

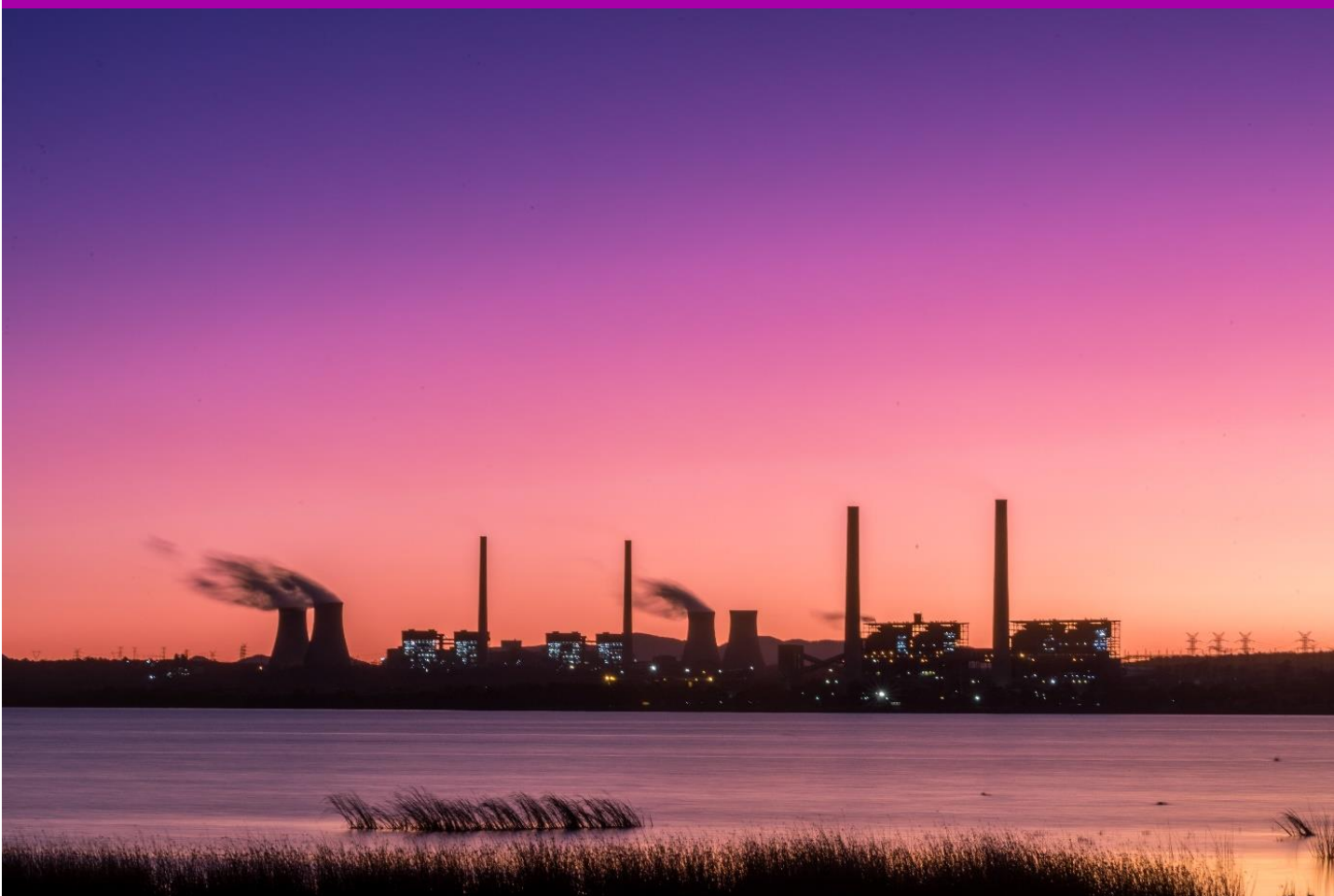
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Stage 3 Bayswater Ancillary Works - Air Quality Management Plan

AGL Macquarie Limited

SSD Post Approval Documentation
8 December 2023



Stage 3 Bayswater Ancillary Works - Air Quality Management Plan

Client name: AGL Macquarie Limited
Project name: SSD Post Approval Documentation
Client reference: AGL
Version: B
Date: 8 December 2023
File name: Air Quality Management Sub Plan_Rev B

Project no: IS479000
Project manager: Cynthia do Nascimento
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Document history and status

Version	Date	Description	Author	Checked	Reviewed	Approved
Rev A	17/11/2023	Initial Draft	E. van Haandel	A. Callis	C. do Nascimento	P. Horn
Rev B	08/12/2023	Final Draft	E. van Haandel	C. do Nascimento	C. do Nascimento	P. Horn

Distribution of copies

Version	Issue approved	Date issued	Issued to	Comments

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Acronyms and abbreviations

Term	Definition
AGLM	AGL Macquarie Pty Limited
AQMP	Air Quality Management Plan
Bayswater	Bayswater Power Station
BAW	Bayswater Ancillary Works
CEMP	Construction Environment Management Plan
DPE	Department of Planning and Environment
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	Environment Protection Authority
EPL	Environment Protection Licence
LBBAWP	Liddell Battery and Bayswater Ancillary Works Project
MW	Megawatt
NEM	National Electricity Market
NSW	New South Wales
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
The Project	Stage 3 Bayswater Ancillary Works
SEARs	Secretary's Environmental Assessment Requirements
SEPP SRD	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>
SSD	State Significant Development

1. Introduction

Jacobs Australia Pty Limited (Jacobs) were commissioned by AGL Macquarie Pty Limited (AGLM) to prepare an Air Quality Management Plan (AQMP) for the Stage 3 Bayswater Ancillary Works (hereafter referred to as "BAW" or "the Project") to be undertaken at Bayswater Power Station (Bayswater) as part of the Liddell Battery and Bayswater Ancillary Works Project (LBBAWP). These works will allow Bayswater to maintain supply to the National Energy Market (NEM) until its planned closure in 2035, and ultimately improve the environmental performance of the plant with no change to coal consumption - with electricity, emissions, and ash generation remaining consistent.

The LBBAWP is classified as a State Significant Development (SSD) under the *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP SRD) and it is subject to Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) which requires an Environmental Impact Statement (EIS) to be prepared in accordance with the NSW Department of Planning and Environment (DPE) Secretary's Environmental Assessment Requirements (SEARs).

AGL submitted the LBBAWP EIS in March 2021. The Development Consent (SSD 8889679) was issued by the DPE on the 8th of March 2022. The LBBAWP is being undertaken in the staged approach shown in Table 1, approved by DPE on the 18th of October 2022.

Table 1. LBBAWP Stages

Stage
Stage 1 - Liddell decoupling works
Stage 2 - Liddell battery energy storage system and associated works
Stage 3 - Bayswater Ancillary Works

1.1 Context

This AQMP has been developed to address the SDD 8889679 development consent condition C1(e)(i) issued for the LBBAWP by the Planning Secretary for the NSW DPE. This condition requires a subplan to manage the environmental impacts of emissions to air during construction.

Relevant conditions are outlined in Table 2.

Table 2. Air Quality - Consent requirements for SDD 8889679

Consent requirement	Section/reference
<p>C1. Prior to commencing construction, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:</p> <p>(e) include:</p> <p>(i) the following subplans:</p> <ul style="list-style-type: none"> • soil, stormwater, water quality, flood and spoil management; • construction and decommissioning noise, including an out-of-hours works protocol; • air quality management; • contamination, including an unexpected finds protocol; • waste management; and • traffic. 	This AQMP
B15. The Applicant must take all reasonable and feasible steps to:	Section 6

- | | |
|---|--|
| (a) minimise odour, fume and dust emissions of the development
(b) eliminate or minimise the risk of spontaneous combustion; and
(c) minimise to the greatest extent practicable, dust generating surfaces exposed on the site. | |
|---|--|

1.2 Purpose and scope

The purpose of this AQMP is to:

- Summarise the potential impacts of construction on the local air quality environment as assessed in the LBBAWP EIS (Jacobs, 2021)
- Identify the controls to be implemented to minimise construction air quality impacts
- Maintain compliance with the conditions of SSD 8889679, Environmental Protection Licence (EPL) 779, and legislation relating to air quality.

The LBBAWP is staged and this AQMP specifically addresses the Stage 3 BAW as identified in Section 1.3.1 and described in the Environmental Management Strategy (EMS) (hereafter referred to as “the Project”). The AQMP and EMS for Stage 1 and Stage 2 works are available on the [AGLM Website](#) for public reference following DPE approval.

Works undertaken by the Principal Contractor and any appointed sub-contractors must comply with the environmental management measures outlined in Section 6 of this AQMP.

1.3 Project overview

AGL Macquarie Pty Limited (AGLM) own and operate the Bayswater power station (Bayswater) which is approved to generate up to 2,740 megawatts (MW), the now retired (April 2023) 2,000 MW Liddell power station (Liddell), the 50 MW Hunter Valley Gas Turbines and associated ancillary infrastructure systems.

AGL has publicly announced its intention to transition towards a low-carbon future and respond to the requirements from the NEM and customers. Bayswater is expected to operate through to 2035 and then is intended to be retired. AGL has committed to closing all coal fired generation assets in its portfolio by 2050.

AGLM is undertaking works that will facilitate the efficient, safe, and reliable continuation of electricity generating works from the Bayswater and Liddell sites through the LBBAWP, of which this Project is a sub-stage. The overarching LBBAWP involves the following:

- **Decoupling Works:** Alternative network connection arrangements for the Liddell 33 Kilovolt (kV) Switching Station that provides electricity to infrastructure required for the ongoing operation of Bayswater and associated ancillary infrastructure and third-party industrial energy users.
- **Liddell Battery (the Battery):** The installation of a grid connected Battery Energy Storage System with capacity of up to 500 MW and 2 GWh.
- **Bayswater Ancillary Works:** Works associated with the ongoing operation of Bayswater which includes (but is not limited to) upgrades to ancillary infrastructure such as pumps, pipelines, conveyor systems, roads and assets to enable maintenance, repairs, replacement, expansion or demolition.
- **Consolidated consents:** A modern consolidated consent for the continued operation of Bayswater through the voluntary surrender and consolidation into this application of various existing development approvals required for the ongoing operation of AGLM assets.

The Project includes Stage 3 BAW works as listed in Section 1.3.1.

1.3.1 Project elements

The purpose of the Stage 3 BAW Project is to respond to the ongoing operational and maintenance requirements of Bayswater, as well align with modern office and site requirements. The proposed works and expected construction staging include:

1. **Shortening of the MA1B Conveyor** as the conveyor is no longer required to transport coal from the Mt Arthur Coal Mine. Works are anticipated to be completed over a 3-month period and involve approximately 25 construction personnel.
Proposed works would include:
 - (a) Construction of a new concrete foundation adjacent to the existing Antiene Check Weigh Bin
 - (b) Modification to ancillary power, water and communications infrastructure
 - (c) Establishment of spillage control and capture and water management infrastructure
 - (d) Removal of redundant conveyor belts and associated conveyor stringer, purlins, idler rollers footing piers, electrical cabling, pull wires and roof sheeting
 - (e) Rehabilitation of areas no longer required for operational purposes.
2. **Refurbishment of River Road** including complete surface removal, repairs will be made to the underlying layers (subgrade) and levelling and reconstruction of approximately 3 kilometres (km) of the dual lane River Road from its junction with the Bayswater Access Road to the Bayswater tank farm. Anticipated to be completed over a 2-month period and involve approximately 50 contract personnel. No change expected to scope or footprint of the current roadway. Staging is expected to occur within the construction footprint, with traffic diverted to a single lane when works are to occur (no additional disturbance area).
Proposed works include:
 - (a) Current road surface removal
 - (b) Repairs to the underlying layers and levelling
 - (c) Construction of the new road surface.
3. **Formalisation of Waste Storage Area** for hydrocarbons, oils, and greases generated onsite, with a total storage capacity of approximately 20 Kilolitres (kL). This includes environmental controls such as bunding, runoff management and roofing. A fully containerised / self-bunded solution is proposed to be established in a pre-bunded concrete hard stand area (already existing).
4. **Construction of a small diameter brine concentrator return water pipeline** (approximately 3 km long) to return brine from the brine concentrator decant basin to the brine concentrator. Minimal earth works are expected to be required. Installation of additional HDPE pipe approximately 50 mm diameter. To be laid on earth surface adjacent to existing pipeline (within 1 m of existing pipeline). No additional works outside of pipeline installation are expected. Anticipated to be completed over a 1-month period and to involve approximately 20 contract personnel.
5. **Replacement of the existing emergency power system** with a new system. The new system would include three 415 V diesel generators with two located outside the existing diesel generator building that would connect to the existing 6.6 kV network via 415 V / 6.6 kV step up transformers. The third diesel generator would remain connected to the 1/2 end 415 V diesel generator switchboard via a change-over switch such that power can be supplied from the third diesel generator or via the 6.6 kV network. The existing diesel generator building would have all redundant equipment removed allowing the building to be repurposed. Anticipated to be completed over a 2-month period and to involve approximately 5 contractor personnel.

6. **Formalisation of the contractor area** involving upgrades to the current informal contractor area established between Bayswater turbine hall and coal handling yards including electrical works, earthworks, road grading, sealing, drainage improvements and establishment of carparks and offices for use during maintenance shutdowns.
7. **Installation of auxiliary infrastructure** such as maintenance storage areas, laydown, car parks, security gatehouse upgrades, washdown facilities, car wash, equipment wash, and a drive through hard stand area. These are to be equipped with appropriate civil design, drainage, coal settlement bund, oil water separator and water transfer to contaminated water bund to the east of proposed area. Works associated with security gatehouse, laydown and storage are currently seen as maintenance and upkeep of existing infrastructure.
8. **Establishment of a cultural heritage storage area** for heritage items salvaged during earthworks. This will be a temporary containerised solution available for use as required. It is expected that the containers would be trucked in to site and placed on to a disturbed area on the inner footprint at Bayswater. The storage containers would be removed from site once the cultural heritage items are relocated. This would occur after construction is completed and be carried out in agreement with the RAPs.
9. **Refurbishment of the Administration Building** including redesign and upgrade of workspaces, kitchens and amenities.

The proposed works include:

- (a) removal of internal walls to create more open plan office space and lunchrooms, effectively repurposing some areas within the existing building
- (b) conversion of an existing toilet into a disabled compliant toilet
- (c) installation of a cabin lift in the existing to improve accessibility, noting that the only means of accessing the first floor currently is via stairs
- (d) replacement of two existing doors with an automatic opening door
- (e) installation of small internal roof electronic beacons to enable assisted office navigation for seeing or hearing-impaired persons
- (f) modification of kitchen spaces to increase accessibility, by lowering fittings and improving cabinetry and
- (g) widening of concrete paths and installation of handrails to enable wheelchair access.

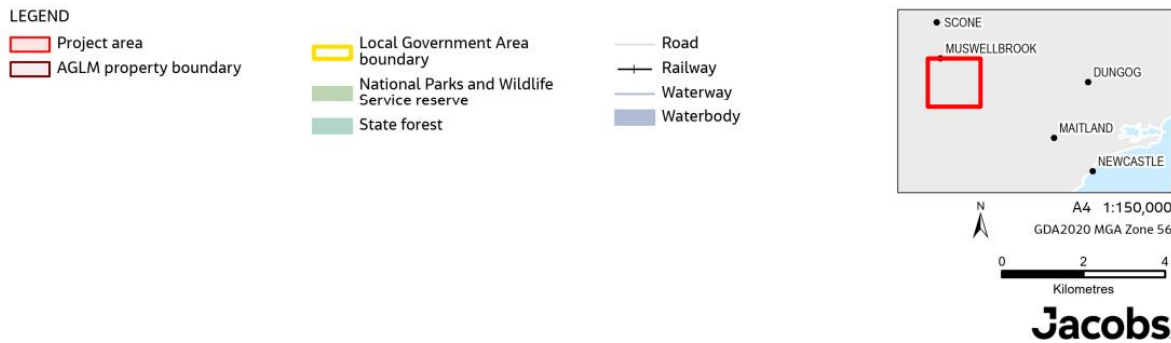
The Social club will be pursued under a stand-alone Development Application at a later stage on a separate parcel of land.

1.4 Site location

The Project is located within the 10,000 hectares (ha) AGLM landholding, which encompasses Bayswater, Liddell, the Ravensworth rehabilitation area, Lake Liddell and surrounding buffer lands. The AGLM landholding is located approximately 15 kilometres (km) south-east of Muswellbrook, 25 km north-west of Singleton, and approximately 165 km west northwest of Sydney in NSW. The location of the AGLM landholding is shown in Figure 1.

The Project footprint is located within and surrounding Bayswater, as shown in Figure 2. Bayswater is accessible from the New England Highway via an interchange with an unnamed east-west access road. The access road is a single carriageway road with one lane in each direction.

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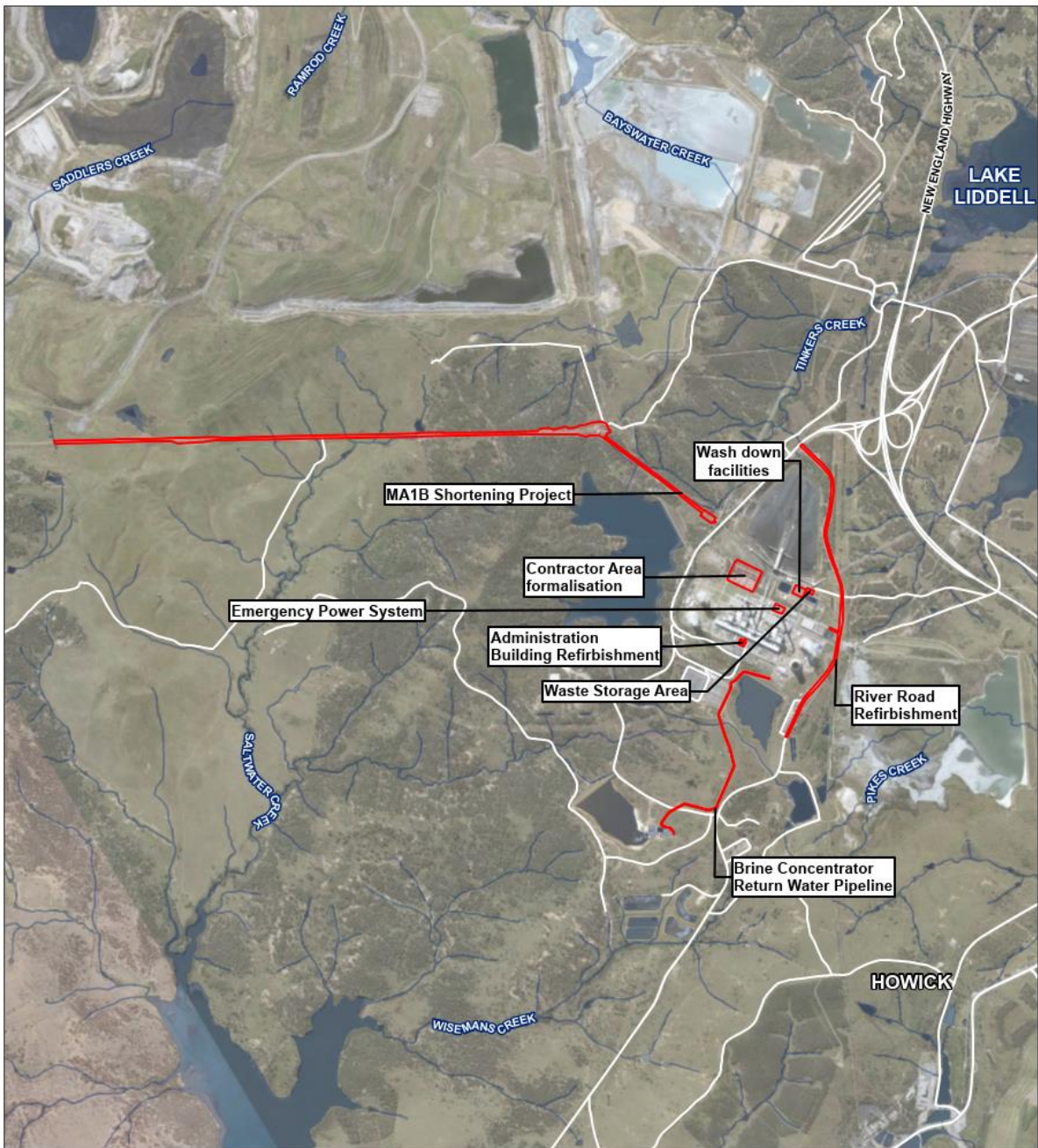


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Data Sources: Geosciences Australia (2006); Department of Customer Service (2023); AGL (2023); Imagery Sources: Aerometrex

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Figure 1. Project location



LEGEND
 Project area



A4 1:40,000
 GDA2020 MGA Zone 56
 0 0.5 1
 Kilometres

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Figure 2. Project area

1.5 Related reports and plans

There are environmental assessments, management plans and monitoring programs for existing and proposed operations within the AGLM landholdings. The following documents are considered related and shall be read in conjunction with this AQMP:

- Air Quality, Greenhouse Gas and Noise Management Plan (AGLM-HSE-PLN-009.04) (AGLM, 2020)
- Environmental Monitoring & Reporting Schedule (AGLM-HSE-FRM-008.10.1) (AGLM, 2017)
- Liddell Battery and Bayswater Ancillary Works Project EIS: Appendix H - Air Quality Impact Assessment (Jacobs, 2021)
- Bayswater WOAOW Environmental Management Strategy (Jacobs, 2022).

2. Regulatory requirements

2.1 Relevant legislation and conditions

Legislation relevant to managing air quality impacts:

- *Protection of the Environment Operations Act, 1997* (NSW) (POEO Act)
 - The POEO Act is the primary piece of legislation for the regulation of potential pollution impacts associated with Scheduled Operations or Activities in NSW. Scheduled activities are those defined in Schedule 1 of the POEO Act. Bayswater is operated under Environmental Protection Licence (EPL) 779, and the Project will be carried out in accordance with relevant conditions listed in Table 3.
- *POEO Clean Air Regulation, 2021* (NSW)
 - The POEO Clean Air Regulation contains provisions for the regulation of emissions to air from wood heaters, open burning, motor vehicles, fuels and industry.
- *National Environment Protection (Ambient Air Quality) Measure, 2021* (Cth)
 - The *National Environment Protection (Ambient Air Quality) Measure 2021* provides an approach to measuring six common pollutants the same way across Australia, namely carbon monoxide, lead, nitrogen dioxide photochemical oxidants (ozone), sulfur dioxide, and particles (PM₁₀ and PM_{2.5}). It sets air quality standards and goals for each of these pollutants.

The Minister's Conditions of Approval for the LBBAWP, relevant to the AQMP, are listed in Table 2.

2.1.1 Environmental Protection Licence

Bayswater is operated under EPL 779; as such, the construction contractor must ensure that all works are conducted in accordance with the conditions of this licence.

The EPL conditions regarding mitigation and management of odour and dust from operations are listed in Table 3. It is assumed that these conditions would also apply to the Project.

Table 3. EPL 779 – Air quality management requirements

Air quality requirements
L6 Potentially offensive odour
L6.1 No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997. Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.
03 Dust
03.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
03.2 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.
03.3 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

2.1.2 Additional requirements

Additional environmental requirements established in the EIS are in Table 4.

Table 4. LBBAWP EIS – Air quality management requirements

Reference	Management measure	Timing
AQ1	<p>The following will be undertaken to manage fugitive emissions from stored chemicals:</p> <ul style="list-style-type: none"> ▪ Limiting the quantity of chemical products stored at the site to the extent practical. ▪ Ensure that all storage tanks are fitted with the appropriate controls in-line with the <i>POEO Clean Air Regulation 2010</i>. 	Construction/ Operation
AQ2	<p>During loading and unloading of materials, the following will be undertaken:</p> <ul style="list-style-type: none"> ▪ Water sprays as applicable. ▪ Minimising drop heights. ▪ Reviewing and where necessary modifying or suspending activities during dry and windy weather and elevated background air quality conditions. 	Construction
AQ3	<p>While hauling materials in trucks, the following will be undertaken:</p> <ul style="list-style-type: none"> ▪ Regular watering of unsealed haulage routes. ▪ Regular inspection and removal of debris from plant and equipment to avoid the tracking of materials on to the adjacent road network. 	Construction
AQ4	<p>The following will be undertaken to manage exhaust emissions from plant and equipment:</p> <ul style="list-style-type: none"> ▪ Inspecting all plant and equipment before it is used on-site. ▪ Ensuring that all vehicles, plant, and equipment are operated in a proper and efficient manner. ▪ Switching off all vehicles, plant and equipment when not in use for extended periods. ▪ Avoiding the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable. 	Construction
AQ5	<p>Activities will be coordinated between the Project and the WOAOW project to limit the potential for cumulative dust impacts where possible.</p>	Construction
AQ6	<p>The following will be undertaken to manage wind erosion from stockpiles and exposed surfaces:</p> <ul style="list-style-type: none"> ▪ Watering stockpiles and exposed surfaces. ▪ Progressive rehabilitation of exposed surfaces (as feasible) where no longer required for construction. 	Construction

2.2 Standards and guidelines

The key standards and guidelines relevant to this AQMP are the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* and *Approved Methods for Sampling and Analysis of Air Pollutants in NSW*.

As the LBBAWP was assessed by the Minister for Planning prior to the 9th of September 2022, a historic version of the *Approved methods for the modelling and assessment of air pollutants* publication is referenced in the assessment. The revised standards relevant to the Project include:

- *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (NSW Environment Protection Authority (EPA), 2016)
 - This document lists the statutory methods to be used for modelling and assessing emissions of air pollutants from stationary sources in NSW. The air pollutants most relevant to the Project are particulate matter emissions from excavation works and material handling, transport and processing activities, and wind erosion of stored materials and exposed surfaces.

The EP has developed assessment criteria for:

- Particulate matter 10 micrometres or less in diameter (PM₁₀) to protect against health impacts
 - Particulate matter 2.5 micrometres or less in diameter (PM_{2.5}) to protect against health impacts
 - Total suspended particulates (TSP) to protect against nuisance amenity impacts
 - Deposited dust to protect against nuisance amenity impacts.
- *Approved Methods for Sampling and Analysis of Air Pollutants in NSW* (EPA, 2022).
 - The Approved Methods provides guidance for the monitoring and analysis of air pollutants in NSW for comparison with limits or performance criteria listed in statutory instruments.

3. Performance criteria

High-level targets for the ambient air environment are set for the Project, described in Table 5. These are based on legislative requirements (SSD 8889679 and EPL 779) and AGLM's commitment to the continuous improvement of their environmental performance.

Table 5. Air quality criteria

Aspect	Target	Indicator	Timeframe
General	All control measures listed in this AQMP are to be implemented, as required.	Number of non-conformances with this AQMP.	Ongoing
Odour	No offensive odours from Project works is to be detected along the AGLM site boundary.	Number of offensive odour reports.	Ongoing
	No community complaints, written warnings or infringement notices are to be received regarding odour.	Number of complaints, written warnings, or infringement notices.	Ongoing
Dust	Dust generating surfaces on the site will be minimised, or suppressed, so far as reasonably practicable.	Number of non-crucial exposed dust generating surfaces.	Ongoing
	Control measures are implemented as required to mitigate the generation and movement of dust plumes across the site boundary.	Number of visible dust reports.	Ongoing
	No community complaints, written warnings or infringement notices are to be received regarding excessive dust.	Number of complaints, written warnings, or infringement notices.	Ongoing
Training & Awareness	All personnel working on behalf of AGLM to complete the Site Induction, which will include environmental awareness components.	Percentage of workforce personnel that have completed the Site Induction prior to beginning work on the Project.	Ongoing
	All relevant personnel working on the Project on behalf of AGLM to attend a CEMP briefing held by the Principal Contractor, and be trained and competent in CEMP requirements.	Percentage of relevant workforce personnel that are trained and competent to enact the CEMP.	Ongoing

4. Existing environment

4.1 Meteorological conditions

Meteorological and ambient air quality data collected at monitors operated by AGLM, as well as a number of other local industrial operators and the DPE, indicate that the annual prevailing winds blow from the southeast and northwest.

4.2 Background air quality

Assessment undertaken for the EIS indicated that the EPA's daily impact assessment criterion was occasionally exceeded around the sensitive receptor locations identified in Section 4.3, and that annual PM₁₀ and PM_{2.5} concentrations and deposited dust levels are occasionally measured above the relevant criteria.

Measurement data from nearby ambient air quality monitoring stations within and surrounding Bayswater represent the contributions from sources that have, at some stage, been upwind of each monitor. As such, the background concentration may contain emissions from many sources such as mining activities, construction works, bushfires and 'burning off', industry, vehicles, roads, windblown dust from nearby and remote areas, fragments of pollens, moulds and domestic wood fires. Measured exceedances against the impact assessment criteria outlined in the Approved Methods are expected to be a result of widespread drought conditions (particularly in 2017 and 2018), with some exceedances also expected to arise from surrounding mining activities.

4.3 Sensitive receptors

The Project site is located entirely within the AGLM landholding, with works generally being undertaken near the Bayswater operational area, MA1B Conveyor, and Brine Concentrator Return Water Pipeline. The surrounding area is dominated by industrial activity including mining and power generation, with large-scale infrastructure being the predominant surrounding land use.

Social infrastructure and sensitive receivers are limited in the locality of the Project, with the nearest sensitive receivers being located in Jerrys Plains approximately 7km to the southwest of the MA1B Conveyor, and approximately 8km to the southwest of the Brine Concentrator Return Water Pipeline.

The LBBAWP EIS identified 15 representative residential receiver locations, listed in Table 6. In addition, 1 recreational and 6 industrial sensitive receivers were identified, shown in Figure 3.

Table 6. Representative sensitive receptor surrounding LBBAWP

ID	X coordinate	Y coordinate	Direction from LBBAWP)	Distance to LBBAWP (m)
RR01	306177	6421554	North	6,300
RR02	316337	6419837	Northeast	7,800
RR03	318041	6411978	East	3,000
RR04	320245	6405818	Southeast	8,000
RR05	316832	6403296	Southeast	8,800
RR06	313729	6403903	Southeast	8,100
RR07	307735	6402915	South	5,300
RR08	302782	6404017	South	1,100
RR09	300275	6406687	Southwest	1,000
RR10	300383	6407252	Southwest	1,100

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ID	X coordinate	Y coordinate	Direction from LBBAWP)	Distance to LBBAWP (m)
RR11	295636	6412963	West	6,800
RR12	311493	6418878	Northeast	2,700
RR13	309979	6420335	Northeast	3,500
RR14	309141	6421575	North	4,700
RR15	302022	6404606	South	700

Note: X and Y coordinates are UTM MGA Zone 56

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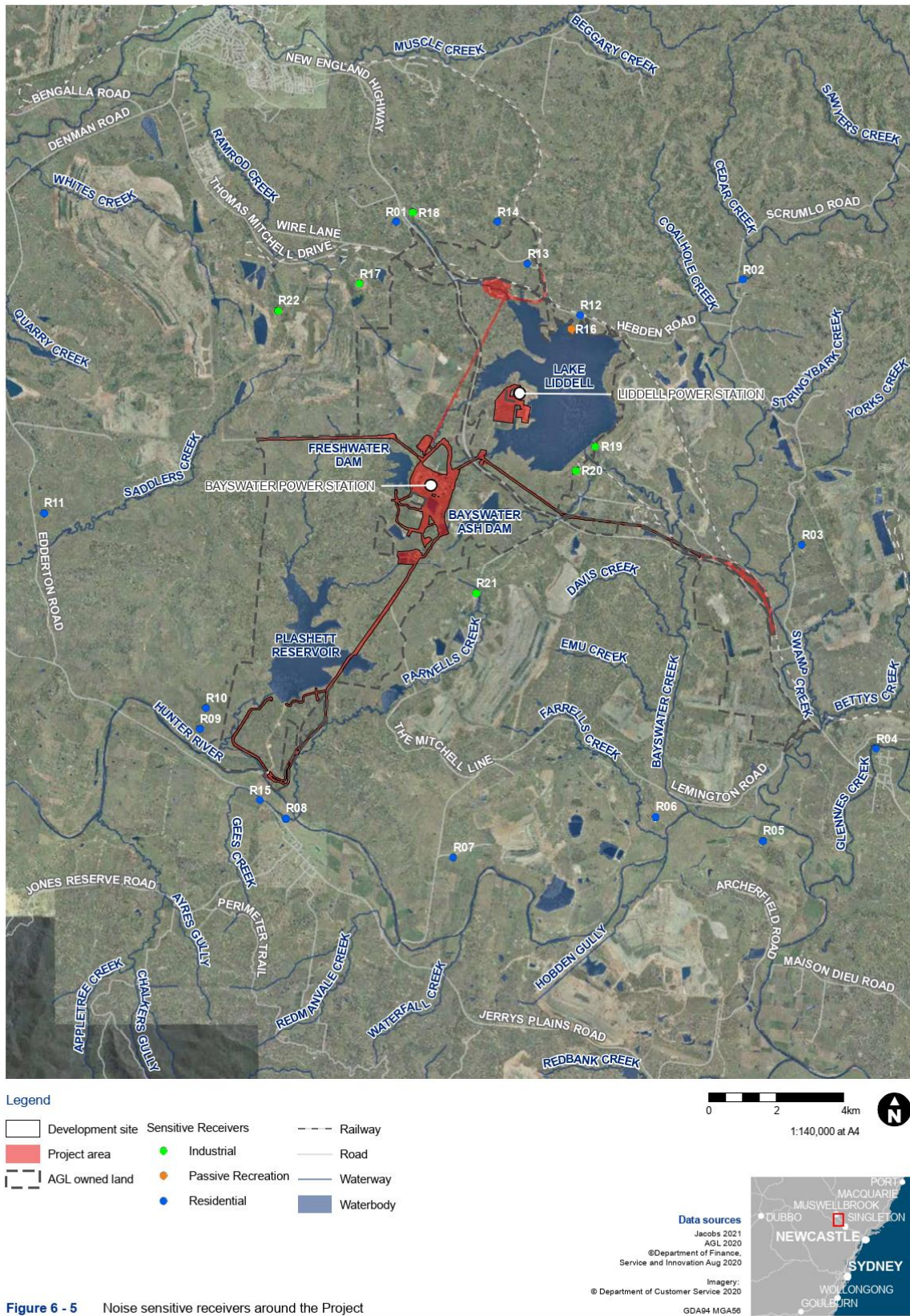


Figure 3. LBBAWP setting

5. Air quality impacts

Construction activities undertaken for the Project may have temporary, localised air quality effects due to dust, engine exhaust, and fugitive emissions. It is expected that these impacts will not result in unacceptable changes in air quality.

Odorous emissions have not been identified as an air-quality related risk associated with the Project.

5.1 Dust emissions

Dust generated from construction activities may come from a variety of sources including site clearing, materials excavation, handling, transport and placement, as well as from wind erosion of stored materials and exposed surfaces. These emissions mainly comprise of particulate matter in the form of suspended particulates (TSP, PM₁₀ and PM_{2.5}) and may impact the health of workers on site, or the health or amenity of sensitive receivers near the site. Dust deposition may also impact flora and fauna and reduce amenity at sensitive receptors.

The assessment undertaken for the EIS concluded that dust emissions from Project activities would have a 'Low' unmitigated risk rating given the limited intensity of emissions to air expected, and the distance from the nearest receptors.

5.2 Exhaust emissions

Emissions of CO, NO_x, SO_x, PM, and VOC's are released from combustion sources including earthmoving equipment, haul trucks, and site vehicles that will be used for the Project. These emissions will be dispersed within the Project site or at sensitive receptors and could have an impact on human health.

The assessment undertaken for the EIS concluded that exhaust emissions from plant and equipment used during the Project activities would have a 'Low' unmitigated risk rating given the limited intensity of emissions to air expected, and the distance from the nearest receptors.

5.3 Fugitive Emissions

The assessment undertaken for the EIS concluded that fugitive emissions from stored chemicals used in Project activities would have a 'Low' unmitigated risk rating given the limited quantities to be stored and the location in relation to surrounding sensitive receptors.

6. Air Quality management measures

Management measures for potential air quality impacts associated with the Project are described in Table 7.

Two categories of controls are identified:

- Standard controls – to be used throughout construction where applicable.
- Controls for adverse meteorological conditions – to be applied when wind speeds are in excess of 18 km/hr (5 m/s), which has the potential to generate excessive dust in accordance with the Beaufort Scale. Further details regarding the implementation of non-standard controls are provided in Section 6.1.

Table 7. Environmental management measures - air quality

Reference	Management measure	Responsibility	Timing	Use
Training				
AQMP1	All construction personnel shall be instructed through the site-specific induction or toolbox with regards to the importance of reducing dust generation during construction activities.	Principal Contractor	Prior to and during construction	Standard
Earthworks, soil, and fill movement				
AQMP2	A Soil and Erosion Management Plan shall be prepared as part of the CEMP.	Principal Contractor	Prior to and during construction	Standard
AQMP3	Source specific control measures shall be routinely implemented (e.g. water spraying roads for dust suppression of traffic movements) where determined to be necessary.	Principal Contractor	During construction	Standard
AQMP4	Water carts will operate across the Project during construction activities that have the potential to produce excessive dust.	Principal Contractor	During construction	Standard
AQMP5	Regular visual dust inspections of work areas to determine if additional dust suppression controls are required.	Principal Contractor	During construction	Standard
AQMP6	Material transported to the Project (including fill materials) will be covered during transport, except during loading and unloading.	Principal Contractor	Prior to and during construction	Standard
AQMP7	Stockpile heights will have maximum heights designed to reduce potential wind mobilisation and transport of materials.	Principal Contractor	Prior to and during construction	Standard
AQMP8	Stockpiles of soils across the project will be managed to reduce dust emission including spraying with water or covering, where determined to be necessary.	Principal Contractor	Prior to and during construction	Considered for adverse meteorological conditions
AQMP8	Ceasing dust generating works should be considered during high winds.	Principal Contractor	During construction	Considered for adverse meteorological conditions

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Reference	Management measure	Responsibility	Timing	Use
Ground disturbance by vehicular movements and heavy plant machinery				
AQMP10	Speed restrictions and signage is to be put in place.	Principal Contractor	Prior to and during construction	Standard
AQMP11	Where there is an increased risk of soil retention on vehicles wash down facilities will be made available prior to vehicles leaving site to minimise mud and silt transfer offsite. Further measures may also be included to reduce the impact of mud and silt such as a rattle grid.	Principal Contractor	During construction	Standard
AQMP12	Haul roads and hardstand areas will be treated with water, the amount of water to be increased/decreased as required by the use.	Principal Contractor	During construction	Standard
Vehicle and heavy equipment emissions				
AQMP13	Source emission reduction controls will be prioritised, such as the use of efficient haul routes and traffic reduction controls.	Principal Contractor	Prior to and during construction	Standard
AQMP14	Construction and maintenance equipment and vehicles are to be operated and maintained to the manufacturer's specifications and be regularly service to minimise exhaust emissions.	Principal Contractor	Prior to and during construction	Standard
AQMP15	Engines and equipment should be switched off when not in use.	Principal Contractor	Prior to and during construction	Standard
AQMP16	Where reasonable and feasible, low emission plant and equipment should be adopted and used on site.	Principal Contractor	Prior to and during construction	Standard
Odour emissions				
AQMP17	In the event excavated material is uncovered that has the potential to produce an offensive odour and needs to remain on site, stockpiles should be stored as far from sensitive receivers, so far as feasibly possible.	Principal Contractor	During construction	Standard
AQMP18	Where required, odorous stockpiles should be covered by a physical barrier (e.g. tarp) to suppress the odour.	Principal Contractor	During construction	Standard
AQMP19	Odorous stockpiles will not be located close to Project boundaries.	Principal Contractor	During construction	Standard
AQMP20	If odour cannot suitably be addressed by a physical barrier, an occupational hygienist should be consulted to advise on the use of odour suppressants on stockpiles.	Principal Contractor	During construction	Standard

Reference	Management measure	Responsibility	Timing	Use
Other impacts				
AQMP21	Limit the quantity of chemical products stored at the site to the extent practical.	Principal Contractor	Prior to and during construction	Standard
AQMP22	Ensure that all storage tanks are fitted with the appropriate controls in line with the <i>POEO Clean Air Regulation 2021</i> .	Principal Contractor	Prior to and during construction	Standard
AQMP23	Where possible, activities will be coordinated between the Project and the Bayswater WOAOW Project to limit the potential for cumulative dust impacts.	Principal Contractor	Prior to and during construction	Standard
Reporting				
AQMP24	Complaints/incidents regarding dust generation shall be reported to the Site Superintendent, Construction Project Manager and to the AGLM Environment Manager.	Principal Contractor	During construction	Standard
AQMP25	Environmental Incident reports shall be completed and forwarded to the Project Manager, who should work with the Principal Contractor to improve processes to reduce or eliminate dust generation at the Project site.	Principal Contractor	During construction	Standard

6.1 Trigger Action Response Plan (TARP)

Contingency measures are to be implemented during periods of high particulate matter concentrations or adverse meteorological conditions. These measures include modification or ceasing of operations as required, as outlined in the Bayswater Trigger Action Response Plan (TARP) (AGLM-HSE-PLN-009.04.1).

6.2 Training

Construction workers who attend the Project site may be required to undergo training and awareness programs regarding air quality impacts and management and the importance of reducing dust generation during construction activities. Compulsory training will be determined by AGLM and will be developed and delivered by the Principal Contractor. Training delivered by the Principal Contractor will be subject to approval and auditing by AGLM to ensure it aligns with AGLM induction requirements and fulfils the conditions of SSD 8889679.

Delivery of training may include:

- Work Inductions
- Toolbox Talks
- Meetings lead by the Environment Team
- Posters and educational items.

Training should detail:

- The contents of this AQMP

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- Legislation and legislative requirements pertaining to air quality impacts and management
- Nearby sensitive locations
- Complaint and enquiry reporting
- Management measures listed in the EIS and this AQMP
- Specific responsibilities regarding the mitigation measures.

Training will be undertaken in accordance with Section 7.4 of the Stage 3 Bayswater Ancillary Works EMS.

7. Air Quality monitoring

A recommended monitoring and inspection plan is provided in Table 8. Monitoring requirements for the Project are listed in Section 10 of the Stage 3 Bayswater Ancillary Works EMS.

Table 8. Air quality monitoring plan

Monitoring	Frequency	Responsibility	Records
<i>Wind speed review:</i> Review of the wind speed forecast at the Daily Pre-Start Meeting, per the recommended trigger, action and response plan (TARP) for the construction.	Daily	Principal Contractor	<ul style="list-style-type: none"> Daily Site Diary
<i>TARP inspection:</i> Visual inspection to identify dust and/or air emission generating activities and ensure required controls are in place.	Daily as required per the TARP.	Principal Contractor	<ul style="list-style-type: none"> Daily Site Diary

8. Compliance management

8.1 Roles and responsibilities

Roles and responsibilities are outlined in Section 7.3 of the Stage 3 Bayswater Ancillary Works EMS.

8.2 Inspections

Inspections of the Project site will occur as outlined in Section 7.6 of the Stage 3 Bayswater Ancillary Works EMS.

8.3 Incidents and complaints

Incident management will be managed in accordance with the process outlined in Section 7.5 of the Stage 3 Bayswater Ancillary Works EMS.

Complaints and enquiries will be managed in accordance with the process outlined in Section 6.3 of the Stage 3 Bayswater Ancillary Works EMS.

8.4 Document review and update

All strategies, management plans, and programs that are produced to meet the SSD 8889679 development consent requirements will be regularly reviewed as part of a continual improvement process to ensure they remain current and relevant to the Project.

It is a requirement of the EMS that the associated plans, studies and strategies are reviewed and updated within three months of the following events, including:

- The submission of an environmental incident report
- The submission of an audit report
- The approval of any modification to the conditions of the development consent
- A direction of the DPE Planning Secretary.

Document and records management for the Project is described in Section 7 of the Stage 3 Bayswater Ancillary Works EMS.