DA Reference 138/93 as modified – Ash Transfer and Water Return Infrastructure Area		
Outcome	**Commitment**	**Status**
The Ash Line constructed under DA 138/(3 is proposed to be replaced as part of SSD 9697, all relevant commitments have been transferred over in the EIS.		
DA Reference 2017-12 – Replacement of 600m of Asbestos Cement Pipeline on the Bayswater Ash Dam Return Water Line		
Outcome	**Commitment**	**Status**
Air quality: Dust odour and fumes	Emission of dust from unsealed roads and other exposed surfaces such as unprotected earth or soil stockpiles must be controlled by use of surface sealants and/or water spray carts.	Construction works completed, commitment no longer applicable.
	Stockpiles must be appropriately maintained and contained which could include covering or regular watering to minimise dust.	Construction works completed, commitment no longer applicable.
	Work must be minimised during high wind periods.	Construction works completed, commitment no longer applicable.
	Trucks transporting spoil and other waste materials from the site must be covered.	Construction works completed, commitment no longer applicable.
	Plant and equipment must be operated in a proper and efficient manner and switched off when not in use.	Construction works completed, commitment no longer applicable.

	Plant and equipment must be maintained in accordance with manufacturer's specifications to ensure that it is in a proper and efficient condition.	Construction works completed, commitment no longer applicable.
	Plant and equipment must be regularly inspected to ascertain that fitted emission controls are operating efficiently.	Construction works completed, commitment no longer applicable.
Contaminated land and Hazardous materials: Asbestos Soil Contamination Hazardous spills	At the discretion of AGL, establish a soil sampling program to determine the presence of asbestos or ACM in the soil both at depth and laterally. Soil sampling should be conducted to investigate the presence of asbestos contamination to the ground surface in the immediate vicinity of the pipeline, and in the vicinity of the proposed location of the HDPE pipe. Soil samples shall be analysed for presence/absence of asbestos and quantification of asbestos (%weight/weight) in accordance with the methodology set out in the *National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), Canberra (NEPM (2013).*	Suitably qualified consultant engaged to test the excavated soil. No ACM found, soil classified for reuse onsite.
	If ACM is identified within the soil during the soil sampling program, a risk assessment should be undertaken and a safe work procedure prepared to encompass the removal of the sections of AC pipeline and excavation works. The removal of the portion of the AC pipeline north of Collar 142 and the portion of the AC pipeline south of Collar 1, and soil excavation works directly adjacent to the AC pipeline are to be undertaken in a controlled manner.	Suitably qualified consultant engaged to test the excavated soil. No ACM found.
	If a soil sampling program is not preferred, the entire sub surface soil planned for excavation should be assumed to contain ACM (as a precautionary approach based on previous investigations). A risk assessment should be undertaken and a safe work procedure be prepared to encompass the removal of the sections of AC pipeline and excavation works. The removal of the portion of the AC pipeline north of Collar 142 and the portion of the AC pipeline south of Collar 1, and soil excavation works directly adjacent to the AC pipeline are to be undertaken in a controlled manner under ACM conditions. A suitably licensed asbestos removalist will need to be engaged to perform the work.	Suitably qualified consultant engaged to test the excavated soil. No ACM found.

	Any work involving the disturbance removal of ACM must be undertaken under controlled conditions. Removal or disturbance of ACM is to be conducted in accordance with the requirements outlined in the following: - *NSW Work Health and Safety Act 2011;* - *NSW Work Health and Safety Regulations 2011;* - *Code of Practice: How to Manage and Control Asbestos in the Workplace;* - *Code of Practice: How to Safely Remove Asbestos;* and - *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition*	Suitably qualified contractor engaged to remove the ACM (pipes), ACM disposed of offsite at an appropriately licensed waste facility.
	An Asbestos Removal Control Plan (ARCP) should be developed by a licenced asbestos removalist to address the requirements of NSW legislation.	Existing HSE Management System documentation relating to ACM used during removal of the asbestos pipeline.
	Airborne asbestos monitoring must be carried out by a Licensed Asbestos Assessor during any work requiring a Class A Asbestos Removal Licence (such as friable asbestos removal work) and all samples should be analysed by a NATA Accredited laboratory. Airborne asbestos monitoring should be conducted around the boundaries of the Asbestos Work Area during all stages of the work.	Existing HSE Management System requirements relating to ACM used during removal of the asbestos pipeline.
	In some cases, airborne asbestos monitoring may be required for the removal of ACM which does not require a Class A Asbestos Removal Licence (such as Class B asbestos removal). For example, airborne asbestos monitoring is recommended during non-friable asbestos removal works at, or near, sensitive locations such as a school or a hospital. Where undertaken, a competent person or a Licensed Asbestos Assessor must conduct this work.	Existing HSE Management System requirements relating to ACM used during removal of the asbestos pipeline.
	At the completion of any asbestos removal work which requires a licence (Class A or B), a clearance inspection must be conducted by a Licensed Asbestos Assessor (or competent person may be used if the removal work does not require a Class A Asbestos Removal Licence) to assess the adequacy of the removal works undertaken and to validate that asbestos contamination has indeed been removed and that the affected areas are safe to be reoccupied. This may include clearance air monitoring and or soil validation sampling depending of the asbestos removal work.	Suitably qualified consultant engaged to test the excavated soil. No ACM found.
	Airborne asbestos monitoring and clearance inspections must be performed by .person/s independent of the asbestos removal contractor.	Suitable qualified occupational hygienist engaged to undertake this work.

	All asbestos waste must be disposed at a suitably approved Location.	Suitably qualified contractor engaged to remove the ACM (pipes), ACM disposed of offsite at an appropriately licensed waste facility.
	Fuels, lubricants and chemicals must be stored and, where practicable, used within containment/hardstand areas designed to prevent the escape of spilt substances to the surrounding environment	Construction works completed, commitment no longer applicable.
	Adequate spill prevention and containment measures (e.g. drip trays) must be used when refuelling equipment on site.	Construction works completed, commitment no longer applicable.
	Appropriate spill response materials to be kept on site.	Construction works completed, commitment no longer applicable.
	If a spill occurs, the material is to be contained to the smallest area possible.	Construction works completed, commitment no longer applicable.
	All spills that cause or may cause material harm to the environment are to be reported to the EPA.	Construction works completed, commitment no longer applicable. EPL in place for ongoing operation of the pipeline.
Water quality: Sedimentation Pollution Oil spills	Work would be scheduled for periods of forecast dry weather to reduce risk of rainfall, runoff and high stream flow. Based on average monthly rainfall the site should be expected to be of a low erosion risk. This is based on long term averages and any scheduling of work would need to consider the short to medium term forecasts.	Construction works completed, commitment no longer applicable.

	During periods of shut down, overnight or expected wet weather, bare earth surfaces including material stockpiles would be covered with anchored and keyed in geofabric sheets.	Construction works completed, commitment no longer applicable.
	Prior to construction, the contractor will be required to install appropriate erosion and sedimentation control measures such as sediment fences and straw bales along the down slope edges of working areas to limit sediment laden stormwater runoff from entering drainage lines and depressions.	Construction works completed, commitment no longer applicable.
	Excavated material would be stockpiled on a geofabric mat. Sediment fences or equivalent sediment control measures would be installed downslope of any material stockpiled for longer than one day to capture any sediment laden water seeping from material or runoff during the event of rainfall.	Construction works completed, commitment no longer applicable.
	Where material is not stockpiled but loaded directly onto a truck, filter cloth would be placed over the ground to capture sediment spills and assist with clean-up and rehabilitation of the site.	Construction works completed, commitment no longer applicable.
	Spill kits would be provided on site for the duration of construction activities.	Construction works completed, commitment no longer applicable.
	Areas subject to earthworks and construction disturbance outside of the new bitumen road corridor would be revegetated with an appropriate native grass in accordance with ‘Blue Book’ standards, as soon as practically possible following completion of works.	Revegetation completed.
	Fuels, lubricants and chemicals must be stored and, where practicable, used within containment/hardstand areas designed to prevent the escape of spilt substances to the surrounding environment.	Construction works completed, commitment no longer applicable.

	Plant and equipment must be regularly inspected to check for oil leaks.	Construction works completed, commitment no longer applicable.
	Refuelling of vehicles or machinery is to occur outside of the Project site where practical, within a containment or hardstand area designed to prevent the escape of spilled substances to the surrounding environment.	Construction works completed, commitment no longer applicable.
Landforms, geology and soils: Soil erosion / stability	Disturbed surfaces must be stabilised as soon as possible.	Revegetation completed.
	Excavated material would be stockpiled on a geofabric mat. Sediment fences or equivalent sediment control measures would be installed downslope of any material stockpiled for longer than one day to capture any sediment laden water seeping from material or runoff during the event of rainfall.	Construction works completed, commitment no longer applicable.
	The only fill material that may be imported to the site is Virgin Excavated Natural Material (VENM) within the meaning of the POEO Act and/or any other waste-derived material the subject of a resource recovery exemption under clause 51A of the *POEO (Waste) Regulation 2005* that is permitted to be used as fill material. Any fill material received at the site must be accompanied by documentation proving its waste classification or the material's compliance with the exemption conditions	Construction works completed, commitment no longer applicable.
Biodiversity: Native Vegetation Threatened Species	Should any noxious weeds be encountered, appropriate management and disposal of these weeds must be carried out.	Construction works completed, commitment no longer applicable.
	Construction works must be stopped if any previously undiscovered threatened species or communities are discovered during works. An assessment of the impact and any required approvals must be obtained.	Construction works completed, commitment no longer applicable.
Noise and Vibration: Noise vibration	Noisy activities are to be conducted during the nominated construction hours where possible, i.e. Monday to Saturday from 06:30 to 17:30.	Construction works completed, commitment no longer applicable.

Heritage: Aboriginal Heritage Non aboriginal Heritage	Should an unexpected historic relic or Aboriginal object be identified during construction, work in the immediate vicinity of the find is to stop and the area must be fenced off with suitable markers (star pickets, flagging or barrier mesh). The Project Manager is to be notified. An archaeologist is to be engaged to determine the significance of the find, and if required, determine the notification, consultation, and approval requirements.	Construction works completed, commitment no longer applicable.
Waste management: Spoil Litter Chemicals Solid waste	Resource management options for the Project must be considered against a hierarchy of the following order embodied in the Waste Avoidance and Resource Recovery Act 2001. • Avoid unnecessary resource consumption. • Recover resources (including reuse, reprocessing, recycling and energy recovery). • Dispose (as a last resort).	Construction works completed, commitment no longer applicable.
	All wastes must be classified in accordance to the Waste Classification Guidelines (EPA, 2014) prior to disposal and transported to a licensed waste disposal facility if required.	Construction works completed, commitment no longer applicable.
	All waste must be removed from the site on completion of the works.	Construction works completed, commitment no longer applicable.
Visual aesthetics and urban design: Visual Views and vistas	A high level of housekeeping must be maintained by ensuring that the work site is kept in a clean and tidy condition, with appropriate areas identified for waste materials.	Construction works completed, commitment no longer applicable.
	Waste materials must be removed from site regularly.	Construction works completed, commitment no longer applicable.
DA Reference 89/2017 – Construction of a new 3/4 Effluent Drain Sump to Replace Existing Sump		
Outcome	**Commitment**	**Status**

Ecology	Considering the minor nature of the construction, the proposed works are unlikely to result in any direct impacts to threatened or migratory biota or their habitats. Mitigation measures to address potential air quality, noise and soil and groundwater impacts will assist to prevent any indirect impacts to flora and fauna during construction and operation.	Construction works completed, commitment no longer applicable.
Air quality and energy	Although the impact will be minor, the following mitigation measures should be implemented: • Plant and machinery will be turned off when not in use • Water will be used with concrete drilling equipment (if applicable) to control dust • Stockpile size and drop-heights should be minimised • Dust suppression via water sprays should be utilised in the event of visible dust emissions.	Construction works completed, commitment no longer applicable.
Soils, hydrology and water quality	The site is currently regulated under environment protection licence 779 issued by the EPA under the Protection of the Environment Operations Act 1997 (NSW). Further, AGL Macquarie formally notified the site to the EPA under section 60 of the Contaminated Land Management Act 1997 (NSW) and is currently finalising a comprehensive contamination study in relation to the site, including in relation to the land that is the subject of this application. A copy of this study will be provided to the EPA once it is finalised. To mitigate any potential environmental impacts, the excavated soil will be tested for contamination and beneficially re-used in land uses appropriate to the outcome of the testing. In the event that any of the material is contaminated, appropriate treatment will be implemented and the soils subsequently re-used (if possible) or disposed of accordingly. Further, works would be staged as required and exposed soil (e.g. replaced soil following installation of the pipework) would be stabilised to reduce potential for erosion and sedimentation to occur.	Contamination study provided to EPA. Suitably qualified consultant engaged to undertake soil testing. Soil deemed suitable for reuse onsite.
Waste	Excavated material generated during construction will be disposed of in accordance with the NSW DECCW (2008) Waste Classification Guidelines. Wherever possible, suitable excavated spoil will be reused on site for backfilling, all other waste generated from the reconstruction should be re-used/recycled if possible, or adequately disposed of at an approved landfill. AGL's existing Site Waste Minimisation and Management Plan will be used to minimise and manage waste generated during demolition, construction and ongoing use of the site/premises.	Suitably qualified consultant engaged to undertake soil testing. Soil deemed suitable for reuse onsite.
DA Reference 12/2018 – Construction of Pipeline to Connect to Ravensworth Ash Line to Enable Transfer of Water from Bayswater Ash Dam to Ravensworth Void		

Outcome	Commitment	Status
Air quality: Dust Odour and fumes	Emission of dust from unsealed roads and other exposed surfaces such as unprotected earth or soil stockpiles will be controlled by use of surface sealants and/or water spray carts.	Construction yet to commence.
	Stockpiles will be appropriately maintained and contained which could include covering or regular watering to minimise dust.	
	Work will be minimised during high wind periods.	
	Trucks transporting spoil and other waste materials from the site will be covered.	
	Plant and equipment will be operated in a proper and efficient manner and switched off when not in use.	
	Plant and equipment will be maintained in accordance with the manufacturer's specifications to ensure that it is in a proper and efficient condition.	
	Plant and equipment will be regularly inspected to ascertain that fitted emission controls are operating efficiently.	
Contaminated land and hazardous materials: Localised land contamination.	Adequate spill prevention and containment measures (e.g. drip trays) will be used when refuelling equipment on site.	Construction yet to commence.
	Appropriate spill response materials will be kept on site.	
	If a spill occurs, the material is to be contained to the smallest area possible.	
	All spills that cause or may cause material harm to the environment are to be reported to the EPA.	
Water quality: Sedimentation Pollution Oil spills	Work will be scheduled for periods of forecast dry weather to reduce risk of rainfall, runoff and high stream flow. Based on average monthly rainfall the site should be expected to be of a low erosion risk. This is based on long term averages and any scheduling of work will need to consider the short to medium term forecasts.	Construction yet to commence.
	During periods of shut down, overnight or expected wet weather, bare earth surfaces including material stockpiles will be covered with anchored and keyed in geofabric sheets.	

	Prior to construction, the contractor will be required to install appropriate erosion and sedimentation control measures such as sediment fences along the down slope edges of working areas to limit sediment laden stormwater runoff from entering drainage lines and depressions. The constructor shall review and update the Preliminary Erosion and Sediment Control Plan (ESCP) provided in Appendix D.	
	In situ soil material used to construct the secondary containment bund and basin will be stockpiled on a geofabric mat. Sediment fences or equivalent sediment control measures will be installed downslope of any material stockpiled for longer than one day to capture any sediment laden water seeping from material or runoff during the event of rainfall.	
	Where material is not stockpiled but loaded directly onto a truck, filter cloth will be placed over the ground to capture sediment spills and assist with clean-up and rehabilitation of the site.	
	Spill kits will be provided on site for the duration of construction activities.	
	Plant and equipment will be regularly inspected to check for oil leaks.	
	Refuelling of vehicles or machinery is to occur outside of the Project site where practical, within a containment or hardstand area designed to prevent the escape of spilled substances to the surrounding environment.	
Landforms, geology and soils: Soil erosion / stability	Disturbed surfaces will be stabilised as soon as possible.	Construction yet to commence.
	Should fill material be imported on site for any reason it must meet Virgin Excavated Natural Material (VENM) or Excavated Natural Material (ENM) classification within the meaning of the POEO Act and/or any other waste-derived material the subject of a resource recovery exemption under clause 51A of the *POEO (Waste) Regulation 2005* that is permitted to be used as fill material. Any fill material received at the site must be accompanied by documentation proving its waste classification or the material's compliance with the exemption conditions.	
Biodiversity: Native Vegetation Threatened Species	Should any noxious weeds be encountered, appropriate management and disposal of these weeds will be carried out.	Construction yet to commence.
	Construction works will be stopped if any previously undiscovered threatened species or communities are discovered during works. An assessment of the impact and any required approvals must be obtained.	

	Hay bales are not to be used for erosion and sediment control due to the risk of importing weed seed.	
	Do not park vehicles or equipment in areas of long grass	
	Machinery is to be clean and free of soil and seed prior to entry to the project site.	
Noise and vibration: Noise vibration	Noisy activities are to be conducted during the nominated construction hours where possible, i.e. Monday to Saturday from 07:00 to 17:00.	Construction yet to commence.
Heritage: Aboriginal Heritage Non Aboriginal Heritage	Should an unexpected historic relic or Aboriginal object be identified during construction, work in the immediate vicinity of the find is to stop and the area must be fenced off with suitable markers (star pickets, flagging or barrier mesh). The Project Manager is to be notified. An archaeologist is to be engaged to determine the significance of the find, and if required, determine the notification, consultation, and approval requirements.	
	In the unexpected event that Aboriginal or historical heritage items, including human skeletal material (remains), are identified during the proposed works, all works in the area must cease immediately and a qualified archaeologist/heritage specialist should be engaged to assess the site. Management action(s) would vary according to the type of site identified and its significance.	
	Contractors should be made aware of their legal responsibilities pertaining to heritage under the NP&W Act 1974.	
	The NPW Act requires that, if a person finds an Aboriginal object on land and the object is not already recorded with the Aboriginal Heritage Information Management System (AHIMS) database, they are legally bound under s.89A of the NPW Act to notify Office of Environment and Heritage (OEH) as soon as possible of the object's location. This requirement applies to all people and to all situations.	
Waste management: Spoil Litter Chemicals Solid waste	Resource management options for the Project will be considered against a hierarchy of the following order embodied in the Waste Avoidance and Resource Recovery Act 2001. • Avoid unnecessary resource consumption; • Recover resources (including reuse, reprocessing, recycling and energy recovery); and • Dispose (as a last resort).	Construction yet to commence.
	All wastes will be classified in accordance to the Waste Classification Guidelines (EPA, 2014) prior to disposal and transported to a licensed waste disposal facility if required.	
	All waste will be removed from the site on completion of the works.	
Environmental hazards: Grass fire	HDPE Pipe Butt welding is to use thermal equipment that does not produce sparks where possible.	Construction yet to commence.

	During welding pipes are to be placed on a fire proof ground cover, such as fire blanket or bare earth, whilst being welded.	
	Welding is to be undertaken in cleared areas and with no adjoining areas of long grass.	
	No vehicles and machinery are to be parked in areas of long grass.	
	A fire extinguisher and blanket are to be available on site during construction.	
	Once the pipeline is completed, grazing or slashing is to be used to keep fuel loads down in the area of the pipeline.	
DA Reference 06_0047 as modified – Bayswater Water Treatment Plant Upgrade		
Outcome	**Commitment**	**Status**
Hydrology, hydrogeology and water quality: Surface water management	All water discharges would be monitored and controlled in accordance with relevant licences and legislation.	EPL 779 in place.
	Clean water diversion drains would be constructed to divert runoff away from areas to be disturbed.	Construction works completed, diversion regularly maintained.
	Straw bales/sediment fences would be installed around areas to be disturbed.	Works ongoing, works conducted in accordance with CEMP.
	Land disturbance would be confined to minimum workable areas.	Works ongoing, works conducted in accordance with CEMP.
	Excavation works would be suspended during heavy periods of rainfall.	Works ongoing, works conducted in accordance with CEMP.
	Monitoring and maintenance of erosion and sediment control structures would occur throughout the life of the project.	Works ongoing, works conducted in accordance with CEMP.

	Disturbed areas would be watered to control dust during windy and dry weather.	Works ongoing, works conducted in accordance with CEMP.
	The Department of Housing's Managing Urban Stormwater: Soils and Construction, 4th edition (DoH, 2004) (the "blue book") would be adhered to when undertaking erosion and sediment control measures.	Works ongoing, works conducted in accordance with CEMP.
	Temporary soil and water management structures would be removed only after the disturbed area had been sufficiently stabilised.	Works ongoing, works conducted in accordance with CEMP.
	No changes to existing discharges would occur as a result of operation of the proposed modification.	Works ongoing, works conducted in accordance with CEMP.
Soils and contaminated lands: Erosion and sedimentation	Temporary soil and water management structures would be removed only after the disturbed area had been sufficiently stabilised.	Works ongoing, works conducted in accordance with CEMP.
	An Erosion and Sedimentation Control Plan would be prepared to detail appropriate control measures in accordance with Soils and Construction: Managing Urban Stormwater – 'the Blue Book' (DECC 2008). Erosion and sediment controls.	Works ongoing, works conducted in accordance with CEMP which includes a CEMP.
	Erosion and sedimentation control measures would be implemented for the entirety of construction until disturbed areas are reinstated.	Works ongoing, works conducted in accordance with CEMP.
	Erosion and sedimentation control measures would be regularly inspected, and where necessary repaired, to ensure they function adequately.	Works ongoing, works conducted in accordance with CEMP.

Soils	Any material requiring for off-site disposal, must be appropriately tested and classified against the NSW EPA 2014 Waste Classification Guidelines Part 1: Classifying Waste and any relevant exemptions. Off-site disposal must be to a suitably licenced waste facility.	Works ongoing, works conducted in accordance with CEMP.
	Potentially contaminated soils would be tested to confirm suitability prior to reuse on site.	Works ongoing, works conducted in accordance with CEMP.
	Salt waste cake would be appropriately stored during transportation to prevent spillage.	Works ongoing, works conducted in accordance with CEMP.
Waste: EPL compliance	Only the following hazardous and/or industrial and/or Group A and/or Group B listed below would be treated, processed, reprocessed or disposed of at the premises: — Acid solutions or acids in solid form — Asbestos — Fly Ash and Bottom Ash — Waste mineral oils unfit for their original use — Waste oil/water hydrocarbon/water mixtures or emulsions — Boiler cleaning residues — Filter bags — Water treatment residues.	Works ongoing, works conducted in accordance EPL 779.
Waste	Any additional material, including excavated soils, requiring for off-site disposal, would be appropriately tested and classified against the NSW EPA 2014 Waste Classification Guidelines Part 1: Classifying Waste and any relevant exemptions. Off-site disposal must be to a suitably licenced waste facility. The Bayswater Power Station Environmental Management System (EMS) would be updated to incorporate the proposed modification.	Works conducted in accordance EPL 779.
General waste	General waste generated by construction and operation of the proposed modification would be managed in accordance with existing waste management procedures for the Bayswater Power Station	Works ongoing, works conducted in accordance with CEMP and Waste Management Plan.

Ecology	Existing tracks and disturbed areas would be utilised by construction vehicles and equipment. Areas of ecological sensitivity located in the vicinity of the construction footprint would be communicated to site personnel as 'no-go' zones and identified within the CEMP.	Works ongoing, works conducted in accordance with CEMP.
	Areas mapped as Central Hunter Grey Box - Ironbark Woodland would be avoided during the detailed design of the proposed modification, and communicated to construction personnel as 'no go' zones.	Works ongoing, works conducted in accordance with CEMP.
	Impacts to trees, including planted trees, would be avoided during construction works, potentially including the use of barriers or tree protection zones were required.	Works ongoing, works conducted in accordance with CEMP.
	Vegetation in disturbed areas not required for ongoing operations would be allowed to re-establish after the completion of construction.	Works ongoing, works conducted in accordance with CEMP.
Noise: Construction noise Operating noise	All works would be carried out Monday to Friday between 7 am and 6 pm (Except in cases where safety reasons require work outside of these times).	Works ongoing, works conducted in accordance with CEMP.
	All significant noise generating equipment would be enclosed in soundproof barriers.	Works ongoing, works conducted in accordance with CEMP.
Visual amenity	Selection of equipment and infrastructure through the detailed design of the project would consider the mass and scale to minimise any potential visual impacts.	Works ongoing, works conducted in accordance with CEMP.
	Vegetation in disturbed areas not required for ongoing operations would be allowed to re-establish to reduce visual impact.	Works ongoing, works conducted in accordance with CEMP.

	Planting of vegetation would be considered to aide this process and/or improve existing vegetation coverage.	Works ongoing, works conducted in accordance with CEMP.
Heritage: Protection of Aboriginal Objects	Aboriginal objects are protected under the NPW Act (as amended), regardless of location. Should any objects be identified during the course of site works, all works must cease and the DEC (North Eastern Branch, Environment Protection and Regulation Division, Regional Archaeologist) contacted in regard to appropriate permit requirements before any further impact is undertaken. All works must cease if suspected skeletal material is uncovered during the course of site works, and the DEC, the NSW Police and the NSW Coroners office must be contacted immediately.	Works ongoing, works conducted in accordance with CEMP.
Heritage and Archaeology	All contractors who work on site would be made aware of the NPW Act 1974 (as amended) and the fact that it is an offence to move, disturb or destroy Aboriginal objects during their induction training.	Works ongoing, works conducted in accordance with CEMP.
	An unexpected finds protocol would be incorporated into the CEMP for construction of the proposed modification. In the event that unknown or potential Aboriginal or non-Aboriginal object(s), including skeletal remains are found during construction, works would cease in the area until further investigation is completed.	Works ongoing, works conducted in accordance with CEMP.
Air quality: Emissions to air	Dust suppression measures to be utilised include: — Land disturbance would be confined to minimum workable areas — Excavation works would be suspended during periods of strong winds — Monitoring and maintenance of erosion and sediment control structures would occur throughout the life of the project. — Disturbed areas would be watered to control dust during windy and dry weather.	Works ongoing, works conducted in accordance with CEMP.
	All equipment would be maintained as per the manufacturer's specifications.	Works ongoing, works conducted in accordance with CEMP.
	Vegetation would be allowed to regenerate in exposed areas not required for ongoing operations, reducing the risk of dust generation.	Works ongoing, works conducted in accordance with CEMP.

	Salt waste cake would be appropriately managed, including covering during transport and storage, to prevent it mobilising during periods of high winds.	Construction on salt caking plant has not commenced.
	Operational controls to manage dust from vehicles transporting salt waste cake to the BCDB would be incorporated into the EMP for the Bayswater Power Station.	Construction on salt caking plant has not commenced. Currently no salt cake is produced.
Hazards and risks: Leaks/spills	Emergency procedures, including containment and clean-up of spills, as well as the notification of these events to AGLM personnel, would be included in emergency procedures outlined in the CEMP of both the construction contractor and plant operator.	Works ongoing, works conducted in accordance with CEMP.
	Adequate emergency spill kit equipment would be located on site at all times.	Works ongoing, works conducted in accordance with CEMP.
	Equipment brought onto the site would be required to be in proper working order and maintained in accordance with the manufacturer's specifications.	Works ongoing, works conducted in accordance with CEMP.
	Chemical storage areas forming part of the upgraded WTP would have adequate bunding designed in accordance with Australian Standard 1940:2004, and would be managed in accordance with AGL Macquarie's current handling procedures. Regular inspections of chemical storage areas would also be undertaken.	Works ongoing, works conducted in accordance with CEMP and EPL.
Greenhouse gas: Increased Greenhouse Gas Emission	AGLM would continue to actively meet the targets set in its Greenhouse Challenge Cooperative Agreement with the Commonwealth of Australia	Works ongoing, works conducted in accordance with CEMP.
	AGLM would also continue to meet the targets set by the Commonwealth Government's Generator Efficiency Standards Program.	Works ongoing, works conducted in accordance with CEMP.
DA Reference 2019/37 – Construction of pipes and pump infrastructure to return water seepage from Lake Liddell dam wall to Lake Liddell		

Outcome	Commitment	Status
Soils and contamination	Mitigation measures would be implemented to minimise potential impacts on soils and geology: Preparation of a contingency plan for unexpected finds/contaminated soils within the construction environmental management plan (CEMP). This section would include details of excavation, segregation, stockpiling, remediation, validation and disposal requirements for any contaminated matter.	Construction works completed, commitment no longer applicable.
	Implementation of an Erosion and Sediment Control Plan (ESCP) in accordance with Blue Book - Managing Urban Stormwater: Soils and Construction (4th ed, Landcom, March 2004) and Volume 2A: Installation of Services, which is attached in Appendix C.	Construction works completed, commitment no longer applicable.
	Prepare an incident emergency spill plan as part of the CEMP to be implemented during construction. Further, procedures for the storage and handling of hazardous materials including fuel and chemicals would be prepared and included within the CEMP, including: – No refuelling to occur on-site unless appropriate bunded hardstand and spill protection/spill plan is prepared – Storage of hazardous materials on-site to be kept to a minimum and would be in accordance with national guidelines and the Safety Data Sheets relating to bunding, coverage, storage of incompatible materials, etc.	Construction works completed, commitment no longer applicable.
Surface and groundwater	Mitigation measures would be implemented to minimise potential impacts on surface water and groundwater:	Construction works completed, commitment no longer applicable.
	Keep all excavations free of water, where possible, and ensure appropriate erosion and sediment controls are installed at the completion of daily construction activities.	Construction works completed, commitment no longer applicable.
	A Water Access Licence for extraction of groundwater would be obtained from the Department of Primary Industries – Water, under Section 56 of the *Water Management Act 2000,* should dewatering be required.	Construction works completed, commitment no longer applicable.

	A controlled activity approval would be obtained from the Department of Industry – Lands and Water prior to the commencement of construction under Section 91 of the *Water Management Act 2000.*	Not required as per correspondence from NRAR.
	Spread of contaminants: – The storage and handling of fuels and chemicals shall comply with Australian Standard AS1940. – No chemicals, fuels, and/or waste would be stored or collected for disposal within or adjacent to drainage lines or unsealed surfaces. – A 'spill kit' would be kept on site at all times for potential chemical or fuel spills. – Construction contractors would be trained in the correct use of the spill kit.	Construction works completed, commitment no longer applicable.
	Implement erosion and sediment control measures described in the erosion and sediment control plan (Appendix C), particularly concerning placement of stockpiles as far away from drainage lines and waterways as possible.	Construction works completed, commitment no longer applicable.
	Any material removed from the waterway that is to be temporarily deposited or stockpiled on land is to be located well away from the waterway and to be contained by appropriate sediment control devices.	Construction works completed, commitment no longer applicable.
	Vehicle wash down and/or cement truck washout would occur in a designated bunded area or offsite.	Construction works completed, commitment no longer applicable.
	Rehabilitation would be undertaken along the length of the construction corridor in all areas subject to ground disturbance, including ground stabilisation and establishment of vegetative groundcover in all disturbed areas. Sediment and erosion controls (including dust) would be maintained until vegetation cover is suitable.	Construction works completed, commitment no longer applicable.
	A contingency procedure would be developed to manage potential leaks from the new pipes during operation.	Construction works completed, commitment no longer applicable.
	During operation AGL Macquarie personnel would inspect the site regularly to ensure the pumping stations are operating as intended and that there are no leaks or blockages in the seepage collection and transfer infrastructure. Inspections would be carried out in conjunction with ongoing seepage flow measurements at the site.	Construction works completed, commitment no longer applicable.

	The Valve Chamber Pump would be monitored during operation to ensure it functions appropriately, and removed for maintenance where required.	Construction works completed, commitment no longer applicable.
	Discharge of dewatered groundwater to watercourses or waterways is prohibited. Dewatered groundwater would be discharged overland or removed from site for appropriate disposal.	Construction works completed, commitment no longer applicable.
Ecology	Mitigation measures would be implemented to minimise potential impacts on biodiversity: Avoid clearing of wooded vegetation and disturbance to trees. If tree removal is required, a pre-clearing survey may be necessary to delineate the construction limits or monitor/capture any fauna impacted by the disturbance.	Construction works completed, commitment no longer applicable.
	Revegetation works will commence within approximately two weeks of completion of construction, providing there is suitable weather. This will prevent wind erosion and decrease chances of weed invasion in disturbed areas. Revegetation may be via laying of turf or direct seeding, using commercially sourced, sterile seed stock.	Construction works completed, commitment no longer applicable.
	Any environmental weeds encountered during site works would be disposed of at an appropriately licenced facility.	Construction works completed, commitment no longer applicable.
	Wildlife would not be handled by personnel. Construction staff would only handle wildlife in an emergency situation. Wildlife encountered would be gently encouraged to leave the site. WIRES would be contacted if injured fauna is noted on 1300 094 737.	Construction works completed, commitment no longer applicable.
	The detailed design would include signposting and appropriate speed limits on the site to reduce the likelihood of vehicle strikes for native fauna.	Construction works completed, commitment no longer applicable.
	Erosion and sediment controls will be implemented to manage impacts on surrounding water bodies associated with construction.	Construction works completed, commitment no longer applicable.

Traffic and access	Access to the site would be confirmed with the landowner prior to the commencement of construction and any applicable notification requirements carried out.	Construction works completed, commitment no longer applicable.
	Access to the site will be restricted to authorised staff and contractors who have been inducted and appropriately trained for the works being undertaken.	Construction works completed, commitment no longer applicable.
	Fencing and/or hoarding will be maintained around the perimeter of the site during the works.	Construction works completed, commitment no longer applicable.
	Signage, including contractor details and contact numbers, will be erected near the gate at the site. The signage will remain displayed on the site entrance throughout the duration of the construction works.	Construction works completed, commitment no longer applicable.
	Provide traffic control should oversized vehicles be required (unlikely).	Construction works completed, commitment no longer applicable.
Air quality	Iimplement erosion and sedimentation mitigation measures (refer Section 5.1).	Construction works completed, commitment no longer applicable.
	Machinery would be turned off when not in use and not left to idle for prolonged periods.	Construction works completed, commitment no longer applicable.
	Construction plant and equipment will be maintained in a good working condition to limit impacts from emissions	Construction works completed, commitment no longer applicable.

Visual amenity	Ensure all work equipment and materials are contained within the designated boundaries of the work site.	Construction works completed, commitment no longer applicable.
	Limit construction vehicles and personnel on site to those needed for that activity, with all excess equipment moved off-site to reduce visual impacts.	Construction works completed, commitment no longer applicable.
	Ensure that all waste is removed promptly off site.	Construction works completed, commitment no longer applicable.
	All communications and complaints will be assessed and an appropriate response, corrective and/or preventative action implemented (as necessary).	Construction works completed, commitment no longer applicable.
Noise and vibration	Mitigation measures to reduce noise and vibration impacts as a result of the proposal: Inductions for the work crew would include the specific noise issues and mitigation measures required for the site.	Construction works completed, commitment no longer applicable.
	Reasonable and feasible practises to minimise or avoid noise would be implemented.	Construction works completed, commitment no longer applicable.
	Construction works would be carried out during standard construction hours (Monday – Friday 7 am to 6 pm and Saturday 8 am to 1 pm).	Construction works completed, commitment no longer applicable.
	Truck drivers would be informed of designated vehicle routes, parking locations and the requirement to minimise engine idling.	Construction works completed, commitment no longer applicable.

	Where practicable, locate noisy plant as far away from noise-sensitive receptors as possible.	Construction works completed, commitment no longer applicable.
Heritage: Aboriginal Non Aboriginal Heritage	The following mitigation measures will be implemented to minimise potential impacts on heritage: If Aboriginal or non-Aboriginal objects are uncovered during ground surface works, all works will cease and OEH contacted to advise on a course of action.	Construction works completed, commitment no longer applicable.
	In the unlikely event that suspected human remains were found, all work must cease, the site secured and the NSW Police notified to advise on a course of action. If the remains were found to be archaeological, OEH will be contacted to assist in determining appropriate management.	Construction works completed, commitment no longer applicable.
	Aboriginal stakeholders will be consulted in any situation where decisions about the management of Aboriginal cultural sites or values are undertaken.	Construction works completed, commitment no longer applicable.
Waste	All rubbish and debris generated on-site during the demolition works would be separated into recyclable (i.e. concrete, metals, timber) and non-recyclable (other wastes) materials.	Construction works completed, commitment no longer applicable.
	All materials will be subsequently recycled/re-used or stored appropriately prior to disposal to an appropriately licensed site or landfill facility.	Construction works completed, commitment no longer applicable.
	Wherever possible, suitable excavated spoil will be reused on site for backfilling, all other waste generated from the reconstruction should be re-used / recycled if possible, or adequately disposed of at an approved landfill.	Construction works completed, commitment no longer applicable.
	Any additional soil not required to be utilised during construction and unable to be re-used on site would be disposed of at an appropriate waste facility.	Construction works completed, commitment no longer applicable.

	All waste is to be managed in accordance with the *Waste Avoidance and Resource Recovery Act 2001* and the EPA *Waste Classification Guidelines 2014.*	Construction works completed, commitment no longer applicable.
	Removal of any identified hazardous materials is to be undertaken by a suitably licensed contractor prior to the commencement of the demolition of the remaining infrastructure. All materials are to be disposed offsite at a licensed waste facility.	Construction works completed, commitment no longer applicable.
	Maintain the site in a clean and tidy condition at all times.	Construction works completed, commitment no longer applicable.
	Limit smoking to defined areas and provide butt bins for construction workers.	Construction works completed, commitment no longer applicable.
Socio-economic	Safeguards and measures identified in previous sections of this SEE including Section 5.4.3, Section 5.7.3 and Section 5.8.3 will be implemented to mitigate social and economic impacts.	Construction works completed, commitment no longer applicable.

DA Reference 06_0259 as modified – Bayswater Power Station Water Pumping Station Upgrade to increase Water Extraction Capacity

Note: Construction was completed in 2010, as such all construction related commitments are no longer relevant and have not been included in this table. Refer to the Independent Environmental Audit and annual reports for further information on construction relation commitments.

Outcome	**Commitment**	**Status**
Environmental Management – Operation Environmental Management Plan	An Operation Environmental Management Plan (OEMP) will be prepared by Macquarie Generation and implemented in accordance with these Conditions and all relevant Acts and Regulations. Macquarie Generation will obtain the approval of the DirectorGeneral for the OEMP before Operation commences or within any other time agreed to by the Director-General. Macquarie Generation will ensure that the mitigation measures identified in this EA are incorporated into the OEMP or the relevant Sub Plan.	OEMP approved by DPIE 27/07/2015

	The OEMP must be prepared in accordance with the Department's publication entitled Guideline for the Preparation of Environmental Management Plans (2004).	
Greenhouse and Energy Management Strategy	A Greenhouse and Energy Management Strategy will be prepared by Macquarie Generation prior to construction commencing, to ensure the efficient use of any non-renewable resources for Construction and Operation and where practicable, minimized.	AGL Greenhouse Gas Policy in place https://www.agl.com.au/about-agl/sustainability/our-approach-to-the-environment#climate
Bushfire Risk Management Sub Plan	As part of the Construction and Operation EMPs, Macquarie Generation will prepare a Bushfire Risk Management Sub Plan based on the guidelines Planning for Bushfire Protection (RFS, 2001 or its latest edition). The sub plan will include: (a) details of the bushfire hazards and risks associated with the Development; (b) mitigation measures including contingency plans; (c) include the mitigation measures in Chapter 5 of the EA. (d) procedures and programs for liaison and regular drills with the Local Rural Fire Service; and (d) procedures for regular fire prevention inspections by the Local Rural Fire Service and implementation of any recommendations.	OEMP approved by DPIE 27/07/2015
Waste Management and Re-use Sub Plan	As part of the CEMP and OEMP, Macquarie Generation will prepare a Waste Management and Re-use Sub Plan to address the management of wastes during the Construction and Operation stages respectively in accordance with the NSW Government's Waste Reduction and Purchasing Policy. The Sub Plan will identify requirements for: (a) the application of the waste minimisation hierarchy principles of avoid/reduce/reuse/recycle/dispose; (b) waste handling and storage; (c) disposal of wastes. Specific details must be provided for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes; and (d) any waste material that is unable to be re-used, re-processed or recycled must be disposed at a facility approved to receive that type of waste; and will include the mitigation measures in Chapter 5	OEMP approved by DPIE 27/07/2015
Noise	If a noise nuisance is reported after the pumping station is commissioned, Macquarie Generation will review the nature of the noise impact and assess the potential sources. If necessary, testing will be conducted to confirm that equipment performance is in accordance with the required noise specification.	No noise related complaint relevant to the project have been received.
Noise	If the pumping station operation is resulting in noise in excess of the DEC requirements for the relevant receivers, then Macquarie Generation will vary operation of the pumping station to achieve noise compliance.	Noise assessment and modelling conducted in 2018 concluded that there were no exceedances of the relevant noise criteria.

Rehabilitation	Rehabilitation techniques will be employed as necessary to ensure the ongoing stability of the banks of the Hunter River and less drainage lines for the Saltwater Creek catchment. These techniques will be detailed in the construction contractor's rehabilitation plan.	Rehabilitation is undertaken in accordance with the approved Ecology Management Plan.
	Vegetation along the pipeline route will be rehabilitated and revegetated (representing ground cover, understorey and tree canopy) following construction of the Project.	Rehabilitation is undertaken in accordance with the approved Ecology Management Plan.
	A Vegetation Management Plan will be prepared detailing restoration works, including weed management and re-establishment of native understorey species along the Hunter River.	VMP approved by DPIE 27/07/2015
Water Pumping	Establish comprehensive protocols to ensure pumping is managed in accordance to Licence allowances and rules.	Pumping Operations Manual and Procedure in place Operator Training/Competency
Biodiversity	Develop and implement a long-term management plan and monitoring program targeting the health of the River Flat Eucalypt Forest prior to commencement of site works, in conjunction with platypus studies at this locality.	Ecology Management Plan approved by DPIE 27/07/2015
	Provide habitat niches for insects (which in turn provide food resource for vertebrate species) by distributing any cleared vegetation along the pipeline.	Ecology Management Plan approved by DPIE 27/07/2015
Rehabilitation	Undertake post-construction rehabilitation of the study area using locally indigenous species.	Rehabilitation undertaken in accordance with the approved Ecology Management Plan.
	Compensate for native vegetation loss resulting from the pipeline by replanting at a ratio of two to one for each plant lost. This should result in a net increase in vegetation biomass and thus habitat.	Rehabilitation undertaken in accordance with the approved Ecology Management Plan.