



ENVIRONMENTAL MANAGEMENT STRATEGY



ASHTON COAL PROJECT

Version F

Date: September 2020

CONTENTS

1	PURPOSE	3
2	SCOPE.....	3
2.1	Background and Project Overview	3
2.2	Strategic Context and Scope	6
3	PROCEDURAL REQUIREMENTS	7
3.1	LEADERSHIP AND COMMITMENT	7
3.2	POLICY	7
3.3	PLANNING	8
3.3.1	Identification of Environment and Community Hazards & Risks	8
3.3.2	Mine Planning	9
3.3.3	Cumulative Impacts	9
3.3.4	Legal and other requirements	10
3.3.5	Objectives and Targets.....	11
3.4	IMPLEMENTATION	11
3.4.1	Structure, Responsibility and Accountability.....	11
3.4.2	Training and Competence.....	14
3.4.3	Consultation, Communication and Reporting	14
3.4.3.1	Workers.....	15
3.4.3.2	Community Consultation and Communication	15
3.4.3.3	Aboriginal Groups	15
3.4.3.4	Government Departments.....	15
3.4.3.5	Neighbouring Mines.....	16
3.4.3.6	Communication.....	16
3.4.3.7	Reporting.....	16
3.4.3.8	Website	19
3.4.4	Contractors and Suppliers.....	19
3.4.5	Controlling Documents and RECORDS.....	19
3.4.6	Complaint/ Enquiry Handling Procedures	20
3.4.7	Conflict Resolution Procedure	20
3.4.8	Emergency Preparedness and Response	21
3.5	MONITORING AND EVALUATION.....	21

3.5.1	Monitoring and Measurement	21
3.5.2	Incident Investigation, Corrective and Preventative Action.....	22
3.5.3	Auditing and Review	22
3.6	MANAGEMENT REVIEW.....	23
4	RELATED DOCUMENTS AND REFERENCE INFORMATION.....	23
4.1	Internal Documents	23
4.2	External Documents.....	23
5	REVISION HISTORY.....	24
6	APPENDICES	24
	Appendix A – Approval Conditions Relevant to the EMS.....	25
	Appendix B - Approvals Register.....	26
	Appendix C - Environmental Monitoring plans	32
	Appendix D – Consultation Records	33
	Appendix E – Inclusion of Approved MANAGEMENT Plans	34

1 PURPOSE

The purpose of the Environmental Management Strategy (EMS) is to provide the strategic framework for environmental management at the Ashton Coal Project (ACP) in accordance with the:

- ACP Development Consent DA-309-11-2001-i (as modified) (DA); and
- Relevant environmental legislation including the *Environmental Planning and Assessment Act, 1979* and the *Protection of the Environment Operations Act, 1997*.

This document has been prepared to satisfy Schedule 5, Conditions 1 and 2 of the DA, to the satisfaction of the Secretary of NSW Department of Planning, Industry and Environment (DPIE), and in consultation with the Community Consultative Committee (CCC). Details of the relevant consent conditions and where these are addressed in this EMS are included in Appendix A.

2 SCOPE

2.1 BACKGROUND AND PROJECT OVERVIEW

Ashton Coal Operations Pty Limited (ACOL), a wholly owned subsidiary of Yancoal Australia Ltd, operates the ACP, an underground coal mine (and completed open cut mine) located approximately 14 kilometres (km) north-west of Singleton in the Upper Hunter Valley, New South Wales (NSW). **Figure 1** illustrates the location of the ACP.

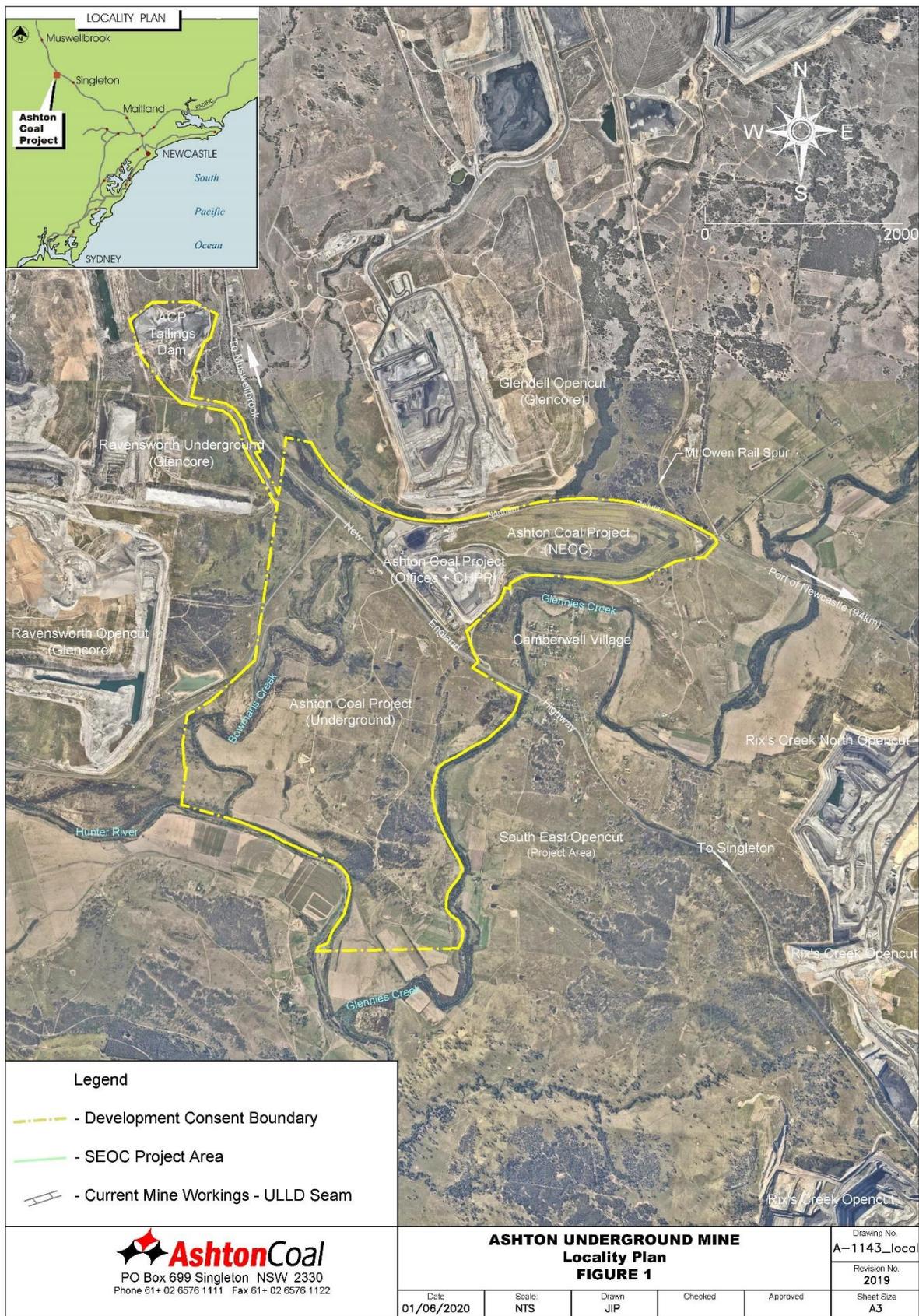
The ACP is adjacent to the open-cut mines of Glendell (Glencore), Rix's Creek (Bloomfield), Hunter Valley Operations (Glencore/Yancoal) and Ravensworth Operations (Glencore). Adjacent underground mines include Integra Underground (Glencore) and Ravensworth Underground Mine (Glencore).

The DA for the ACP was initially granted by the then Minister for Planning in October 2002. The DA has been subsequently modified on ten occasions, with the most recent modification (MOD 5) being granted on 20 June 2016.

The key elements of the ACP include:

- An open cut pit (NEOC) that has now been completed, with the final void remaining for the storage of coarse reject;
- A four-seam descending underground mine with approval to extract up to 5.45 Million Tonne Per Annum (Mtpa) of Run of Mine (ROM) coal;
- Surface mine infrastructure associated with the underground mine, including gas drainage bores, ventilation fans and mine dewatering infrastructure;
- Coal handling and preparation facilities (CHPP) including rail siding and rail loading bin;
- Reject and tailings emplacements; and
- Administration, bathhouse and workshop buildings.

ACOL also holds Project Approval (PA) 08_0182, issued on 17 April 2015, for open cut mining within the South East Open Cut (SEOC). The granting of MOD 5 permitted the integration of the existing ACP and the eventual SEOC Project. Development of the SEOC Project has not yet commenced and is therefore beyond the scope of this EMS. A further review of the EMS will be undertaken should ACOL commence with the development of the SEOC Project.



U:\UG-Survey\Drawings\1000-Environmental\A-1143 ACOL_Locality.dwg

Figure 1: Ashton Coal Project Locality and Arrangement Plan

2.2 STRATEGIC CONTEXT AND SCOPE

ACOL have an integrated Health, Safety, Environment and Community Management System (HSECMS), which provides a structured and systematic approach to the management of health, safety, environment and community relations at the ACP.

Figure 2 illustrates the components of the HSECMS and their relationship.

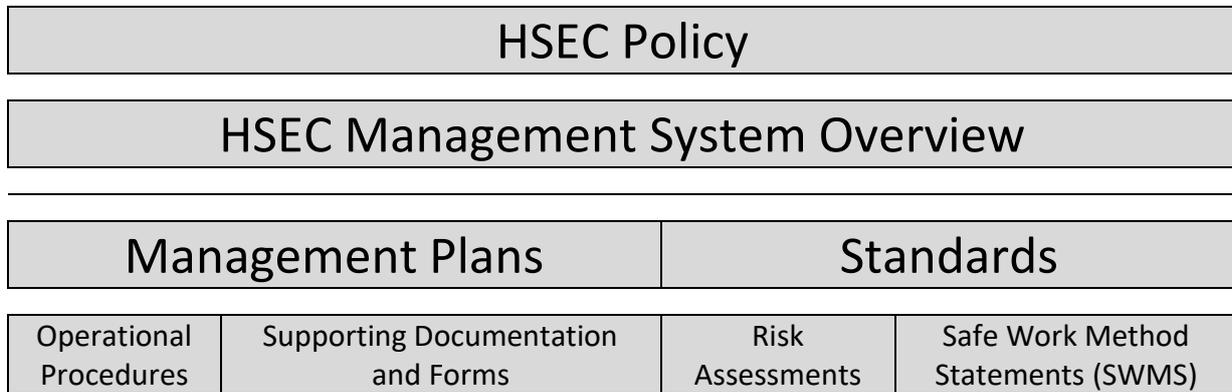


Figure 2 HSECMS Structure

The HSECMS includes:

- The HSEC Policy: the overarching statement of intent that the management system supports.
- The HSECMS Overview: outlines the components of the management system and the requirements that need to be met in order to satisfy the HSEC policy and the management system.
- Management Plans: detail how the requirements of the management system will be met and provide the tools to manage certain aspects of the HSECMS.
- Operational Procedures and Supporting Documents and Forms for the management of risks
- Standards provide documented requirements and criteria for the safe and correct completion of a task or installation / construction of equipment or plant.
- Risk Assessments and Safe Work Method Statement for specific tasks and jobs.

The HSECMS is aligned with ISO 14001 standard for *Environmental Management Systems with Guidance for Use* (2015).

3 PROCEDURAL REQUIREMENTS

The EMS mirrors the procedural requirements of the site HSECMS and is aligned to the management system values of ISO14001. The management system model is shown in **Figure 3**.

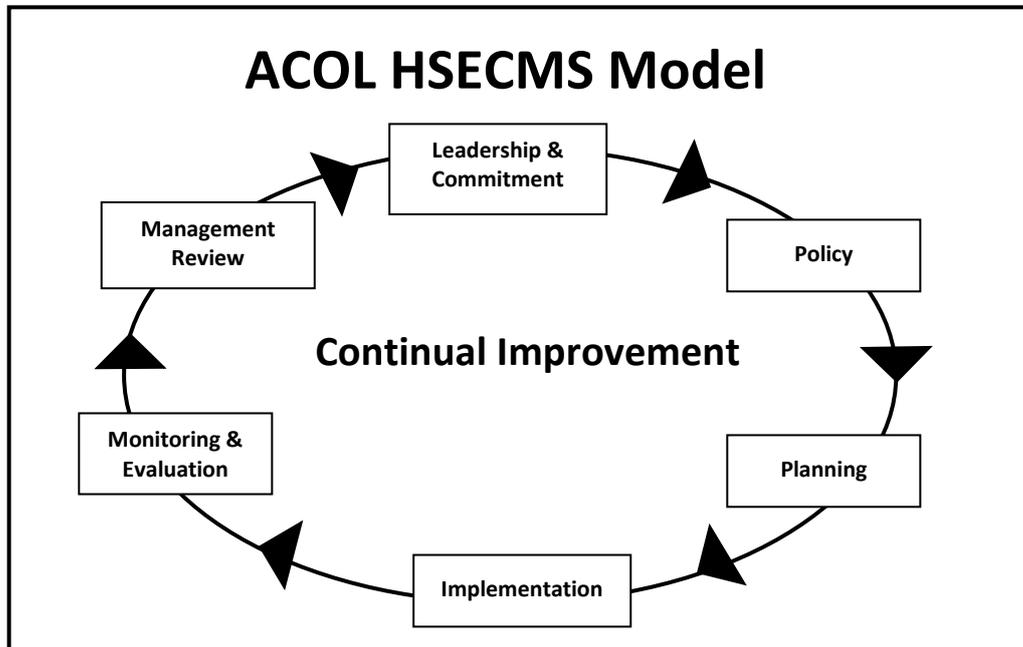


Figure 3 ACOL HSECMS Model

3.1 LEADERSHIP AND COMMITMENT

Environmental management and effective community relations are considered integral to ACP operations. Effective environmental management is the responsibility of all workers at the ACP; however, the Operations Manager is ultimately responsible for E&C performance and has a crucial role in providing direction, leadership, and oversight of site operations

The site Leadership Team supports the Operations Manager in this task, and Leadership Team members are delegated day-to-day responsibility for the management of site HSEC performance, including prevention and mitigation of E&C impacts resulting from operational activities under their management control.

The ACP Environment & Community Relations Superintendent provides technical expertise to assist with operational control of E&C impacts and is delegated responsibility for facilitation / oversight of E&C planning, monitoring and review.

Resources required to manage Environment and Community issues are determined by the Environmental & Community Relations Superintendent in consultation with the Leadership Team, and allocated by the Operations Manager, to ensure that activities on site comply with all relevant approvals, licences and legislation.

Leadership responsibilities and accountabilities relevant to Environment and Community impact management are outlined in **Table 2**.

3.2 POLICY

The ACOL HSEC Policy is authorised by the Operations Manager and representatives of the workforce. It is documented, clearly states overall HSEC objectives, and demonstrates a commitment to improving HSEC

performance. All workers are familiar with the objectives, requirements, and relevance to their duties of the HSEC Policy. The Policy is widely distributed and displayed prominently in main general public and workforce congregation areas.

The ACOL HSEC Policy aligns with the Yancoal Australia Corporate Environment and Community Policy, committing ACOL to the responsible management of E & C risks, environmental performance improvement and regulatory compliance.

3.3 PLANNING

3.3.1 IDENTIFICATION OF ENVIRONMENT AND COMMUNITY HAZARDS & RISKS

Environment and community risks were originally identified in the ACP Environmental Impact Statement (2001) and subsequent modification assessments. Risks are reviewed periodically during the preparation of Mining Operations Plans (MOP) and the broad-brush risk assessment (BBRA) process. Operational activities or key environmental management aspects that entail high risks of environmental harm or community impact are the subject of management plans to ensure effective control. Key environmental management aspects that have dedicated management plans are discussed in **Table 1**.

Table 1: Summary of Environmental Aspects, Potential Impacts and Management

Environmental / Social Aspect	Environmental/ Social Impact	Management Plan/ Controls	Accessibility
Spontaneous combustion	Odour, bushfire risk, land instability, Visual, health and amenity impacts	Mining Operations Plan Spontaneous Combustion Principal Hazard Management Plan	ACOL Website Internal Document Only
Archaeology and cultural heritage	Potential destruction /Disturbance of Aboriginal Heritage. Failure to appropriately salvage and record Aboriginal heritage	Heritage Management Plan, including AHIP 1130976 and AHIP 1131017	ACOL Website
Flora and Fauna	Potential loss of flora, fauna and habitat features, reduction of wildlife corridors and connectivity between important landscape features	Southern Woodland Voluntary Conservation Agreement Flora and Fauna Management Plan Mining Operations Plan Bowmans Creek Diversion Rehabilitation Strategy	ACOL Website Internal Document Only
Land Management	Loss of habitat, visual amenity, poor rehabilitation, long term land stability, mine subsidence	As described in the Mining Operations Plan and Extraction Plans	ACOL Website
Bushfire	Uncontrolled fire resulting in potential injury to people and fauna, damage to infrastructure, surrounding properties and conservation areas	Emergency Management Plan Bushfire Management Plan	Internal Documents Only
Water	Excess site water usage. Community sentiment against use of water that may otherwise support environmental flows. Water recycling and processing leading to water quality changes	Water Management Plan including the: Site water balance, Surface water management plan, Erosion and sediment control management plan, Bowmans Creek Diversion Management Plan	ACOL Website
	Potential for water quality and quantity impacts downstream of		

Environmental / Social Aspect	Environmental/ Social Impact	Management Plan/ Controls	Accessibility
	<p>operations. Potential ponding as a result of mine subsidence causing changes to natural flow patterns</p> <p>Creek diversion may cause downstream impacts in Bowmans Creek, including bed and bank stability, water quality and quantity</p> <p>Impacts to groundwater as a result of mine subsidence, changes in groundwater quality and quantity Potential impacts to groundwater dependent ecosystems</p>	Groundwater Management Plan, and Surface and Groundwater Response Plan.	
Waste	Waste disposal and use of natural resources	Total waste management and segregation onsite as outlined in the Mining Operations Plan	ACOL Website
Air Quality	Traffic on unsealed roads, exposed stockpiles, minor excavations or construction activities leading to visual, amenity and potential health impacts. Cumulative impacts from Ashton and other surrounding operations	Real time proactive and reactive management and monitoring as detailed in the Air Quality and Greenhouse Gas Management Plan	ACOL Website
Noise	Generation of noise through fixed and mobile machinery resulting in amenity impacts, potential deterrent for fauna settlement.	Real time proactive and reactive management as detailed in the Noise Management Plan	ACOL Website
Lighting	Lighting visible from offsite areas leading to visual and amenity impacts from lighting	Mining Operations Plan	ACOL Website

3.3.2 MINE PLANNING

Mining is currently undertaken in the underground operations, with an approval until 26 February 2024 (or a period of 12 years following commencement of open cut mining in the SEOC, should this occur). Mine planning is undertaken in approximately five-year cycles and is documented in the MOP. The MOPs and Environmental Management Plans are designed to comply with the environmental performance objectives set out in the Development Consent, EPL, Mining tenements and associated regulatory requirements.

Environmental Management Plans required under the Development Consent have been developed, approved by the relevant authority and implemented operationally. Management plans are reviewed at least annually, or as required, to the satisfaction of the Secretary of DPIE, as discussed in **Section 3.5.3**. Approved management plans are shown in **Appendix E**.

3.3.3 CUMULATIVE IMPACTS

The ACP is located in close proximity to Camberwell village, as well as neighbouring mining operations and power generators including Rix's Creek Mine (open cut) (Bloomfield group), Glendell, Ravensworth Operations (open cut operations) (Glencore), Integra Underground (Glencore) and Hunter Valley Operations (open cut) (Glencore/Yancoal). When assessing risks, cumulative impacts are considered, including air quality, noise generation and land disturbance, and the effect this can have on the surrounding community. This is undertaken at the planning stage to minimise these impacts where possible. Cumulative impacts are assessed within individual management plans where appropriate.

3.3.4 LEGAL AND OTHER REQUIREMENTS

ACOL is committed to complying with the environmental legislation, regulations, standards and guidelines relevant to the operation.

ACOL has internal processes for the identification of new or modified environmental legal and regulatory requirements applicable to the operation. These processes include:

- regulatory updates via Yancoal Corporate, Mining NSW and other industry groups;
- interaction with regulatory representatives from key NSW government authorities (i.e. DPIE, RR, EPA and NRAR);
- subscription to legal updates service; and
- engagement of a legal firm to provide interpretation advice on regulatory changes.

ACOL also monitors compliance with relevant environmental regulatory requirements through periodic evaluation as facilitated by three yearly Independent Environmental Audits and three yearly Yancoal Australia corporate governance environmental audits. NSW legislation applicable to environmental management at ACP includes:

- *Mining Act 1992*
- *Environmental Planning and Assessment Act 1979*
- *Protection of the Environment Operations Act 1997*
- *Coal Mine Subsidence Compensation Act 2017*
- *Roads Act 1993*
- *Crown Lands Act 1989*
- *Water Act 1912*
- *Water Management Act 2000*
- *Dams Safety Act 1978*
- *Local Government Act 1993*
- *Environmentally Hazardous Chemicals Act 1985*
- *Biodiversity Conservation Act 2016*
- *National Parks and Wildlife Act 1974*
- *Heritage Act 1977*

Commonwealth legislation applicable to environmental management at the ACP include:

- *Environmental Protection and Biodiversity Conservation Act 1999*
- *Native Title Act 1993*
- *National Greenhouse and Energy Reporting Act 2007*

A listing of approvals for the ACP is included in the Annual Review each year and provided in **Appendix B**.

3.3.5 OBJECTIVES AND TARGETS

ACOL's goal is to foster a culture of minimal impact through consistent and effective leadership and appropriate management of impacts and operations. Management objectives and targets for HSEC are integrated into the overall planning process and devolved to all relevant function's activities and processes. Objectives and targets are consistent with HSEC policies, including the commitment to the prevention or minimisation of pollution and aim for continual improvement.

ACOL sets and reviews operational (including HSEC) targets through the annual planning cycle based on site conditions, priorities, risk and budgets. Set targets are realistic, with supporting action plans and assigned responsibility, resources and timeframes for their achievement.

Objectives and targets for individual environmental aspects and impacts (where applicable) are described in relevant management plans.

3.4 IMPLEMENTATION

3.4.1 STRUCTURE, RESPONSIBILITY AND ACCOUNTABILITY

ACOL defines, documents and communicates appropriate roles, responsibilities and authorities of all workers associated with HSEC activities. Management identifies and provides the resources to implement, maintain and improve the HSEC management system.

Table 2 provides a description of the role, responsibility, authority and accountability of key personnel involved in environmental and community management for the ACP.

Table 2: Accountabilities and Responsibilities for Environment and Community Management

Role	Accountabilities / Responsibilities
Mine Operators Site Representative (Operations Manager)	<ul style="list-style-type: none"> Responsible for the effective operation of the EMS and the provision of adequate resources to ensure effective implementation. Ensure that activities on site comply with all relevant Legislation.
Owner of the Procedure (Environmental and Community Relations Superintendent)	<ul style="list-style-type: none"> Coordinate the preparation of the EMS and associated Environmental Management Plans. Facilitate the implementation, monitoring and review. Approve the EMS, any revisions and associated plans and procedures. Audit the effectiveness of implementation of the EMS. Consult with regulatory authorities as required. Coordinate monitoring and maintenance as required. Facilitate measures for continual improvement to this EMS and plans. Communicate the progress of relevant environmental requirements to relevant stakeholders. Assist Chairperson in facilitating operation of the Community Consultative Committee. Provide direction and advice to ensure site environmental compliance is maintained.
Responsible Person for the Procedure (Environment and Community Relations Coordinator)	<ul style="list-style-type: none"> Implement and review the requirements of this EMS. Participate in any review of the EMS.
Site Leadership Team (Operations Manager, E&CR Superintendent, Technical Services Manager, CHPP Superintendent, Production Manager, Health, Safety & Training Superintendent, Human Resources Superintendent, Site Accountant)	<ul style="list-style-type: none"> Collectively determine annual operational targets (including E&C targets) for financial year. Assist in determining allocation of resources to implement this EMS. Participate in management review of the EMS.
Area Manager / Superintendent (Processing, Engineering, Maintenance, Mechanical, Electrical Engineering Managers and Engineers)	<ul style="list-style-type: none"> Responsible for the Mining / Mechanical / Electrical aspects of the mine or CHPP according to their specific engineering discipline, qualifications and appointment. Implement and monitor the operation of the EMS in areas of designated responsibility. Ensure necessary plant and equipment is provided to enable work to be carried out safely and in an environmentally responsible manner, ensuring qualified persons maintain such plant to the manufacturer's specification. Take steps to ensure matters which could affect the Community or the Environment are promptly brought to the Operations Manager and E&CR Superintendent's attention.
Supervisors (All levels)	<ul style="list-style-type: none"> Ensure that the HSECMS is effectively integrated into the work, working environment and contracts under their control, and ensure that all workers and visitors fulfil their HSEC responsibilities. Take steps to ensure that any matter which is of an abnormal or unusual nature and which could affect the Community, or the Environment is promptly brought to the Operations Manager and Area Manager's attention. Become fully familiar and comply with the requirements of EMS as it relates to their role.

Role	Accountabilities / Responsibilities
	<ul style="list-style-type: none"> • Supervise all work undertaken within their area of responsibility is conducted in accordance with the requirements of this EMS and any associated Plans, Procedures or instructions. • Organise for training and assessment of employees who may be affected by the requirements of this EMS including instruction on how the EMS is to be applied. • Administer resources to facilitate effective compliance with this EMS. • Deal with any environmental non-compliance or reported hazard in an efficient and timely manner. • Ensure that activities on site comply with relevant environmental Legislation.
Workers	<ul style="list-style-type: none"> • Comply with all relevant environmental Legislation and integrate the EMS into their work and working environment to ensure adequate environmental management and the minimisation of environmental harm. • Act promptly to rectify or report hazards once identified. • Report any hazardous situations / occurrences, including near-misses immediately to the Supervisor. • Report any issues that may impact ability to comply with the requirements of this EMS immediately to the Supervisor. •
Contractors and Suppliers	<ul style="list-style-type: none"> • Implement HSEC management plans and work programs consistent with ACOL's HSECMS. • Ensure that activities on site comply with all relevant Legislation. • Ensure plant or substances supplied, designed or manufactured for use by workers at work is approved by site contact or work area managers / mechanical superintendents.

3.4.2 TRAINING AND COMPETENCE

ACOL, in consultation with its employees, has developed an internal procedure for training and competence needs analysis (refer to **Section 4.1**). The procedure outlines the system in place to ensure that the environmental training needs of all workers are identified, implemented, documented and reviewed.

Environmental Awareness Training and environmental emergency response is conducted as a part of employee and contractor new starter inductions, and refresher training periodically.

Environmental Awareness Training includes awareness of all relevant development consents, Environmental protection Licences, Aboriginal Heritage Impact Permits (AHIPs), and other statutory documents, as well as covering key points of relevant management plans that are implemented to minimise environmental impacts onsite.

3.4.3 CONSULTATION, COMMUNICATION AND REPORTING

ACOL has implemented processes for effective consultation and communication with relevant internal and external stakeholders on environmental matters affecting workers and community stakeholders (refer to **Section 4.1**).

This EMS has been developed in consultation with the CCC. Management plans under this EMS are also developed in consultation with relevant community groups and government departments, as required. Consultation records for this version of the EMS are found in **Appendix D**.

3.4.3.1 WORKERS

Documented procedures for workers involvement and consultation on HSEC issues are developed, implemented, and maintained. As facilitated by the Workplace Health, Safety and Environment (WHSE) Committee, ACOL workers are involved in the development, implementation and review of policies and procedures for the control of HSEC risks in their areas where applicable, are consulted on potential changes that may affect environment and community management. Environmental toolbox talks are carried out where issues are identified that need to be communicated. Environmental performance is featured in site newsletters that are circulated from time to time.

3.4.3.2 COMMUNITY CONSULTATION AND COMMUNICATION

The ACOL Community Consultative Committee (CCC), established in 2003, provides a forum for important community discussion. CCC members are drawn from the local community and Singleton Council (SC). The CCC is operated in accordance with DPIE's *Community Consultative Committee Guideline* and in accordance with Condition 7 of Schedule 5 of the DA.

ACOL has an Environment and Community Response Line (1800 657 639) which operates 24 hours, 7 days a week. All enquiries and complaints lodged through this line are referred to the environment and community department to be addressed. Community members (and other interested parties) are also able to submit online queries to the ACOL E & C Department via the Ashton Coal website (www.ashtoncoal.com.au).

3.4.3.3 ABORIGINAL GROUPS

ACOL works closely with local Aboriginal people through professional engagement and consultation on cultural heritage management. ACOL have established an Aboriginal Community Consultation Forum (ACCF) to provide a formal forum for effective communication with the broader Aboriginal community. The ACCF meets regularly and involves representatives of Registered Aboriginal Parties, ACOL and other consultants such as archaeologists and facilitators, as agreed between all parties. Further details on the operation of the ACCF is discussed in the Heritage Management Plan.

3.4.3.4 GOVERNMENT DEPARTMENTS

Consultation with government departments is carried out according to the requirements of the Development Consent and other legislative requirements, generally on an as-needs basis. Management Plans and this EMS will be distributed to relevant departments and the CCC in accordance with the development consent. Relevant departments are also provided a copy of the Annual Review, as discussed in **Section 3.4.3.7** below.

3.4.3.5 NEIGHBOURING MINES

Consultation with neighbouring mines and other industry operations occurs periodically via quarterly coordination meetings, or as triggered by specific requirements, to implement processes to better understand and minimise cumulative impacts on the environment and community.

3.4.3.6 COMMUNICATION

ACOL has developed internal procedures for the communication of pertinent HSEC information to and from workers (refer to **Section 4.1**). The procedure outlines the requirements for receiving, documenting, investigating, and responding to relevant communication.

3.4.3.7 REPORTING

ACOL has developed and implemented procedures for relevant and timely reporting of environmental performance. This includes requirements for reporting:

- Environmental performance including results of monitoring, external audits and reviews;
- Incidents and non-conformances including complaints;
- Preventive and corrective action; and
- Statutory requirements.

Schedule 5, Condition 10 of the Development Consent requires the submission of an Annual Review. The Annual Review (previously referred to as an Annual Environmental Management Report) is a major reporting tool for each calendar year and contains information including annual compliance audit findings, performance against consent requirements and Environmental Assessment commitments, review of the environmental effectiveness of the mine, a summary of environmental monitoring results, including noise, air quality, water, groundwater management and compliance, site water balance, status of rehabilitation and revegetation works, and targets and strategies for the following year.

A summary of the key reporting requirements for the ACP, along with the distribution and timing is provided in **Table 3** below.

Table 3: Summary of Reporting Requirements, Distribution and Timing for the ACP

Report	Requirements	Distribution	Trigger/Timing
Annual Review	<p>In accordance with Schedule 5, condition 10 of the development consent, a review of the environmental performance of ACP is undertaken on an annual basis. The review includes:</p> <ul style="list-style-type: none"> • Description of the works (including any rehabilitation) that were carried out during the previous year; • Description of the works that that are proposed to be carried out in the current year; • A comprehensive review of monitoring results and complaints received, including a comparison of the results against: <ul style="list-style-type: none"> ○ Relevant statutory requirements, limits or 	<p>DPIE and CCC Website within 30 days of completion</p>	<p>Annually by 31 March</p>

Report	Requirements	Distribution	Trigger/Timing
	<p>performance measures/ criteria;</p> <ul style="list-style-type: none"> ○ Monitoring results of previous years; and ○ Relevant predictions in the EA and previous EIS's <ul style="list-style-type: none"> • Identification of any non-compliances over the last year, and describe what actions were (or are being) taken to ensure compliance; • Identification of any trends in the monitoring data over the life of the ACP; • Identification and analysis of any discrepancies between the predicted and actual impacts of the ACP; and • Description of the measures to be implemented over the next year to improve the environmental performance of ACP. 		
Complaints Register	Records key details of all complaints received by the Environment and Community Response Line and publish on the ACOL website.	ACOL Website	Upon receipt of complaint Published on website within 30 days
Complaint/ Enquiry Notification Form	To provide a standard format for the investigation and response to received complaints and enquiries.	Internal	Upon receipt of complaint or enquiry
EPL Annual Return	<p>The EPL requires the submission of an Annual Return outlining compliance actions and non-compliances with the EPL.</p> <p>As per EPL condition R5, the Annual Return also requires the co-submission of reports, including (as at 01 May 2020) noise, surface water quality, ground water quality and STP monitoring results.</p> <p>Following modification of EPL version, condition R5 will be reviewed to ensure these required attachments are known and complied with.</p>	EPA	Annually
EPL Monitoring Data	In accordance with Section 66(6) of the <i>POEO Act 1997</i> all monitoring data collected pursuant to EPL 11879 will be available on the ACOL website.	Public	Updated monthly (note continuous data is available following monthly checks and verification)
NGER	In accordance with the <i>National Greenhouse and Energy Reporting Act 2007</i> , greenhouse gas emissions (scope 1 and 2) will be measured and reported under the NGER scheme.	Commonwealth Clean Energy Regulator	Annually by 31 October

Report	Requirements	Distribution	Trigger/Timing
NPI	In accordance with the <i>National Pollution Inventory Guide – Version 6.1</i> (DoEE 2015).	EPA	Annually by 30 September
Non-Compliance Investigation	<p>When non-compliance with the impact criteria occurs, or as directed by a relevant authority, an investigation will be undertaken. The investigation will:</p> <ul style="list-style-type: none"> Describe the date, time, location and nature of the exceedance; Identify the cause (or likely cause) of the exceedance; Identify the activities that were occurring at the time of the non-compliance; Determine the activities that were most likely contributing to the non-compliance; Describe what action has been taken to date; and Describe the proposed measures to address the exceedance. <p>Compliance evaluation procedures for identifying non-compliance are outlined in Section 3.5.2.</p>	A summary is provided in the Annual Review	When Compliance evaluation determines non-compliance with Impact Criteria
Incident Report	<p>Incidents causing or threatening material harm to the environment must be reported at the earliest opportunity to the:</p> <ul style="list-style-type: none"> EPA, by telephoning the Environmental Line service on 131 555 DPIE on 02) 6575 3400 Resource Regulator on (02) 4063 6666, and Any other authority required by the Pollution Incident Response Management Plan (PIRMP). <p>For other incidents, the DPIE and other relevant agencies must be notified as soon as possible following detection of the incident.</p> <p>A Non-compliance investigation will be undertaken (refer above), and written details of notification provided within 7 days of incident, or as directed.</p>	EPA Annual Return	Immediately after becoming aware of material harm incident
ACOL Website (www.ashtoncoal.com.au)	Among other purposes, the ACO website is used to provide updates on the environmental management and monitoring results for the ACP. Revised versions of EMS will be updated on the ACO website within 30 days of approval as required.	Public	Updated monthly

Report	Requirements	Distribution	Trigger/Timing
EMS and associated Management Plan Revisions	The current revised version of this EMS and associated Environmental Management Plans are required to be distributed and placed on the website within 30 days of approval.	Relevant government agencies, SC, CCC and website	Within 30 days of approval

3.4.3.8 WEBSITE

ACOL maintains a website (www.ashtoncoal.com.au) to make documents publicly available, as required by the Development Consent. In accordance with Condition 13 of Schedule 5 of the DA, the following documents are available on the website:

- The documents listed in Condition 2(a) of the DA;
- The current statutory approvals for the development;
- Approved strategies, plans and programs required under the conditions of the consent;
- A comprehensive summary of the monitoring results of the development, including model performance results which have been reported in accordance with the various plans and programs approved under the conditions of the consent;
- A complaints register, which is to be updated on a monthly basis;
- Minutes of CCC meetings;
- The Annual Reviews over the life of the development;
- Any Independent Environmental Audit, and ACOL's response to the recommendations in any audit; and
- Any other matter required by the Secretary.

ACOL keeps this information up to date by ensuring that all management plans, monitoring results and reports are available on the website within 30 days of their completion.

3.4.4 CONTRACTORS AND SUPPLIERS

ACOL maintains procedures for selection, evaluation and monitoring of the HSEC performance of contractors and suppliers (refer to **Section 4.1**). The inherent risks of each contractor's activity must be assessed, and an appropriate amount of effort, planning and supervision be applied to the level of risk of the task being performed.

Contractors are required to implement HSEC management plans and work programs consistent with ACOL's HSECMS. Contractor performance, particularly concerning compliance with the HSEC obligations of contracts, is monitored and reported.

3.4.5 CONTROLLING DOCUMENTS AND RECORDS

All appropriate HSEC documents and records are available via an electronic control system.

All documents and data must be:

- Prepared, reviewed and revised to determine adequacy, by authorised workers;
- Dated, with revision status indicated;
- Legible, and maintained in an orderly manner; and
- Retained for specified periods.

Documents must be capable of being readily located and current versions of the documents must be available where operations essential to the effective environmental management are being performed. Where obsolete, documents are retained they are identified and protected from unintended use. All records retained for the purposes of the management system must be legible, identifiable, and traceable. Records are stored so that they are readily retrievable and protected against damage, deterioration, or loss. Records have retention times established and recorded.

3.4.6 COMPLAINT/ ENQUIRY HANDLING PROCEDURES

ACOL maintains an Environment and Community Response Line (1800 657 639) that is a dedicated, publicly advertised phone line that operates 24 hours per day, 7 days a week, to receive complaints or enquiries from neighbouring residents or other stakeholders. Complaints are formally investigated and acted on in a timely manner.

All complaints are recorded in the ACOL Complaints Register. A summary of complaints and the complaints register is included in the Annual Review, presented to the ACOL CCC, and updated on the ACOL website on a monthly basis.

The ACOL Complaints Handling Procedure specifies complaint handling requirements and protocols including communications with complainants, response procedures and responsibilities.

ACOL uses a Complaint/ Enquiry Notification Form to record each complaint or enquiry. The following information will be recorded, where relevant

- Contact persons details (name and contact details).
- Details of person recording the complaint or enquiry.
- Complaint or enquiry details.
- Method of complaint or enquiry.
- Nature of complaint or enquiry.
- Initial complaint details/conversation.
- Supporting monitoring results.
- Site investigation.
- Site activity and activity changes.
- Call back details.
- Actions assigned.

3.4.7 CONFLICT RESOLUTION PROCEDURE

In the event that ACOL find that a dispute relating to the development consent cannot be resolved to the satisfaction of ACOL or an aggrieved party, the matter will be referred to the Dispute Resolution process as shown by **Figure 4**, where appropriate.

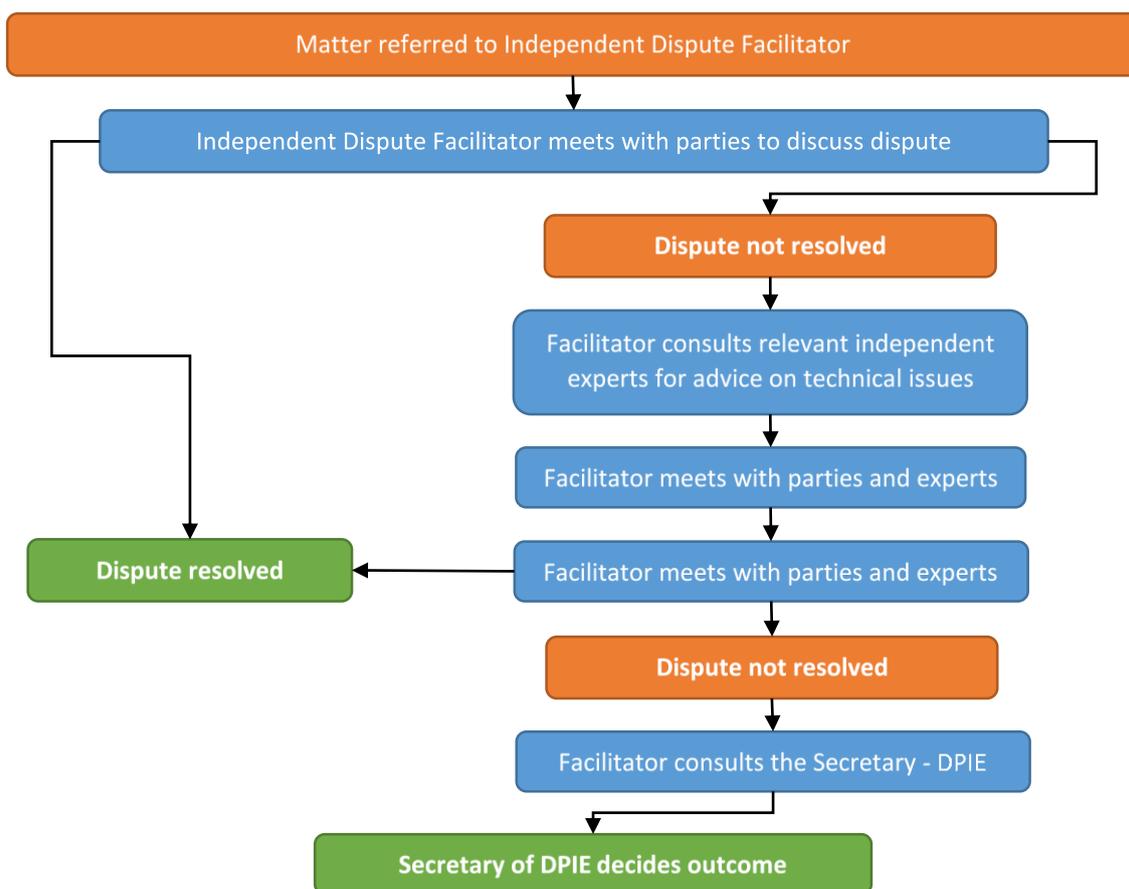


Figure 4 Dispute Resolution Process

3.4.8 EMERGENCY PREPAREDNESS AND RESPONSE

ACOL has implemented an Emergency Management Plan for emergency preparedness and response. This Management Plan has been communicated to all relevant workers and includes links to external emergency services (e.g. EPA, DPIE, fire, ambulance, police and mines rescue).

ACOL shall ensure that workers are trained in emergency preparedness and shall periodically test its emergency response system, conducting desktop and simulated exercises. The emergency response system shall be reviewed and revised where necessary, particularly after the occurrence of incidents or emergencies.

ACOL also has a Pollution Incident Response Management Plan (PIRMP), which outlines how pollution incidents are to be reported to relevant authorities.

3.5 MONITORING AND EVALUATION

3.5.1 MONITORING AND MEASUREMENT

ACOL has developed and maintained procedures for monitoring and measurement of key environmental aspects to demonstrate compliance with relevant approvals, identify performance trends, and indicate progress towards environmental performance improvement objectives and targets. The procedure provides for regular monitoring and analysis of performance, including:

- Compliance with relevant approvals, laws and regulations;
- Compliance with codes and standards to which ACOL voluntarily subscribes; and
- Objectives and targets.

Environmental monitoring programs are designed and implemented as required by Development Consent and Environmental Protection Licence (EPL) conditions. Requirements for environmental monitoring programs are outlined in relevant Environmental Management Plans. Plans illustrating the location of the environmental monitoring undertaken at ACP, current at the time of this strategy review, are provided in **Appendix C**.

Environmental monitoring will be undertaken using standard monitoring techniques and calibrated by relevantly qualified personnel as required by the manufacturer's instructions. Analysis of samples will be carried out by laboratories with approved quality control systems. All monitoring results will be held by the Environment and Community Department and maintained on site for a period of no less than four years.

3.5.2 INCIDENT INVESTIGATION, CORRECTIVE AND PREVENTATIVE ACTION

Incidents and non-conformances with the DA are identified, reported, and investigated. Corrective and preventive actions are identified, documented and assigned to a persons responsible to complete where applicable.

ACOL has established and implemented procedures for dealing with incidents and non-conformances, including:

- Investigating, responding to and taking actions to minimise harm caused from incidents;
- Investigating and responding to system failures, including non-conformances arising from internal and external audits;
- Initiating and completing appropriate corrective and preventive action;
- Recording system or procedural changes resulting from non-conformances or corrective and preventive actions;
- Establishing responsibility and authority for handling and investigating non-conformances, taking action to mitigate any impacts or hazards caused and completing corrective and preventive action;
- Ensuring that any corrective or preventive action taken is appropriate to the magnitude of problems and commensurate with the hazards and impacts encountered.
- Monitoring of the effectiveness of corrective and preventative actions will be undertaken in accordance with Section 3.5 Monitoring and Evaluation

3.5.3 AUDITING AND REVIEW

ACOL undertakes internal audits in accordance with the Auditing Procedure (refer to Section 4.1) to determine the effectiveness of the management system and demonstrate continual improvement. The procedure covers audit scope, frequency and methodologies, as well as responsibilities and requirements for conducting audits and reporting results.

Internal auditing will include an annual compliance audit to review the effectiveness of the management procedures outlined in the EMS and Environmental Management Plans. This audit typically is completed as part of Annual Review report preparation in the first quarter of each calendar year.

In addition to internal audits, three yearly Independent Environmental Audits are undertaken in accordance with Schedule 5, Condition 11 of the DA. Auditors are selected in consultation with the DPIE and results of the Audit published on the Ashton Coal website.

As a subsidiary company of Yancoal Australia, ACOL is also subject to three yearly environmental compliance audits, as part of the corporate risk management, internal governance and Environmental Management systems. Although undertaken for internal management and reporting purposes, these audits are completed by external auditors engaged and scoped by Yancoal Australia.

This EMS will also be reviewed, and updated if necessary, to the satisfaction of the Secretary of DPIE, in accordance with Schedule 5, condition 6 of the DA, within 3 months of:

- a) Submission of an incident report;
- b) Submission of an Annual Review;
- c) Submission of an Independent Environmental Audit; and
- d) Any modification to the conditions of the DA.

The updated documents will be published on ACO's website within 30 days of the DPIE Secretary's approval of the document.

3.6 MANAGEMENT REVIEW

ACOL has a standard for Management Review (refer to Section 4.1) to ensure that all necessary information is collected to facilitate formal and effective evaluation and review of the environmental performance.

Management Reviews are conducted to examine the site management system, including the results of internal audits and the extent to which site objectives and targets have been met. The review is conducted by the site Leadership Team, with relevant information and input provided by the Environment and Community Relations Superintendent.

Management reviews will assess the need for changes in policy, objectives, and other elements of the HSECMS in the light of relevant audit results, changing circumstances and the commitment to continual improvement.

4 RELATED DOCUMENTS AND REFERENCE INFORMATION

4.1 INTERNAL DOCUMENTS

- Yancoal Regional Risk Management Procedure
- Yancoal Regional Training and Competency Management Procedure
- Yancoal Regional Performance Standards and Auditing Procedure
- Yancoal Regional Document Control Procedure
- Ashton Communication, Consultation, Coordination and Co-Operation Procedure
- Ashton Auditing Procedure
- Ashton HSEC Review Standard
- Ashton Emergency Management Plan
- Underground Operations Eastern Region Contractor Management Procedure
- Complaints Handling Procedure
- Ashton Coal Operations Auditing Procedure

4.2 EXTERNAL DOCUMENTS

- *ISO 14001 standard for Environmental Management Systems with Guidance for Use (2015)*
- *Guidelines for Establishing and Operating Community Consultative Committees, State Significant Projects, (DPIE, November 2016)*
- *Refer to Section 3.3.4 for a list of relevant legislation and regulations*

5 REVISION HISTORY

Environmental Management System Version History

Version	Version Date	Description of changes	Authorised/ Approved for Issue
A	2 August 2005	Initial document	Peter Barton
B	19 August 2006	Updated to include underground mining project	Tracey Rock
C	23 May 2016	Major review	Digby Short
D	2 June 2017	Minor review to reflect Modification 5	Phillip Brown
E	05 June 2020	Minor administrative updates	Phillip Brown
F	September 2020	Minor Administrative Update	Phillip Brown

6 APPENDICES

APPENDIX A – APPROVAL CONDITIONS RELEVANT TO THE EMS

Table 4 Development Consent Requirements

Condition	Detail	EMS Section Reference
Schedule 5, Condition 1	Environmental Management Strategy The Applicant shall prepare an Environmental Management Strategy for the Ashton Mine Complex to the satisfaction of the Secretary. The strategy must:	This EMS
	a) Be prepared in consultation with Community Consultative Committee (CCC);	Section 3.4.3
	b) Be submitted to the Secretary for approval;	Section 1
	c) Provide the strategic framework for environmental management of the development;	Section 2.2
	d) Identify the statutory approvals that apply to the development;	Section 3.3.4 and Appendix B
	e) Describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 3.4.1
	f) Describe the procedures that would be implemented to: <ul style="list-style-type: none"> • Keep the local community and relevant agencies informed about the operation and environmental performance of the development; • Receive, handle, respond to, and record complaints; • Resolve any disputes that may arise during the course of the development; • Respond to any non-compliance; • Respond to emergencies; and 	Sections 3.4.3 Section 3.4.6 Section 3.4.7 Section 3.5.2 Section 3.4.8
	g) Include: <ul style="list-style-type: none"> • Copies of any strategies, plans and programs approved under the conditions of this consent; and 	Appendix B
	<ul style="list-style-type: none"> • A clear plan depicting all the monitoring to be carried out in relation to the development. 	Appendix C
	The applicant must implement the approved strategy as approved from time to time by the Secretary.	Section 3.3.2

APPENDIX B - APPROVALS REGISTER

Table 5 Status of Environmental Management Plans as at 31 May 2020

Environmental Management Plan	Condition	Date Issued	Date Approved
Environmental Management Strategy	Schedule 5, Condition 1	02/06/2017	04/10/2017
Noise	Schedule 3, Condition 9	26/06/2017	10/10/2017
Air Quality Greenhouse Gas	Schedule 3, Condition 17	02/06/2017	10/10/2017
Heritage	Schedule 3, Condition 34	29/06/2017	10/10/2017
Flora and Fauna (Biodiversity)	Schedule 3, Condition 28	05/06/2017	10/10/2017
Water	Schedule 3, Condition 26	18/07/2017	01/03/2018
Upper Liddell Seam Extraction Plan LW 105 - 107	Schedule 2, Condition 3.12 (DA Modification 10)	02/12/2015	21/01/2016
Extraction Plan LW 201 - 204	Schedule 3, Condition 32	07/11/2016	15/03/2017

Table 6 ACOL's Primary Statutory Approvals as at 31 May 2017

Approval	Description	Issue date	Expiry date
Development Consents or Project Approvals Issued by the DPIE			
DA 309-11-2001-i	Development Consent for the ACP (as modified from time to time)	11/10/2002 Last modified (MOD 5) 20/06/2016	26/2/2024 or 12 years from recommencement of open cut operations, whichever is later.
Mining Leases and Exploration Licences Issued by the DRE			
ML 1533	Mining Lease	26/02/2003	26/02/2024
ML 1529	Mining Lease	10/09/2003	11/11/2021
ML 1623	Mining Lease	30/10/2008	30/10/2029
EL 5860*	Exploration Licence (EL)	21/05/2012	21/05/2020
EL 4918*	Exploration Licence	17/12/2010	17/12/2015
EPL Issued by the EPA			
EPL 11879	Environment Protection Licence (EPL)	01 January (anniversary date)	Not specified

* Renewals for exploration licences 5860 and 4918 were lodged on 19 May 2020 and 17 December 2015, respectively.

Table 7 ACOL's other Statutory Approvals as at 31 May 2017

Approval	Description	Expiry date
Radiation Management Licence		
RML5061098	Radiation Management Licence	Renewed annually on 6 th April
Aboriginal Heritage		
Section 90 Consent Permits AHIP 1131017 AHIMS Permit ID 3436	Longwalls 1-4: Salvage excavations. Community collection. Harm to certain Aboriginal objects through proposed works. Certain Aboriginal objects must not be harmed	23/12/21
Section 90 Consents Permits AHIP 1130976	Longwalls 5-8: Movement only of certain Aboriginal objects. Test excavations. Salvage excavations. Community collection. Harm to certain Aboriginal objects through proposed works. Certain Aboriginal objects must not be harmed	26/08/31
Voluntary Conservation Agreement		
Conservation Agreement	Conservation agreement over the southern conservation area. Agreement between The Minister administering the NPW Act 1974 and Ashton Coal Mines Limited for Ashton Coal Mine.	Perpetuity
Tailings Emplacement Approval		
S126 Approval	Emplacement of carbonaceous materials Ashton North East Open Cut (NEOC) Issued 08/04/04	Perpetuity
S126 Approvals	Emplacement of carbonaceous materials Ravensworth Void 4 Issued 17/01/07	Perpetuity
S100 Approval	Emplacement of coarse rejects materials in the NEOC void Issued 01/03/12	Perpetuity
S100 Approval	Emplacement of fine rejects in the Ravensworth Void No 4 Issued 2/01/2007	Perpetuity
Subsidence Approvals		
Extraction Plan	Ashton Coal Extraction Plan for Longwalls 201 – 204 in Upper Lower Liddell Seam November 2016	Approved 16/05/2017
Extraction Plan	Upper Liddell Seam Extraction Plan for Longwalls 105 to 107 December 2015	Approved 22/01/16
Extraction Plan	Extraction Plan for Upper Liddell Seam Longwall Panel 1 – 8 17 July 2012 (approved for panels 1 – 4 only)	Approved 27/12/12

Table 8 Water Management Act 2000 Licences

Water Licence Number	DPI Water Reference	Water Sharing Plan, Source and Management Zone	Entitlement
984	20AL201282	Hunter Regulated Water Sharing Plan, surface water, zone 3A (Glennies Creek), General Security	9
997	20AL201311	Hunter Regulated Water Sharing Plan, surface water, zone 3A (Glennies Creek), High Security	11
1120	20AL201624	Hunter Regulated Water Sharing Plan, surface water, Hunter Regulated River Water Source, High Security	3
1121	20AL201625	Hunter Regulated Water Sharing Plan, surface water, zone 1B (Hunter River from Goulburn River Junction to Glennies Creek Junction), General Security	335
1358	20AL203056	Hunter Regulated Water Sharing Plan, surface water, Hunter Regulated River Water Source, Supplementary	4
6346	20AL203106	Hunter Regulated Water Sharing Plan, surface water, Hunter Regulated River Water Source, Supplementary	15.5
8404	20AL200491	Hunter Regulated Water Sharing Plan, surface water, zone 3A (Glennies Creek), High Security	80
15583	20AL204249	Hunter Regulated Water Sharing Plan, surface water, zone 3A (Glennies Creek), General Security	354
19510	20AL211015	Hunter Regulated Water Sharing Plan, surface water, zone 1B (Hunter River from Goulburn River Junction to Glennies Creek Junction), High Security	130
23912	20AL211423	Hunter Unregulated and Alluvial Water Sources 2009, surface water, Whole Water Source (Jerrys Water Source) (Bowmans Creek), Unregulated	14
29566	20AL212287	Hunter Unregulated and Alluvial Water Sources 2009, aquifer, Jerrys Management Zone (Jerrys Water Source), Unregulated	358
36702	20AL212975	Hunter Unregulated and Alluvial Water Sources 2009, surface water, Jerrys Management Zone (Jerrys Water Source) (Bowmans Creek), Unregulated	116
36703	20AL212976	Hunter Unregulated and Alluvial Water Sources 2009, surface water, Jerrys Management Zone (Jerrys Water Source) (Bowmans Creek), Unregulated	150
41501	20AL216955	North Coast Fractured and Porous Rock Groundwater Sources, Sydney Basin – North Coast Groundwater Source, aquifer (NEOC)	100

Water Licence Number	DPI Water Reference	Water Sharing Plan, Source and Management Zone	Entitlement
41552	20AL219014	North Coast Fractured and Porous Rock Groundwater Sources, Sydney Basin – North Coast Groundwater Source, aquifer (U/G)	511
TOTAL			2190.5

Table 9 Water Act 1912 Licences

Water Licence Number	Water sharing Plan, Source and Management Zone	Entitlement
20BL173735	Water Act 1912 Groundwater Licence	Nil - Monitoring Only

APPENDIX C - ENVIRONMENTAL MONITORING PLANS

- AIR QUALITY AND NOISE MONITORING LOCATIONS
- SURFACE WATER MONITORING LOCATIONS
- GROUNDWATER MONITORING LOCATIONS

APPENDIX D – CONSULTATION RECORDS

Organistaion	Date	Fomat	Topic
Ashton Community Consultative Committee (ACCC)	9.07.2020	ACCC meeting https://www.ashtoncoal.com.au/page/sustainability/community/community-consultative-committee/ccc-meeting-minutes/2020-july-ccc-minutes/	EMS

APPENDIX E – INCLUSION OF APPROVED MANAGEMENT PLANS

Approved management plans are available on the ACOL website www.ashtoncoal.com.au

This includes:

- Noise Management Plan;
<https://www.ashtoncoal.com.au/page/publications/environmental/environmental-management-plans/ashton-coal-project-management-plans/noise-management-plan-2016/>
- Air Quality Greenhouse Gas Management Plan;
<https://www.ashtoncoal.com.au/page/publications/environmental/environmental-management-plans/ashton-coal-project-management-plans/air-quality-management-plan-2016/>
- Flora and Fauna Management Plan;
<https://www.ashtoncoal.com.au/page/publications/environmental/environmental-management-plans/ashton-coal-project-management-plans/flora-and-fauna-biodiversity-management-plan-2016/>
- Heritage Management Plan;
<https://www.ashtoncoal.com.au/page/publications/environmental/environmental-management-plans/ashton-coal-project-management-plans/archaeology-and-cultural-heritage-management-plan/>
- Rehabilitation Management Plan (integrated with the Mining Operations Plan); and
<https://www.ashtoncoal.com.au/page/publications/mining/mining-operations-plan/>
- Extraction Plans.
<https://www.ashtoncoal.com.au/page/publications/mining/extraction-plans-subsidence-management-plans/>