

Environmental Management Strategy



Executive Summary

This Environmental Management Strategy (EM Strategy) has been developed to address the environmental management requirements of SSD 7142 and Environment Protection Licence (EPL) 3141 as relevant to open cut mining operations associated with the United Wambo Open Cut Coal Mine Project (United Wambo).

The key management and mitigation measures contained within the EM Strategy are included in *Table*.

Table 1: Environmental Management and Mitigation Measures

No.	Mitigation/Management Measure	Section	Timing
1	Prior to the commencement of Phase 2 the Rehabilitation Management Plan (RMP) will be updated to incorporate open cut mining activities at Wambo.	8.3.1.6	Prior to Phase 2
2	A Conceptual Mine Closure Plan will be prepared for United Wambo within 12 months of commencement of Phase 2. The Plan will be conceptual as the operation has a Life of Mine (LOM) of greater than five years. Mine closure requirements contained in the EIS and in the consent for SSD 7142 and the Wambo consents are to be integrated into this Plan.	8.4 and 9.6.11	Within 12 months of commencement of Phase 2
3	A detailed Mine Closure Plan will be prepared for United Wambo within five years prior to mine closure in accordance with Condition B93 of SSD 7142.	8.4	Five years prior to mine closure
4	In accordance with SSD 7142, in the event a non-compliance with any environmental impact assessment criteria is identified, United Wambo will notify DPIE and any affected landowners and/or existing or future tenants (including tenants of mine-owned properties) accordingly, and provide monthly monitoring results to each of these parties until the results show that the operation is complying with the relevant criteria.	9.3	As required
5	In the event of a disagreement between United Wambo and a member of the community, the United Wambo ECM and/or United Wambo Operations Manager will undertake the necessary liaison and communication to reach a resolution, which may include a meeting with the complainant to discuss the issue. Where relevant, negotiations will be initiated in accordance with SSD 7142 conditions for United Wambo.	9.3.2	As required
6	Prior to the commencement of Phase 2, United Wambo will prepare a Rehabilitation Strategy in accordance with Condition B87 of SSD 7142.	9.6.10	Prior to Phase 2
7	Each of the offset areas will have their own management plans which will be developed as part of the Stewardship Agreements to be prepared with 12 months of commencement of operations at United Wambo.	9.6.12	Within 12 months of commencement

No.	Mitigation/Management Measure	Section	Timing
8	In accordance with SSD 7142, in the event a non-compliance with any environmental impact assessment criteria is identified through environmental monitoring, United Wambo will notify DPIE and any affected landowners and/or existing or future tenants (including tenants of mine-owned properties) accordingly, and provide monthly monitoring results to each of these parties until the results show that the operation is in compliance with the relevant criteria.	10.1.1	A required
9	Within three months of commissioning an audit required by the conditions of consent, or as otherwise agreed by the Planning Secretary, United Wambo will submit a copy of the audit report to the Planning Secretary with a response to any recommendations contained in the audit report and a timetable for the implementation of the recommendations.	10.3	As required
10	Additionally, any non-compliance resulting in an environmental incident will be managed in accordance with Section 9.5.2 .	10.4	Ongoing
11	Internal reporting will be undertaken in accordance with relevant United Wambo internal reporting requirements.	Table 10-1	Ongoing
12	Within seven days of becoming aware of a non-compliance with any of the conditions of SSD 7142, United Wambo must also notify DPE of the non-compliance.	10.5.3	As required
13	This report will be prepared by the ECM and approved by the United Wambo Operations Manager prior to submission to external agencies.	10.5.3	As required
14	Written details of the incident will be provided to the Secretary and the EPA within seven days of the date on which the incident occurred.	10.5.3.1	As required
15	Review of the EMS and EM Strategy will be undertaken to assess the suitability and effectiveness of the systems used to manage environmental issues at United Wambo and compliance with the GCAA requirements, legislation, approvals and licences.	11.1	Ongoing
16	United Wambo will implement all reasonable and feasible best practice mitigation measures throughout operations.	11.2	Ongoing
17	Through the development of corrective/preventative actions, United Wambo will investigate and implement, where practicable, ways to minimise impacts generated by operations.	11.2	Ongoing

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1. Project Design

The United Wambo Open Cut Coal Mine (United Wambo) is situated approximately 15 kilometres west of Singleton, near the village of Warkworth, New South Wales (*Figure 1-1*). United Wambo is a 50:50 joint venture between neighbouring mines operated by United Collieries Pty Limited (United), owned 95 per cent by Abelshore Pty Limited, a wholly owned subsidiary of Glencore Coal Pty Limited (Glencore) and five per cent by the Construction, Forestry, Maritime, Mining and Energy Union (CFMMEU), and managed by Glencore, and Wambo Coal Pty Limited (Wambo), a subsidiary of Peabody Energy Australia Pty Limited (Peabody).

The Project includes open cut mining operations in two areas:

- the United Open Cut (United Pit); and
- ongoing mining of the approved Wambo Open Cut (Wambo Pit) with a proposed minor surface boundary extension in addition to a depth increase to maximise coal recovery.

The project will enable the extraction of an additional approximately 150 million tonnes (Mt) of run-of-mine (ROM) coal over 23 years, delivering up to 10 million tonnes per annum (Mtpa) of ROM coal from the combined operations of the United and Wambo Open Cuts. The project will deliver ROM coal to the Wambo coal handling and preparation plant (CHPP), along with coal deliveries from the Wambo underground. All coal is transported by rail from Wambo to the Port of Newcastle for export. Total production deliveries to the Wambo CHPP will be limited to the currently approved production rate of 14.7 Mtpa ROM.

In addition to integrated open cut mining at United and Wambo, the project will require changes to existing mining and public infrastructure within the project area including:

- ongoing use of the Wambo CHPP, mine infrastructure area and related facilities for the life of the project;
- ongoing use of the Wambo train loading facility for the life of the project;
- ongoing use of, upgrades to, and expansion of the existing Wambo and United mining infrastructure; and
- realignment of a two kilometre section of the Golden Highway and the relocation of sections of 330 kV and 66 kV transmission lines to maximise coal recovery from the United Open Cut.

An overview of the Project is shown in *Figure 1-2*.

Open cut mining will be managed by United Wambo on behalf of the joint venture, whilst Wambo manages the CHPP and train loading facilities as well as Wambo's continued underground operations in accordance with the existing Wambo environmental management system.



Figure 1-1: Project Locality

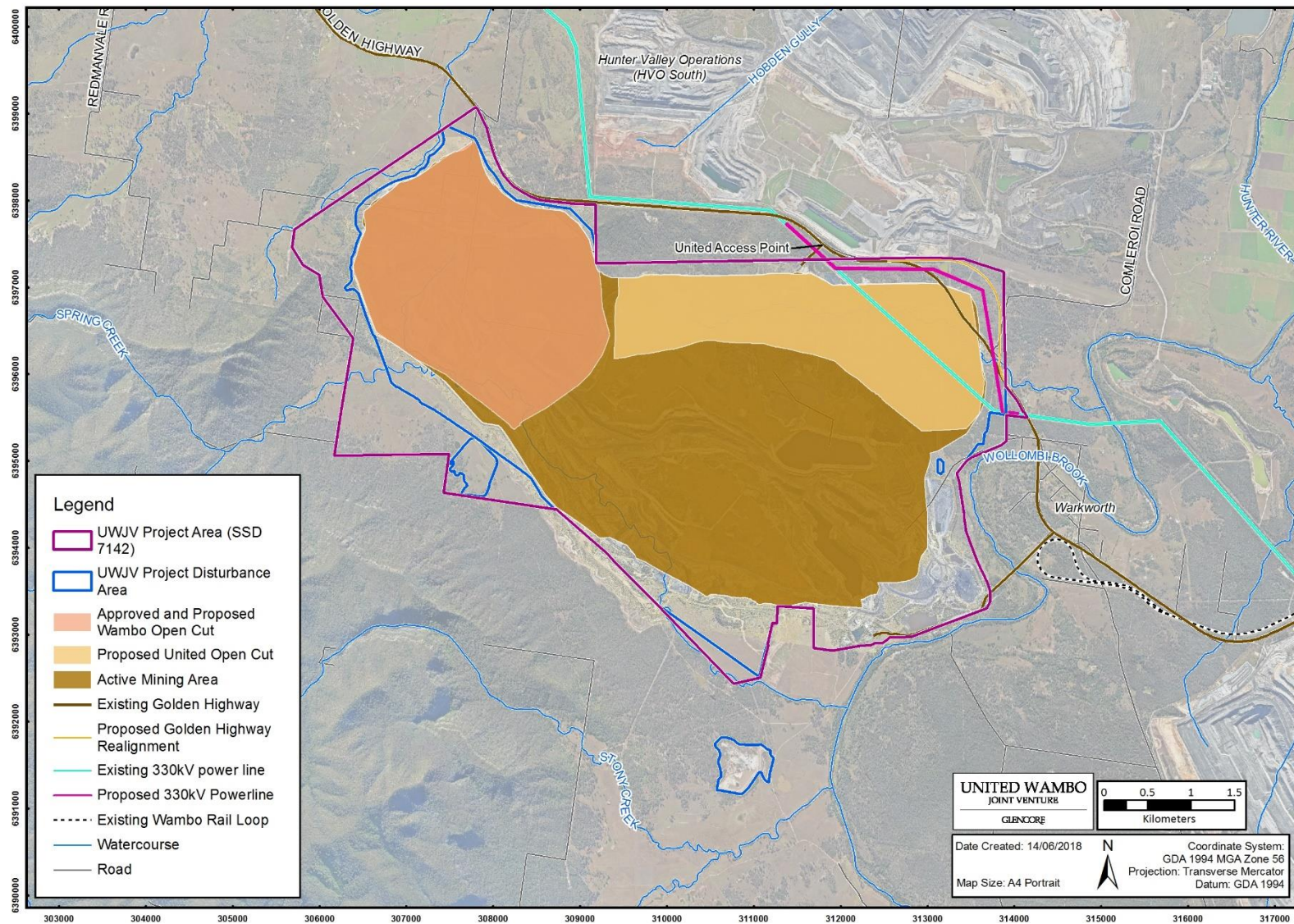


Figure 1-2: Project Overview

Number: UWOC-1689771511-360
Owner: Environment & Community Manager

Status: Final
Version: 2.1

Effective:
Review:

2. Purpose

The purpose of the United Wambo Environmental Management Strategy (EM Strategy) is to:

- document and implement the systems and processes, which provide the means to apply consistent environmental and community management across United Wambo;
- ensure adherence to statutory requirements, including regulatory approvals and licences;
- comply with applicable legislation, standards, codes and other external requirements;
- align United Wambo's operating philosophy with the Glencore Coal Assets Australia (GCAA) Health, Safety, Environment and Community (HSEC) framework and the principles of ISO14001; and
- manage and minimise environmental impacts.

The EM Strategy forms part of the environmental management system (EMS), and is the main document that describes the overall systems and processes for planning, communication, documentation, monitoring, evaluation and review of environmental management. United Wambo aims to maintain and improve environmental and community performance through regular monitoring, review and audits of the EMS (and associated EM Strategy).

This EM Strategy is implemented as the lead document to provide the environmental management framework for controlling and reporting on the environmental impacts of the operation. Detailed management plans for key environmental aspects have also been prepared and should be referred to for further information.

The EMS for United Wambo has been prepared generally in accordance with ISO 14001 Environmental Management Systems standard.

The EM Strategy and management plans are available on the United Wambo website: www.unitedproject.com.au.

3. Scope

The EM Strategy applies to all operational activities at United Wambo within land owned or managed by United and Wambo. Environmental management is the responsibility of all employees and contractors and the EM Strategy applies to all United Wambo employees, and contractors working for, or on behalf of, United Wambo within the project approval boundary.

United Wambo aims to provide sufficient strategic planning, resources, controls, and leadership to maintain a high standard of management, continually improving performance, ongoing compliance with relevant, legal and other external requirements, and improved efficiency with regard to management.

Environment and community responsibilities are defined, documented and communicated by establishing:

- roles, responsibilities and accountabilities for specific risks and controls;
- specific and measurable performance indicators; and
- organisational structures and lines of reporting.

4. Statutory Requirements

The EM Strategy has been developed in accordance with the relevant environmental legislation, and incorporates the environmental control measures and commitments outlined in the United Wambo Project Development Consent (SSD 7142) conditions and associated documentation. The EM Strategy has been prepared to satisfy Conditions E1, E2 and E3 of SSD 7142.

A full list of the requirements of this condition and an indication of where these are addressed within this document is provided in **Table 4-1**.

Table 4-1: Development Consent Conditions

Condition	Condition Details	Section of EM Strategy
E1	Environmental Management Strategy The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	This document
	a) provide the strategic framework for environmental management of the development;	Section 8
	b) identify the statutory approvals that apply to the development;	Section 4 and Section 8.3
	c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 9.1
	d) set out the procedures to be implemented to:	Section 9
	i keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Section 9.3
	ii receive, record, handle and respond to complaints;	Section 9.3.1
	iii resolve any disputes that may arise during the course of the development;	Section 9.3.2
	iv respond to any non-compliance and any incident;	Section 9.5 and Section 10.4
	v respond to emergencies; and	Section 9.5.1
	vi include: references to any strategies, plans and programs approved under the conditions of this consent; and	Section 9.6 and Appendix B - Approved Strategies, Plans and Programs

Condition	Condition Details	Section of EM Strategy
	a clear plan depicting all the monitoring to be carried out under the conditions of this consent.	<i>Appendix C - Environmental Monitoring Plans</i>
E2	The Applicant must not commence Phase 1B until the Environmental Management Strategy is approved by the Planning Secretary.	Complete, EM Strategy approved 13 July 2020.
E3	The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.	

5. Stakeholder Consultation for the EM Strategy

In accordance with Condition E1 of SSD 7142, the EM Strategy has been prepared to the satisfaction of the Secretary of the Department of Planning Industry and Environment (DPIE). Copies of correspondence in relation to the development of this plan are available upon request. A copy of the approval of this EM Strategy is provided in *Appendix A - DPIE Consultation Records*.

Specific Environmental Management Plans (EMPs) also have additional consultation requirements. These are addressed in the relevant plans, with copies of the required approval included as appendices to the EMPs.

6. Objectives

United Wambo recognises that its operations have the potential to impact the environment and community in both a positive and negative manner. The objective of this EM Strategy is to provide the overarching framework to ensure that appropriate procedures and programs of work are in place to manage all aspects of potential environmental and community impacts.

This EM Strategy seeks to achieve the following:

- responsible environmental management;
- active engagement with the community;
- a structured and systematic environmental risk based management system;
- proactive and strategic sustainable development and environmental and community management planning in order to achieve business objectives;
- continuous improvement of environmental performance;

- meeting ongoing compliance with legal obligations; and
- meeting internal company requirements.

7. Glencore Policy

7.1 Environmental Policy

United Wambo operates in accordance with the Glencore Environmental Policy, which applies to all Glencore operations. The intent of the policy, and the verifiable outcomes from its implementation, are:

- senior and line management are accountable for environmental performance;
- operations, assets and projects comply with applicable environmental regulations and monitor relevant regulations for changes;
- compliance, risk based management approaches, and resource efficiency determine our priorities, capability requirements, capital expenditure, and controls;
- improvement plans and target-setting at each level of our organisation take the group's focus areas into account, namely:
 - integrity of our facilities for preventing pollution (e.g. spills, emissions, effluents);
 - efficient use of resources (e.g. energy, water, land, raw materials, waste);
 - protected areas and biodiversity; and
 - closure planning and rehabilitation;
- all environmental incidents are reported and investigated to prevent repeat incidents.

United Wambo specific environmental management measures are covered in detail in **Section 8**, **Section 9** and **Section 10**.

7.2 Community and Stakeholder Engagement Policy

United Wambo operates in accordance with the Glencore Community and Stakeholder Engagement Policy, which applies to all Glencore operations. The intent of the policy, and the verifiable outcomes from its implementation, are:

- we believe that Glencore's global presence and economic strength have a predominantly positive impact on the communities in which we operate;
- the social impact of our activities, community concerns, needs and social risks to our operations are identified by means of a stakeholder engagement strategy;
- communities are engaged in constructive, transparent and proactive dialogue through the community engagement plan;
- community development plans help reduce dependency on our operations and contribute to sustainable growth in the regions where we operate; and
- community investment activities target the following group-wide focus areas, as well as needs identified on a local or regional level:

- capacity building, including education/training, enterprise development and economic diversification;
- health; and
- environment.

Community and stakeholder engagement at United Wambo is covered in **Section 9.3**.

7.3 Emergency Response and Crisis Management Policy

United Wambo operates in accordance with the Glencore Emergency Response and Crisis Management Policy, which applies to all Glencore operations. The intent of the policy, and the verifiable outcomes from its implementation, are:

- foreseeable emergencies and crises can be systematically identified and their impacts assessed;
- response plans must be developed for high potential emergencies and crisis scenarios; and
- mandatory annual emergency/crisis response exercises will evaluate the adequacy of the plans, resources, structures and team preparedness.

Emergency Response at United Wambo is covered in **Section 9.5.1**.

8. Planning

8.1 Environmental Aspects and Impacts

United Wambo identify, manage, review and document all environmental aspects and impacts relevant to its operation.

Key aspects and impacts are formally identified during the annual review of the United Wambo Environment and Community Risk Assessment (Annual E&C Risk Assessment). The Annual E&C Risk Assessment is undertaken in accordance with Glencore Coal Assets Australia (GCAA) requirements.

This process involves personnel formally identifying the potential risks to the environment and community, prioritising these in order of risk, assessing the suitability of controls and determining if any additional controls are required.

The typical inputs into the risk assessment include, but are not limited to the following:

- baseline environmental studies, including the Environmental Impact Statement (EIS) and associated documentation that was prepared for United Wambo;
- review of current environmental performance data;
- review of any existing or proposed changes to the operations;
- review of relevant legislation, standards, codes and additional external requirements;
- industry experience; and
- input from relevant stakeholders, particularly needs, interests and local knowledge.

For identified significant environmental aspects and impacts, appropriate preventative and/or mitigating measures are documented through the site environmental management systems. This may include, but is not limited to, EMPs required from relevant government approvals described in this EM Strategy.

The United Wambo Environment and Community Manager (ECM) is responsible for maintaining the operation's aspects and impacts register through the risk assessment process.

8.1.1 Change Management

Implications of changes to operations and management are assessed against external and internal risks, with additional controls identified and implemented where required. A decision, change or event is significant if it could potentially have a material impact on the achievement of objectives. The United Wambo ECM is responsible for maintaining the changes concerning the environment and community in the compliance management tracking system, CMO.

8.2 Objectives and Targets

The objectives and targets for United Wambo are derived from the EIS and associated documentation, the Development Consent, EPL, previous environmental performance, community concerns and other regulatory and company requirements. Objectives and targets are set in order to meet the commitments outlined in the EIS, and to measure the performance of the United Wambo EMS and associated EM Strategy.

An annual HSEC plan is developed to include additional internal environmental performance targets set as required by the United Wambo Management Team, to address specific operational issues and to promote continual improvement. Objectives and targets identified by GCAA during the development of the GCAA Strategy and Annual Plan are also included where relevant to the United Wambo operations.

The status of the strategy and annual plan actions are updated in the site's CMO database. Should actions not be completed or where objectives are not being met, remedial actions are developed.

8.3 Regulatory Requirements

8.3.1 Statutory Approvals

Federal and State environmental legislation, regulations, planning policies and project specific approvals are considered in developing plans, reviewing risk assessments, preparing Ground Disturbance Permits (GDPs) and training and awareness or proposing changes to the approved mine plan. Approvals are registered on the GCAA intranet-based Approvals Registry in accordance with **CAA HSEC PCL 0020 11.01 Environmental Compliance Management**.

United Wambo is regulated by a range of leases, licences and approvals. Some components of operations also occur under approvals, licences and leases currently held individually by either United or Wambo. These will continue to apply to United Wambo operations, where applicable. A summary of the leases, licences and approvals that regulate United Wambo operations are discussed in the following sections.

8.3.1.1 Project Approvals

Development consents and approvals required under state and federal legislation applicable to United Wambo are listed in **Table 8-1**.

Development Consent SSD 7142, issued under the Environmental Planning and Assessment Act 1979 (EP&A Act) to United Wambo, allows for the extraction of up to 10 Mtpa of ROM for a period of up to 23 years from the granting of approval for open cut mining in the Wambo Pit and the United Pit. Approval was granted on 29 August 2019, and SSD 7142 expires in 2042.

Wambo Development Consent DA 305-7-2003 (as modified) allows for the processing of coal from United Wambo operations as well as the ongoing Wambo underground operations. Wambo Development Consent DA 177-8-2004 (as modified) provides approval for the handling and transport of coal from the United Wambo operations via the Wambo Train Loading Facility, as well as the ongoing Wambo underground operations. Compliance with DA 305-7-2003 and DA 177-8-2004 is managed by Wambo.

Wambo also has approval under the Commonwealth Environment and Protection and Biodiversity Conservation Act, 1999 (EPBC Act), EPBC 2003/1138, which allows for the open cut and underground mining operations at Wambo and the operation of the CHPP and train loading facilities.

A referral was submitted to the Department of the Environment (DoE) for the components of United Wambo that are not already approved under Wambo's EPBC 2003/1138 approval. This includes mining in the United Pit and public infrastructure relocations. The Project was deemed a Controlled Action in December 2015. Approval for EPBC 2015/7600 was received on 5 December 2019.

Table 8-1: Current Development Consents and Project Approvals

Approval	Holder	Approvals Description	Approval Authority	Approval Date	Expiry Date
SSD 7142	United Wambo JV	United Wambo Open Cut Coal Mine	DPIE	29 August 2019	31 August 2042
DA 305-7-2003 MOD 16	Wambo	Wambo CHPP and Phase 1 open cut mining	DPIE	4 February 2004	31 December 2041
DA 177-8-2004 MOD 3	Wambo	Wambo train loading facilities	DPIE	16 December 2004	31 December 2041
EPBC 2015/7600	United Wambo JV	United Wambo Open Cut Coal Mine	DoE	5 December 2019	31 December 2052
EPBC 2003/1138	Wambo	Open cut and underground operations, CHPP and train loading facilities at Wambo	DoE	23 November 2004	31 December 2029

8.3.1.2 Environment Protection Licence

The United Wambo operations are required to comply with the conditions contained in the United Environment Protection Licence (EPL) No. 3141 issued under the Protection of the Environment (Operations) Act 1997. Operations at Wambo are managed in accordance with EPL 529.

8.3.1.3 Mining Leases

There are a number of active mining and exploration leases, issued in accordance with the Mining Act 1992, that apply to United Wambo operations, as summarised in **Table 8-2** and shown in **Table 8-1**. Open cut mining in the Wambo Pit is undertaken under Wambo's Mining Lease (ML) 1572, whilst mining in the United Open Cut pit is undertaken under United's Consolidated Coal Lease (CCL) 775.

Though the joint venture holds one Authorisation Lease (A) and three Exploration Leases (EL): A444, EL7211, EL8452 and EL8456.

Table 8-2: Current Mining and Exploration Licences

Lease	Holder	Date Granted	Expiry Date
Joint Venture Managed Leases			
CCL775	CFMEU (on behalf of United)	2 September 1992	2 March 2033
ML1572	Wambo	21 December 2005	21 December 2026
A444	Wambo and CFMEU (on behalf of United)	4 October 2007	16 May 2021
EL7211	Wambo	29 September 2008	Renewal sought
EL8452	CFMEU (on behalf of United)	8 August 2016	Renewal sought
EL8456	United	8 August 2016	8 August 2021
Wambo Managed Surface Leases			
CCL743	Wambo	4 March 1990	14 August 2022
CL397	Wambo	4 June 1992	4 June 2034
ML1402	Wambo	23 September 1996	14 August 2022
ML1594	Wambo	1 May 2007	30 April 2028

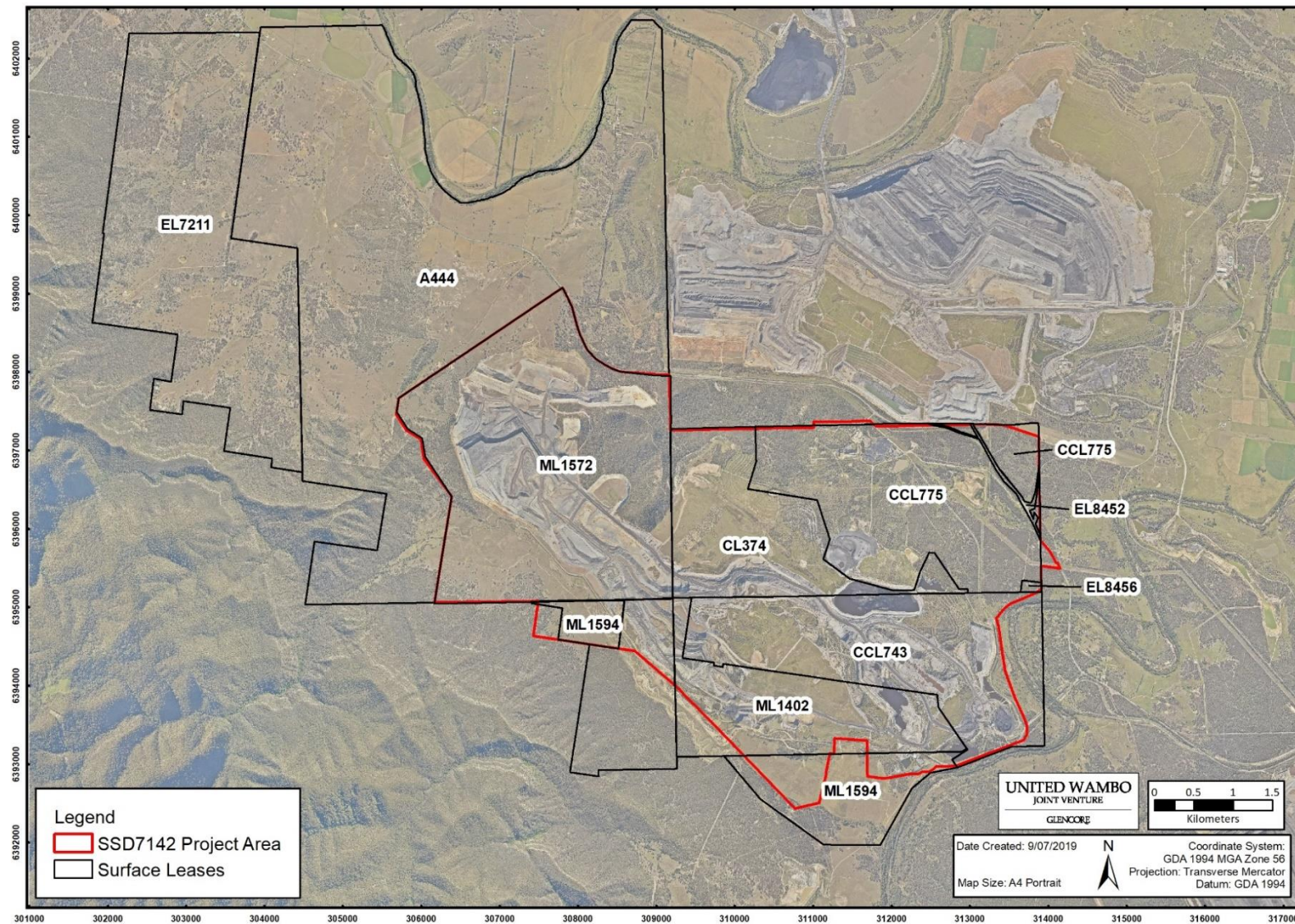


Figure 8-1: United and Wambo Surface Leases

8.3.1.4 Groundwater Licences

United and Wambo currently hold the groundwater licences listed in **Table 8-3**, issued under the Water Management Act, 2000, in accordance with the Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources, 2016.

Table 8-3: Groundwater Licences

Licence No	Description	Holder	Entitlement ¹	Tenure Type
Groundwater: Lower Wollombi Brook Water Source ²				
WAL23897	Well No.2	Wambo	70 unit shares	Perpetuity
Groundwater: Porous Rock Water Source ³				
WAL39735	Dewatering Bore	Wambo	40 unit shares	Perpetuity
WAL39738	Old Well No. 1	Wambo	243 unit shares	Perpetuity
WAL39803	Dewatering (Bore No. 1)	Wambo	450 unit shares	Perpetuity
WAL41494	Dewatering (Bore No. 2 and 2a)	Wambo	750 unit shares	Perpetuity
WAL41532	Dewatering	Wambo	98 unit shares	Perpetuity
WAL41528	Dewatering Bore	Wambo	57 unit shares	Perpetuity
WAL41520	Dewatering Bore	Wambo	9 unit shares	Perpetuity
WAL41510	Dewatering	United	300 unit shares	Perpetuity

8.3.1.5 Surface Water Licences

United and Wambo hold a number of Water Access Licences (WALs) under the Water Management Act 2000 for the Water Sharing Plan for the Hunter Regulated River Water Source 2016 and the Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009. **Table 8-4** presents the WALs held by United and Wambo.

Table 8-4: Surface Water Licences

Licence No.	Water Source	Category	Holder	Share Component	Tenure Type
WAL718	Hunter Regulated River Water Source	Regulated River (High Security)	Wambo	1000 units	Continuing
WAL8599	Hunter Regulated River Water Source	Regulated River (High Security)	Wambo	6 units	Continuing

Licence No.	Water Source	Category	Holder	Share Component	Tenure Type
WAL8600	Hunter Regulated River Water Source	Regulated River (General Security)	Wambo	868 units	Continuing
WAL8604	Hunter Regulated River Water Source	Supplementary Water	Wambo	240 units	Continuing
WAL10541	Hunter Regulated River Water Source	Regulated River (High Security)	United	300 units	Continuing
WAL18445	Hunter Unregulated and Alluvial Water Sources (Lower Wollombi Brook Water Source)	Unregulated River	United	200 units	Continuing
WAL18549	Hunter Unregulated and Alluvial Water Sources (Lower Wollombi Brook Water Source)	Unregulated River	United	100 units	Continuing
WAL18437	Hunter Unregulated and Alluvial Water Sources (Lower Wollombi Brook Water Source)	Unregulated River	Wambo	350 units	Continuing
WAL 23897	Hunter Unregulated and Alluvial Water Sources (Lower Wollombi Brook Water Source)	Aquifer	Wambo	70 units	Continuing

8.3.1.6 Mining Operations Plan (MOP)

The United Wambo RMP has been approved as meeting the requirements for a Mining Operations Plan under Condition 3 of CCL 775. The initial RMP covered Phase 1A and 1B operations for the period 1 July 2019 to 31 December 2020.

The Phase 2 RMP was updated to incorporate open cut mining activities at Wambo and is approved from the commencement of Phase 2 until 31 December 2022.

8.3.2 Relevant Legislation

The planning and environmental legislative framework within which United Wambo must operate is detailed in **Section 4** of the EIS.

In addition, **GCAA Protocol CAA HSEC PCL 0020 – 11.01 Environmental Compliance Management**, describes the processes and systems for identifying, monitoring and assessing compliance with environmental regulations. In accordance with the Compliance Management Protocol, GCAA maintains a Legal Register for relevant environmental legislation and how it applies to operations.

United Wambo also maintains a register, through CMO software, of the relevant environmental obligations, as contained within licences, leases and approvals, as well as Environmental Management Plans.

Environmental risks associated with applicable regulatory and non-regulatory requirements are considered within the environmental aspects and impacts register, as outlined in **Section 8.1**.

8.4 Mine Closure Planning

Planning for the closure of United Wambo is undertaken to ensure the best outcome is achieved for the community and United Wambo. Mine closure planning is undertaken in accordance with **GCAA Protocol GCAA-625378177-10325 – 11.17 Mine Closure Planning**.

A Conceptual Mine Closure Plan will be prepared for United Wambo within 12 months of commencement of Phase 2. The Plan will be conceptual as the operation has a Life of Mine (LOM) of greater than five years. Mine Closure requirements contained in the EIS and in the consent for SSD 7142 and the Wambo consents are to be integrated into this Plan.

A detailed mine closure plan will be prepared for United Wambo within five years prior to mine closure in accordance with Condition B93 of SSD 7142.

9. Implementation and Operation

9.1 Roles and Responsibilities

Environmental management is the responsibility of all employees and contractors at United Wambo. The key United Wambo personnel and their relevant environmental and community management roles and responsibilities are outlined in Table 4-1. Specific roles and responsibilities are also defined within personnel position descriptions and the specific management plans and procedures that support this EM Strategy.

The United Wambo Operations Manager is ultimately responsible to regulatory authorities for all aspects of environmental compliance and is to facilitate the implementation of this EM Strategy. This includes the provision of adequate resources such as:

- qualified personnel;
- adequate financial resources; and
- additional training as required for all employees and contractors.

Table 9-1: Roles and Responsibilities

Role	Responsibility
Operations Manager	• Maintain a working knowledge of this EMS and EM Strategy and be aware of all environmental legislative requirements associated with their respective operation. • Provide sufficient resources for the implementation of this plan and associated plans.
Environment & Community Manager (ECM)	• Implement and maintain the EMS and EM Strategy. • Facilitate a process of managing overall compliance with regulatory requirements and undertake external reporting for legislative non-compliances as required. • Coordinate complaints recording and investigation processes including associated reporting requirements. • Coordinate the implementation of corrective actions and evaluate their effectiveness associated with community complaints. • Liaise with relevant government authorities and affected landholders in relation to regulatory conditions and compliance issues. • Coordinate training to communicate requirements of the EMS and EM Strategy to relevant personnel.
Environment & Community Coordinators and Officers (ECC/ECO)	• Conduct monthly environmental inspections to determine compliance with legislation, standards, codes and other external requirements (ECC). • Coordinate monitoring as per United Wambo environmental management plans. • Review all environmental monitoring data to confirm compliance with the relevant criteria. • Assist with the development and delivery of environmental training packages. • Conduct environmental inspections as per the EM Strategy. • Provide ongoing environmental advice as required.
Operational Managers/ Supervisors	• Facilitate activities under their control so that they are completed in accordance with this EM Strategy and associated management plans and site procedures. • Ensure environmental controls within their jurisdiction are operated and maintained in a proper and efficient manner. • Report all environmental incidents. • Report all community complaints.
Employees and Contractors	• Conduct all activities in accordance with this EM Strategy, and associated management plans and procedures, in an environmentally responsible manner. • Immediately report all environmental incidents and community complaints to their immediate supervisor.

Role	Responsibility
	Participate in relevant environmental training.

9.2 Document Control and Records

Documents, data and records for United Wambo are maintained using the using the SharePoint intranet system, in accordance with ***UWOC-1689771511-50 Documents and Records***. Document control procedures ensure that:

- documents essential to the effective functioning of the EMS are available for operations;
- all documents are correctly labelled and filed;
- obsolete documents are promptly removed from all points of issue or use;
- changes resulting from a review of components of the EM Strategy are incorporated into EMS documentation and communicated effectively to the relevant personnel;
- environmental documents are reviewed by the appropriate personnel prior to being issued; and
- environmental documents, including correspondence, environmental monitoring data and environmental records, are effectively maintained for a minimum of four years in accordance with relevant statutory requirements, in a centrally maintained filing system.

Further, in accordance with EPL 3141 Schedule 05 Condition M1.1, the results of any monitoring required to be conducted by EPL 3141 or a load calculation protocol must be recorded and retained as set out in conditions of the licence.

All records required to be kept by EPL 3141 must be:

- in a legible form, or in a form that can readily be reduced to a legible form;
- kept for at least four years after the monitoring or event to which they relate took place; and
- produced in a legible form to any authorised officer of the EPA who asks to see them.

The following records must be kept in respect of any samples required to be collected for the purposes of EPL 3141:

- the date(s) on which the sample was taken;
- the time(s) at which the sample was collected;
- the point at which the sample was taken; and
- the name of the person who collected the sample.

The SharePoint Intranet is the system used by United Wambo for the control of all EMS documents. The ECC and ECO will be responsible to ensure all versions of the EM Strategy and related documents on United Wambo Internet are current and available to employees and contractors.

9.3 Stakeholder Consultation and Communication

The United Wambo Social Impact Management Plan (SIMP) outlines how United Wambo plans, manages and reviews stakeholder engagement and investment in the community. Section 10.5 provides an overview of the reporting mechanisms United Wambo use to keep the local community and relevant agencies informed about the operation and environmental performance of the development. Progress on the SIMP will be reported in the Annual Review. The plan is developed based on information including:

- the identification and assessment of community and external stakeholders;
- issues, opportunities and risks, concerns and interests;
- community profile; and
- impacts of United Wambo activities.

Records of stakeholder consultation are maintained and are utilised in developing the SIMP. The SIMP has clear objectives for engagement and outlines a plan on who, how, why and when identified stakeholders are to be engaged.

The following principles are adhered to in all aspects of stakeholder engagement at United Wambo:

- communication: open, clear, accurate, regular, two-way information flow;
- integrity and transparency;
- follow through;
- understanding and awareness; and
- respect.

United Wambo has developed a comprehensive stakeholder list that is recorded in Consultation Manager and includes stakeholders identified through the EIS process. New stakeholders are added to Consultation Manager as they are identified.

In accordance with SSD 7142, in the event a non-compliance with any environmental impact assessment criteria is identified, United Wambo will notify DPIE and any affected landowners and/or existing or future tenants (including tenants of mine owned properties) accordingly, and provide monthly monitoring results to each of these parties until the results show that the operation is complying with the relevant criteria.

9.3.1 Community Complaints

Complaints can be received through a number of sources, including but not limited to:

- Community Response Line;
- face to face consultation;
- direct phone call to reception or to Environment and Community personnel;
- interaction of employees/contractors of United Wambo Open Cut with stakeholders;
- Government agencies; and
- personal email or phone contact with any employee or contractor of United Wambo.

United Wambo maintain a 24-hour, seven-day a week community and employee information telephone line, 1800 801 440, to manage complaints and enquires received for United Wambo. This service is also used to provide access to open cut blasting information for interested stakeholders. The public are notified of the telephone number for the Community Response Line so that members of the community can readily lodge a complaint or enquiry. United Wambo advertise the details of this hotline on the United Wambo website (www.unitedproject.com.au) and provide it to the community via the newsletter.

Community complaints at United Wambo are managed in accordance with ***UWOC-1689771511-359 - Complaints Management Procedure***, which includes:

- acknowledging all complaints by contacting the complainant to discuss the details of the complaint within 24 hours of receipt, where practicable;
- registering all complaints in CMO;
- investigating complaints impartially giving proper consideration to the facts and the circumstances prevailing at the time;
- implementing corrective actions if required; and
- reporting investigation outcomes and corrective actions taken to the complainant.

Details of complaints received by United Wambo are recorded in CMO and reported to stakeholders at each Community Consultative Committee meeting and via the Annual Review. A monthly Community Complaint Register is also uploaded to the United Wambo website, as required by Condition E16 (a) (x) of SSD 7142.

Complaints are also collated and reported through internal meetings and reports

9.3.2 Dispute Resolution

In the event of a disagreement between United Wambo and a member of the community, the United Wambo ECM and/or United Wambo Operations Manager will undertake the necessary liaison and communication to reach a resolution, which may include a meeting with the complainant to discuss the issue.

For disputes related to concerns raised by community members regarding the exceedance of criteria or performance measures in Development Consent SSD 7142, should resolution of the dispute not be reached through this primary process, either party may refer the matter to the Planning Secretary for resolution.

For disputes not related to the exceedance of criteria or performance measures, should resolution of the dispute not be reached through this primary process, United Wambo may engage an independent mediator to assist with seeking a resolution to the matter.

In accordance with the referenced Conditions of Development Consent SSD 7142, the following matters may be referred by either party to the Planning Secretary for resolution.

- **Condition B14 Property Inspections**

If there is a dispute over the selection of a suitably qualified, experienced and independent person to be appointed to carry out a property inspection at the request of the owner of any privately owned land within 3 km of any approved open-cut mining pit to establish the baseline condition of any building or structures on the land, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Planning Secretary for resolution.

- **Condition B17 Property Investigations**

If there is a dispute over the selection of the suitably qualified, experienced and independent person to be appointed to carry out a property investigation at the request of the owner of any privately owned land within 3 km of any approved open-cut mining pit where the Planning Secretary is satisfied an investigation is warranted, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution.

- **Condition B44 Compensatory Water Supply**

If the Applicant and the landowner cannot agree on whether the loss of water supply from a privately-owned licenced groundwater bore is to be attributed to the development or the

measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

- Condition B88 Additional Visual Mitigation

If the Applicant and the landowner disagree on the level of visual impact or the additional visual mitigation measures that should be implemented at potentially affected residences in the Moses Crossing and South Wambo areas to minimise the visual impact of the development, then either party may refer the matter to the Planning Secretary for resolution.

- Condition B90 Hunter Valley Gliding Club

If the Applicant and Hunter Valley Gliding Club Co-operative Limited cannot come to an agreement under condition B89 to address the potential impacts of the development on the Hunter Valley Gliding Club facilities and associated recreational activities, then either party may refer the matter to the Planning Secretary for resolution.

- Condition D3 Additional Mitigation upon Request

If within 3 months of receiving a request from the owner of land listed in Table 7 of SSD 7142 for additional noise mitigation measures at or in the vicinity of their residence, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

- Condition D12 Land Acquisition

If, within 2 months of a binding written offer being made for property acquisition under condition D11, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.

- Condition D15 Land Acquisition

In the event that an independent valuer is appointed by the NSW Division of the Property Institute at the request of the Planning Secretary to and either party disputes the independent valuer's determination of a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in condition D11, then within 14 days of receiving the independent valuer's report, either party may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Planning Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in condition D11, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.

9.4 Environment and Community Training and Awareness

Environment and community management training at United Wambo is undertaken in accordance with **UWOC-1689771511-44 Training and Competency**.

United Wambo aims to provide the necessary tools and training for its employees and contractors to enable the effective implementation of the EMS. The content of training packages will be dependent upon the receiving audience and associated environmental issues, however, all environmental and community training programs consider the following:

- the importance of conformance with environmental legislation, approvals and licences, the EMS and associated EM Strategy;
- the potential environmental and community impacts and associated controls for their work activities;
- their roles and responsibilities in achieving conformance with environmental legislation, approvals and licences, the Glencore Environmental Policy, EM Strategy and EMS; and
- the potential consequences of non-compliance with environmental legislation, approvals and licences and the Glencore Environmental Policy, EM Strategy and the EMS.

The site familiarisation includes information relevant to the environmental and community management of United Wambo. As a minimum, the site familiarisation includes:

- an overview of the United Wambo EM Strategy and EMS;
- key environmental issues for the site (i.e. surface water, noise, blasting, air quality and biodiversity);
- environmental incident and community complaint reporting requirements; and
- emergency contact details.

9.5 Incident Response

9.5.1 Emergency Response and Preparedness

An Emergency Response Team is maintained and trained to coordinate and respond to emergency situations and accidents, and undertake rescues as required. Preparedness for emergencies by staff, personnel, contractors and service providers is undertaken in accordance with on site training requirements whereby personnel will be appropriately trained in the use of emergency response equipment and procedures, and will be made aware of their responsibilities should such an event occur.

The **UWOC-1689771511-244 Emergency Management Plan** has been developed for United Wambo to assist with the response to emergency situations. It includes a number of potential environmental emergency scenarios and the response procedures to be initiated in the event of an environmental emergency. The plan also details the responsibilities of key personnel in the event of an environmental emergency as well as the contact details for the appropriate emergency services (refer also to **Section 9.5.2** regarding the site Pollution Incident Response Management Plan).

9.5.2 Environmental Incident Response

An Incident Management Team is maintained and trained to coordinate and respond to incidents, and undertake rectification works as required. Environmental incident reporting and corrective and preventative action is undertaken in accordance with **GCAA-625378177-9992 6.0 Incident** standard. All personnel (United Wambo employees and contractors) are required to report environmental incidents to their immediate supervisor/site contact. The Supervisor or site contact contacts a member of the United Wambo Environment and Community Department (E&C Department), immediately after becoming aware of the incident. The E&C Department determines the appropriate corrective or preventative action required to remediate or prevent a reoccurrence of the incident. The details and final investigation results from all environmental incidents are recorded in CMO.

Material Harm incident notifications are detailed in **Section 10.5.3** as well as in **UWOC-1689771511-374 - United Wambo Pollution Incident Response Management Plan** (PIRMP) (Appendix D -).

Reporting of incidents where material environmental harm is caused or threatened (as defined in the POEO Act) occurs immediately, as detailed in the PIRMP.

9.6 Environmental Controls

9.6.1 Compliance Management

Compliance management at United Wambo is undertaken in accordance with **GCAA-625378177-10301– 11.01 Compliance Management**. This protocol was developed by GCAA as a system for managing compliance for environmental approvals which encompasses the following elements:

- environmental approvals storage;
- management of compliance and associated evidence within the CMO system; and
- internal assurance program for environmental approvals.

Awareness of changes to standards, codes or legislation is addressed in the following ways:

- receipt of regular updates from GCAA legal advisers;
- participation in industry groups, such as the NSW Minerals Council and the Hunter Coal Environment Group;
- notification from the GCAA General Manager for Environment and Community;
- access to state and federal legislation via the internet; and
- adoption of the GCAA Legislation Schedule.

The requirement to provide training to personnel and contractors is assessed following the E&C Department becoming aware of a legislative change.

If there are changes to existing activities/processes, or new projects are proposed that have potential for environmental impact, a GCAA work authorisation is required. One of the purposes for the GCAA work authorisation is consideration of whether the proposed works have the required environmental approval and that the person(s) undertaking the works have appropriately managed risks to minimise impacts on the environment and community.

9.6.2 Cultural Heritage Management

United Wambo have developed the **United Wambo Aboriginal Cultural Heritage Management Plan** (ACHMP), with consideration to the requirements of the consents and in line with the Glencore protocol **GCAA-625378177-10266 – 11.21 Aboriginal Cultural Heritage Management – NSW**. The purpose of the ACHMP is to describe the management and mitigation strategies, procedures, and controls that will be implemented to manage Aboriginal cultural heritage at United Wambo.

The ACHMP has been prepared in consultation with relevant Aboriginal parties and in accordance with all relevant legislation and development consent requirements.

The **United Wambo Historic Heritage Management Plan** (HHMP) addresses the historical (non-Aboriginal) heritage and archaeological management issues associated with the Project. The purpose of the HHMP is to provide a description of the measures to be implemented by United Wambo to manage and protect known heritage values within and in the vicinity of Project Area.

Together, the ACHMP and HHMP form an overall **Heritage Management Plan** (HMP) for the Project.

9.6.3 Blast Management

United Wambo manages the environment and community impacts of surface blasting using the **United Wambo Blast Management Plan**, **United Wambo Road Closure Plan** and the **United Wambo Blast Fume Management Strategy**, which have been developed to address requirements of development consent approval SSD 7142 and the **GCAA protocol GCAA-625378177-9975 – 11.12 Blast**.

The plans provide guidance on the minimum site requirements relating to environment and community aspects through all phases of blasting, from pre-blast planning and design, which includes community notification, to post-blast monitoring, data analysis/evaluation and reporting.

9.6.4 Exploration and Drilling

Exploration and drilling activities at United Wambo are undertaken in accordance with **GCAA-625378177-10237 – 11.09 Exploration and Drilling**. This protocol provides sites with a process to follow to ensure drilling activities are conducted in a healthy, safe and environmentally responsible manner and with due consideration to the community. It outlines the risk assessment process when planning a drilling project, requirements for monitoring and record keeping.

To assist with the planning of drilling programs, Environment and Community personnel undertake inspections prior to, during and post drilling, so that works are performed in a safe manner and adequate controls are in place to minimise impacts on the environment and the community. Drilling inspections are held by the geologist responsible for managing the drilling program and returned to the E&C Department upon completion of the program (including rehabilitation of drill sites).

9.6.5 Hydrocarbon Management

Hydrocarbon storage and inspections at United Wambo are addressed by the GCAA Hydrocarbon Management Standard **GCAA-625378177-10243 – 11.07 Hydrocarbon Management**. This plan documents the requirements for the design, installation, operation and maintenance of hydrocarbon management infrastructure as well as requirements for transportation, storage and use of hydrocarbons. This plan aims to meet the following objectives;

- a) minimise the risk of hydrocarbon spillages or leakages, which may lead to contamination and subsequent environmental harm;
- b) provide that contingencies for containment and remediation are in place to minimise environmental impacts if spillages or leakage occurs;
- c) maintain compliance with the requirements of the United Wambo Environmental Protection Licence (EPL) No. 3141, SSD 7142 and relevant legislation;
- d) meet the requirements of the Glencore Coal Assets Australia (GCAA) Hydrocarbon Management Standard; and
- e) maintain compliance with relevant Australian standards for hydrocarbon storage and use.

The GCAA Hydrocarbon Management Standard **GCAA-625378177-10243 – 11.07 Hydrocarbon Management** provides direction to operations to support compliance with Australian Standard (AS) 1940 – 2004 The storage and handling of flammable and combustible liquids.

9.6.6 Air Quality and Greenhouse Gas Management

SSD 7142 has a requirement for an air quality and greenhouse gas management plan and these conditions are addressed within the United Wambo Air Quality and Greenhouse Gas Management

Plan (AQGHGMP). The plan was developed in accordance with the GCAA protocol **GCAA-625378177-10324 – 11.10 Air Quality Management**. This protocol establishes the minimum requirements for dust management across GCAA Sites, and provides the framework for coordinated dust management.

Aspects of dust management at United Wambo includes the treatment and maintenance of roads, timely rehabilitation of disturbed ground and the use of sprays on coal stockpiles. There is an approved monitoring network which includes real-time monitors, the locations for which are shown in **Appendix C - Environmental Monitoring Plans**.

The objectives of the AQGHGMP are to:

- a) provide the framework for the identification and implementation of source specific dust controls and site-wide systems and procedures;
- b) provide the system for investigating, responding to and reporting dust related incidents and complaints;
- c) define the roles and responsibilities for dust management;
- d) provide for training and awareness on dust management;
- e) outline the program of internal and external communication and reporting of dust monitoring; and
- f) facilitate continual improvement of dust management at United Wambo.

9.6.7 Noise Management

United Wambo has prepared the **United Wambo Noise Management Plan (NMP)** to describe the noise management and mitigation strategies, procedures, controls and monitoring programs that will be implemented to manage noise emissions from operations at United Wambo in accordance with the noise management requirements for SSD 7142 and EPL3141. The NMP is aligned with the commitments of **GCAA-625378177-10238 – 11.11 Noise Management** protocol.

The noise monitoring locations for United Wambo are shown in **Appendix C - C.3, Noise Monitoring Locations**.

9.6.8 Water Management

The **United Wambo Water Management Plan (WMP)** has been developed to address all water related requirements of SSD 7142 and Environment Protection Licence (EPL) 3141 as relevant to open cut mining operations at United Wambo.

The key objectives of water management at United Wambo are to:

- satisfy regulatory requirements, including meeting required performance criteria;
- segregate clean waters away from active mining areas, where possible, to reduce the volume of mine affected water requiring subsequent storage and treatment;
- segregate mine impacted water and runoff from undisturbed and revegetated areas with better water quality to minimise the volume of mine impacted water that requires reuse;
- reuse mine impacted water within the WMS to reduce reliance on raw/clean water; and
- minimise adverse effects on downstream waterways (including hydraulic and water quality impacts).

The WMP is part of a set of documents that have been developed to manage surface and groundwater impacts for United Wambo (refer to **Figure 9-1**). The WMP should also be read in conjunction with the following sub-plans:

- Erosion and Sediment Control Plan;
- Surface Water Management Plan; and
- Groundwater Management Plan.

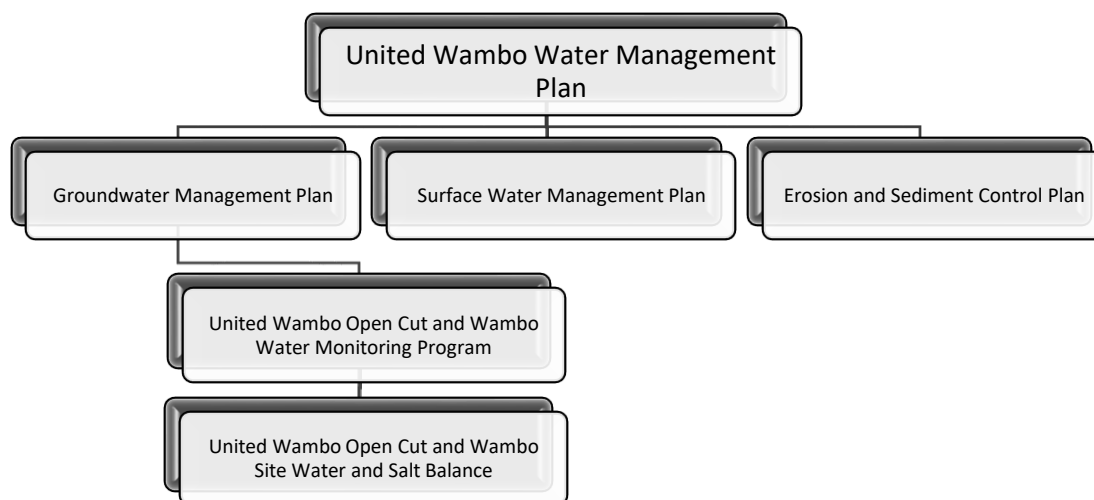


Figure 9-1: Water Management Plan Structure

The WMP adopts the **GCAA-625378177-10320 – 11.03 Water Management** and **GCAA-625378177-10322 – 11.05 Dams and Diversions** protocols. **GCAA-625378177-10320 – 11.03 Water Management** specifies the site requirements for water management planning. It aims to ensure that it is linked to the mine planning process so that water management infrastructure is provided in advance of mining operations and that the water related risks are identified, managed and monitored. The purpose of **GCAA-625378177-10322 – 11.05 Dams and Diversions** is to minimise the safety, economic and environmental risks associated with the failure of dams, levees and diversions through the proper planning, design, construction and operation.

Monitoring of water quality occurs in accordance with the WMP. There is an approved monitoring network which includes both surface water and ground water, the locations for which are shown in **Appendix C - Environmental Monitoring Plans**.

The Minerals Council of Australia (MCA) has developed the Water Accounting Framework (WAF) to report on the water use in a consistent manner across the mining industry. GCAA has adopted the WAF as the water reporting tool for all operations, and United Wambo provides water reporting data using this tool. The data is then used to update the site balance in the Annual Review.

9.6.8.1 Erosion and Sediment Control

Erosion and sediment control is managed under the **United Wambo Erosion and Sediment Control Plan** (ESCP), which was developed in line with the **GCAA-625378177-10323 – 11.06 Erosion and Sediment Control** protocol. The protocol outlines the requirements for the planning and design of sediment and erosion controls on GCAA sites, and aims to prevent the pollution of downstream waterways and ensure that sites are minimising the environmental impacts of the works.

The ESCP provides the overarching details for how erosion and sediment control is managed at United Wambo, including broad scale figures showing the location of more permanent erosion and sediment control structures. Individual erosion and sediment control plans for site specific disturbance activities are developed in accordance with the ESCP and the Ground Disturbance Permit process and generally remain separate to the broad scale figures in the plan. When works require individual designs, these are done as per the ESCP.

The ESCP should be implemented in conjunction with the **United Wambo Water Management Plan** so the objectives of this ESCP are met.

9.6.8.2 Pipeline Management

Water pipelines across United Wambo are not managed under a specific pipeline management plan, but are incorporated into the WMP

Prior to pipelines being installed the **GCAA-625378177-10248 11.02 Pipeline Management** protocol is followed to assess what hazards exist and what controls need to be in place. The protocol outlines the environmental controls required during the planning and design phase, requirements for operation and maintenance, and monitoring inspections required.

9.6.9 Tailings Management

United Wambo manages two decommissioned tailings storage facilities: Tailings Dams 1 and 2. Tailings Dam 2 is a prescribed dam under the *Dams Safety Act 2015* and is managed in accordance with the Tailings Dam 2 Operation and Maintenance Manual and the Tailings Dam 2 Dam Safety Emergency Plan.

Capping of the United Wambo tailings dams will be undertaken in accordance with detailed engineering designs to be developed and relevant regulatory requirements.

Management of the Wambo CHPP will remain the responsibility of Wambo throughout the life of the Project. As such, tailings will be managed by Wambo in accordance with the relevant site management plans.

9.6.10 Rehabilitation Management

Rehabilitation is conducted in line with the **United Wambo Rehabilitation Management Plan (RMP)** and has been prepared to define the rehabilitation activities, objectives and outcomes for Phase 2 of the Project.

The RMP has been prepared to satisfy the relevant requirements for a Rehabilitation Management Plan in accordance with Condition B90 of SSD 7142 and Mining Lease (ML) conditions.

United Wambo is required by GCAA to submit an annual rehabilitation and land management plan in line with the **GCAA-625378177-10241 – 11.16 Rehabilitation Management** protocol. This annual plan covers which areas are planned to be disturbed and which will be rehabilitated during that year. The results are then reported in the United Wambo Complex Annual Review (AR).

Prior to the commencement of Phase 2, United Wambo prepared a Rehabilitation Strategy in accordance with Condition B87 of SSD 7142. The purpose of this site specific strategy is to provide a structured and documented process for managing and improving rehabilitation activities at United Wambo.

9.6.11 Mine Closure Planning

Planning for the closure of United Wambo is undertaken to ensure the best outcome is achieved for the community and United Wambo. Mine closure planning is undertaken in accordance with GCAA Protocol **GCAA-625378177-10325 – 11.17 Mine Closure Planning**.

A Conceptual Mine Closure Plan will be prepared for United Wambo within 12 months of commencement of Phase 2. The Plan will be conceptual as the operation has a Life of Mine (LOM) of greater than five years. Mine Closure requirements contained in the EIS and in the consent for SSD 7142 and the Wambo consents are to be integrated into this Plan.

A detailed mine closure plan will be prepared for United Wambo within five years prior to mine closure in accordance with Condition B93 of SSD 7142.

9.6.12 Biodiversity Management

The United Wambo Biodiversity Management Plan outlines the strategies to be employed for the management of remnant vegetation and fauna species at United Wambo, in accordance with biodiversity requirements in SSD 7142. This plan also outlines the offset strategy for the Project.

Each of the offset areas will have their own management plans which will be developed as part of the Stewardship Agreements to be prepared within 12 months of commencement of operations at United Wambo.

9.6.13 GIS Spatial Data Management

The United Wambo Spatial Management Database (SMD) is a core E&C system. The operating procedure for managing the SMD is the **Geographic Information Systems (GIS) Management Plan**. This plan describes the structure, use and maintenance of GIS for United Wambo and was developed in line with **GCAA-625378177-10327 – 11.19 GIS Spatial Data Management** protocol.

9.6.14 Waste Management

Waste at United Wambo is managed under the **Waste Management Plan**. This plan provides all employees and contractors with standards and instruction on the correct handling, storage and disposal of waste materials and encouraging efficient resource use and recovery. It also assist sites to comply with legislation, regulations, standards and development approvals that apply to the site, and the appropriate monitoring, reporting and audit waste management performance. The site Waste Management Plan was developed in line with the **GCAA-625378177-10249 – 11.08 Waste Management** protocol.

10. Measurement and Evaluation

10.1 Environmental Monitoring

Environmental monitoring programs have been developed in accordance with the conditions of SSD 7142 and EPL 3141. The relevant management plans outline the monitoring regime, roles and responsibilities and details for assessing compliance with the relevant impact assessment criteria outlined in the Development Consent, for each environmental aspect. Monitoring is undertaken as detailed in the EMPs.

The purpose of the monitoring programs is to measure the performance of the operation, which can be compared against objectives, targets and performance criteria specified in United Wambo's approval and licence conditions.

The key environmental monitoring programs for the operation include:

- air quality monitoring;
- noise monitoring;
- blast monitoring;
- surface water monitoring;
- ground water monitoring; and
- ecological monitoring, including rehabilitation.

Trained personnel undertake all monitoring using industry accepted monitoring techniques with equipment calibrated to relevant Australian Standards. Analysis of all samples is completed in NATA approved laboratories.

Specific authority, roles and accountabilities for environmental monitoring are clearly defined within each applicable management plan or strategy.

Monitoring results are stored on the United Wambo Environmental Monitoring Database (EMD) in accordance with **GCAA-625378177-10274 Environmental Data Collection and Reporting**. The EMD is a web-based database that provides automatic email notification to Environment and Community personnel when a monitoring point is approaching, or has exceeded a nominated trigger level for non-compliance.

In accordance with SSD 7142, a clear plan depicting all monitoring required to be carried out under the conditions of consent for United Wambo is provided in **Appendix C - Environmental Monitoring Plans**. Hyperlinks to copies of the strategies, plans and programs approved under the conditions of consent for United Wambo are also provided in **Appendix B - Approved Strategies, Plans and Programs**.

10.1.1 Environmental Monitoring Non-Compliance

In accordance with SSD 7142, in the event that a non-compliance with any environmental impact assessment criteria is identified through environmental monitoring, United Wambo will send letters notifying DPIE, other relevant agencies and any affected landowners and/or existing or future tenants (including tenants of mine-owned properties) accordingly. Follow up letters, including monitoring results, will be provided on a monthly basis to each of these parties until the results show that the operation is in compliance with the relevant criteria.

10.2 Environmental Inspections

As a minimum, monthly environmental inspections are undertaken across the site to determine compliance with legislation, standards, codes and other external requirements. Inspections are conducted by the United Wambo ECC or his/her delegate. Inspection results are completed and recorded as per United Wambo Monthly Environmental Inspection Form, or filled out in the pre-populated form in CMO. Other area specific inspections, such as an inspection of pipelines, erosion and sediment controls, lighting, weeds and rehabilitation are undertaken on an as needs basis.

In the event a non-conformance is identified during the inspection, corrective and/or preventative actions are identified and implemented, as discussed further in **Section 10.4**. The completion and

effectiveness of the corrective and/or preventative action is then assessed during the following monthly inspection.

10.3 Audits

Internal and external audits are undertaken to verify compliance with legislation and licences in accordance with **GCAA-625378177-10301 11.01 Environmental Compliance Management** and **GCAA-625378177-9980 13.0 Assurance**. The results of internal and external audits are communicated to the United Wambo Management Team accordingly.

The recommendations from internal and external audits are consolidated into action plans and entered into the CMO database to allow tracking of progress against the audit actions.

All internal and external audits are conducted by appropriately qualified persons. All audits are undertaken in accordance with the requirements of the Development Consent.

Condition E12 of SSD 7142 requires United Wambo to undertake an independent environmental audit within one year of commencement of development under SSD 7142, and every three years after. The audit must:

- a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;
- b) be carried out in consultation with the relevant agencies and the CCC;
- c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals);
- d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent;
- e) recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and
- f) be conducted and reported to the satisfaction of the Planning Secretary.

Within three months of commissioning an audit, or as otherwise agreed by the Planning Secretary, United Wambo will submit a copy of the audit report to the Planning Secretary with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.

10.4 Incidents, Non-Compliances and Corrective & Preventative Action

An incident or non-compliance are as defined in development consent SSD 7142. These can include, but are not limited to:

- any inspection/test or monitoring result that does not meet the acceptance criteria specified in any environmental approvals or relevant standard or legislation;
- any notice of non-compliance issued by a government agency with environmental jurisdiction;
- any non-conformance with identified objectives and targets; and

- any action that causes unapproved environmental harm or has the potential to cause environmental harm.

A non-compliance can be identified as a result of the following:

- an environmental site inspection;
- an internal or external audit;
- an environmental incident or community complaint;
- a review of environmental monitoring results against project specific/EPL criteria; or
- failure to adequately meet the objectives and targets of the EMS and EM Strategy.

The ECM will be responsible for:

- recording all EMS non-compliances;
- investigating the cause of any non-compliance;
- identifying the correct reporting requirements;
- recommending corrective and/or preventative actions to prevent the non-compliance from occurring again; and
- communicating the non-compliance to:
 - United Wambo Management Team; and/or
 - GCAA Group Environmental Manager where applicable.

Notification and reporting procedures for non-compliance events are included in **Sections 10.1.1** and **Section 10.5.3**. Additionally, any non-conformance resulting in an environmental incident will be managed in accordance with **Section 9.5.2**.

10.5 Environmental Reporting

All reporting is undertaken in accordance with relevant internal and statutory requirements, and with the approval of the United Wambo Operations Manager and ECM. A list of the external reporting requirements for United Wambo, their frequency and required recipients are provided in **Table 10-1**. External reporting associated with incidents is included in **Section 10.5.1**.

Table 10-1: Reporting Requirements

Report	Frequency	Recipient(s)	Requirement for Reporting/Comments
EPL Annual Return	Annually	EPA	EPL 3141
Annual Review	Annually	DPIE MEG	SSD 7142 (Condition E11) ML Condition 4 and Condition 5
EPBC Annual Report	Annually	DAWE	EPBC approval 2015/7600
National Pollutant Inventory Report (NPI)	Annually	EPA	National Environment Protection Measure

Report	Frequency	Recipient(s)	Requirement for Reporting/Comments
National Greenhouse and Energy Reporting System (NGERS)	Annually	Clean Energy Regulator	<i>National Greenhouse and Energy Reporting Act 2007</i>
Monitoring Data Summary	Quarterly	General Public (website)	SSD 7142 (Condition E16)
Documents required by Development Consent (including strategies, plans, programs, audits or Annual Review (last five reports))	Within three months of Approval or completion	General Public (website)	SSD 7142 (Condition E16)
Complaints register	Monthly	General Public (website)	SSD 7142 (Condition E16)
Minutes of CCC meetings	Quarterly (minimum)	General Public (website)	SSD 7142 (Condition E16)
Community Newsletter	Quarterly	General Public (website) CDP Recipients	Stakeholder Engagement Strategy (SES)
Monthly EPL monitoring summaries and any exceedances of EPL conditions.	Within 14 days of the data being obtained for the last sample for that period.	General Public (website)	<i>POEO Act, 1997 (2011 Amendment) & "Requirements for publishing pollution monitoring data" (EPA, 2012)</i>
Annual Community Consultation Report for exploration licences	Annual within 28 days from grants date of A444, EL7211, EL8452 and EL8456	MEG	
Internal reporting will be undertaken in accordance with relevant United Wambo internal reporting requirements.			

10.5.1 Annual Review

An Annual Review is prepared to report on the environmental performance of United Wambo, in accordance with Condition E11 of SSD 7142, by the end of March each year. The review must:

- describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
- report on the progress of biodiversity credits retirements and the associated actual versus proposed surface disturbance for each stage;

- c) report on the progress of implementing reasonable and feasible diesel emissions reduction measures for the Project;
- d) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the:
 - i. relevant statutory requirements, limits or performance measures/criteria;
 - ii. requirements of any plan or program required under this consent;
 - iii. monitoring results of previous years; and
 - iv. relevant predictions in the document/s listed in condition A2(c) of SSD 7142;
- e) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
- f) evaluate and report on:
 - i. the effectiveness of the noise and air quality management systems; and
 - ii. compliance with the performance measures, criteria and operating conditions in this consent;
- g) identify any trends in the monitoring data over the life of the development;
- h) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- i) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.

10.5.2 Access to Information

In accordance with Condition E16 of SSD 7142, regular reporting on the environmental performance of the project is available on the United Wambo website, at www.unitedproject.com.au. The following information is kept up-to-date and available on the website:

- a) the document/s listed in condition A2(c);
- b) all current statutory approvals for the development;
- c) all approved strategies, plans and programs required under the conditions of this consent;
- d) detailed plans for the phases of the development;
- e) minutes of CCC meetings;
- f) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;
- g) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
- h) a summary of the current phase and progress of the development;
- i) contact details to enquire about the development or to make a complaint;
- j) a complaints register, updated monthly;

- k) the Annual Reviews of the development;
- l) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report; and
- m) any other matter required by the Planning Secretary.

10.5.3 Non-Compliance and Incident Reporting

Within seven days of becoming aware of a non-compliance with any of the conditions of SSD 7142, United Wambo must also notify DPE of the non-compliance. The notification must be in writing to compliance@planning.nsw.gov.au and identify the development (United Wambo Open Cut Coal Mine Project (SSD 7142)), set out the condition SSD 7142 that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

This report will be prepared by the ECM and approved by the United Wambo Operations Manager prior to submission to external agencies.

10.5.3.1 Material Harm Incidents

In addition to incident notification required by Condition E9 of SSD 7142, Material Harm incident notifications are detailed in the **United Wambo Pollution Incident Response Management Plan (PIRMP)**. The ECM, in conjunction with the Operations Manager, will determine whether an incident is classified as having caused, or threatened to cause, material harm to the environment, as defined in the POEO Act. Reporting of material harm incidents occurs immediately.

Authorities which must be immediately advised of environmental harm incidents include:

- DPIE;
- the EPA;
- the Ministry of Health via the local Public Health Unit;
- WorkCover;
- Singleton Council; and
- NSW Fire and Rescue.

Information about a pollution incident that must be notified includes:

- the time, date, nature, duration and location of the incident;
- the location of the place where pollution is occurring or is likely to occur;
- the nature, estimated quantity or volume, and the concentration of any pollutants involved, if known;
- the circumstances in which the incident occurred, including the cause of the incident, if known; and
- the action taken, or proposed to be taken, to deal with the incident and any resulting pollution or threatened pollution, if known.

Written details of the incident will be provided to the Secretary and the EPA within seven days of the date on which the incident occurred. All reportable incidents are detailed in the Annual Review (AR) and the EPL Annual Return, if appropriate.

11. Review and Continuous Improvement

11.1 Management Review Process

Review of the EMS and EM Strategy will be undertaken to assess the suitability and effectiveness of the systems used to manage environmental issues at United Wambo and compliance with the GCAA requirements, legislation, approvals and licences. The review will include all components of the EMS including strategies, management plans, monitoring plans and procedures and will consider the following:

- Glencore environmental policy and standards;
- legislative requirements;
- performance against objectives and targets;
- results of audits;
- community complaints and environmental incidents;
- environmental monitoring results;
- non-conformances and corrective actions; and
- feedback from stakeholders.

Additionally, in accordance with Condition E7 of SSD 7142, the suitability of existing strategies, plans and programs required under the Consent must be reviewed within three months:

- a) the submission of an incident report under Condition E9 of SSD 7142;
- b) the submission of an Annual Review under Condition E111 of SSD 7142;
- c) the submission of an Independent Environmental Audit under condition E12 of SSD 7142; or
- d) the approval of any modification of the conditions of SSD 7142.

In accordance with Condition E8 of SSD 7142, if necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review. All approved versions of the EM Strategy, EMPs and programs will be available on the company website.

11.2 Continuous Improvement

Where possible, United Wambo will attempt to implement all reasonable and feasible best practice mitigation measures throughout operations at United Wambo. The basis for continuous improvement will be through the ongoing monitoring of impacts and the corrective/preventative action process outlined in **Section 10.4**. Through the development of corrective/preventative actions, United Wambo will investigate ways to minimise impacts generated by operations and implement where practicable.

12. Document Information

Relevant legislation, standards and other reference information must be regularly reviewed and monitored for updates and should be included in the site management system. Related documents and reference information in this section provides the linkage and source to develop and maintain site compliance information.

12.1 Related Documents

Related documents, listed in Table 12-1 below, are *documents* directly related to or referenced from within this document.

Table 12-1: Related documents

Number	Title
UWOC-1689771511-366	Aboriginal Cultural Heritage Management Plan
UWOC-1689771511-367	Air Quality and Greenhouse Gas Management Plan
UWOC-1689771511-368	Biodiversity Management Plan
UWOC-1689771511-382	Blast Management Plan
UWOC-1689771511-369	Erosion and Sediment Control Plan
UWOC-1689771511-370	Groundwater Management Plan
UWOC-1689771511-371	Historic Heritage Management Strategy
UWOC-1689771511-383	Noise Management Plan
UWOC-1689771511-348	Rehabilitation Management Plan
UWOC-1689771511-364	Surface Water Management Plan
UWOC-1689771511-365	Water Management Plan
UWOC-1689771511-359	Complaints Management Procedure
UWOC-1689771511-50	Documents and Records
UWOC-1689771511-498	Emergency Management Plan
UWOC-1689771511-656	Environment and Community Risk Assessment
UWOC-1689771511-381	Monthly Environmental Inspection Form
UWOC-1689771511-374	Pollution Incident Response Management Plan
UWOC-1689771511-44	Training and Competency

12.2 Reference Information

Reference information, listed in Table 12-2 **Error! Reference source not found.** below, is information that is directly referred to for the development of this document.

Table 12-2: Reference information

Reference	Title
Legislation	Environmental Planning and Assessment Act 1979
	Mining Act 1992
	Protection of the Environment Operations Act 1997
	Environment Protection and Biodiversity Conservation Act 1999
	Water Management Act 2000
	National Parks and Wildlife Act 1974
	Work Health and Safety (Mines and Petroleum Sites) Act 2013
	Work Health and Safety (Mines and Petroleum Sites) Regulation 2014
	NSW Work Health and Safety Act 2011
	NSW Work Health and Safety Regulation 2011
Standards and Guidelines	ISO14001:2004 - Environmental management systems Requirements with guidance for use
	ISO31000:2009 - Risk Management – Principles and Guidelines
	AS/NZS 4801:2001 - Occupational health and safety management systems— Specification with guidance for use
Glencore Coal Assets Australia	HSEC POL 0007 HSEC Management Framework
	G HSEC POL 0005 Health and Safety Policy
	G HSEC POL 0006 HSEC Assurance Policy
	G HSEC POL 0004 Environmental Policy
	G HSEC POL 0008 Human Rights Policy
	G HSEC POL 0003 Emergency Response and Crisis Management Policy
	CA HSEC FWK 0006 Glencore Corporate Risk Management Framework
	GCAA-625378177-10524HSEC Management System Framework
	GCAA-625378177-2844 Risk Management
	CAA HSEC PCL 0020 11.01 Environmental Compliance Management
	GCAA-625378177-10248 11.02 Pipeline Management

Reference	Title
	GCAA-625378177-10320 11.03 Water Management
	GCAA-625378177-819 11.04 Tailings Management
	GCAA-625378177-10322 11.05 Dams and Diversions
	GCAA-625378177-10892 11.06 Erosion and Sediment Control
	GCAA-625378177-10243 11.07 Hydrocarbon Management
	CAA HSEC PCL 0011 11.08 Waste Management
	GCAA-625378177-10237 11.09 Exploration and Drilling
	GCAA-625378177-10324 11.10 Air Quality Management
	GCAA-625378177-10238 11.11 Noise Management
	GCAA-625378177-9975 11.12 Blast Management
	GCAA-625378177-13661 11.13 Emissions and Energy
	GCAA-625378177-10240 11.14 Environment and Community Training
	GCAA-625378177-10242 11.15 Land and Property Management
	GCAA-625378177-10241 11.16 Rehabilitation Management
	GCAA-625378177-10325 11.17 Mine Closure Planning
	CAA HSEC PCL 0028 11.18 Biodiversity Offset Management
	GCAA-625378177-10327 11.19 GIS Spatial Data Management
	GCAA-625378177-10328 11.20 Statutory Approval Management - NSW
	GCAA-625378177-9976 1.0 Leadership, Culture and Accountability
	GCAA-625378177-9987 2.0 Strategy and Planning
	GCAA-625378177-9989 3.0 Documents and Records
	GCAA-625378177-9990 4.0 Training
	GCAA-625378177-9991 5.0 Contractors and Suppliers
	GCAA-625378177-9992 6.0 Incident
	GCAA-625378177-9993 7.0 Emergency
	GCAA-625378177-9994 8.0 Health and Hygiene
	GCAA-625378177-9995 9.0 Human Rights and Our People
	GCAA-625378177-9977 10.0 Community and Stakeholder Engagement
	GCAA-625378177-9978 11.0 Environment

Reference	Title
	GCAA-625378177-9979 12.0 Change
	GCAA-625378177-9980 13.0 Assurance
	GCAA-625378177-10266 11.21 Aboriginal Cultural Heritage NSW
	GCAA-625378177-10281 11.25 National Native Title Exploration and Mining Leases
	CAA HSEC REG 0001 HSEC Definitions and Terms.
	GCAA-325378177-10274 11.01 Environmental Data Collection and Reporting

12.3 Change Information

Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in Table 12-3 **Error! Reference source not found.** below.

Table 12-3: Change information

Version	Date	Change Details
D.1	17 April 2020	New document
D.2	23 June 2020	Updated to address comments received from Department of Planning, Industry and Environment (DPIE)
1.0	13 July 2020	Approved by DPIE
2.0	2 September 2020	Updated for Phase 2 of the Development.
2.1	24 Nov 2020	Updated to include comments from DPIE review.

Appendix A - DPIE Consultation Records

Section	Comment	Response /Change
Throughout	Use of; - Regular/regularly/periodically; - Non-conformance; and - Appropriate.	Altered to; - Provide timeframes; - Non-compliance; and - Describe what is appropriate.
Executive Summary	Items 1 and 7 in Table 1 included the same commitment.	Item 7 removed from Table 1 and subsequent item numbers updated accordingly.
Executive Summary	Item 10 in Table 1 did not specify that the commitment related to audits required by the conditions of consent.	Words “required by conditions of consent” added.
Executive Summary	Words “Where possible” and “attempt to” should be removed from Item 17 in Table 1.	Words removed.
Executive Summary	Item 18 in Table 1 should require investigation and implementation rather than just investigation.	Added words “and implement, where practicable”.
Section 1	Clarify Phases for Figure 1-3 in label.	Figure 1-3 label changed to “Phase 1A and 1B Areas” Removed for Phase 2
Section 4	Paragraph 2 contains a reference error.	Reference corrected.
Section 9.3	Should be reviewed for consistency with DPIE’s comments on the SIMP and does not describe a procedure.	Added words “Section 10.5 provides an overview of the reporting mechanisms United Wambo use to keep the local community and relevant agencies informed about the operation and environmental performance of the development. Progress on the SIMP will be reported in the Annual Review.”
Section 9.3.1	Should outline the Complaints Management Procedure or the document should be appended to this management for review as it is being used to satisfy a requirement of a consent condition.	Complaints Management Procedure outlined. Details of how complaints are acknowledged and the relevant stakeholders added.

Section	Comment	Response /Change
	Request to include detail on how complaints are acknowledged and who the relevant stakeholders are.	
Section 9.3.2	Further information is required to set out a procedures to be implemented to resolve dispute.	More detail provided on the procedure to be used to resolve different types of disputes.
Section 9.5.1	Does not provide enough detail of the Emergency Management Procedure that would be followed to satisfy the requirements of the consent conditions.	Detail regarding the Emergency Response Team and Incident Management Team added.
Section 9.5.2	Requires further explanation of the Pollution Incident Response Management Plan, including information to be recorded, and authorities to be notified.	Reference to Section 10.5.3 added which includes the requested details.
Section 9.6.4	Community notification to be included as a part of blasting procedures in the second paragraph.	Community notification included.
Section 9.6.7	Note that Figure in Appendix C1 differs from monitoring locations shown in the Phase 1B AQGHGMP. Please check and make sure are consistent.	Plan in Appendix C1 updated to reflect monitoring locations shown in Phase 1B AQGHGMP.
Section 10.1.1	Should include the procedure for notification and provision of regular monitoring results to required parties, including relevant agencies, following a non- compliance with environmental impact assessment criteria.	Procedure of sending letters specified and relevant agencies added as a party to be notified.
Section 10.4	Include incidents with definitions of incident, material harm and non-compliance as defined in the development consent.	Incidents added and development consent reference with respect to definitions.
Section 10.5.3.1	Check against the requirements of Condition E9 of SSD 7142.	DPIE added to the list of agencies to be immediately notified in the event of an environmental harm incident.
Section 12.1	List of documents referenced in Table 12-1 to be reviewed.	Further discussion has been added to the sections where internal procedures are referenced, it is not proposed that internal documents are published externally.
Appendix B	Table does not contain links or hyperlinks to referenced documents.	Links documents to be added to Table once they have been approved and uploaded.

Section	Comment	Response /Change
		United Wambo website is currently being updated to a new website, all links will change, new updated links will be added once the new website is live.

Appendix B - Approved Strategies, Plans and Programs

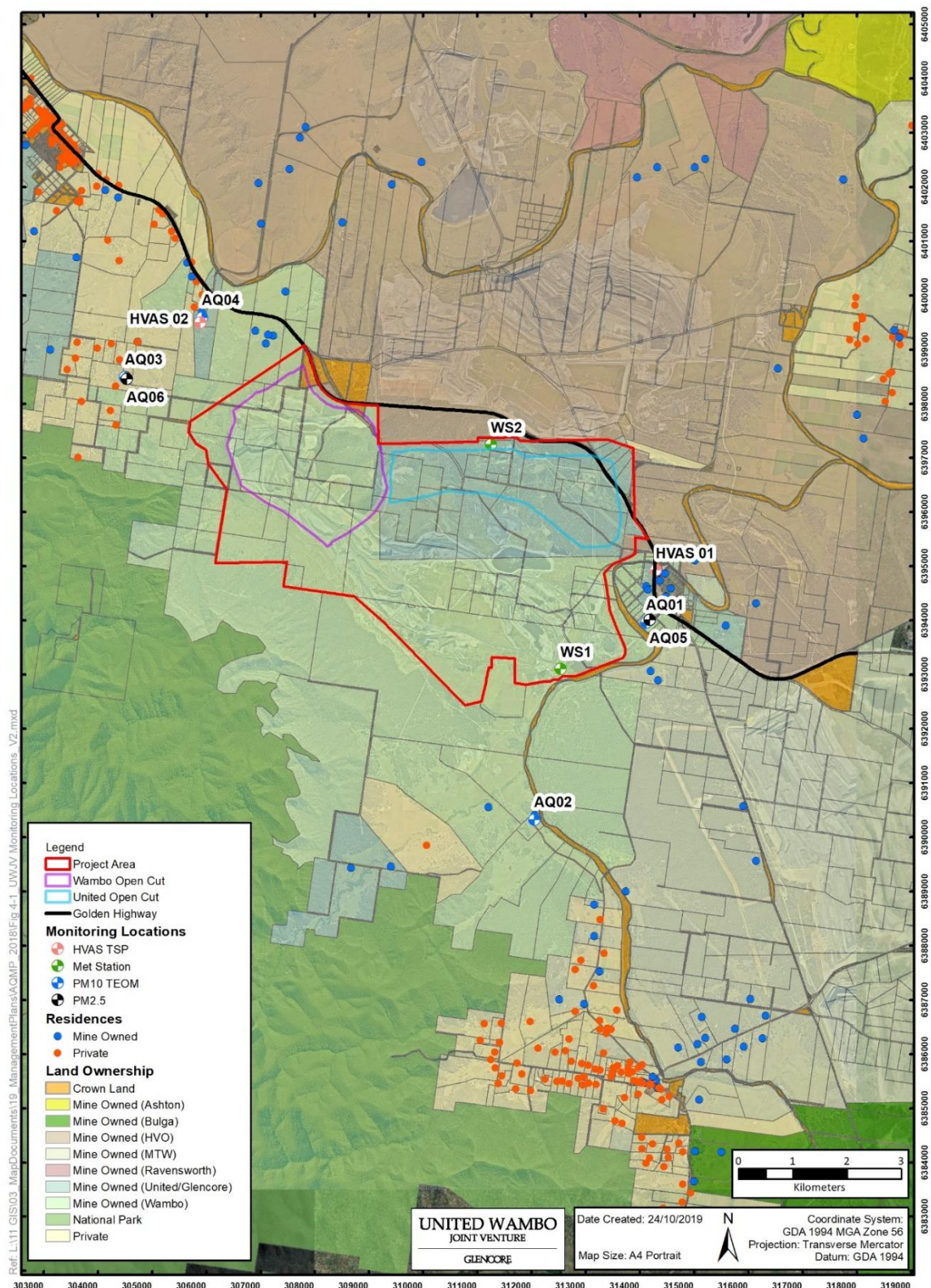
Approved strategies, plans and programs are available on the United Wambo website www.unitedproject.com.au.

Table 12-4: Approved Strategies, Plans and Programs

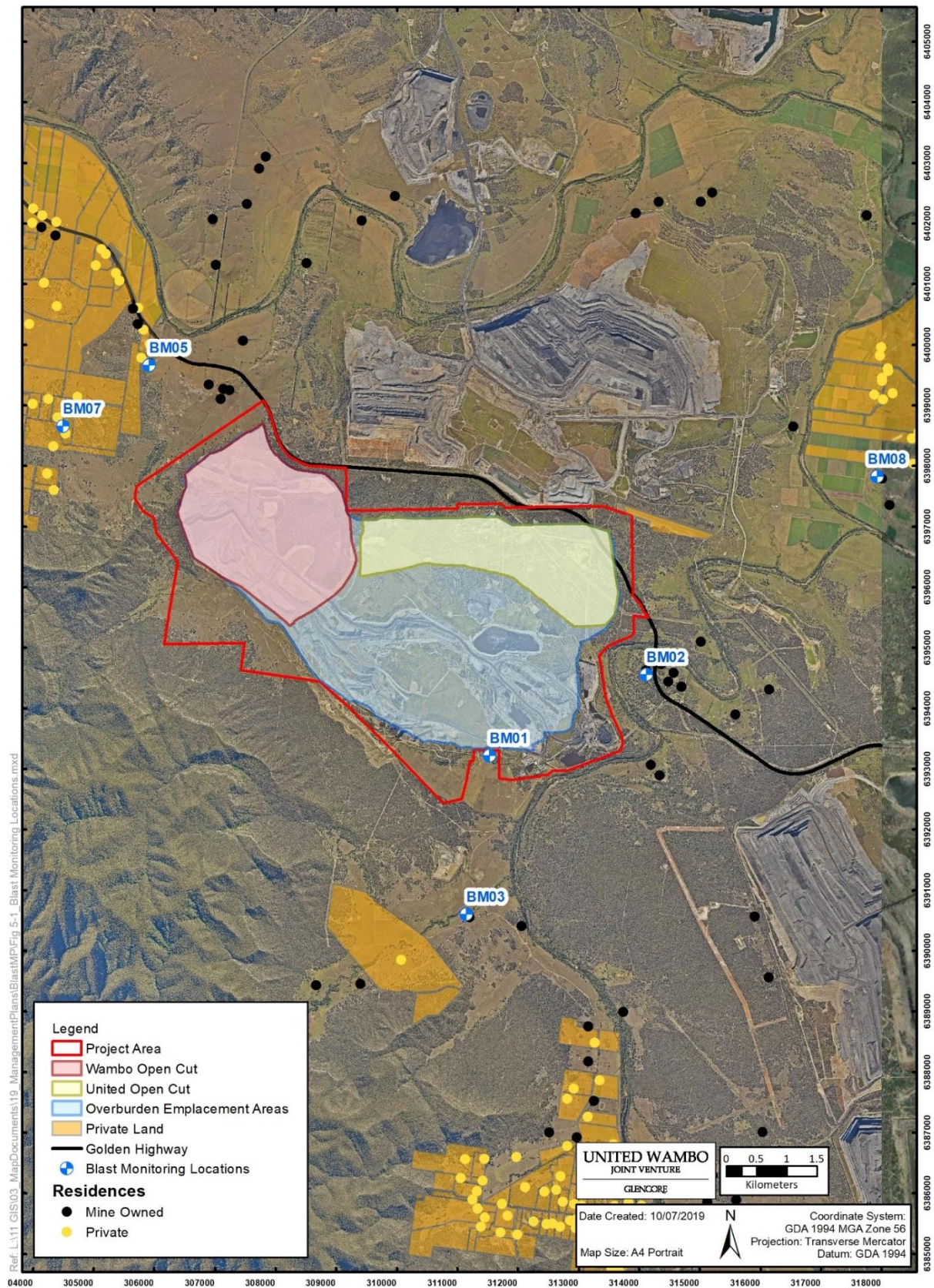
Links to Management Plans and Programs	
Noise Management Plan	
Blast Management Plan	
Air Quality and Greenhouse Gas Management Plan	
Aboriginal and Cultural Heritage Management Plan	
Historic Heritage Management Strategy	
Rehabilitation Management Plan	
Water Management Plan:	
• Surface Water Management Plan	
• Groundwater Management Plan	
• Erosion and Sediment Control Plan	
Biodiversity Management Plan	
Social Impact Management Plan	
Bushfire Management Plan	

Appendix C - Environmental Monitoring Plans

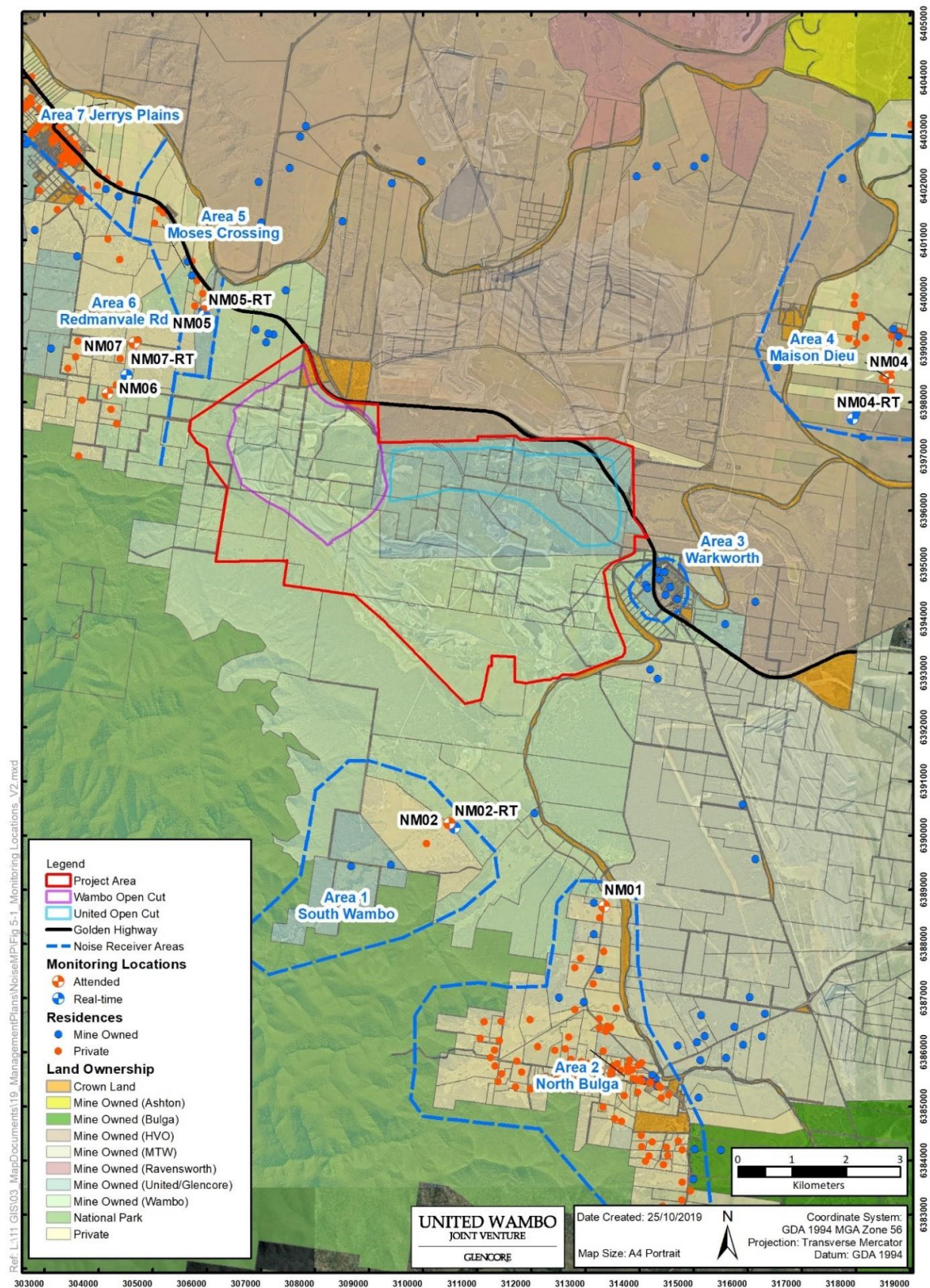
C.1 Air Quality Monitoring Locations



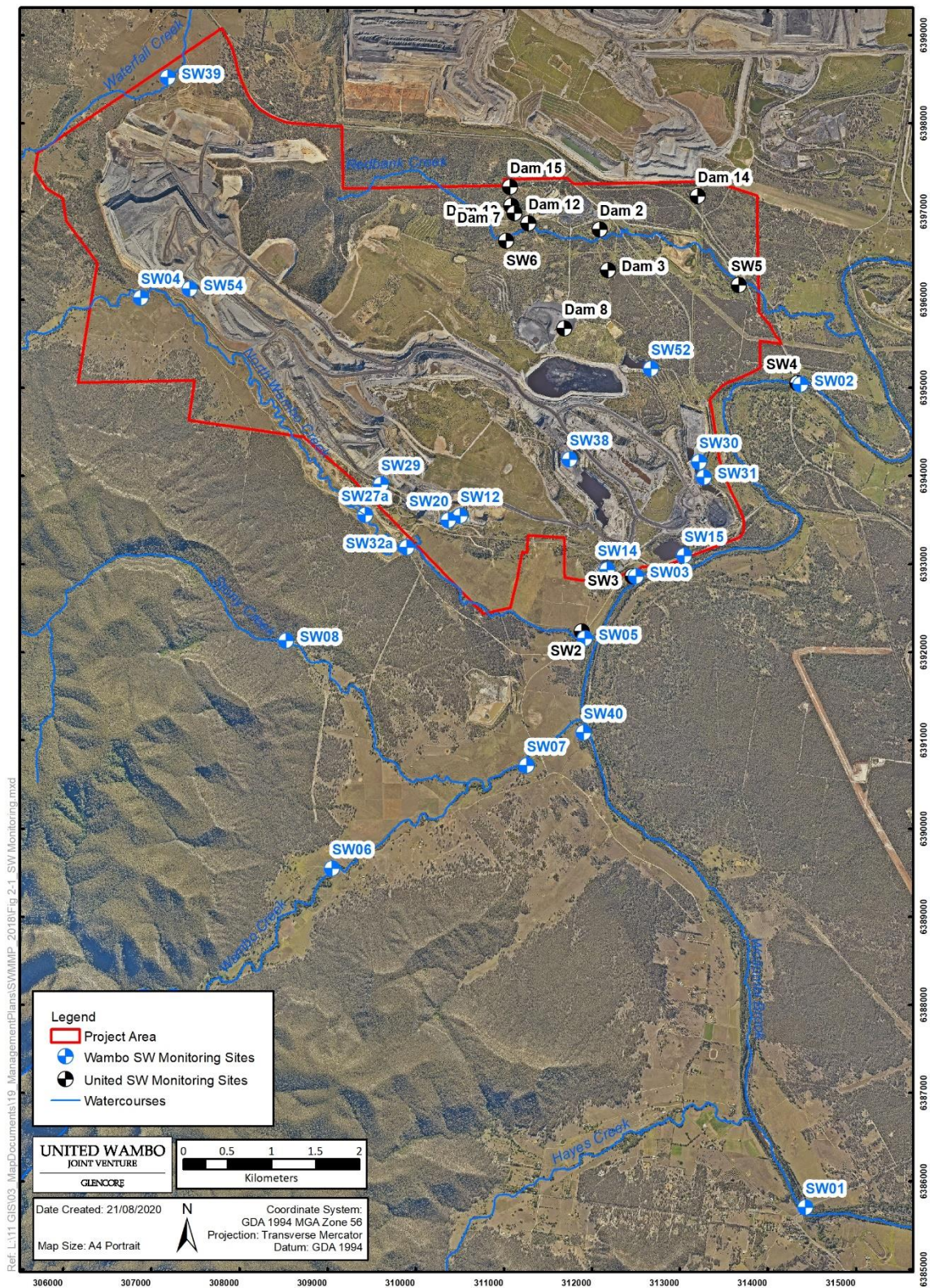
C.2 Blast Monitoring Locations



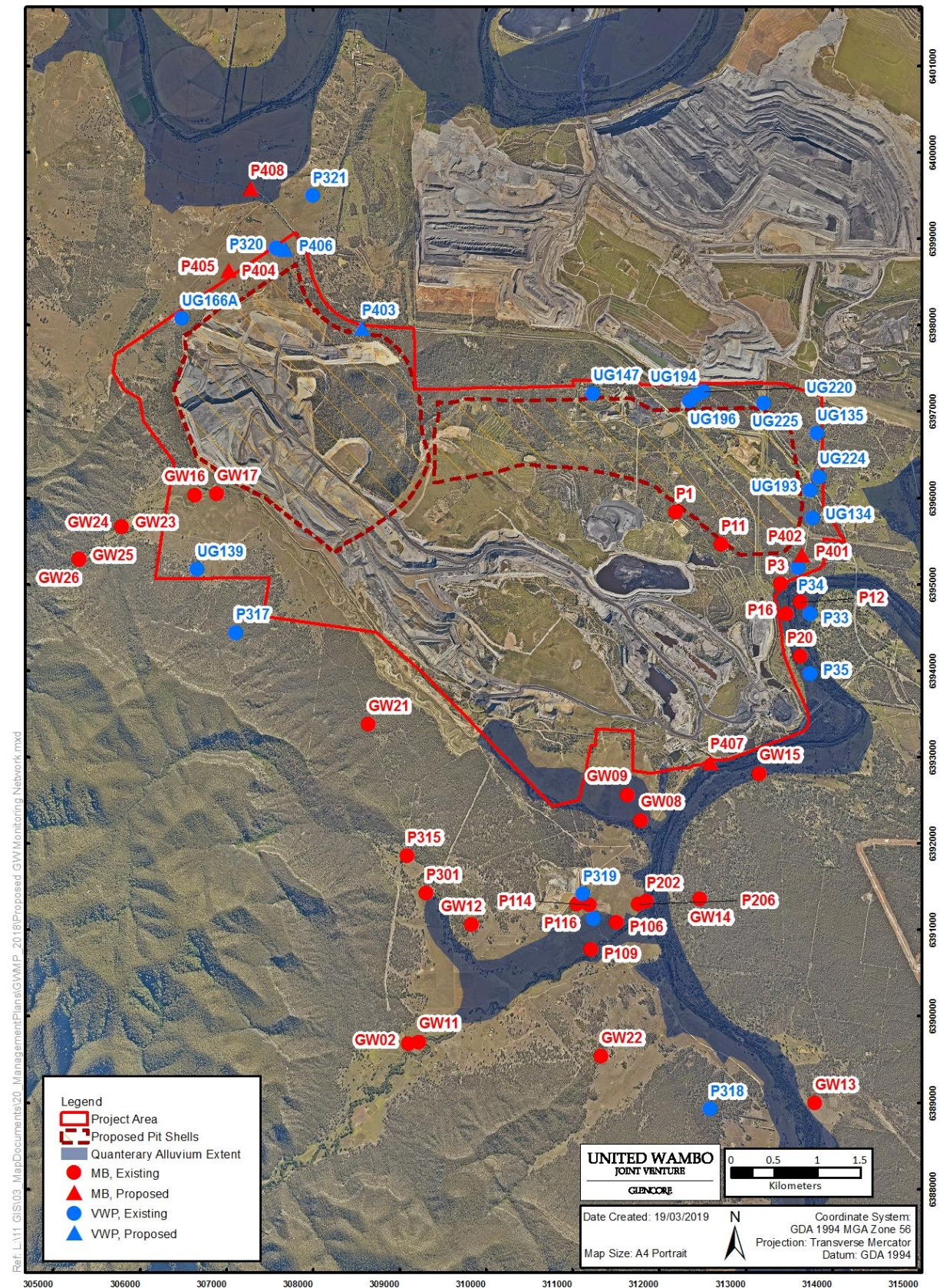
C.3 Noise Monitoring Locations



C.4 Surface Water Monitoring Locations



C.5 Groundwater Monitoring Locations



Appendix D - PIRMP



Pollution Incident Response Management Plan

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1. Purpose

The *Protection of the Environment Legislation Amendment Act 2011* (PELA) received assent on 16 November 2011, resulting in changes to the *Protection of the Environment Operations Act, 1997* (POEO Act). The intent of the PELA is to improve the way pollution incidents are reported and managed. Provisions include a requirement for holders of Environmental Protection Licences (EPLs) to prepare, keep, test and implement a Pollution Incident Response Management Plan (PIRMP). The specific requirements for PIRMPs are set out in Part 5.7A of the POEO Act and the *Protection of the Environment Operations (General) Regulation 2009* (POEO (G) Regulation). In summary, this legislation requires the following:

- holders of EPLs must prepare a Pollution Incident Response Management Plan (Section 153A, POEO Act);
- the plan must include the information detailed in the POEO Act (section 153C) and the POEO(G) Regulation (Clause 98C) and be in the form required by the POEO(G) Regulation (clause 98B);
- licensees must keep the plan at the premises to which the EPL relates (section 153D, POEO Act);
- licensees must test the plan at least every 12 months and after a pollution incident in accordance with the POEO(G) Regulation (clause 98E); and
- if a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened within the meaning of Part 5.7 of the POEO Act, licensees must immediately implement the plan (Section 153F, POEO Act).

As the holder of EPL 3141, United Collieries Pty Ltd (United) is required to comply with the POEO Act. As such, this document has been developed to satisfy the PIRMP requirements documented above, and detail the procedures for notification of pollution incidents resulting in or having the potential to cause material harm to the environment.

The notification of environmental incidents under this PIRMP is only required for those incidents causing or threatening to result in material environmental harm (a material harm incident) as defined in the POEO Act (see *Section 3.1*).

2. Planning

2.1 Regulatory Requirements

Specific detail is required for inclusion in the PIRMP. ~~Table 2-1~~**Table 2-1** lists information mandated under Section 153C of the POEO Act and Clause 98C of the POEO (G) Regulation, and details where this information is located in this document.

Table 2-1: Regulatory Requirements and Document Directory

Section	Detail required	Location in document
153C (a)	The procedures to be followed by the holder of the relevant EPL in notifying a pollution incident to:	

Section	Detail required	Location in document
	a) the owners or occupiers of premises in the vicinity of the premises to which the EPL relates; b) the local authority for the area in which the premises to which the EPL relates, are located and any area affected, or potentially affected, by the pollution; and c) any persons or authorities required to be notified by Part 5.7 (of the POEO Act)	<i>Section 5.3</i> <i>Section 5</i> <i>Section 5</i>
153C (b)	A detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant EPL to reduce or control any pollution	<i>Section 4</i>
153C (c)	The procedures to be followed for coordinating with the authorities or persons that have been notified, any action taken in combatting the pollution caused by the incident and, in particular, the persons through whom all communications are to be made	<i>Section 5.2</i>
98C	Any other matter required by the Protection of the Environment Operations (General) Regulation 2009 (as set out below): <i>98C (1)(a)</i> <i>A description of the hazards to human health or the environment associated with the activity to which the licence relates (the "relevant activity").</i>	<i>Section 2.3</i>
	<i>98C (1)(b)</i> <i>The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood.</i>	<i>Section 2.3</i>
	<i>98C (1)(c)</i> <i>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.</i>	<i>Section 2.3</i>
	<i>98C (1)(d)</i> <i>An inventory of potential pollutants on the premises or used in carrying out the relevant activity.</i>	<i>Section 2.4</i>
	<i>98C (1)(e)</i> <i>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.</i>	<i>Section 2.4</i>
	<i>98C (1)(f)</i> <i>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.</i>	<i>Section 4</i>

Section	Detail required	Location in document
	98C (1)(g) <i>The names, positions and 24-hour contact details of those key individuals who:</i> (i) <i>are responsible for activating the plan;</i> (ii) <i>are authorised to notify relevant authorities under Section 148 of the POEO Act; and</i> (iii) <i>are responsible for managing the response to a pollution incident.</i>	Section 3.2
	98C (1)(h) <i>The contact details of each relevant authority referred to in section 148 of the POEO Act.</i>	Section 5.2
	98C (1)(i) <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.</i>	Section 5.3
	98C (1)(j) <i>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.</i>	Section 4
	98C (1)(k) <i>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.</i>	Figures 2.2 to 2.4 Note: no stormwater drains are located on the premises
	98C (1)(l) <i>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.</i>	Section 4
	98C (1)(m) <i>The nature and objectives of any staff training program in relation to the plan.</i>	Section 6.1
	98C (1)(n) <i>The dates on which the plan has been tested and the name of the person who carried out the test.</i>	Section 6.2
	98C (1)(o) <i>The dates on which the plan is updated.</i>	Section 6.2

Section	Detail required	Location in document
	98C (1)(p) The manner in which the plan is to be tested and maintained.	Section 6.2

2.2 Site Details

The United Wambo Joint Venture (UWJV) is a coal mining operation which operates under EPL 3141. UWJV is a joint venture between United Collieries Pty Limited (United) (a joint venture between Abelsore Pty Limited (Glencore) (95 per cent) and the Construction, Forestry, Mining and Energy Union (CFMEU) (five per cent)) and Wambo Coal Pty Limited (managed by Peabody). UWJV is located approximately 16 kilometres west of Singleton and approximately 8 kilometres south-east of Jerrys Plains in the Hunter Valley of New South Wales (~~Figure 2-1~~ **Figure 2-1**).

The surrounding area, which may potentially be impacted by a pollution incident occurring at United, in addition to the premises itself, may include the following (refer to ~~Figure 2-2~~ **Figure 2-2**):

- landholders adjacent to the mine site;
- downstream watercourses (including inundation areas and adjacent landholders): Redbank Creek and Wollombi Brook, both of which subsequently flow into the Hunter River; and
- Wambo and Hunter Valley Operations coal mines.

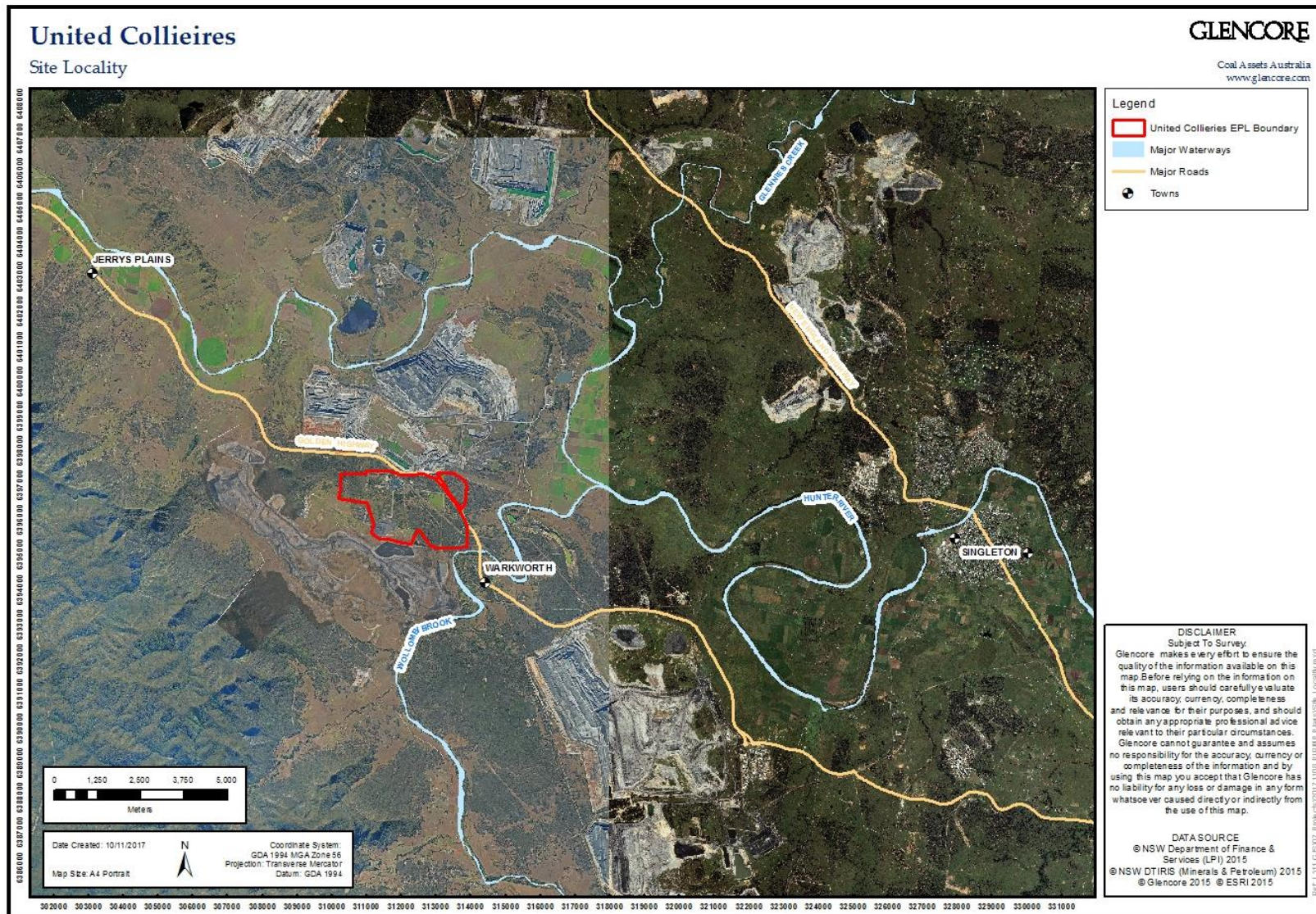


Figure 2-1: Site Locality

Number: UWOC-1689771511-847
Owner: Environment & Community Manager

Status: Pending
Version: 0.2

Effective:
Review:

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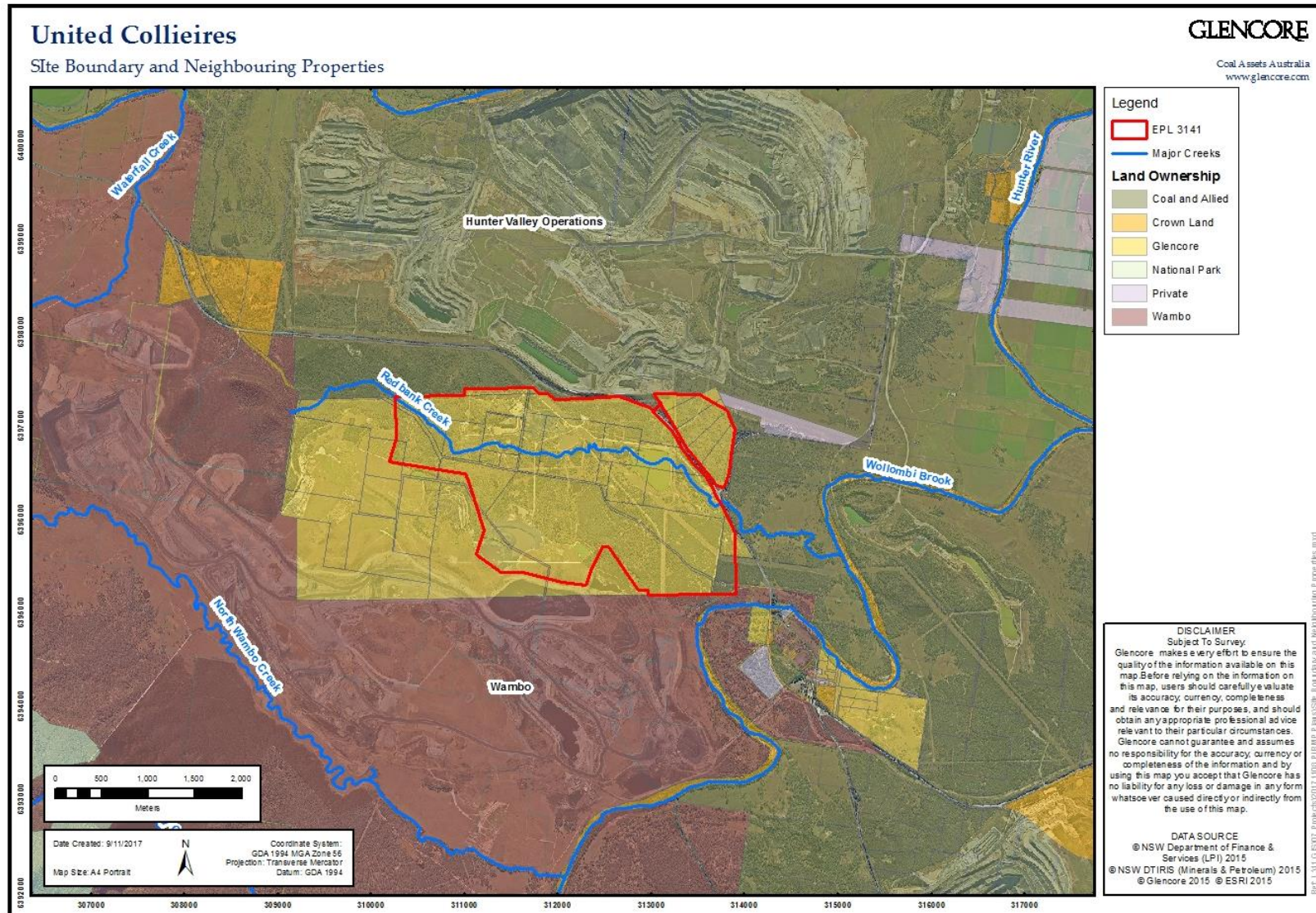


Figure 2-2: Site Boundary and Neighbouring Properties

Number: UWOC-1689771511-847
Owner: Environment & Community Manager

Status: Pending
Version: 0.2

Effective:
Review:

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2.3 Major Hazards

The potential major hazards which have been identified for United include:

- spills (e.g. hydrocarbon, hazardous chemicals, etc) resulting in land contamination;
- spills (e.g. hydrocarbon, hazardous chemicals, saline or sediment laden water, etc) resulting in water contamination;
- major water discharge (e.g. dam failure); and
- fire.

The likelihood of environmental hazards occurring at United has been captured through the **United Collieries Environment and Community Risk Assessment (E&CRA)**. The purpose of the Health, Safety, Environment and Community (HSEC) Broad Brush Risk Assessment (BBRA) is to identify significant environment and community hazards across the site, the risk they pose to operations and the controls necessary to effectively manage them. Management of impacts is prioritised according to the level of risk each hazard is assigned. The United E&CRA outlines the identified hazards, potential impacts, risks and the controls employed to manage them. This document is prepared and reviewed in accordance with **GCAA-625378177-10317 - 11.01 Annual Environment and Community Risk Assessments**.

United implements site specific management plans and standards that have been developed to manage specific risks and outline management objectives, targets and detail information regarding their management at United, including:

- *Environmental Management Strategy;*
- *Erosion and Sediment Control Management Plan;* and
- *Environmental Monitoring Program.*

The systematic identification, assessment and management of foreseeable catastrophic (core) hazards is undertaken utilising the adopted Glencore Sustainable Development Guideline for Catastrophic (Core) Hazard Management.

This process includes:

- identifying foreseeable hazards associated with United;
- assessing HSEC risks using recognised analysis and evaluation methodologies; and
- implementing controls necessary to eliminate or reduce identified catastrophic (core) risks in accordance with the established hierarchy of controls for environmental management.

2.4 Chemicals and Potential Pollutants

All chemicals are accompanied by the relevant Material Safety Data Sheets (MSDS) as required by Work, Health and Safety Regulations. United Collieries has access, via the site intranet, to ChemAlert 2, which provides the site with up-to-date information on chemicals which may be found and/or used at United Collieries, including MSDS.

The facilities that store fuel, oil and hazardous chemicals have been designed in accordance with Australian Standard 1940 – 1993. The system has been designed to incorporate:

- impervious walls and floors;

- sufficient capacity to maintain 110% of the volume of the tank (or 110% volume of the largest tank where more than one tank is stored in the bund);
- walls not less than 250 mm high; and
- floors graded to a collection sump.

Maximum inventories for bulk fuels and oils onsite are contained in ~~Table 2-2~~ **Table 2-2** below.

Table 2-2: Pollutant Register

Pollutant Type	Location	Capacity
Diesel	LV Tank	29,000L
Diesel	HV Tank	70,000L
LPG	MIA	3,500L
Oils and Grease	Oil Store	12,000L (12 x 1,00L IBCs)

Potential pollutants created as part of mining operations and, thus, excluded from registers, include:

- mine tailings;
- mine water (extracted from underground and open cut mine workings);
- sediment laden surface water runoff from disturbed areas; and
- effluent waste.

~~Figure 2-3~~ **Figure 2-3** displays the location of potential pollutants including tailings dams, sediment dams, and fuel storage locations.

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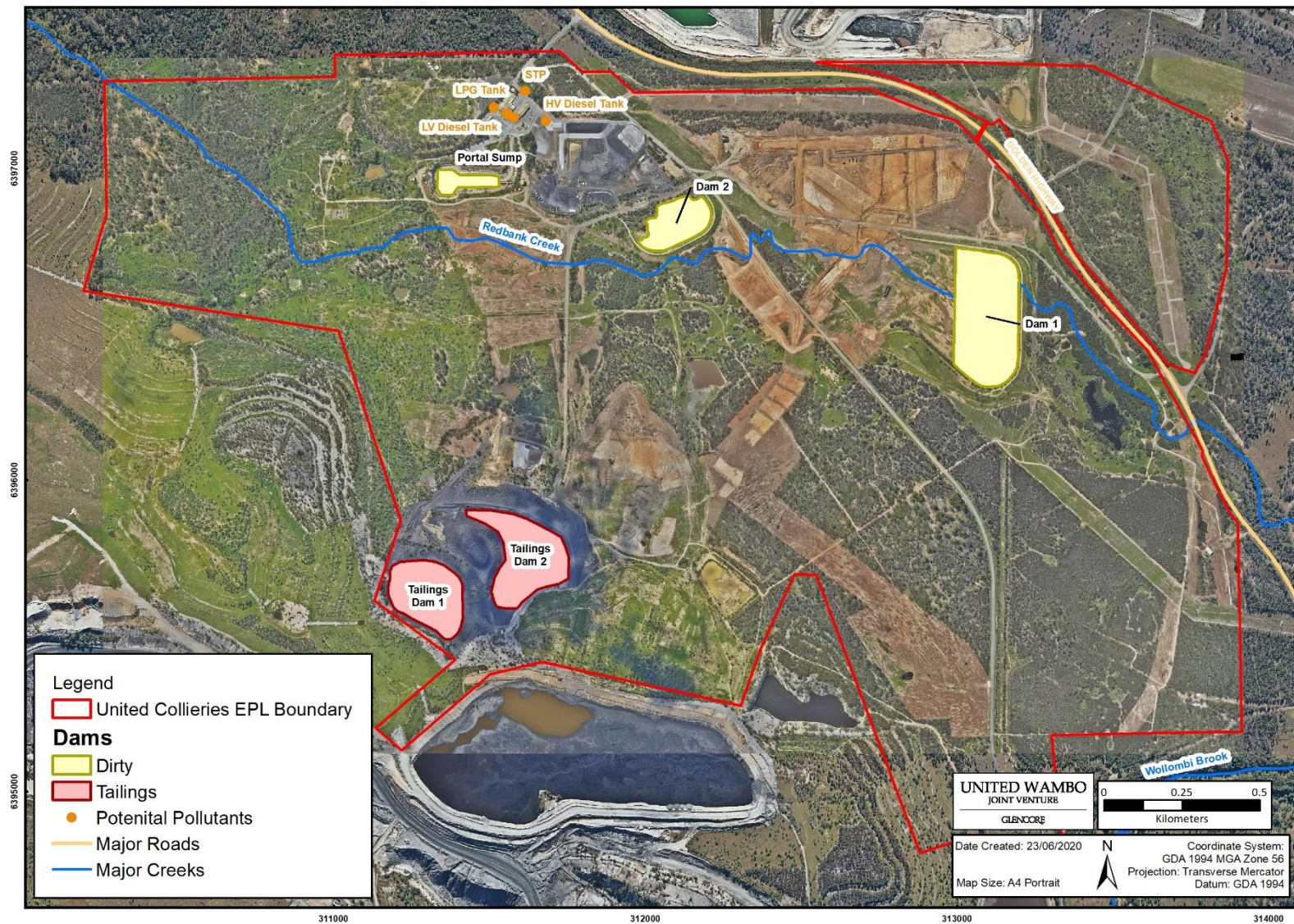


Figure 2-3: Potential Pollutant Locations

Number: UWOC-1689771511-847
Owner: Environment & Community Manager

Status: Pending
Version: 0.2

Effective:
Review:

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3. Management and Responsibilities

3.1 Legal Duty to Notify

All United employees and contractors are responsible for alerting management personnel to all environmental incidents or hazards which may result in environmental harm or the potential to cause environmental harm, regardless of the nature or scale.

Notification responsibilities are detailed in the POEO Act (Section 148), which encompasses all site personnel, including contractors and sub-contractors. These can be categorised broadly as:

- the duty of an employee or any person undertaking an activity;
- any person engaged as an employee or undertaking an activity (at the licensed premises) must, immediately after becoming aware of any potential incident, notify their relevant manager of the incident and all relevant information about it. This is to be undertaken as per **Section 5.2**; and
- the duty of the employer or occupier of a premises to notify.

An employer or occupier of the premises on which the incident occurs, who is notified (or otherwise becomes aware of) a potential pollution incident, must undertake immediate notification to the appropriate regulatory authority of any “**material harm incidents**”, including relevant information. Notification shall be undertaken by the Environment & Community Manager or Operations Manager as per **Section 5.2**.

3.2 Contact Details

The specific responsibilities associated with the management and implementation of the PIRMP are outlined in [Error! Reference source not found. Table 3-1](#) below.

Table 3-1: PIRMP Contact Details

Name	Contact details	Position	Responsibility
Gary Wills	Mobile: 0429 900 814	Operations Manager	Responsible for authorising the PIRMP and all subsequent updates Responsible for ensuring adequate resourcing for implementation of the PIRMP Authorised to liaise with the relevant authority
Aislinn Farnon	Mobile: 0429 306 208	Environment and Community Manager	Responsible for undertaking notification as defined in this PIRMP Responsible for managing the response to a pollution incident Responsible for arranging testing and updating of the PIRMP Responsible for coordinating communications with affected community members

4. Incident Management

A pollution incident is defined in the POEO Act as 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.

In the case of an environmental incident, prior to any other action, the site must contact 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, as they are responsible for controlling and containing incidents.

If the incident does not pose any threat to human health or property, concurrently with contacting emergency services (000), all possible actions should be taken to control the pollution incident and minimise health, safety and environmental consequences. These actions must be employed to the maximum extent possible to:

- provide for the safety of people at and within the vicinity of the site, and
- contain the pollution incident.

In compliance with **GCAA-625378177-9992 6.0 Incident Standard**, the actions to be implemented at United on the occasion of an incident include the following:

- secure the scene and contain the incident;
- gather information (i.e. environmental monitoring, photographs);
- determine the investigation level;
- commence an ICAM (if required);
- review and classify information and determine actions;
- complete actions; and
- trend analysis reports.

Arrangements, including description and location of safety equipment for minimising risk of harm to people and the environment as result of a pollution incident, and for containing or controlling a pollution incident, are included in the following documentation:

- **UTDOC-1327719663-85 - Emergency Response Control Plan**

The above management plan documents the roles and accountabilities of key personnel in the event of an incident.

Incident management at United focuses on actions to:

- secure and assign necessary tactical response resources, including equipment and/or personnel to minimise the environmental impacts associated with the incident;
- establish that tactical response operations are carried out in a safe, well-organised, legal and effective fashion;
- provide for the safety and welfare of all responders, employees, contractors and visitors;
- continuously assess the incident to determine the adequacy of tactical response operations and the need for assistance from the GCAA Crisis Management Team;

- manage stakeholders arriving at site;
- minimise effects on people, the environment, property, production, and company reputation;
- implement an environmental monitoring program to quantify impacts as a result of the incident as well as to be used as the basis to notify adjacent landholders and downstream water users as to whether avoidance or remediation measures are required; and
- interact, as appropriate, with GCAA personnel.

With regards to the specific major hazards identified in **Section 2.3**, the following incident procedures have been developed:

- **UTDOC-1327719663-85 - Emergency Response Control Plan**
- **UWJV Erosion and Sediment Control Management Plan**
- **Spill Response Procedure**
- **Tailings Dam 2 Dam Safety Emergency Plan**

All United employees and contractors receive emergency preparedness and response training during their site familiarisation induction. Controls of personal protective equipment and incident containment and control equipment are detailed in the risk assessment documents listed in **Section 2.2**. This includes but is not necessarily limited to:

- emergency spill kits;
- portable pumping infrastructure;
- earthmoving plant; and
- erosion and sediment control materials.

United has limited authority to undertake pollution management activities on private property, or outside the site boundary and, in such cases, will liaise directly and provide appropriate assistance to the relevant authority and emergency services.

5. Notification Procedures

5.1 Determination of Material Harm

Following containment of the incident, immediate action must be taken to determine if the incident can be classified as a **'material harm incident'**, i.e. considered to be causing or threatening material harm. As defined by Section 147 of the POEO Act, a **material harm incident** has occurred if the incident:

- involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or
- results in actual or potential loss (including all 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) or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations).

It is possible for a material harm incident to occur on land that is within the boundary of the EPL.

The determination of a material harm incident will be made by the Operations Manager in consultation with the Environment and Community Manager. If the Site Manager is not available immediately, the determination will be made by the Environment & Community Manager.

5.2 Internal and External Notification

As discussed in **Section 3.1**, notification of an environmental incident is the responsibility of all site and contractor personnel.

In the instance of identification of an environmental incident or hazard, the personnel will report the issue immediately to their manager, who, in turn, shall report it to the Environment and Community Manager, or any member of the environmental team. 'Immediately' is taken to mean 'promptly and without delay'. **As per guidance provided by the EPA, the decision on whether to notify the incident in accordance with Part 5.7 of the POEO Act should not delay immediate actions to provide the safety of people or contain a pollution incident. However, incident notification will be made as soon as it is safe to do so¹.**

The agencies listed in **Table 5-1** must be contacted in the order outlined below.

Record-keeping of incident details, including investigations and outcomes, will be undertaken in accordance with **GCAA-625378177-9992 6.0 Incident Standard**.

After initial notification of any material harm incident, it will be the responsibility of the Environment and Community Manager to liaise with the authorities listed in **Table 5-1** or any authority that is providing directions for management of the material harm incident and provide any additional information that is required or requested. This may include incident investigation reports and ongoing environmental monitoring results. Within six days of the occurrence of a material harm incident, a written report outlining the details and management of the incident is to be provided to the Department of Planning and Environment as required by DA 410-11-2002-i.

Table 5-1: External Contact Details

Agency	Contact Details
Fire and Rescue	000 (To be contacted first if the incident presents an immediate threat to human health or property and emergency services are required, or contacted last if emergency response is not required)
EPA	131 555
Ministry of Health	(02) 4924 6477 (ask for Public Health Officer on call)
WorkCover	13 10 50
Singleton Council	(02) 6578 7290 (office hours) or (02) 6572 1400 (after hours)
Extra reporting requirements required by Project Approval and Mining Lease	
Department of Planning and Environment	0(2) 6575 3400 and also send an email to: compliance@planning.nsw.gov.au

¹ EPA, *Frequently Asked Questions Regarding the Duty to Notify of a Pollution Incident* (March 2012) <
<http://www.environment.nsw.gov.au/legislation/poefaqsnotify.htm>>

Agency	Contact Details
Division of Resources and Geosciences	(02) 4931 6605

5.3 Notification to Local Landholders and Community

Community notification shall be undertaken at the determination of the Environment and Community Manager. Names and contact details of stakeholders, including local and downstream residents, are included in the ***United Collieries Stakeholder Register***. The following notification methodology is proposed to be utilised as required:

- early warnings: same day telephone notification to landholders whom may be affected by the incident over the subsequent 24-hour period;
- updates: follow-up phone calls to all landholders whom may have been notified by the initial early warning. Updates may be provided to the broader local community in affected areas via information sheets or newsletters, Community Consultative Committee meetings, United Collieries website and media statements; and
- priority will be granted to notification of sensitive premises in close proximity.

Information provided to the community will be relevant to the incident and may include the following details:

- type of incident that has occurred;
- potential impacts local landholders and the community;
- site contact details; and
- advice or recommendations based on the incident type and scale.

6. Training, Testing and Communication

6.1 Training

Incident management and emergency response shall be included in all GCAA Generic Inductions and United Collieries Site Familiarisations.

6.2 Testing, Review and Maintenance

The testing of the PIRMP will be undertaken to check that the information is accurate and current and that the plan is capable of being implemented in a workable and effective manner. Testing shall be undertaken in the following ways:

- the PIRMP will be tested by assessing and reviewing it and making any necessary changes as identified. Testing is taken to be either a desktop review or an environmental emergency drill procedure. Testing will include all components of the plan, including training requirements;

- a review of the PIRMP will occur every 12 months commencing from the date of authorisation by the United Operations Manager. Contact details in this document must be kept current at all times; and
- the PIRMP will be reviewed within one month from the date of any pollution incident that occurs in the course of an activity to which the EPL relates. This review will be undertaken in light of the incident, to provide the information included in the plan is accurate and up to date and the plan is still capable of being implemented in a workable and effective manner.

Information to be retained regarding PIRMP testing includes:

- the manner in which the test was undertaken;
- dates when the plan has been tested;
- the person who carried out the testing; and
- the date and description of any update or amendment to the plan.

PIRMP testing to be conducted in accordance with **GCAA-625378177-10354 - PIRMP Test Record**. Records of testing are recorded in ***Error! Reference source not found.*** **Appendix A – PIRMP Testing History** and dates and description of updates to this plan are recorded in **Table 7-3** ~~Table 7-3~~.

6.3 Availability of the PIRMP

The PIRMP shall be kept in written form at the EPL premises and shall be made available to all personnel responsible for implementing the plan, and to an authorised officer (as defined in the POEO Act) on request.

The PIRMP will be made publicly available within 14 days of finalisation (taken to be authorisation of the PIRMP by the Operations Manager) via the United website, in a prominent position and on a publicly available page.

No personal information (within the meaning of the Privacy and Personal Information Protection Act, 1998) will be made publicly available as part of the PIRMP.

7. Document Information

Relevant legislation, standards and other reference information must be regularly reviewed and monitored for updates and should be included in the site management system. Related documents and reference information in this section provides the linkage and source to develop and maintain site compliance information.

7.1 Related Documents

Related documents, listed in **Table 7-1** ~~Table 7-1~~ below, are *documents* directly related to or referenced from within this document.

Table 7-1: Related Documents

Number	Title
UTDOC-1327719663-168	United Collieries Environmental Management Strategy

Number	Title
UTDOC-1327719663-169	United Collieries Environmental Monitoring Program
UTDOC-1327719663-170	United Collieries Erosion and Sediment Control Management Plan
	United Collieries Spill Response Procedure
	United Collieries Environment and Community Risk Assessment
	United Collieries Stakeholder Register
GCAA-625378177-10317	11.01 Annual Environment and Community Risk Assessments
GCAA-625378177-10354	PIRMP Test Record
GCAA-625378177-9992	6.0 Incident Standard.
UTDOC-1327719663-153	Tailings Dam 2 Dam Safety Emergency Plan
UTDOC-1327719663-85	Emergency Response Control Plan

7.2 Reference Information

Reference information, listed in **Table 7-2** below, is *information* that is directly referred to for the development of this document or referenced within this document.

Table 7-2: Reference Information

Reference	Title
NSW EPA	Protection of the Environment Operations Act 1997 (POEO Act)
NSW EPA	Protection of the Environment Operations (General) Regulation 2009 (POEO (G) Regulation)
NSW EPA	Environmental Guidelines: Preparation of Pollution Incident Response Management Plans

7.3 Change Information

Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in **Table 13-3** below.

Table 7-3: Change Information

Date of Update	Name of Personnel Undertaking Review	Manner of Testing	Summary of Changes (Include brief detail and section number)
28/09/12	Mat Goddard	Desktop review	Updated reference documents and procedure names, updated 24 hr contact

Date of Update	Name of Personnel Undertaking Review	Manner of Testing	Summary of Changes (Include brief detail and section number)
			info, removed generic information not required for ease of interpretation.
29/05/2013	Mat Goddard	Desktop Review	Included DoPI in the list of relevant authorities to be contacted, updated incident reporting requirements and included reporting as required by DA 410-11-2002-i
30/04/2014	Mat Goddard & Julene Gunn	Desktop Review and update and PIRMP test	Update PIRMP to new Glencore template, review content and include XCN PIRMP Test record form, conduct PIRMP test as per Test record form, update contact details as per PIRMP Test.
20/11/2015	Paul Amidy	Desktop review and PIRMP test	Update PIRMP to new Glencore template, conduct PIRMP test as per Test record form, update contact details
16/12/2016	Sean Pigott	Desktop Review and PIRMP test	Updates to contact details, procedure references due to PRIMP test undertaken 22/11/2016
13/11/2017	Sean Pigott	Desktop Review and PIRMP test	Updates to plans and hazard registers, procedure references. Desktop testing undertaken
31/10/2018	Sean Pigott	Desktop Review and PIRMP test	Review of contact details and procedure references due to PRIMP test undertaken 31/10/2018.
11/02/2020	Sean Pigott	Desktop Review and PIRMP test	Update PIRMP to new Glencore template, conduct PIRMP test as per Test record form, update contact details

8. Accountabilities

Table 8-1 outlines the accountabilities associated with this PIRMP.

Table 8-1: Accountabilities

Role	Accountabilities for this Document
Operations Manager	Responsible for authorising the PIRMP and all subsequent updates Responsible for ensuring adequate resourcing for implementation of the PIRMP Authorised to liaise with the relevant authority

Role	Accountabilities for this Document
Environment and Community Manager	- Responsible for undertaking notification as defined in this PIRMP - Responsible for managing the response to a pollution incident - Responsible for arranging testing and updating of the PIRMP - Responsible for coordinating communications with affected community members

Appendix A - PIRMP Testing History

Date	Review Team	Nature of the Test	Actions
28/09/2012	Mat Goddard	Desktop review	Updated reference documents and procedure names, updated 24hr contact info, removed generic information not required for ease of interpretation
29/05/2013	Mat Goddard	Desktop Review	Included DoPI in the list of relevant authorities to be contacted, updated incident reporting requirements and included reporting as required by DA 410-11-2002-i
30/04/2014	Mat Goddard Julene Gunn	Desktop Review	Update PIRMP to new Glencore template, review content and include PIRMP Test record form, update contact details
20/11/2015	Paul Amidy	Desktop review	Update PIRMP to new Glencore template, update contact details
16/12/2016	Sean Pigott	Desktop Review	Updates to contact details and procedure references
13/11/2017	Sean Pigott	Desktop Review	Updates to plans and hazard registers, procedure references
31/10/2018	Sean Pigott	Desktop Review	Updates to contact details and procedure references
05/12/2019	Sean Pigott	Desktop Review	Update PIRMP to new Glencore template, update contact details
17/09/2020	Sean Pigott	Simulated Emergency	Simulated emergency conducted at United Wambo to test effectiveness of PIRMP. Deemed to be suitably followed.