



STRATFORD MINING COMPLEX Waste Management and Minimisation Strategy

STRATFORD MINING COMPLEX (STRATFORD EXTENSION PROJECT)

WASTE MANAGEMENT AND MINIMISATION STRATEGY



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TABLE OF CONTENTS

1	INTRO	DDUCTION	1	
	1.1	STRATFORD MINING COMPLEX	1	
	1.2	PURPOSE AND SCOPE	4	
2	STATU	JTORY REQUIREMENTS	5	
	2.1	EP&A ACT DEVELOPMENT CONSENT	5	
		2.1.1 Waste Management Requirements	5	
	2.2	LICENCES, PERMITS AND LEASES	5	
	2.3	OTHER LEGISLATION AND GUIDELINES	6	
3	IDENT	IFICATION OF WASTE STREAMS	7	
4	WAST	E MANAGEMENT AND MINIMISATION MEASURES	8	
	4.1	GENERAL SITE WASTE MANAGEMENT	8	
	4.2	WASTE REDUCTION	8	
	4.3	RE-USE OF WASTE MATERIALS	8	
	4.4	RECYCLING	9	
	4.5	STORAGE AND DISPOSAL	9	
	4.6	HAZARDOUS WASTE		
	4.7	TRAINING AND AWARENESS	10	
5	MONI	MONITORING, REPORTING AND REVIEWING		
	5.1	MONITORING		
	5.2	REPORTING	11	
		5.2.1 Reporting Protocols	11	
		5.2.2 Annual Review	12	
		5.2.3 Independent Environmental Audit	12	
	5.3	WASTE MANAGEMENT AND MINIMISATION STRATEGY REVIEW	12	
6	RESP	PONSIBILITIES AND ACCOUNTABILITIES		
7	REFERENCES			

LIST OF FIGURES

Figure 1 Regional Location

Figure 2 Approved General Arrangement

LIST OF TABLES

Table 1 EPL 5161 Conditions Applicable to this Waste Management and Minimisation Strategy

LIST OF APPENDICES

Appendix 1 SMC Waste Stream Analysis

01111084 i Stratford Coal Pty Ltd

1 INTRODUCTION

1.1 STRATFORD MINING COMPLEX

Stratford Coal Pty Ltd (SCPL), a wholly owned subsidiary of Yancoal Australia Limited (Yancoal), owns the Stratford Coal Mine (SCM), which is located approximately 100 kilometres (km) north of Newcastle, New South Wales (NSW) (Figure 1). SCPL also owns the Bowens Road North Open Cut (BRNOC), located to the immediate north of the SCM. The SCM and BRNOC are collectively referred to as the Stratford Mining Complex (SMC).

Yancoal also owns the Duralie Coal Mine (DCM), which is located approximately 20 km south of the SMC (Figure 1). Run-of-mine (ROM) coal from the DCM is transported by rail to the SMC for processing and export.

Mining activities approved under the SCM Development Consent and the BRNOC Development Consent were suspended in mid-2014, however, processing of ROM coal from the DCM and the export of product coals continued under the SCM Development Consent.

Development Consent SSD-4966 for the Stratford Extension Project (SEP) was granted on 29 May 2015 under Part 4 of the NSW *Environmental Planning and Assessment Act, 1979* (EP&A Act) and involves the extension and continuation of mine operations at the SMC¹, including (among other things) (Figure 2):

- mining of up to 2.6 million tonnes of ROM coal per annum;
- continuation of mining in the BRNOC and extension of mining into three additional open cut mining areas:
 - Roseville West Pit Extension;
 - Avon North Open Cut; and
 - Stratford East Open Cut.
- progressive backfilling of mine voids with waste rock behind the advancing open cut mining operations;
- continued and expanded placement of waste rock in the Stratford Waste Emplacement and Northern Waste Emplacement;
- coal processing at the existing coal handling and preparation plant (CHPP);
- stockpiling and loading of product coal to trains for transport on the North Coast Railway to Newcastle;
- disposal of CHPP rejects via pipeline to the existing co-disposal area in the Stratford Main Pit and, later in the mine life, the Avon North Open Cut void;
- continued use of existing water storages/dams and progressive development of additional sediment dams, pumps, pipelines, irrigation infrastructure and other water management equipment and structures;
- other associated minor infrastructure, plant, equipment and activities and minor modifications to existing structure, plant and equipment and activities; and
- rehabilitation of the site.

The general arrangement of the approved SMC is provided in Figure 2. A detailed description of the approved SEP is provided in the *Stratford Extension Project Environmental Impact Statement* (SCPL, 2012).

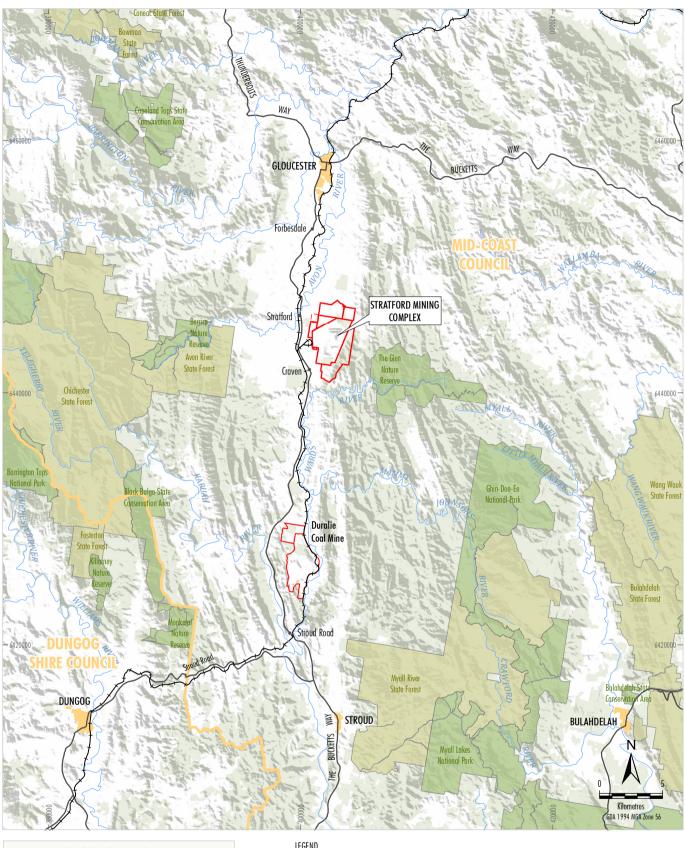
Current Status of SCM

Mining activities approved under the SEP Development Consent (SSD-4966) commenced on 4 April 2018. Current mining operations at the SMC are associated with:

- completion of mining in the Roseville West Open Cut Pit followed by progressive backfilling with waste rock material;
- completion of mining in the BRNOC followed by progressive backfilling with waste rock material;
- continued development and mining of the Stratford East Open Cut; and
- continued development and mining of the Avon North Open Cut.

01111084 1 Stratford Coal Pty Ltd

¹ A copy of Development Consent SSD-4966 (and other statutory State and Federal licenses and approvals) is available on the Stratford Coal website (www.stratfordcoal.com.au).





LEGEND
Mining Lease Boundary
Mining Lease Application Boundary *
NSW State Forest
National Park, Nature Reserve or State Conservation Area
Local Government Area Boundary
*MLA1 is a proposed future Mining Lease Application (MLA) area

*MLA1 is a proposed future Mining Lease Application (MLA) area and has not yet been lodged.

Source: Geoscience Australia (2006); Yancoal (2019); NSW Department of Planning & Environment (2017)





LEGEND
Mining Lease Boundary
Mining Lease Application Boundary*
Electricity Transmission Line
Approximate Extent of Existing/Approved Surface Development
Conceptual Up-Catchment Diversion

*MLA1 is a proposed future Mining Lease Application (MLA) area and has not yet been lodged.

Not yet Constructed

Source: Orthophoto - Yancoal (2021); LPI (2016); NSW Department of Planning & Environment (2017)



Condition 5, Schedule 2 of the SMC's Development Consent (SSD_4966) authorises mining operations to be carried at the SMC until 31 December 2025. As the SMC progresses towards the end of its approved mine life, operations and activities at the SMC over the next four years will progressively change to reflect this and will generally involve the following:

- Reduction of open cut pit mining and total mobile plant fleet: Open cut mining operations will progressively reduce with mining of the SMC's remaining operational pits (Avon North Open Cut and Stratford East Open Cut) to reduce sequentially over the next four years. Consequently, total mobile plant fleet operating at the SMC will also reduce.
- **Progressive open cut pit backfilling activities**: As mining of the open cut pits is progressively completed, backfilling of some of the pits with waste rock material, including Roseville West Open Cut Pit and BRNOC, will also occur either concurrently with mining or after the completion of mining.
- **Progressive rehabilitation of completed areas**: Rehabilitation of backfilled open cut pits, completed areas of the waste emplacements and other disturbed areas will continue to be progressed in accordance with the SMC's Rehabilitation Management Plan.
- Reduction and then cessation of vegetation clearance activities: The proposed extent of development
 of the remaining open cut pits and ancillary mining activities will be reached over the next four years, and
 subsequently after this time, no new disturbance areas (within the approved surface disturbance areas) are
 proposed.
- Closure Planning: SCPL will continue to implement the SMC's Mine Closure Planning Program (described in the SMC Mining Operations Plan and Rehabilitation Management Plan [and in future Rehabilitation Management Plans]) which includes technical assessments and works that will be undertaken and implemented as the SMC progresses towards the mine closure phase. As these assessments and works are completed, the SMC's environmental management plans will be reviewed and revised as required to reflect the progression of the SMC towards mine closure, in consultation with relevant regulatory agencies.

Following the cessation of mining operations on 31 December 2025, SCPL will undertake bulk rehabilitation earthworks, to achieve the final landform design and satisfy geotechnical requirements in accordance with the SMC's Rehabilitation Management Plan. Once bulk rehabilitation earthworks are complete, all major fleet will be removed from site and the site workforce will be reduced to support post-closure activities. Consequently, due to the removal of mining fleet and other major fleet and the reduction in workforce, waste generation at the SMC will significantly reduce.

1.2 PURPOSE AND SCOPE

This SEP Waste Management and Minimisation Strategy (WMMS) has been prepared by SCPL to address the requirements of Condition 52, Schedule 3, of the SMC's Development Consent SSD-4966 (Section 2.1).

The WMMS aims to provide a framework to:

- identify the waste streams produce by the project;
- detail the control measures to prevent and/or minimise any material harm to the environment;
- describe what measures would be implemented to reduce, re-use and recycle the waste generated by the project;
- outline the procedures and protocols, where the above principles are not practicable, for the storage and disposal of waste in the most environmentally appropriate manner;
- detail the monitoring, reporting and reviewing of the requirements and measures set out in the WMMS; and
- establish the responsibilities and accountabilities for the management of waste at the SMC.

2 STATUTORY REQUIREMENTS

SCPL's statutory obligations are contained in:

- (i) the conditions of Development Consent SSD-4966;
- (ii) the conditions of Commonwealth Approval (EPBC 2011/6176);
- (iii) relevant licences and permits, including conditions attached to mining leases (MLs); and
- (iv) other relevant legislation.

Obligations relevant to this WMMS are described below.

2.1 EP&A ACT DEVELOPMENT CONSENT

The conditions of Development Consent SSD-4966 relevant to waste management are described below.

2.1.1 Waste Management Requirements

Condition 52, Schedule 3, of the NSW Development Consent SSD-4966 requires the minimisation of waste at the SMC. Condition 52 states:

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- 52. The Applicant shall:
 - (a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the development;
 - (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and
 - (c) monitor and report on the effectiveness of waste minimisation and management measures in the Annual Review.

These requirements are addressed in Sections 4 and 5.

2.2 LICENCES, PERMITS AND LEASES

In addition to the NSW Development Consent SSD-4966 and Commonwealth Approval (EPBC 2011/6176), all activities at or in association with the SMC will be conducted in accordance with a number of licences, permits and leases which have been issued or are pending issue.

Key licences, permits and leases pertaining to the SMC include:

- The conditions of Environment Protection Licence (EPL) 5161 administered by the EPA under the NSW Protection of the Environment Operations Act, 1997 (POEO Act). The conditions in EPL 5161 relevant to this WMMS are outlined later in this section.
- The conditions of the MLs 1360, 1409, 1447, 1538, 1521, 1577, 1528, 1733, and 1787 issued under the NSW Mining Act, 1992².
- The SMC Mining Operations Plan (and/or Rehabilitation Management Plan) approved by the NSW Resources Regulator within the Minerals, Exploration and Geoscience (MEG) division of the Department of Regional NSW.
- Water supply works, water use approvals and water access licences issued by Water NSW under the NSW Water Management Act, 2000.

01111084 5 Stratford Coal Pty Ltd

Mining Lease Application (MLA) area 1 is a proposed ML area and has not yet been lodged.

A detailed register of current licences, permits and approvals is maintained on site by SCPL personnel and a summary of current approvals is presented in the SMC Annual Review.

EPL conditions that are applicable to this WMMS are provided in Table 1.

Table 1
EPL 5161 Conditions Applicable to this Waste Management and Minimisation Strategy

Condition	Requirement			
Section 4	Licensed activities must be carried out in a competent manner.			
Condition O1.1	This includes:			
	(a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and			
	(b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			
Section 4 Condition O5.5	The licensee must ensure that any liquid and/or non-liquid generated and/or stored at the premises is assessed and classified in accordance with the NSW EPA Waste Classification Guidelines as in force from time to time.			
Section 4 Condition O5.6	The licensee must ensure that waste identified for recycling is stored separately from other waste.			
Section 4 Condition O6.13	Waste rock must be assessed to determine if it is Potential Acid Forming (PAF). PAF waste rock must be segregated, handled and disposed so as to mitigate against acid formation and pollution of waters.			
Section 4 Condition O6.14	PAF material must not be disposed above groundwater level without EPA specifically approving in writing the location and design of the out-of-pit PAF waste cells.			

2.3 OTHER LEGISLATION AND GUIDELINES

SCPL will conduct the SMC consistent with the NSW Development Consent SSD-4966, the Commonwealth Approval (EPBC 2011/6176), EPL 5161 and any other legislation that is applicable to an approved Part 4 Project under the EP&A Act.

In addition to the Acts referred to above and in Section 2.2, the NSW Acts, Regulations and key guidelines applicable to the WMMS include, but are not limited to, the:

- Protection of the Environment Operations (Waste) Regulation, 2014.
- Waste Avoidance and Resource Recovery Act, 2001 (WARR Act).
- Waste Classification Guidelines Parts 1-4 (EPA, 2014).
- Leading Practice Sustainability Development Program for the Mining Industry Hazardous Materials Management (Department of Industry, Science, Energy and Resources, 2016).

3 IDENTIFICATION OF WASTE STREAMS

A waste stream analysis (Appendix 1) has been undertaken for the SMC and wastes classified in accordance with the *Waste Classification Guidelines Part 1: Classifying Waste* (EPA, 2014). The key waste streams for the SMC during the mining operations phase comprise:

- waste rock consisting of potentially acid forming rock, non-acid forming rock and ROM coal reject;
- waste generated by mining related activities including workshop and maintenance activities (e.g. used tyres, scrap metal and waste hydrocarbons and oil filters), drilling and exploration activities, agricultural and irrigation activities, coal handling and preparation plant (CHPP), administration buildings and crib rooms;
- general recyclable and non-recyclable wastes; and
- sewage and wastewater.

4 WASTE MANAGEMENT AND MINIMISATION MEASURES

4.1 GENERAL SITE WASTE MANAGEMENT

Waste management at the SMC is the responsibility of the mine owner (SCPL) and all personnel on-site including contractors.

Waste management at the SMC is based around the general principles of the waste hierarchy established under the WARR Act and ensures resource management options are considered against the following priorities:

- 1. **Avoidance/minimisation** the first priority is to take action to reduce the overall volume of waste generated at the SMC;
- 2. **Resource recovery** where possible, generated waste will be re-used or recycled consistent with the most efficient use of the recovered resource; and
- 3. **Disposal** remaining waste which cannot be used by the above means will be disposed of in the most environmentally responsible manner.

The methods and procedures by which the principles of the waste hierarchy are applied at the SMC are detailed in the following sections. Further to these procedures, specific waste management at the SMC is detailed in the waste stream analysis (Appendix 1).

4.2 WASTE REDUCTION

General waste avoidance and minimisation principles are the key priority at the SMC to reduce the quantity of wastes required to be disposed off-site. Waste reduction is achieved by:

- All personnel and contractors to consider possible opportunities for waste avoidance during the procurement of resources for SMC operations and projects;
- SMC resources and stock will be regularly monitored and reviewed to ensure efficient stock control and avoid unnecessary wastage;
- All waste streams generated at the SMC will be segregated to avoid contamination of wastes which may be recovered and re-used or recycled; and
- The Environment and Community Superintendent is responsible for identifying and implementing waste minimisation opportunities and strategies.

SCPL or the mine contractor will provide suitable waste segregation and disposal bins and will arrange for contents to be regularly removed from site.

Waste reduction will continue to be prioritised during the mine closure phase (i.e. after 31 December 2025) for the remaining waste streams.

4.3 RE-USE OF WASTE MATERIALS

SCPL encourages the efficient use of recovered resources and will seek all opportunities to re-use materials to ensure maximum utilisation of the resource is achieved. Re-use of waste materials will be achieved by ensuring all personnel and contractors consider the possible opportunities for waste re-use whilst undertaking operations and projects at the SMC. Any practicable and cost effective means for waste re-use will be implemented and monitored by the Environmental and Community Superintendent and the mine contractor.

Potential resources and wastes for re-use include, but are not limited to, timber and timber pallets, polyethylene and steel pipelines, and scrap metal.

Sewage effluent from site buildings will be treated at an on-site sewage treatment facility and self-irrigated on a designated area of vegetated land. The sewage treatment facility will be monitored by SCPL to ensure correct operation and avoidance of any adverse environmental impacts.

It is anticipated that the on-site sewage treatment facility would remain on-site until relinquishment of the relevant ML.

4.4 RECYCLING

All waste materials which may not be re-used on-site will be segregated and recycled where practicable. SCPL or the mining contractor will provide recycling bins and arrange for the contents to be regularly removed from site. All contractors are responsible for the collection and removal of their own rubbish. Recycling at the SMC will be carried out to the maximum practicable extent.

The following waste streams generated by the SMC will be recycled:

- scrap timber and timber pallets;
- paper and cardboard;
- plastic products suitable for recycling;
- scrap metal (ferrous and non-ferrous);
- waste oil;
- batteries; and
- general recyclables e.g. aluminium cans, plastic containers, glass jars and bottles.

These waste streams may still be generated at the SMC during the mine closure phase (i.e. after 31 December 2025), however at significantly reduced volumes.

4.5 STORAGE AND DISPOSAL

The least desirable and "end of pipe" solution for waste management is storage and disposal. These wastes must be carefully managed to minimise negative environmental outcomes. All waste streams generated by the SMC will be first evaluated for their potential for re-use or recycling. Where re-use or recycling is not practicable, the waste will be collected and stored at a designated waste disposal area. Sufficient bins, recycling and waste collection areas will be provided and maintained to facilitate efficient waste management. These facilities will be monitored and maintained.

The Environmental and Community Superintendent will ensure all wastes intended to be disposed of off-site are removed on a regular basis by an appropriately licensed contractor. Waste streams not re-used or recycled are not to be disposed of at the premises except as expressly permitted by EPL 5161 and/or Development Consent SSD-4966. No waste (other than approved waste) is to be buried or disposed of at any location within the ML or on SCPL-owned land including the burial of waste within the pits and waste rock emplacement.

Waste rock and used tyres are the only waste streams exempt from this requirement. Waste tyres are approved to be stockpiled and disposed in the backfilled sections of SMC open pits/voids. The location (and depth) and quantity of tyres disposed in the open pits/voids will be surveyed and recorded in a used tyre register that is maintained on a regular basis by SCPL. Tyres would be placed in discrete lots and buried with a minimum cover of 5 m, and avoid other combustible material.

If any soils found to be contaminated by hydrocarbons (beyond minor spillages) are identified, their existence will be reported to SCPL environmental staff. SCPL environmental staff, will then provide instruction for the contaminated soil to be collected and removed for disposal offsite or treatment at a dedicated onsite bioremediation area. Soils contained within this area may not be removed or disturbed until the soils under treatment have been deemed suitable for burial as non-contaminated waste following appropriate analytical testing instigated by SCPL. A Land Contamination Assessment would be undertaken during the mine closure phase, with any identified areas of contamination remediated as required.

SCPL will not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal.

Potentially Acid Forming Material Management

Stratford East Open Cut waste rock material is expected to be generally potentially acid forming (PAF) with PAF-low capacity and non-acid forming materials present (SCPL, 2012). The proactive management of PAF material is undertaken in accordance with the PAF material management measures described in the SMC's Surface Water Management Plan (Appendix 2 of the SMC Water Management Plan). SCPL will continue to undertake PAF material rehandling activities to emplace all identified PAF material either in pit below the predicted post-mining groundwater table level, or within dedicated PAF containment cells within the Stratford Waste Emplacement.

4.6 HAZARDOUS WASTE

Hazardous chemicals and materials are managed in accordance with the Stratford Coal Hazardous Chemicals and Materials Procedure. All waste streams classified as hazardous waste will be segregated and stored in an appropriately contained area for the specific type of hazardous waste. SCPL holds an "Acknowledgement of Notification of Hazardous Chemicals on Premises" for the SCM fuel handling facility and blasting explosives compound.

Hazardous waste will be transported from site in accordance with the National Transport Commission (NTC) Australian Code for the Transport of Dangerous Goods by Road or Rail, Edition 7.7 (NTC, 2020). Hazardous waste will only be transported from site by an appropriately licensed contractor and where required, will be tracked and reported.

4.7 TRAINING AND AWARENESS

SCPL is committed to continual training and awareness of all staff, employees and contractors at the SMC. Training and awareness procedures are an integral part of ensuring the full implementation of the WMMS across all aspects of the project. Training and awareness at the SMC is provided in the form of:

- site inductions;
- · departmental familiarisations; and
- tool box talks.

All staff, employees and contractors are required to be appropriately inducted and familiar with their intended work area. Tool box talks will be conducted on an ongoing basis as required for refreshing information or raising awareness of a particular issue. Staff training includes safe handling and legal disposal of contaminated materials and wastes, and emergency and incident response protocols.

5 MONITORING, REPORTING AND REVIEWING

5.1 MONITORING

To ensure full and satisfactory implementation of the WMMS, all areas of the operation will undergo routine inspections and monitoring which will include all waste disposal areas. Routine monitoring will comprise fort-nightly inspections of waste handling, storage and disposal areas. Monitoring of waste management procedures will be conducted by SCPL or the waste contractor with inspections to include:

- general housekeeping, waste and litter accumulation;
- waste segregation and contamination;
- proper waste re-use and recycling;
- proper storage of hazardous wastes;
- · waste storage volumes; and
- regular waste disposal.

Additional periodic inspections will be conducted by SCPL environmental staff. Any incidents with the potential to cause material environmental harm or health and safety issues will be reported immediately in accordance with the Pollution Incident Response Management Plan (PIRMP) and will be managed accordingly.

All waste tracking and reporting will be conducted by SCPL or the waste contractor. Records will include waste type and mass/volume and will reference the waste management procedure. The waste management procedure will identify waste intended for recycling or disposal, the licensed contractor engaged to remove the waste and the final destination of the waste product. Reports will include all special wastes, hazardous wastes and general waste. All records and receipts of waste management will be retained.

Routine monitoring and periodic inspections will continue during the mine closure phase focussing on the remaining waste streams and disposal areas.

5.2 REPORTING

5.2.1 Reporting Protocols

In accordance with Condition 3, Schedule 5 of Development Consent SSD-4966, SCPL has developed protocols for managing and reporting the following:

- incidents;
- complaints;
- non-compliances with statutory requirements; and
- exceedances of the impact assessment criteria and/or performance indicators.

The management of incidents is described in the SMC PIRMP. The management of complaints and non-compliances is described in detail in the SMC Environmental Management Strategy. In accordance with Condition 8, Schedule 5 of NSW Development Consent SSD-4966, SCPL will provide regular reporting on the environmental performance of the SMC on the SMC's website.

5.2.2 Annual Review

In accordance with Condition 4, Schedule 5 of Development Consent SSD-4966, SCPL will prepare an Annual Review of the environmental performance of the SMC by the end of March each year (or other timing as may be agreed by the Secretary of the NSW Department of Planning, Industry and Environment [DPIE]).

The Annual Review will specifically address the following aspects of Condition 4, Schedule 5 of Development Consent SSD-4966:

- include a comprehensive review of the monitoring results and complaints records for the SMC over the previous calendar year, including a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;
 - monitoring results of previous years; and
 - relevant predictions in the Stratford Extension Project Environmental Impact Assessment (SCPL, 2012);
- identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;
- identify any trends in the monitoring data over the life of the SMC;
- identify any discrepancies between the predicted and actual impacts of the SMC, and analyse the potential cause of any significant discrepancies; and
- describe what measures will be implemented over the next year to improve the environmental performance of the SMC.

The Annual Review will be made publicly available on the Stratford Coal website, in accordance with Condition 11, Schedule 5 of Development Consent SSD-4966.

5.2.3 Independent Environmental Audit

In accordance with Condition 9, Schedule 5 of Development Consent SSD-4966, an independent environmental audit will be undertaken every three years. A copy of the audit report will be submitted to the Secretary of DPIE and made publicly available on the Stratford Coal website. The independent environmental audit will be undertaken by an appropriately qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary of the DPIE.

5.3 WASTE MANAGEMENT AND MINIMISATION STRATEGY REVIEW

The WMMS will be periodically reviewed and revised if required. The WMMS will be made publicly available on the Stratford Coal website. A hard copy of the WMMS will also be kept at the SMC.

6 RESPONSIBILITIES AND ACCOUNTABILITIES

SCPL considers waste management to be the responsibility of all personnel employed onsite and as such, all personnel are required to comply with the procedures and protocols set out in this WMMS.

Compliance with all approvals, plans and procedures will be the responsibility of all personnel (staff and contractors) employed on or in association with the SMC.

The SMC Environment & Community Superintendent will undertake regular inspections, internal audits and initiate directions identifying any remediation/rectification work required, and areas of actual or potential non-compliance. A protocol for the managing and reporting of non-compliances with statutory requirements has been developed as a component of the SMC Environmental Management Strategy.

The SMC Operations Manager and Environment & Community Superintendent are responsible for:

- satisfactorily implementing the WMMS;
- ongoing review of SMC's waste management performance;
- responding to any incidents with the potential to cause harm to the environment or personnel;
- periodic inspections and monitoring for compliance;
- effecting any amendments or modifications made to the WMMS;
- providing all resources necessary for waste management at the SMC;
- ensuring all wastes are managed appropriately including storage, segregation, recycling and disposal;
- ensuring all personnel are fully trained and aware of relevant requirements;
- engaging appropriately licensed contractors for the disposal of waste; and
- monitoring, reporting and reviewing as required by the WMMS.

7 REFERENCES

Department of Industry, Science, Energy and Resources (2016) Leading Practice Sustainability Development Program for the Mining Industry – Hazardous Materials Management.

Environmental Protection Authority (2014) Environmental Guidelines: Waste Classification Guidelines Parts 1-4.

National Transport Commission (2020) *Australian Code for the Transport of Dangerous Goods by Road and Rail, edition 7.7.* Melbourne.

Stratford Coal Pty Ltd (2012) Stratford Extension Project Environmental Impact Statement.

APPENDIX 1

SMC WASTE STREAM ANALYSIS

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Table A1-1 Waste Stream Analysis

Waste Classification	Waste Material	Source	Disposal	Management/Treatment
Special Waste	Waste Tyres	Workshop – heavy and light vehicles	Buried Onsite	Disposed of in backfilled sections of open pits/voids. Record on used tyre register.
	Clinical Waste	First aid room	Dispose Offsite	Collected and disposed of by an appropriately licensed contractor. Recorded on waste register.
Liquid Waste	Sewage/effluent	Buildings and facilities	Dispose Onsite	Treatment at onsite sewage treatment plant and irrigated on to pasture.
Hazardous Waste	Spray Cans/Aerosols	Pit, Workshop	Dispose Offsite	Collected in designated receptacle and removed from site by an approved regulated waste receival contractor. Recorded on waste register.
	Waste Oil/Grease	Workshop, CHPP	Recycle, Dispose Offsite	Stored on spill containment pallets or in bunded area with lids to prevent spillage. Recorded on waste register.
	Oil Filters, Hydraulic hoses	Workshop	Dispose Offsite	Separated from waste stream, stored in designated bin in workshop for removal by an appropriately licensed contractor. Recorded on waste register.
	Oily Rags	Workshop, Pit	Dispose Offsite	Collected and taken offsite with hydrocarbon contaminated material. Recorded on waste register.
	Grease Cartridges	Workshop	Dispose Offsite	Collected in designated receptacle and removed from site by an approved waste receival contractor. Recorded on waste register.
	Empty Oil Drums	Workshop, CHPP	Dispose Offsite	Collected in designated receptacle and removed from site by an approved waste receival contractor. Recorded on waste register.
	Batteries	Workshop	Recycle, Dispose offsite	Collected in bunded used battery storage area and removed by an appropriately licensed contractor. Recorded on waste register.
	Degreaser	Workshop	Dispose Offsite	Collected in designated receptacle and removed from site by an approved regulated waste receival contractor. Recorded on waste register.
	Engine Coolant	Workshop	Dispose Offsite	Collected in designated receptacle and removed from site by an approved regulated waste receival contractor. Recorded on waste register.
	Contaminated Soils (Hydrocarbons)	Pit, Workshop, CHPP	Dispose Onsite or Offsite	Contaminated soils will be contained and removed to the bioremediation area onsite or disposed offsite.
General Solid Waste (putrescibles)	Food Waste and Mixed General Waste	Admin, Offices, Crib Room	Dispose Offsite	Collected by an appropriately licensed contractor and recorded on a waste register.

Table A1-1 (Continued) Waste Stream Analysis

Waste Classification	Waste Material	Source	Disposal	Management/Treatment
General Solid Waste (non-putrescibles)	Food Containers	Admin, Offices, Crib Room	Dispose Offsite	Collected by an appropriately licensed contractor and recorded on a waste register.
	Scrap Metal, Fencing Wire	Workshop, CHPP, Pit, Rural	Recycle	Separated for recycling and collected by an approved scrap metal merchant
	General Recyclables: Aluminium Cans, Plastics, Glass Bottles	Admin, Offices, Crib Room	Recycle	Separated for recycling and collected by an appropriately licensed contractor and recorded on a waste register.
	Scrap Paper/Cardboard	Admin, Offices, Workshop	Recycle	Separated for recycling and collected by an appropriately licensed contractor and recorded on a waste register.
	Packaging/Containers	Admin, Offices, Workshop, CHPP	Dispose Offsite	Collected by an appropriately licensed contractor and recorded on a waste register.
	Timber/Pallets	Workshop, CHPP, Pit, Rural	Re-use, Recycle, Dispose Offsite	Stored and re-used onsite collected by a licensed contractor for disposal. Recorded on waste register.
	Stationary, Toner Cartridges	Admin, Offices	Dispose Offsite	Collected by an appropriately licensed contractor and recorded on a waste register.
	Mechanical Parts	Workshop, CHPP	Dispose Offsite	Collected by an appropriately licensed contractor and recorded on a waste register.
	PE and Steel Pipelines	Pit, Rural	Re-use	Collected in a designated storage area and re-used onsite.
	Electrical Cables/Wires	Workshop, CHPP	Dispose Offsite	Collected by an appropriately licensed contractor and recorded on a waste register.
	Conveyer Belts	CHPP	Dispose Offsite	Collected by an appropriately licensed contractor and recorded on a waste register.