



WASTEWATER MANAGEMENT PLAN

131-3227

Palmer Wind Farm Balance of Plant

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Rev 2

**POWERING FUTURES,
CREATING LEGACIES.**

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1. INTRODUCTION

1.1. Purpose and scope

This Wastewater Management Plan (WWMP) provides a framework for the management of all wastewater associated with the construction of the Palmer Wind Farm. Its primary purpose is to describe the management systems and procedures which will be adhered to in achieving project environmental objectives and goals. The purpose and scope of this WWMP is to satisfy the requirements of the Project's Planning Consent, specifically Reserved Matter RM5 stating *"A final Wastewater Management Plan detailing the on-site wastewater treatment system shall be prepared in consultation with the Mid Murray Council and submitted to the satisfaction of the State Planning Commission"*.

The WWMP is the overarching project reference for wastewater management throughout the construction phase. It describes how BMD Constructions propose to manage and control wastewater related environmental aspects and potential impacts of the project, through both project-wide and element-specific approaches. The WWMP prescribes all applicable procedures, processes, and practices to be undertaken by BMD Constructions and subcontractors to manage wastewater related environmental risks, effectively minimise impacts on the surrounding environment, and ensure compliance with regulatory and other obligations throughout project delivery.

For the purposes of this document, the Project will utilise traditional pump out systems using holding tanks within prefabricated ablution buildings as supplied by a third party (for example Ausco). No septic system is going to be installed on the property itself and therefore this plan has been developed to address this requirement.

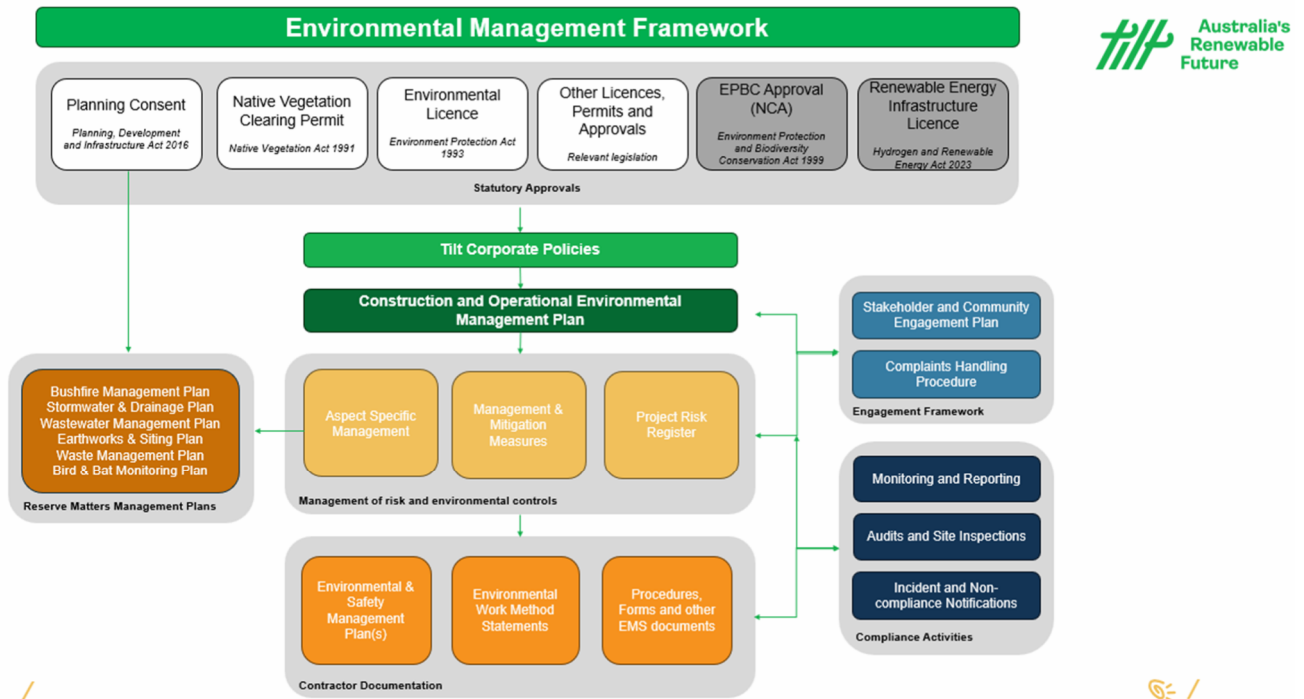
This WWMP is one of several environmental management plans (EMPs) for the Project. The WWMP and its procedures will be applicable to all project works, staff, and subcontractors during construction of this project.

1.2. Environmental management system

To achieve the intended environmental objectives and goals, BMD Constructions have established, implemented, maintained and continually improved an Environmental Management System (EMS) in accordance with the requirements of ISO14001:2016.

Furthermore, this WWMP is a standalone management plan that incorporates the Project Environmental Management Framework set out in Figure 1 below. This plan links to the Construction and Operational Environmental Management Plan (COEMP) to ensure compliance with the Reserved Matters obligations under the Planning Consent and forms part of the suite of management plans for the project as illustrated in Figure 1 below.

Figure 1: Project Environmental Management Framework



This Plan should be read in conjunction with the Project CEMP and relevant sub-plans and Reserved Matter Management Plans.

1.3. Project overview

This document has been prepared for contract number 131-3227 (Palmer Wind Farm Project).

The Palmer Wind Farm Project (the Project) is located approximately 70 km east of Adelaide, between the townships of Palmer and Tungkillo, wholly contained within the Mid Murray Council (MMC) Local Government Area and on the lands of the Peramangk People. The Project will help reduce Australia's carbon footprint by generating up to 300MW of clean energy when constructed, which is enough to power up to 150,000 South Australian homes.

Palmer Wind Farm Pty Ltd (the Proponent) as trustee for Palmer Wind Farm Project Trust, is proposing to construct and operate up to 40 wind turbine generators, totalling approximately 288 megawatts (MW) of installed generation capacity as part of the Project, with associated wind farm infrastructure. The Project will connect to the national electricity grid via the existing Tungkillo Switchyard, owned and operated by ElectraNet.

Development authorisation by way of Planning Consent under the Development Act 1993 was granted for the Project by MMC in December 2015 (DA 711/072/14). A variation to the Development Plan Consent was approved by the State Commission Assessment Panel under the Planning, Development and Infrastructure Act 2016 (PDI Act) in February 2025 (DA 24005571; Planning Consent).

Figure 2: Location Map



Palmer Wind Farm
Project Map



Under the Planning Consent, micro-siting of turbines and associated infrastructure is permissible within the micro-siting area (see Figure 2) to respond to site constraints during finalisation of detailed design and construction sequencing. Examples may include a change in location following geotechnical assessment, construction and site accessibility for plant and equipment and/or to avoid identified environmentally sensitive areas.

1.4. Site overview

The wind farm site is located in the eastern Mount Lofty Ranges, South Australia, approximately 70 km east of Adelaide CBD. There are five key localities near the development: Palmer, Tungkillo, Cambrai, Sanderston and Milendella. Tungkillo has a population of approximately 600 people and includes the township of Tungkillo and the town of Palmer, a small township (approximate population 75 people) that consists of a general store, hotel and a small primary school consisting of approximately 25 students.

Mount Pleasant is the regional centre of the area with a population of approximately 1000 people. Mount Pleasant has a number of facilities, including a small primary school. The wind farm will be located on a number of private properties, primarily used for farming and is predominantly rural in nature with limited residential properties.

The topography of the area comprises undulating hills of the eastern Mount Lofty Ranges, with steep escarpments present along geological fault zones, particularly at the eastern extent of the ranges. Steep sided valleys occur where watercourses cross the escarpments. There are a number of watercourses within the area, with the majority being ephemeral.

Transportation networks in the wider area consist of mainly unsealed gravel roads owned and maintained by the Mid Murray Council, plus regional / collector sealed roads servicing the townships.

1.5. Consultation requirements

Reserved Matter RM5 requires that consultation is undertaken with Mid Murray Council for the preparation of this WWMP. The WWMP has been updated following receipt of comments. Summary of the outcomes of consultation and how they have been addressed are below:

Section	Comment	Response from BMD
8.2.1 Monitoring and Inspection	It is noted that site inspections and visual monitoring is proposed and summarised on the Compliance Obligations Register. In addition to the reporting proposed under Section 8.2.3, Council requests that the Compliance Obligations Register be provided on a regular basis.	Section 8.2.1 has been updated to reflect this request.
8.2.3 Reporting	Recommend that reporting be provided on a regular basis rather than 'following any written request.'	Section 8.2.3 has been updated to reflect this request.
Site Access/Egress	As noted in previous submissions regarding the Traffic Management Plan and Infrastructure Deed, all entering and exiting from the site for all contractors and subcontractors shall be from the main site access point on Randell Road. No entering and exiting shall occur off Council roads at the crossing points.	Noted. This requirement will be reflected in relevant management plans and project inductions.

2. OBJECTIVES AND TARGETS

The key objective of this Wastewater Management Plan (WWMP) is to minimise risks to human health, the environment, and surrounding landholders from the generation, storage, treatment, and disposal of construction-related wastewater.

As a means of assessing environmental performance, environmental objectives, targets and performance indicators have been established for the project and are provided in the table below. These objectives and targets have been developed in consideration of requirements in the planning approval, contractual requirements, legislative requirements, and significant environmental aspects and impacts.

Exceedances of the proposed targets will be investigated and reported based on the issue. Any exceedances which result in a non-compliance with the Planning Approval will be reported in accordance with Section 8.4.

Objectives	Targets	Performance Indicators
Minimise risks to human health, environment, and surrounding land from wastewater generation, storage, treatment, and disposal	No spills/overflows and contamination incidents affecting soil, surface water, or groundwater	Incident records Monthly reporting Depth monitoring of holding tanks
Implementation of performance outcomes, commitments and mitigation measures specified in planning approval documents	Full compliance	Monthly Reporting
Compliance with Planning Approval requirements and relevant legislation as it applies to the Project	Full compliance	Monthly Reporting
Compliance in accordance with the South Australia On-Site Wastewater Systems Code.	Full compliance as it relates to the system	Monthly Reporting

3. LEGISLATIVE REQUIREMENTS AND COMPLIANCE OBLIGATIONS

3.1. Legislative requirements

The following legislation and regulatory guidelines apply directly to project works.

Commonwealth

- *Environment Protection and Biodiversity Conservation Act 1999*
- *Environment Protection and Biodiversity Conservation Regulations 2000*
- *Water Act 2007*
- *National Environmental Protection Council Act 1994*
- *National Environmental Protection Measure 1999*
- *National Greenhouse and Energy Reporting Act 2007*
- *National Greenhouse and Energy Reporting Regulations 2008*

South Australia (SA)

- *Environmental Protection Act 1993*
- *Environment Protection Regulations 2023*
- *Environment Protection (Water Quality) Policy 2015*
- *South Australian Public Health Act 2011*
- *Public Health (Wastewater) Regulations 2013*
- *Local Government Act 1999*
- *River Murray Act 2003*
- *National Construction Code (NCC) 2022*

- *Landscape South Australia Act 2019*

3.2. Compliance obligations

The project team will ensure all environmental compliance obligations are identified prior to the commencement of works onsite. These requirements shall be included in project documentation and communicated to the project team. Key project compliance obligations are included in the table below.

Item Name	Legislation	Responsibility	Timing	Requirement
Development Approval	<i>Planning, Development and Infrastructure Act 2016</i>	Principal / Project Manager	Prior to and during construction	Comply with all conditions of approval including reserved matters
Statement of Commitments (SoC)	Incorporated under Approval Condition C1	Project Manager / Environmental Representative	Construction	Implement commitments relating to wastewater management
EPA Licences and Approvals (if applicable)	<i>Environmental Protection Act 1993</i>	Project Manager / Environmental Representative	Prior to and during construction	Obtain and comply with any licences or approvals required under the Environment Protection Act 1993 for prescribed activities (e.g. concrete batching plant)
Mid Murray Council	<i>Planning, Development and Infrastructure Act 2016</i>	Project Manager	Prior to construction	Review of this WWMP

Requirements and conditions of these licences, permits and approvals are incorporated within this WWMP.

3.3. Other requirements

Additional to the requirements identified above, the following standards, specifications, publications and codes of practice relating to environmental management will be implemented or referenced by the project during delivery.

Australian Standards

- AS/NZS ISO 14001: Environmental Management Systems – Specifications with Guidance for Use
- AS 1546.1: On-site domestic wastewater treatment units – Septic tanks
- AS/NZS 1547: On-site domestic wastewater management

Government Publications and Guidelines

- *SA EPA guideline 1086/16 – Wastewater & Water Quality Guidance*
- *SA EPA guideline 396/10 – Water quality, dredging and Earthworks Drainage*
- *SA EPA guideline 247/1 – Septic tank sludge management*
- *SA EPA guidelines 080/16 – Bunding and spill management*
- *SA EPA Environmental management of dewatering during construction activities guideline* (updated June 2021).
- *SA Health - Community Wastewater Management Systems Code 2013*

- *Australian Guidelines for Water Recycling (AGWR) Managing Health and Environmental Risks (Phase 1) (2006)*
- *South Australian Community Wastewater Management System (CWMS) Design Criteria 2019*

4. RISK IDENTIFICATION AND ASSESSMENT

4.1. Environmental risk assessment

Potential environmental risks associated with project works were identified during the environmental assessment process. Additional risks have been identified through the BMD risk management standard and are outlined in the Project's Risk Register. Refer to the Project Risk Register for the environmental risks identified as they relate to wastewater management.

Significant environmental risks for wastewater include, but are not limited to:

Aspect	Potential Impact	Management Document
Water Quality	Contamination of surface water or groundwater from uncontrolled discharge, spills or leaks of wastewater	Wastewater Management Plan Construction Environmental Management Plan Water Quality Sub-Plan
Soil	Pollution, nutrient loading, or degradation from spills, leaks, or inappropriate disposal of wastewater	Wastewater Management Plan Construction Environmental Management Plan Soil and Land Sub-Plan
Community	Reduction of water quality as a result of inappropriate storage, handling, or disposal of wastewater	Wastewater Management Plan Construction Environmental Management Plan Construction Stakeholder and Community Engagement Plan
Concrete Batching Plant	Contaminated runoff into local drains or waterways	Wastewater Management Plan Environmental Control Plan Construction Environmental Management Plan Earthworks and Siting Management Plan
Contamination	Adverse environmental impact from tank leak, vehicle spill and/or loose connection.	Emergency Response Plan Wastewater Management Plan Construction Environmental Management Plan Soil and Land Sub-Plan

4.2. Ongoing risk assessment

Environmental risk assessment will be ongoing throughout project delivery as per BMD risk management standard detailed above. Emphasis will be placed on any changes to construction methodology and changes in materials or quantities used. All project staff are responsible for identifying risks and managing assessments in consultation with the project team. Forums for facilitation of risk identification include:

- Project meetings
- Toolbox meetings
- Informal site discussions.

4.3. Impact identification

Potential impacts are identified through the risk identification processes addressed within this Wastewater Management Plan (WWMP). Potential impacts to the environmental values and wider rural community may result from:

- Failure, overloading, or poor maintenance of temporary or permanent holding systems
- Uncontrolled discharge, leakage, or overflow of wastewater
- Interaction of wastewater with stormwater during rainfall events
- Inappropriate storage, handling, or disposal of wastewater (i.e. to a non-approved facility)

The potential impacts outlined above are typical of large-scale infrastructure construction projects and are considered manageable through the implementation of the wastewater management controls and mitigation measures detailed in this WWMP.

Upon identification of additional potential impacts, this WWMP will be updated accordingly.

5. WASTEWATER MANAGEMENT

Wastewater generated during construction will be managed to maintain the quality of local water resources and prevent adverse impacts to land, surface water and groundwater. Wastewater management systems will be designed, operated, inspected and maintained in accordance with the *South Australia On-Site Wastewater Systems Code* to ensure effective containment, treatment and lawful disposal.

Wastewater utilities are not available in the project area, therefore, on-site management and appropriately licensed off-site disposal will be implemented.

Where practicable, opportunities to capture, treat and reuse wastewater for non-potable on-site uses (e.g. dust suppression) will be investigated during planning.

5.1. Wastewater sources and capture

All wastewater generated on site will be contained and managed to prevent discharge to land or waters in a way that is reasonably likely to cause environmental harm, consistent with obligations under the *Environment Protection Act 1993* and the *Environment Protection (Water Quality) Policy 2003*.

Wastewater generated during construction may include domestic wastewater, greywater, and construction-related wastewater. The table below identifies these sources and the capture/management methods that will be used on site.

Source	Description	Capture/Management Method
Domestic Wastewater	Wastewater from site amenities including toilets, hand basins, showers (if provided) and kitchen/crib facilities	Temporary holding tanks; regularly serviced by licensed contractors; removed to licensed facilities
Greywater	Wastewater from hand washing, showers, kitchen sinks	Temporary holding tanks; regularly serviced by licensed contractors; removed to licensed facilities
Concrete Batching Wastewater	Wash-down water from concrete mixers, trucks, and associated equipment; contaminated process water from batching operations	Bunded, impermeable wash-down areas with sloped drainage to tanks or settling pits; water reused in batching or dust suppression where practicable; excess water pumped out for disposal at licensed facilities
Equipment Wash-Down Water	Water from cleaning vehicles, cranes, and tools	Designated wash-down areas with appropriate containment measures (e.g. bunding or impermeable surfaces) to capture water; collected water reused in batching or dust suppression if appropriate or removed by licensed contractors to approved facilities.

Source	Description	Capture/Management Method
Biosecurity Wash-Down Water	Water from cleaning plant, equipment and PPE	Designated biosecurity wash-down areas with appropriate containment measures (e.g. bunding or impermeable surfaces). If appropriate, wash-down water will be reused for dust suppression within the same property boundary. Any excess water will be retained within the contained area to allow for evaporation.
Contaminated Stormwater / Site Runoff	Rainwater or site runoff that may become contaminated from wastewater sources (e.g. tank overflow, leaks, or concrete washdown spills)	Bunded areas or lined containment around holding tanks; monitoring of bunds and tanks for leaks; excess water removed by licensed contractors for off-site treatment

5.2. Treatment systems

5.2.1. Domestic wastewater and greywater

Temporary on-site holding tanks will be utilised for site amenities during construction and will be designed to comply with the relevant legislation and guidelines listed within this WWMP.

Temporary septic systems will be appropriately sized to accommodate anticipated workforce numbers and wastewater generation rates and will be installed, operated and maintained in accordance with the *South Australia On-Site Wastewater Systems Code*. Holding tanks and associated infrastructure will be fully contained to prevent leakage, overflow or uncontrolled discharge to land or waters.

Maintenance will be undertaken as required by the manufacturer's requirements, with contents transported and disposed of at appropriately licensed facilities in accordance with the South Australian Biosolids Guidelines and EPA requirements and authorisations obtained as appropriate.

Systems will be regularly inspected to ensure effective operation. Upon completion of construction, the ablutions would be appropriately decommissioned and removed from site.

Under no circumstances will wastewater be discharged to land or waterways.

5.2.2. Construction wastewater

Construction wastewater will be treated using appropriate physical treatment systems, including settlement or sedimentation tanks, designed to remove suspended solids prior to reuse or off-site disposal. These systems will be located within bunded and impermeable areas and will be inspected and maintained to ensure effective performance. Accumulated solids (sludge) will be pumped out by licensed contractors and disposed of at appropriately licensed facilities in accordance with EPA SA requirements.

Where possible, captured process water from construction activities will be reused on site for non-potable purposes such as dust control, consistent with SA EPA *Environmental management of dewatering during construction activities guideline* (updated June 2021).

Wastewater which is to be reused shall comply with the following criteria:

- Oils and petrochemicals – no visible film on water surface
- Waste – no waste or litter within water
- Odour – visibly clean and no odour

Wastewater that cannot be reused on site will be disposed by licensed contractors using sealed tankers to prevent spillage and contamination. Transport will comply with relevant EPA and transport regulations.

6. ROLES AND RESPONSIBILITIES

Refer to CEMP Section 6.1 for Project Organisation Chart.

6.1. Project Manager

- Familiarising themselves with their responsibilities within this WWMP and BMD's environmental management system.
- Ensuring the project is compliant with the requirements detailed in this WWMP and relevant legislation.
- Ensuring wastewater management requirements are fully implemented and not secondary to construction activities.
- Providing adequate resources (personnel, financial and equipment) to support effective wastewater management.
- Reviewing and authorising wastewater management procedures, controls and revisions to this WWMP.
- Monitoring compliance with site wastewater management requirements, schedules and targets.
- Ensuring wastewater-related risks are identified, assessed and managed in accordance with the Project risk management framework.
- Ensuring subcontractors submit appropriate Work Method Statements (WMS) and environmental documentation addressing wastewater management prior to commencement.
- Ensuring subcontractor compliance with the requirements of this WWMP and other relevant documentation.
- Reviewing wastewater-related incidents, hazards and near misses and ensuring corrective actions are implemented within agreed timeframes.
- Reporting wastewater management performance and statistics as required.
- Upholding an active interest in workplace environmental and wastewater management issues.

6.2. Field Supervision

- Implementing wastewater management requirements and control measures in accordance with this WWMP.
- Ensuring wastewater collection, storage, containment and treatment systems are in place and maintained.
- Conducting routine inspections of wastewater systems, storage areas and associated infrastructure and coordinating corrective actions as required.
- Ensuring all site personnel and subcontractors are aware of wastewater management requirements and controls.
- Ensuring required approvals are in place prior to commencing wastewater-generating activities.
- Ensuring subcontractors comply with BMD wastewater management requirements and taking immediate action where non-compliance is identified.
- Reporting wastewater-related incidents, spills, contamination or non-conformances to the Environmental Representative or Project Manager.
- Participating in toolbox talks and pre-start meetings to communicate wastewater management requirements.

- Upholding an active interest in workplace wastewater and environmental management.

6.3. Project Engineer

- Familiarising themselves with their responsibilities under this WWMP and BMD's Environmental Management System.
- Ensuring wastewater management requirements are considered in construction planning and sequencing of works.
- Developing, reviewing and approving WMS that address wastewater generation, segregation, storage and disposal.
- Reviewing subcontractor WMS to ensure wastewater management risks and controls are adequately addressed.
- Undertaking risk assessments where changes to activities may affect wastewater generation or management.
- Liaising with the Environmental Representative on wastewater-related matters, including spoil classification and controlled wastewater management.
- Conducting inspections to identify wastewater-related environmental risks or non-conformances.
- Raising wastewater management issues or concerns with the Environmental Representative or Project Manager.

6.4. Environmental Representative (or delegate)

- Establishing, maintaining and reviewing this WWMP and associated wastewater management documentation.
- Implementing wastewater-related monitoring, inspection and reporting requirements.
- Providing wastewater management training and awareness to personnel, subcontractors and visitors.
- Coordinating approvals, licences and permits relevant to wastewater management.
- Liaising with the South Australian EPA, local council, regulators and environmental consultants on wastewater-related matters.
- Maintaining records of wastewater-related incidents, complaints and corrective actions.
- Monitoring compliance with wastewater legislation, policies and standards and updating this WWMP as required.
- Assisting subcontractors with understanding and applying BMD wastewater management requirements.
- Participating in audits, inspections and reviews related to wastewater management.
- Advising the Project Manager of any wastewater management issues that may pose a risk to the environment, personnel or compliance obligations.

6.5. All site personnel

- Familiarising themselves with the requirements of this WWMP and site wastewater management procedures.
- Attending site inductions, pre-start meetings and toolbox talks addressing wastewater management.
- Complying with site wastewater handling, storage and disposal requirements.
- Using wastewater controls identified in WMS, procedures and work instructions.
- Preventing wastewater spills, leaks or cross-contamination and maintaining tidy work areas.
- Stopping work and notifying supervision if wastewater-related activities pose a risk to the environment.
- Reporting wastewater-related hazards, incidents and near misses immediately.
- Actively participating in wastewater management reviews and continuous improvement initiatives.
- Upholding an active interest in workplace wastewater and environmental management.

7. MITIGATION AND MANAGEMENT MEASURES

Specific measures and requirements to meet the objectives of this sub-plan and to manage wastewater related impacts are outlined in the table below, with more detail provided in Section 5. These measures have been developed in line with the requirements in the Project Approvals (refer to Attachment 1 Compliance Matrix).

ID	Measure / Requirement	Responsibility	Timing	Evidence
WWM1	Ablutions, equipment and controls would be installed on-site generally in accordance with Appendix 2.	Field Supervision Environmental Representative	Construction	Site inspections Photos
WWM2	The ablutions will be regularly inspected and maintained including monitoring of bunds and tanks for leaks	Field Supervision Environmental Representative	Pre-construction and construction	Site inspections Maintenance logs
WWM3	All wastewater from site offices, amenities, and compounds will be collected in holding tanks and transported off site by licensed contractors	Field Supervision Environmental Representative	Construction	Contractor records Waste Tracking Register Site inspections
WWM4	Holding tanks and ablutions will be designed as per SA Health wastewater requirements as it relates to the site and be verified by a qualified person as per manufacturers specifications.	Engineer Equipment Supplier	Construction	Ablutions hire verification
WWM5	Reuse of wastewater for non-potable purposes (e.g., dust suppression) will be implemented where safe and practicable in accordance with SA EPA <i>Environmental management of dewatering during construction activities guideline</i> . Wastewater which is to be reused shall comply with the following criteria: • Oils and petrochemicals – no visible film on water surface • Waste – no waste or litter within water • Odour – visibly clean and no odour	Field Supervision Environmental Representative	Construction	Site inspections Water use records

ID	Measure / Requirement	Responsibility	Timing	Evidence
WWM6	Training on wastewater handling, capture, and management would be undertaken for those involved in the task where appropriate.	Field Supervision Environmental Representative	Pre-construction and construction	Toolbox talk records Attendance registers Training materials
WWM7	Fittings, fixtures and equipment from ancillary facilities into tanks shall be installed using appropriately qualified specialists (e.g. plumbers) and comply with appropriate Australian Standards.	Project Engineers Specialists	Pre-Construction	Scope of work documentation Records
WWM8	Ablutions tanks are to be monitored with alert systems in place once systems reach capacity to avoid spills.	Field Supervision Project Engineers Specialists	Pre-Construction	Scope of work documentation Photos
WWM9	Accumulated solids (sludge) from settlement or sedimentation tanks will be pumped out and disposed of at licensed facilities	Field Supervision Environmental Representative	Construction / as required	Weekly inspections Pump-out records
WWM10	Wastewater infrastructure will be sited with required separation distances from watercourses, bores, and sensitive receptors	Field Supervision Environmental Representative	Pre-construction	Design approval Site inspections
WWM11	Designated biosecurity wash-down areas with appropriate containment measures (e.g. bunding or impermeable surfaces) would be installed where required. If appropriate, wash-down water will be reused for dust suppression within the same property boundary. Any excess water will be retained within the contained area to allow evaporation.	Field Supervision Environmental Representative	Construction / as required	Site inspections
WWM12	Containment will be established around holding tanks, temporary wastewater storage and wash-down areas to prevent uncontrolled runoff	Field Supervision	Construction / as required	Site inspections

ID	Measure / Requirement	Responsibility	Timing	Evidence
		Environmental Representative		
WWM13	Temporary wastewater tanks will be removed or decommissioned at the completion of the Project under the guidance of licenced specialists (e.g. plumbers).	Field Supervision Project Engineers Specialists	Post-construction	Decommissioning records Photos
WWM14	Prior to transport of redundant tanks, each tank shall be emptied, and fittings and fixtures are to be checked and confirmed as locked out by the transporter prior to movement from site	Field Supervision Transport contractor	Demobilisation	Site records Photographs

8. COMPLIANCE MANAGEMENT

8.1. Training and Awareness

Personnel will receive training appropriate to their role in wastewater management on the project. Ongoing toolbox talks covering the requirements for management of wastewater will be used to raise awareness to the wider project team. Timing and content of such meetings will be aligned with project works programme and the significant risks at that time.

The site induction will be utilised to train all staff in the general requirements of wastewater management. Specific environmental training courses may also be facilitated as required for appropriate personnel.

Further details regarding staff induction and training are outlined in Section 10 of the CEMP.

8.2. Monitoring, Inspections and Auditing

8.2.1. Monitoring and inspection

Regular site inspections and visual monitoring of construction activities and wastewater storage areas will be undertaken to ensure the environmental controls detailed within this WWMP are being implemented. Environmental monitoring requirements will be carried out as per project requirements and specifications.

Project environmental monitoring requirements relating to waste water management shall be summarised on the BMD Compliance Obligations Register which will be provided to Mid Murray Council on a regular basis.

8.2.2. Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this sub-plan, Planning Approval and other relevant licenses, and guidelines. These audits will be undertaken at planned intervals to provide information on whether the Project:

- Is meeting its compliance obligations
- Conforms to this sub-plan
- Determines if this sub-plan is effectively implemented and maintained.

The approach to audits is outlined further in Section 8.3 of the CEMP.

8.2.3. Reporting

The Project will communicate relevant wastewater performance information both internally and externally, as identified in its communication processes and as required by its compliance obligations. Project wastewater information will be captured and provided to the principal monthly including, but not limited to:

- environmental incident data

This information will be made available to Mid Murray Council on a regular basis.

8.3. Environmental Incidents

The procedure for the management of environmental incidents will be undertaken in accordance with Section 7 of the CEMP. All environmental incidents are to be investigated, reported, documented, actioned and closed out as per the details provided in the CEMP.

Examples of environmental incidents and non-compliances relevant to wastewater management may include, but are not limited to:

- Overflow, leakage or malfunction of septic systems or temporary wastewater units

- Unauthorised discharge of wastewater to land, surface water or drainage lines
- Incorrect storage, handling or containment of wastewater
- Spills of wastewater associated with pump-out or maintenance activities

Following an incident, corrective and preventative actions will be identified, assigned to the appropriate person/s and closed out in accordance with the appropriate time frames set in response to the circumstances.

8.4. Non-Conformance Reports (NCRs)

Non-conformance with any environmental project requirement will be managed and reported on in accordance with the BMD Incident and Accident Management Standard. In the event of any non-conformance with any regulatory or other compliance obligation, as set out in the WWMP, corrective action/s shall be raised. All corrective actions shall be entered into the Corrective or Improvement Actions Database.

8.5. Environmental Complaints

All complaints made by the community and stakeholders will be managed in accordance with the Complaints Management Plan.

9. REVIEW AND IMPROVEMENT

This Plan, its operation and implementation, will be periodically reviewed during project delivery to ensure it remains current, effective and responsive. A formal review of the WWMP will be implemented at least once every 6 months. Other triggers for review may include:

- Corrective or Preventative Actions are raised through the incident reporting process requiring amendments to the WWMP;
- Changes to relative legislative, regulatory or compliance obligations;
- Significant changes to any constituent of project construction;
- Request from Mid Murray Council or any regulatory authority;
- Significant changes to the site conditions or surrounding land use;
- Updates to recognised waste water management best practise; or
- Identification of new or increased environmental risks.

Where this review leads to a revision of the WWMP, the revised WWMP will be submitted to the SPC and/or Mid Murray Council for approval if required.

9.1 Minor Amendments to the WWMP

The Environmental Representative/Project Manager may consider minor amendments to be made to the WWMP which will be approved by the Principal.

'Minor amendments' are defined as those that involve updating a document of an administrative nature and do not increase impacts to the environment or nearby dwellings, and may typically include those that:

- Are editorial in nature e.g. staff and agency/authority name changes;
- Do not increase the magnitude of impacts on the environment when considered individually or cumulatively;
- Do not compromise the ability of the project to meet approval conditions or legislative requirements;
- Are required as a result of monitoring, inspection and audit results;
- Result from consideration of recent and relevant incidents and any lessons learnt;
- Are required because of any new regulatory requirements;
- Are identified as needed base on a review of the effectiveness of environmental controls;
- Are required because of changes in operational needs such as resourcing; and/or

- Are required because of feedback from regulators and other relevant stakeholders.

The Environmental Representative (or Project Manager nominee) will be responsible for review and amendment of the WWMP. The updated WWMP will be provided to all relevant site personnel and stakeholders and provided to relevant authorities, such as the Mid Murray council, as appropriate.

ATTACHMENT 1 – COMPLIANCE MATRIX

Project Approval Requirements

Condition Number	Condition	Document Reference	How Addressed
Reserved Matters			
RM5	A final Wastewater Management Plan detailing the on-site wastewater treatment system shall be prepared in consultation with the Mid Murray Council and submitted to the satisfaction of the State Planning Commission.	This Plan	Project wastewater management systems are detailed within this Plan. Summary of consultation with Mid Murray Council is included in Section 1.5.
Conditions			
C1	The development authorisation granted herein shall be undertaken in accordance with the stamped approved plans, drawings, specifications and other documents submitted to the State Planning Commission, except where varied by conditions below (if any).	This Plan	This WWMP has been prepared to align with the approved project documentation, including the Statement of Commitments and Project Approval conditions. Compliance is addressed through implementation of this plan.

Statement of Commitments

Number	Commitment	Document Reference	How Addressed
4.9.1	During construction activities the subject land must be managed in a manner as to prevent erosion and pollution of the subject site and the environment, including keeping the area in a tidy state and ensuring any waste materials are appropriately contained to ensure no pollutants (including excavation or fill material) enter the River Murray system.	Section 3 Section 6 Section 7	Stormwater shall be managed in accordance with relevant legislative framework detailed in Section 3. Approach to management of site drainage is detailed in Sections 5 and 7.

ATTACHMENT 2 – EXAMPLE ABLUTIONS BLOCK INSTALLATION AND EQUIPMENT FOR PALMER WIND FARM



Source: Ausco

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