pollution Incident and conditions influencing likelihood of occurrence	Likelihood of incident occurring	Consequence of incident	Proposed Actions <ul style="list-style-type: none"> • Pre –emptive actions (i.e. controls) • Control Actions (i.e. incident actions)
		RISK		
Surface water storage	<i>Polluting Incident</i> <ul style="list-style-type: none"> • Overtopping of surface water catchment dams/ponds releasing contaminated water onto land <i>Influencing Conditions (i.e. potential incident causes)</i> <ul style="list-style-type: none"> • Poor maintenance of dams/drains ponds • Major rainfall/storm event 	Rare	Major	<i>Pre-emptive Actions (i.e. controls)</i> <ul style="list-style-type: none"> • Catchments, ponds/dams and drains designed and located in accordance with regulator approved Surface Water Management Plan • Regular drain maintenance carried out • Regular inspections carried out <i>Incident control actions (i.e. post-incident actions)</i> <ul style="list-style-type: none"> • Cease flow of water into dam/pond via diversions or pumping • Follow END-PLN-ERS-006 Emergency Response Plan • Remediate area that maybe impacted upon by release
		Medium (10)		
Sewerage Treatment	<i>Polluting Incident</i> <ul style="list-style-type: none"> • Raw or treated sewerage is released onto land <i>Influencing Conditions (i.e. potential incident causes)</i> <ul style="list-style-type: none"> • Leak aeration tanks or pipe fittings causing release to land • Sewer main break or damage caused by machinery causing release to land 	Rare	Significant	<i>Pre-emptive Actions (i.e. controls)</i> <ul style="list-style-type: none"> • Preventative maintenance carried out • Ground disturbance permit required prior to any excavation being allowed • Routine inspection of the Sewerage Treatment Plant <i>Incident control actions (i.e. post-incident actions)</i> <ul style="list-style-type: none"> • Contain and barricade the spill (only authorised personnel are to enter the spill area for health reasons) • Report the spill to first aid, who will enact END-PLN-ERS-006 Emergency Response Plan • Apply disinfectant to the spill (e.g. solution with at least 200ppm of chlorine), leaving it to soak for at least 30minutes (reapply if it dries out in that time) • Keep the spill barricaded for 24hours • Hose down the spill or, if necessary, remediate the area
		Medium (6)		



Table 9-1 Pollution Incident Risks

Hazard	Potential Pollution Incident and conditions influencing likelihood of occurrence	Likelihood of incident occurring	Consequence of incident	Proposed Actions <ul style="list-style-type: none">Pre –emptive actions (i.e. controls)Control Actions (i.e. incident actions)
		RISK		
Mobile Plant	<i>Polluting Incident</i> <ul style="list-style-type: none">Release of oil/fuel from plant <i>Influencing Conditions</i> <ul style="list-style-type: none">Damage due to plant collisionPoor maintenanceEquipment failure	Unlikely	Major	<i>Pre-emptive Actions</i> <ul style="list-style-type: none">Spill kits located on siteRegular inspections and maintenanceContinuing education through toolbox meetingsCompliant refuelling systemsSite induction for all employees and contractors <i>Incident control actions:</i> <ul style="list-style-type: none">Stop release at sourcesContain release using spill kits or earth bundingFollow incidence response plan and procedureRemediate area
		Medium (14)		
		High (15)		
Ground water seepage	<i>Pollution Incident</i> <ul style="list-style-type: none">Seepage from surface water storages and TSF to land and groundwater <i>Influencing Conditions</i> <ul style="list-style-type: none">Failure of interception trench pumpsBlockage of interception trenchesTransformer failure or long term power failure	Unlikely	Major	<i>Pre-emptive Actions</i> <ul style="list-style-type: none">Routine monitoring of piezometer depths carried outRoutine monitoring of ground water in piezometers carried outDaily inspections carried out of all pumps and trenches surrounding TSF and evaporation dam during operation, monthly inspections during care and maintenance.Backup diesel pumps on site <i>Incident control actions</i> <ul style="list-style-type: none">Carryout repair or improvement works to interception trench pumping systemsConnect diesel pumps to system in the event of long term power interruption and remediate area.
		Medium (14)		



Table 9-1 Pollution Incident Risks

Hazard	Potential Pollution Incident and conditions influencing likelihood of occurrence	Likelihood of incident occurring	Consequence of incident	Proposed Actions <ul style="list-style-type: none">• Pre –emptive actions (i.e. controls)• Control Actions (i.e. incident actions)
		RISK		
Air Quality	<i>Dust Emissions</i> <ul style="list-style-type: none">• Emission of excessive dust from mining operations, resulting in complaints from neighbours. <i>Influencing Conditions</i> <ul style="list-style-type: none">• Unsealed roads,• crushing/processing of ore,• TSF operations,• construction/demolition operations.	Rare	Moderate	<i>Pre-emptive Actions</i> <ul style="list-style-type: none">• Dust suppression (water sprays, water carts)• Dust monitoring• Covering of haul trucks/trains• Weather forecast factored into operations management <i>Incident control actions</i> <ul style="list-style-type: none">• Stop release at source/stop the dust generating activities where safe to do so• Follow incidence response plan and emergency response procedure
		Low (3)		
Bush Fire	<i>Bush Fire</i> <ul style="list-style-type: none">• from vehicle/machinery malfunctions igniting fire,• uncontrolled hot work,• human error or sabotage or;• natural causes such as lightning, natural veldt fires; <i>Influencing Conditions</i> <ul style="list-style-type: none">• influenced by high winds and• hot weather conditions	Rare	Moderate	<i>Pre-emptive Actions</i> <ul style="list-style-type: none">• <i>Bushfire management plan</i>• <i>Fire breaks</i>• <i>Preventive maintenance of vehicle/machinery.</i>• <i>Hot work permit system</i> <i>Incident control actions</i> <ul style="list-style-type: none">• Fire suppression systems• Fire truck and emergency rescue team• Follow incidence response plan and emergency response procedure• Remediation and Rehabilitation plans
		Low (3)		



Table 9-1 Pollution Incident Risks				
Hazard	Potential Pollution Incident and conditions influencing likelihood of occurrence	Likelihood of incident occurring	Consequence of incident	Proposed Actions <ul style="list-style-type: none">• Pre –emptive actions (i.e. controls)• Control Actions (i.e. incident actions)
		RISK		
Gas Storage	<p><i>Pollution Incident</i></p> <ul style="list-style-type: none">• Uncontrolled release of gas to atmosphere• Low quantities of gases are stored during care and maintained on site. The amount of gas cylinders are usually only the ones in use, there is no additional storage of gas cylinders. <p><i>Influencing Conditions</i></p> <ul style="list-style-type: none">• Impact/damage to cylinders releasing diesel or oil• Cylinders not stored correctly• Cylinders not transported correctly	Rare	Moderate	<p><i>Pre-emptive Actions</i></p> <ul style="list-style-type: none">• No bulk gas tanks used on site• All cylinders stored in secure gas yard• All cylinders stored in secure purpose build cabinets• All cylinders secured to forklift or utility/truck during transport around site• Continuing education through toolbox meetings• Site induction for all employees and contractors <p><i>Incident control actions</i></p> <ul style="list-style-type: none">• Stop release at source where safe to do so• Test atmosphere if in confined area• Follow incidence response plan and emergency response procedure.
		Low (3)		
Explosives	<p><i>Pollution incident</i></p> <ul style="list-style-type: none">• Uncontrolled detonation of explosives• Uncontrolled release of emulsion onto land• Uncontrolled release of gasser on to land <p><i>Influencing Conditions</i></p> <ul style="list-style-type: none">• Security breach in magazine• Fire in magazine yard• Impact/damage to emulsion tank	Rare	Catastrophic	<p><i>Pre-emptive Actions</i></p> <ul style="list-style-type: none">• Workcover approved Explosives Security Plan in place• Only appropriately ticketed employees permitted to access explosives• Site induction for all employees and contractors• External Audits of dangerous goods storage areas• All explosives stored in approved structures• Vegetation management carried out surrounding explosive storages <p><i>Incident control actions:</i></p> <ul style="list-style-type: none">• Follow END-PLN-ERS-006 Emergency Response Plan for spills that cannot be contained using spill kits or for spills of a hazardous nature• Have explosives expert declare area safe• Remediate area
		High (15)		



10. POLLUTION INCIDENT RESPONSE

EOPL's emergency response protocols are described in END-PLN-ERS-006 Emergency Response Plan. This plan includes responding to environmental incidents.

In the event of a pollution incident resulting in potential or actual environmental harm, relevant NSW Government Authorities are to be notified in accordance with END-PRO-SAF-087 Notification of Incident or Injury to Regulator Procedure. In the event of pollution incident with the potential to impact nearby land owners, the Site Manager or delegate is to notify the land owner by telephone. The contact details of neighbouring land owners are maintained by the Environment Department. In the event of a pollution incident resulting in potential harm to persons on the EOPL premises the site's evacuation procedure is to be enacted as per END-PLN-ERS-006 Endeavor Mine Emergency Response Plan, Appendix C Evacuation Procedure.

11. INVENTORY OF POLLUTANTS

A list of potential pollutants at EOPL along with their storage locations and maximum volumes is provided in **Table 11-1**. Other pollutants identified on site that pose a potential risk are detailed in **Table 11-2**. A site plan depicting the storage locations of the items listed in the Dangerous Goods Pollutant Inventory is provided in **Figure 11-1**. A site plan depicting the storage locations of the items listed in the Other Potential Pollutant inventory is provided as **Figure 11-3**.

Table 11-1 Dangerous Goods Depots

Depot Number*	Depot Type	DG Class	Max Volume Stored	Potential Pollutant
1	External Magazine	1(1.1D)	30,000kg	Explosives
2	External Magazine	1(1.1B)	1000kg	Detonators
3	External Magazine	1(1.1B) and 1(1.4B)	1000kg	Detonators
5	Above Ground Tank	3(C1)	60,000L	Diesel
6	Above Ground Tank	3(C2)	25,000L	Lubricants (oil)
7	Above Ground Tank	3(C2)	55,000L	Waste oil
8	Above Ground Tank	3(C1)	55,000L	Diesel
10	Roofed Store	4.2(III)	60,000kg	Xanthates
11	Roofed Store	8(II)	4000kg	Sodium Hydroxide
12	Roofed Store	8(III)	1600L	Sodium Hypochlorite
14	Roofed Store	8(II) and 8(III)	1000L	Acids
16	Cylinder Store	2.1 and 2.2	5,700L	Acetylene/ Oxygen
17	Above Ground Tank	8(II)	60,000L	Sulphuric Acid
18	Drum Store	8(III)	615L	Sodium Hypochlorite
19	Open Store	C2	39,680L	Oil Drum Storage
21	Silo	5.1(II)	40,000kg	Ammonium Emulsion Phase
23	Open Store	5.1(III)	2000kg	Gasser Products
24	Roofed Store	9(III)	132,000kg	Copper Sulphate

*missing numbers represent depots that were previously included in Endeavor's Hazardous Chemical Manifest.



Most of the Depots are empty during the care and maintenance stage of the mine, no explosives, detonators, gasser products or ammonium emulsions will be stored on site. Low quantities of diesels, oils and waste oils will be kept for maintenance activities. Minor remaining quantities of chemicals in the reagent roofed storage will be removed/disposed during the care and maintenance stage of the mine.

Table 11-2 Other Potential Pollutant Inventory

Storage Name	Amount Stored	Pollutant
Central Thickened Discharge Tailings Storage Facility	Approx. 19,000 ML	Mineralised Milled Tailings
Sector 5 Tailings Storage Facility	Approx. 2,500 ML	Mineralised Milled Tailings
Retention Dam	48 ML	Contaminated Water (metals)
Supergene Dam	17 ML	Contaminated Water (metals)
Pontoon Dam	24 ML	Contaminated Water (metals and pH)
Evaporation Dam	450 ML	Contaminated Water (metals and pH)
Scotty's Dam	7.8 ML	Contaminated Water (metals and pH)
Ore Processing Plant	Not applicable	Ore, Zinc Concentrate, Lead Concentrate, Process Water



Figure 11-1: Hazardous Substance Location Map



Figure 11-2: Dangerous Goods Stores



Figure 11-3: Other Pollutant Locations



Legend

 Hydrocarbon waste storage

Scale 1:4,421
0 0.03 0.06 0.09 0.12
Kilometres
Grid: SUTM55
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994



CBH Resources Pty Ltd
Endeavor Mine, Cobar NSW
Hydrocarbon Waste Storage

Revision | A
Date | 7/08/2020

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Figure 11-4 Location of the Waste Hydrocarbon Depot



12. SAFETY EQUIPMENT

The safety equipment and other devices that are used to minimise risks to human health or the environment and to contain or control a pollution incident:

- Bunded storages;
- Sand Storage (The Mill);
- Chemical and flammable goods storage cabinets compliant with AS1940 and AS3780;
- Appropriate PPE for all chemicals used on site;
- Spill kits located in all workshops and areas where hydrocarbons are stored or used;
- Chemical suits and breathing apparatus for use in the event of a spill or hazardous atmosphere;
- Gas monitoring equipment; and
- Earth moving equipment for the creation of earth bunds or clean up in the event of a spill

13. SITE CONTACT DETAILS

The names, positions and contact details of key site personnel with responsibility for managing a pollution event are listed in Table 13-1.

Table 13-1 Endeavor Mine Contacts

Name	Position	Phone	Email
Patrick Mukwindidza	Site Manager	(02) 6830 9464 Office Hours 0419 683 760 After hours	mukwindidzap@endeavor.com.au
Daniel Nash	Site Coordinator	(02) 6830 9456 Office Hours 0427 537 000 After hours	dnash@endeavor.com.au
Judah Magaya	Environmental Officer	(02) 6830 9428 Office Hours 0459 831 642 After hours	magaya@endeavor.com.au



14. GOVERNMENT AGENCY CONTACT DETAILS

The contact details of NSW Government Authorities relevant to this plan are listed in Table 14-1.

Table 14-1: NSW Government Authorities contact details

AGENCY	TELEPHONE NUMBERS
NSW Environment Protection Authority (EPA)	EPA Hotline 131 555
SafeWork	13 10 50
Cobar Shire Council	02 6836 5888
Dubbo Public Health Unit (Far West and Western NSW LHD)	02 6885 8666 - 0418 866 397
NSW Division of Resources and Energy	1300 736 122
Dam Safety NSW	0403 681 645
Fire and Rescue NSW	000 or (02 6836 2722)

15. TRAINING

All EOPL employees, contractors and visitors shall be briefed on their responsibilities under this plan as part of the site induction requirements. A copy of this plan is to be maintained on the site intranet and made publically available on the CBH Resources website.

16. TESTING AND REVIEW

This plan is to be tested and reviewed annually. The testing and review process involves: reviewing the plans content for currency and relevance, and conducting a desktop pollution incident simulation.

Review and testing records are to be maintained by the Endeavor Environment Department and stored in:

- The Endeavour Mine Document Management System.

**17. SUMMARY OF CHANGES**

DATE	VERSION	RESPONSIBLE	DESCRIPTION
20/07/2022	7.0	PU	Updated the plan for care and maintenance, updated contact details, Table 5-2, Table 7-1, Table 9-1, removed the hazard of concentrate transport. Included comment in section 11 about current state of depots.
21/07/2023	7.1	PU	Updates in Table 9-1 (include minor changes from desktop scenario review)
18/06/2024	7.2	JM	Updates in Table 9-1 (include additions the Pollution Incident Risks)