Six Mile Creek Dam Safety Upgrade Project

Dust & Air Quality Management Plan

Document number: LMDIP-05829-GNL-ENV-MPL-00006

Revision 0 | April 2025

Definitions & Abbreviations

Terms	Definition / Abbreviations
AQP	Appropriately qualified person - A person having the qualifications, experience or standing appropriate to undertake the work required.
CM	Construction Manager
CSM	Community & Stakeholder Manager
CEMP	Construction Environmental Management Plan
CGCR	Coordinator-General's change report – Construction (2025)
EMP	Environmental Management Plan
EP Act	*Environmental Protection Act 1994* (Qld)
EPR	*Environmental Protection Regulations 2019*
EPP (Air)	*Environmental Protection (Air) Policy 2019*
ESM	Environment and Sustainability Manager
HSM	Healthy and Safety Manager
IAR	Impact Assessment Report
$mg/m^2/day$	Milligram per square metre per day
OCG	Office of the Coordinator General
PM	Project Manager
PM_{10}	Particulate matter with a diameter of 10 micrometres or less
SEMP	Site Environmental Management Plan
Sup	Supervisor
$\mu g/m^3$	Microgram per cubic metre

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1. Scope

This Dust and Air Quality Management Plan (this Management Plan) is applicable to all construction phase works associated with the Lake Macdonald Dam Improvement Project (the Project).

This Management Plan has been compiled using information from and should be read alongside the following documents:

- Site Environmental Management Plan (ref: LMDIP-10000-GNL-ENV-MPL-00002).
- SMEC Impact Assessment Report incl. the Draft Environmental Management Plan (Ref: Appendix B) and the Air Quality Impact Assessment (ref: SLR Consulting Pty Ltd, Appendix J).

This Management Plan has been prepared to address the relevant imposed conditions outlined in the Coordinator-General's change report 2025 (CGCR) – Construction and recommendations (the addressable items).

1.1. Objectives

The objectives of this Dust and Air Quality Management Plan are to:

- Define procedures and identify control measures to effectively manage and minimise air emissions.
- Minimise the potential for generating dust and air quality impacts on sensitive receptors.
- Prevent dust and odour nuisance resulting from construction activities from affecting sensitive receptors.
- Ensure that the Project complies with federal, state, and local laws and regulations on air quality.
- Establish and maintain personal awareness of the importance of dust and air quality management practices during the construction phase of the Project.

1.2. Stakeholder Consultation

In the preparation of this Management Plan, the following stakeholders were consulted and feedback considered in the development of management measures:

- The Office of Coordinator General (OCG) through the review of the draft Management Plans provided in May 2024.
- Communities which include residences near Collwood Road and residences adjacent to Lake Macdonald prior to the commencement of the project.
- John Holland Group during development of the mitigation measures.

2. Specific Performance Measures

The specific performance measures relevant to the implementation of this Management Plan have been detailed in Table 1.

Table 1: Performance Measures

Specific Performance Measure	Measurable Target(s)
Minimise airborne dust concentrations at sensitive receptors	PM_{10} (24-hr average) concentration of 50 µg/m^3 not to be exceeded at any sensitive receptor.
Minimise dust nuisance at sensitive receptors	Dust deposition (monthly average) rate of 120 mg/m^2/day not to be exceeded at any sensitive receptor.
Minimise impacts on vegetation to acceptable levels	No excessive dust visible on vegetation adjacent to construction areas.

3. Roles and Responsibilities

Roles and responsibilities applicable to the implementation of this Management Plan have been detailed in Table 2. These roles and responsibilities are in addition to those described in Table 9 of the SEMP.

Table 2: Roles and Responsibilities

Role	Responsibility
Seqwater	• Manage the construction process as the Project proponent. • Allocate sufficient resources to prepare, review and update this Management Plan. • Ensure that the requirements of any statutory approvals, legislation and this Management Plan are included in the contract documentation and implemented. • Undertake audits of the contractor to verify compliance with any legislative requirements and this Management Plan. • Maintain a current copy of the contract and the CEMP, a record of the completion of planned actions, and monitoring records and reports, supplied by the Principal Contractor
Contractor Project Manager (PM)	• Maintain a master copy of this Management Plan, a record of the completion of management measures, monitoring records and reports. • Obtain all necessary statutory approvals and licences, and ensure that conditions of licences/approvals/permits are met. • Provide sufficient resources to ensure the effective implementation of this Management Plan. • Participate in any audits initiated by Seqwater. • Coordinate required monitoring. • Provide relevant and timely information about construction activities that may impact on the amenity of stakeholders.

Role	Responsibility
Contractor Construction Manager (CM)	• Ensure all staff are trained/inducted to site (including environmental management responsibilities) and that all training/inductions are recorded in a Training and Induction Register. • Ensure appropriate waste facilities are provided on site and that maintenance and waste disposal is conducted by a licenced contractor, where required. • All vehicles accessing the site use the designated access routes, entries/exits, and parking locations. • All equipment is maintained and 'fit for purpose' before arriving at the site. • Report any incidents, non-compliances and complaints Contractor Project Manager. • Participate in any investigations of complaints or non-conformances. • Ensure all staff are trained/inducted to the Project.
Contractor Environment and Sustainability Manager (ESM)	• Develop and implement the contractor CEMP in accordance with the Seqwater environmental management plans including this Management Plan. • Primary responsibility for implementation and compliance with this Management Plan, statutory approvals, legislation, codes of practice, and/or industry standards. • Undertake regular inspections of work activities to ensure adherence to this Management Plan. • Participate in toolbox talks as required to ensure staff are aware of key concerns associated with air quality and dust management. • Conduct daily/weekly inspections of work activities, including completion of a Weekly Inspection Checklist and ensure adherence to the environmental management measures required by the contractor CEMP. • Report any incidents, non-compliances and complaints to Seqwater. • Liaise with stakeholders, including regulatory agencies. • Lead any investigations of complaints or non-conformances and report any findings and corrective actions to Seqwater.
Healthy and Safety Manager (HSM)	• Liaise with the ESM to ensure compliance with health and safety regulations related to dust and air quality in the workplace.
Community & Stakeholder Manager (CSM)	• Ensure community members are appropriately notified of project work including the construction activities. • Manage the Project enquiries and responses. • Register and report community complaints and ensure adherence to the complaints procedure.
Supervisors (Sup)	• Ensure that this Management Plan requirements are communicated to all personnel and are being fully implemented on site. • Undertake any rectifications as required by the Contractor Environment and Sustainability Manager.
All Project personnel (including Subcontractors)	• Comply with reasonable directions given by the Principal Contractor regarding environmental matters. • Attend a site-specific environmental induction and awareness training. • Comply with the requirements of this Management Plan as relevant to the subcontracted works. • Environmental incidents, non-conformances and near misses are to be reported to the CM.

4. Receiving Environment

The Project area is bordered to the north by Tewantin National Park and otherwise surrounded by a semi-rural residential area (Lake Macdonald suburb), see Figure 1. The residential receptors along Lake Macdonald Drive near to the entrance to the site are identified as the most sensitive to dust in the immediate area.

The closest dwellings to the Project construction area are located:

- Approximately 30 m to the west of the left embankment.
- Approximately 210 m to the west of the area in which the borrow pit may be located.
- Approximately 215 m to the west of the closest proposed stockpile area.
- Approximately 300 m to the east of the clay borrow area.

Other potentially affected residential receptors include:

- Residences in the vicinity of Collwood Road, east of the Project construction site, which could experience dust emissions from borrow pit activities.
- Residences adjacent to the lake, which could experience odour emissions due to lowering of the water level.

In addition, regard needs to be given to the Tewantin National Park as a sensitive area, particularly in terms of potential impacts on vegetation associated with elevated levels of dust deposition.

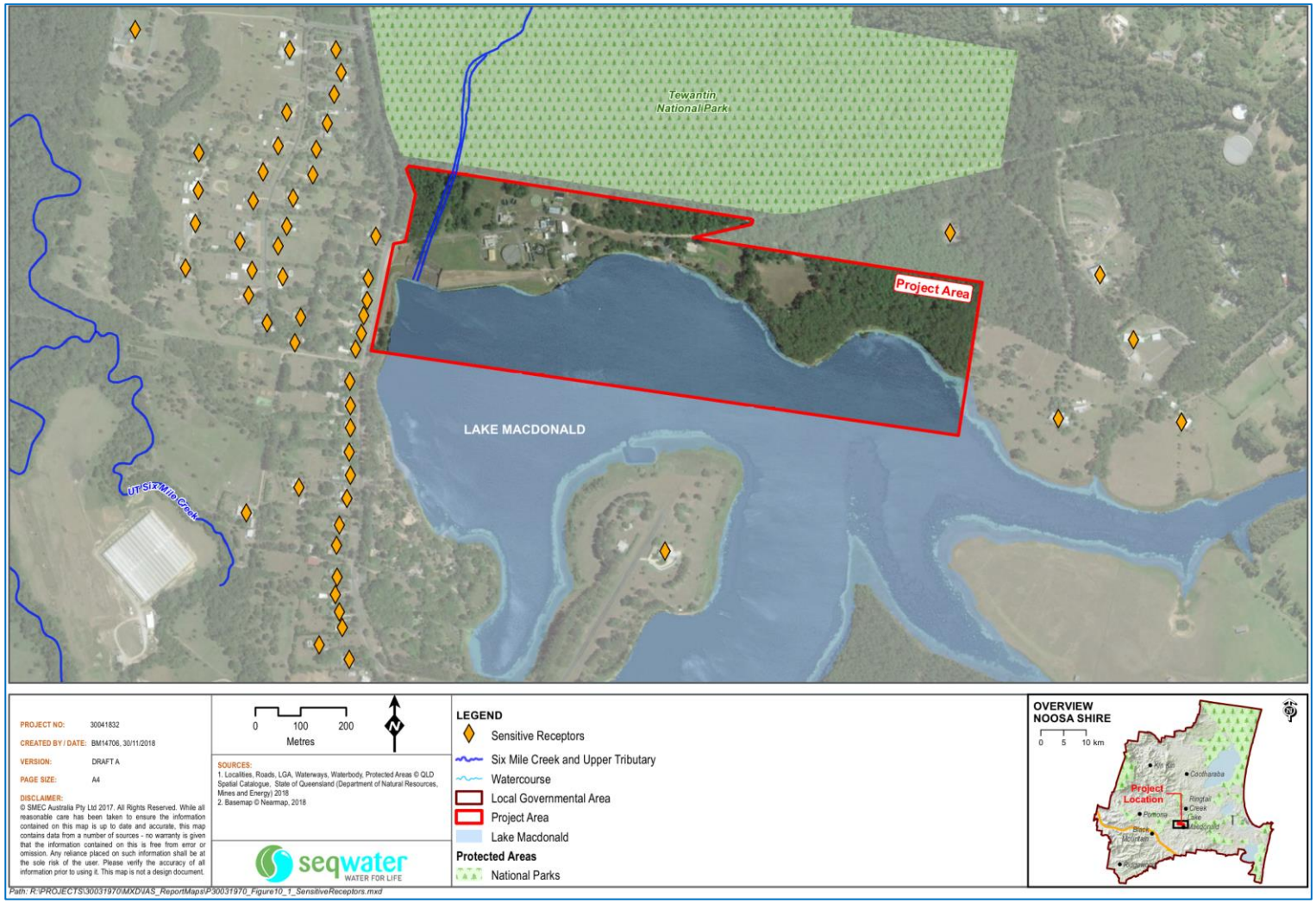


Figure 1: Residential sensitive receptors

5. Legislative and Other Compliance Requirements

To ensure that the identified dust and air quality impacts associated with the Project are minimised or avoided, relevant environmental legislation, controls, standards, and guidelines must be adhered to, meeting the community's expectations around environmental management.

5.1. CGCR Addressable Items

Details of the applicable CGCR addressable items and how these have been addressed in this Management Plan have been detailed in Table 3.

Table 3: CGCR addressable items relevant to this Management Plan

CGCR Reference	Type	Addressable Items	How addressed in this Management Plan
Coordinator-General (CG) Conditions			
Appendix A. Imposed Conditions, Schedule 1, Condition 1 (c) Site Environmental Management Plan (SEMP)	Imposed Condition	The SEMP must include the following construction EMPs: (F) dust and air quality management plan	This Dust & Air Quality Management Plan is a construction environmental plan (CEMP) and sub-plan of the Site Environmental Management Plan (SEMP)
Appendix A. Imposed Conditions, Schedule 1, Condition 3 (b) Construction vehicle haulage	Imposed Condition	Any laden construction vehicle must have its load fully covered and secured.	Section 7 includes measures to constrain and cover truck loads, including management measures 25, and 28- 31 in Table 7.

5.2. Legislation

The relevant legislation applicable to this Management Plan has been detailed in Table 4.

Table 4: Other legislation applicable to this Management Plan

Legislation	How it Applies to this Management Plan
Environment Protection Act 1994 (EP Act)	Under the EP Act, the Project "must not carry out an activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm (the general environment duty)". Air emissions if not managed may impact health and well-being of surrounding sensitive receptors. Seqwater has an obligation to uphold their general environmental duty, duty to notify, and duty to restore the environment under the EP Act to prevent environmental harm, nuisance and contamination occurring from project activities.

Legislation	How it Applies to this Management Plan
Environmental Protection Regulations 2019 (EPR)	Under the EPR (2019), the Project is required to set a clear framework for air quality management, including dust control, and take proactive steps to minimise emissions and air pollution to protect public health. The EPR mandates monitoring and reporting to ensure compliance.
Environmental Protection (Air) Policy 2019 (EPP (Air))	Air quality objectives are set out in the EPP (Air) to protect the following environmental values relevant to this Project: • The qualities of the air environment that are conducive to protecting the health and biodiversity of ecosystems. • The qualities of the air environment that are conducive to human health and wellbeing.
Noosa Plan 2020	Under the *Noosa Plan 2020,* the land around the Project is zoned as *Rural, Rural Residential* and *Environmental Management and Conservation.* Overall outcomes within these zones that apply to dust and air quality management include: • *Environmental Management and Conservation Zone:* Development avoids and mitigates against adverse impacts on the value s and processes within ecologically important areas • *Rural Zone*: Development is reflective of, and sensitively responds to, the environmen tal constraints of the land • *Rural Residential Zone*: The Rural residential zone provides a high level of amenity for permanent residents Air quality management measures proposed in this plan have been developed to protect these outcomes of the relevant zones.

5.3. Standards

The standards presented in Table 5 provide standardised methods and guidance for collecting and analysing air quality data.

Table 5: Standards applicable to this Management Plan

Guideline/Standard	How it Applies to this Management Plan
AS/NZS 3580.10.1:2016 Determination of particulates – deposited matter – gravimetric method	This standard specifies methods for sampling and analysing deposited particulate matter.
AS/NZS 3580.9.6:2015 Methods for sampling and analysis of ambient air, Method 9.6: Determination of suspended particulate matter — PM10 high volume sampler with size selective inlet — Gravimetric method *AS 3580.9.9:2017 Methods for sampling and analysis of ambient air, Method 9.9: Determination of suspended particulate matter — PM 10 low volume sampler — Gravimetric method* *AS/NZS 3580.9.11:2022 Methods for sampling and analysis of ambient air, Method 9.11: Determination of suspended particulate matter — PM10 beta attenuation monitors*	These standards specify the methods for determining suspended particulate matter in ambient air.
AS/NZS 3580.1.1:2016 Methods for sampling and analysis of ambient air, Part 1.1: Guide to siting air monitoring equipment	This standard provides a comprehensive guideline for the siting of ambient air monitoring equipment.

6. Air Emission Sources and Potential Impacts

The most significant emissions to air associated with the proposed Project activities will be emissions of particulate matter from the excavation, handling and transport of soil and rocks, as well as from wind erosion of disturbed soils.

The potential impacts relevant to this Management Plan have been detailed in Table 6.

Table 6: Potential impacts

Activity	Potential Impact No.	Potential Impact
Emissions of particulate matter from: • Clearing and grubbing • Site gravel road construction • Material delivery • Construction of the cofferdam • Reservoir lowering • Dam crest demolition & excavation • Demolition of the spillway • Concrete batching and dam construction	PI1	Penetration into the respiratory system resulting in potential adverse health impacts such as increased mortality from cardiovascular and respiratory diseases, chronic obstructive pulmonary disease and hearth disease, and reduced lung capacity in asthmatic children
	PI2	Dust settling on surfaces and possessions, affecting visibility and contaminating tank water supplies
	PI3	Dust blanketing leaf surfaces and adversely affecting vegetation
Emissions from fuel combustion by mobile equipment, including excavators, dozers and haul trucks, as well as generator(s) used to power the dewatering pumps from proposed construction activities	PI4	Sufficiently high concentration of pollutants present in air give rise to adverse health effects, particularly respiratory impacts and exacerbation of pre-existing respiratory conditions such as asthma.
Generation of odorous emissions from lowering of the water level in Lake Macdonald, exposing normally inundated soil and aquatic vegetation.	PI5	Odour emissions negatively impact the quality of life for nearby residents.

7. Management Measures

The management measures that will be implemented to minimise the potential for impacts associated with dust and air quality are detailed in Table 7. Management measures are consistent with those described in the *Code of practice for the concrete batching industry*.

Table 7: Management Measures

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
General Site Management					
MM1		Planning of construction activities to incorporate dust management requirements wherever required.	PI2, PI4	PM/ESM	Workplace Planning
MM 2		Plan to sequence the works to keep the size of cleared areas to a minimum to limit exposed areas susceptible to dust emissions by wind erosion.	PI3	PM/ESM	Workplace Planning
MM 3		Retain existing vegetation, where practical, between construction activities and sensitive receptors to reduce particulate concentrations and dust deposition rates at receptors.	PI1- PI5	PM/ESM	Workplace Planning
MM 4		Ensure there is an adequate water supply on the site for effective dust/particulate matter suppression/mitigation at all times, using non-potable water where possible and appropriate.	PI1 – PI3	CM	Project Delivery
MM 5	Y	Install a meteorological station on-site for continuous weather monitoring at least one month prior to the commencement of construction works. The weather station shall be sited at a nearby location representative of the general area and be away from obstructions such as buildings and trees. Additionally, set up PM10 and deposited dust monitoring, before commencing construction works.	PI1 – PI5	ESM	Prior to commencing work
MM 6		Ensure community contact signage is clearly visible on-site boundary fencing to enable community feedback / complaints.	PI5	ESM/CSM	Project Delivery
MM 7	Y	Conduct monitoring activities as outlined in Section 9 of this Management Plan	PI1 – PI5	ESM	Project Delivery
MM 8		Maintain records of all documentation pertaining to dust and air quality management as detailed in Section 11.	PI1 – PI5	ESM	Project Delivery

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
MM 9		Ensure relevant personnel receive adequate environmental awareness and training on this Management Plan's requirement for air quality management and monitoring.	PI1 – PI5	PM/CM/ESM	Prior to commencing work
Construction Area					
MM 10	Y	Seqwater Superintendent to be notified a minimum 7 business days in advance if any noise intensive activities are to be undertaken.	PI11 – PI4	ESM	Prior to commencing noise intensive activities
MM 11	Y	Community consultation with sensitive receivers will be undertaken prior to commencing the following dust intensive activities: • Pump operations during night time • Sheet piling of the coffferdam • Demolition of the existing dam structure • Clearing and grubbing and gravel road construction on the east and west embankment • Mobilisation and demobilisation of heavy plant and equipment Any activity that will be undertaken outside of standard construction hours	PI1 – PI4	CSM	Prior to commencing noise intensive activities
MM 12		Consider prevailing wind speed and direction when operating the concrete batching plant or carrying out earthworks, such as surface excavation. Cease works if high winds are blowing in the direction towards sensitive receptors.	PI1 – PI4	CM/ESM/Sup	Project Delivery
MM 13		Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.	PI1 – PI4	CM/ESM	Project Delivery
MM 14		Use water sprays to control dust from unsealed traffic areas on site, particularly during periods of unfavourable wind conditions (easterly wind, greater than 5 m/s). Where the avoidance of dust-generating activities is not practicable, dust-suppression techniques such as Level 2 watering (>2 litres/m^2/h) to protect vegetation, worker health and amenity must be applied.	PI1 – PI3	Sup/ESM/HSM	Project Delivery
MM 15		Undertake dust management and suppression during and following vegetation clearing activities.	PI1 – PI3	Sup	Project Delivery

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
MM 16		Impose and signpost a maximum speed limit of 20 km/h within the Project site and reduce to 10km/h when passing working crews within Project boundaries.	PI1 – PI4	CM/ESM	Project Delivery
MM 17		Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	PI1, PI4	Sup	Project Delivery
MM18		Prohibit burning of vegetation for the Project.	PI1, PI4, PI5	ESM/Sup	Project Delivery
MM19		Ensure effective water suppression is used during demolition operations. Use an appropriate method of directing water mist to the point of demolition where dust is generated. This may involve misting equipment fitted to demolition machinery or handheld sprayers positioned in a safe location.	PI1 – PI4	Sup	Demolition works
Haul/Access Road Movements					
MM 20		Seal heavy use haul roads or cover with a hard surface or low dust capping layer	PI1 – PI3	CM	Project Delivery
MM 21		For unpaved roads, periodically apply water for dust suppression, for example with a light application at Level 1 watering (<2 litres/m^2/h). The frequency of application will be dependent on weather conditions and traffic volumes. Further measures for high-volume traffic areas, such as temporary gravel cover or dust suppression polymer, may also be required.	PI1 – PI3	ESM/Sup	Project Delivery
MM 22		Keep public roads adjacent to the construction area free from tracked-out materials and cleaned up daily. Remove accumulated material from roadways by spray trucks equipped with brushes and/or by personnel with hand equipment (e.g. shovels, bristle brooms).	PI1 – PI4	CM/ESM	Project Delivery
MM 23		Hydro-mulch, mulch, hydro-seed or stabilisation spray will be applied to exposed batters adjacent to haul roads, to stabilise these areas and minimise wind-blown dust.	PI1 – PI4	CM/ESM	Project Delivery
MM 24	Y	Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site) as required. Where practicable, the wash shall be set back from intersection with public roads by an area of hard surfaced road to minimise carriage of residual dust and mud onto public roads	PI1 – PI4	PM/ESM	Workplace Planning
MM 25		Use designated access points for site entry. Stabilise these points with gravels pad or similar means.	PI1 – PI4	All personnel/CM	Workplace Planning and Project Delivery

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
MM26		Install barriers alongside internal construction roads, or use some other suitable form of delineation to deter driving off nominated access roads	PI1 – PI4	CM	Workplace Planning and Project Delivery
MM27		Cover haul truck loads carrying loose materials when travelling on public roads. The load must be lower than the sides of the truck, and the truck is to be free of loose mud and dirt before entering public roads.	PI1 – PI4	All personnel/CM	Project Delivery
Materials Handling and Management					
MM 28		Minimise multiple handling of soil and rock materials.	PI1 – PI4	Sup	Project Delivery
MM 29		Regularly water, stabilise and/or cover all permanent stockpiles onsite or those left for longer than one week.	PI1 – PI5	Sup	Project Delivery
MM 30		Wet down or cover loads in trucks transporting soil, aggregate or other dust generating materials to and from the construction area.	PI1 – PI4	All personnel/Sup	Project Delivery
MM 31		Constrain load of all trucks entering and leaving the site of works in such a manner as to prevent the dropping or tracking of materials onto the streets. This shall include ensuring that all wheels, tracks and body surfaces are free of mud and other accumulated contaminants before entering the sealed road network (including the use of shaker screens or rubble pads). Wheel wash stations and/or vibration grids will be installed at the ends of haul route before entering into the public roads.	PI1 – PI4	All personnel/Sup	Project Delivery
MM 32		Minimise drop heights when offloading or handling materials. Use chutes, screens, enclosures, sprays, covers, dust guards or dust extraction systems as appropriate to reduce dust generation.	PI1 – PI4	All personnel/Sup	Project Delivery
MM 33		Remove materials that have the potential to produce dust from the site as soon as practicable, unless being re-used on site.	PI1 – PI4	All personnel/Sup	Project Delivery
MM 34		Avoid site runoff of water or mud, where practicable. Remove silt and other materials from around any erosion control structures, where practicable, following any significant rain event (>10 mm) to ensure deposits do not become a dust source.	PI1 – PI5	All personnel/Sup	Project Delivery
MM35		Ensure bagged supplies of fine powder materials are sealed after use and stored appropriately to prevent dust from escaping.	PI1 – PI4	All personnel/Sup	Project Delivery

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
MM36		In the event that any hazardous material is discovered such as asbestos, buried waste, hydrocarbons etc. the following steps will be undertaken (It is noted that the probability of encountering hazardous asbestos material is very low). • Stop all work immediately and notify the supervisor for the area • Barricade off the area to minimise access • Supervisor to notify the ESM and HSM • ESM and HSM will attend the scene and advise on the appropriate course of action Where external agencies or the regulator attend the incident, work will not recommence until authorised by the relevant administering authority.	PI1 – PI4	All personnel/ESM/HSM	Project Delivery
Stockpile, Borrow Pit, Spoil and Laydown Area					
MM 37		Implement dust suppression measures such as water, polymers, or surfactants during material extraction and handling activities. All chemical components of treatment must be safe for usage within aquatic environments.	PI1 – PI4	Sup	Project Delivery
MM 38		Manage stockpiles in accordance with the requirements of the relevant erosion and sediment controls outlined in the Water Management Plan (LMDIP-05829-GNL-ENV-MPL-00002).	PI1 – PI4	Sup	Project Delivery
MM 39		Position stockpiles in areas away from sensitive receptors or where the nearest sensitive receptors are not downwind of the prevailing wind directions.	PI1 – PI4	CM/Sup	Project Delivery
MM 40		Minimise the number and size of stockpiles. Stockpile heights will be maintained at <1.5m for topsoil and <4m for subsoil.	PI1 – PI4	CM/Sup	Project Delivery
MM41		Use watering sprays, surface binders and/or covers on piles if wind is lifting fine particles or dust. All chemical components of treatment must be safe for usage within aquatic environments.	PI1 – PI4	Sup	Project Delivery
MM42		Minimise drop heights from loading shovels and other loading or handling equipment, and use fine water sprays on such equipment wherever appropriate.	PI1 – PI4	All personnel/Sup	Project Delivery
Vehicle, Equipment and Machinery Emissions					

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
MM 43		Minimise the use of diesel or petrol powered generators and instead use mains electricity or battery powered equipment where practicable.	PI4	PM/ESM	Project Delivery
MM 44		Maintain diesel-powered stationary plant to ensure appropriate levels of air emissions and consider fitting emission controls where required.	PI4	CM	Project Delivery
MM 45		Use low-sulfur fuel to minimise emissions from vehicles and equipment, where practicable.	PI4	CM/ESM	Project Delivery
MM 46		Regularly maintain diesel exhaust equipment and ensure compliance with appropriate design emission standards for in service vehicles.	PI4	CM	Project Delivery
MM 47		For the diesel-powered dewatering pumps, locate the units a suitable distance from sensitive receptors to ensure no impact and ensure the exhaust emissions are discharged away from areas where workers or members of the public would be exposed to the plume.	PI4	CM/Sup	Workplace Planning
MM 48		Ensure all vehicles switch off engines where idling time on-site is likely to exceed two minutes.	PI4	All personnel	Project Delivery
MM 49		Conduct regular visual inspections of vehicle and machineries. Implement appropriate corrective measures when there are indications of high levels of particulate matter and other pollutants, such as dark, thick smoke.	PI4	CM/ESM	Project Delivery
Odour (during dewatering)					
MM 50		Ensure a high level of communication with local residents regarding the potential for odours to be generated as a result of lowering the water level within Lake Macdonald.	PI5	CSM	Dewatering
MM 51		Recover and dispose of promptly any dead fish or other aquatic macro-fauna from the reservoir to minimise potential for odours relating to decomposition of aquatic fauna.	PI5	ESM	Dewatering
MM52		Monitor, and if required, promote vegetation growth on the exposed banks as per the Erosion and Sediment Control Plan to encourage drying out of the sediments /mud and promote aerobic conditions that may minimise offensive odour generation.	PI5	PM/ESM	Dewatering
Rehabilitation					
MM 53		Minimise areas of exposed earth by only stripping/clearing areas immediately prior to works and rehabilitating the area as soon as possible	PI1 – PI5	ESM/Sup	During rehabilitation

No.	Hold Point	Actions	Related Potential Impact	Staff Responsible	When
MM 54		All disturbed land will be rehabilitated to achieve stable and sustainable soil cover and minimise sediment run off.	PI1 – PI5	CM/Sup	During rehabilitation

8. Hold Points

A list of all hold points relevant to this Management Plan is presented in Table 8. Construction work is described as all work on the project not already covered under the early works site establishment scope – refer to LMDIP-10000-GNL-ENV-MPL-00001_EWEMP.

Table 8: Project hold points

Hold Point Number	Related Management Measure	What	When does it occur	Staff responsible	Construction activities restricted until Hold Point completed
1	MM7	Baseline particulate matter (PM_{10}) monitoring	One month prior to the commencement of the work	ESM	All construction works
2	MM7	Baseline deposited particle monitoring	Two months prior to the commencement of the work	ESM	All construction works
3	MM5	Set up meteorological station on site for continuous weather monitoring, including wind speed, wind direction and rainfall	One month prior to the commencement of the work	ESM	All construction works
4	MM11	Community consultation with sensitive receptors	1 day prior to dust intensive activities commencing or non-standard construction hours	CSM	Commencing dust intensive activities or any activities outside of standard construction hours
5	MM10	Seqwater notification	10 days prior to dust intensive activities commencing or non-standard construction hours	ESM	Commencing dust intensive activities or any activities outside of standard construction hours
6	MM24	Install a wheel wash at the entrance/exit to the site	Prior to construction commencing	PM/ESM	All construction works

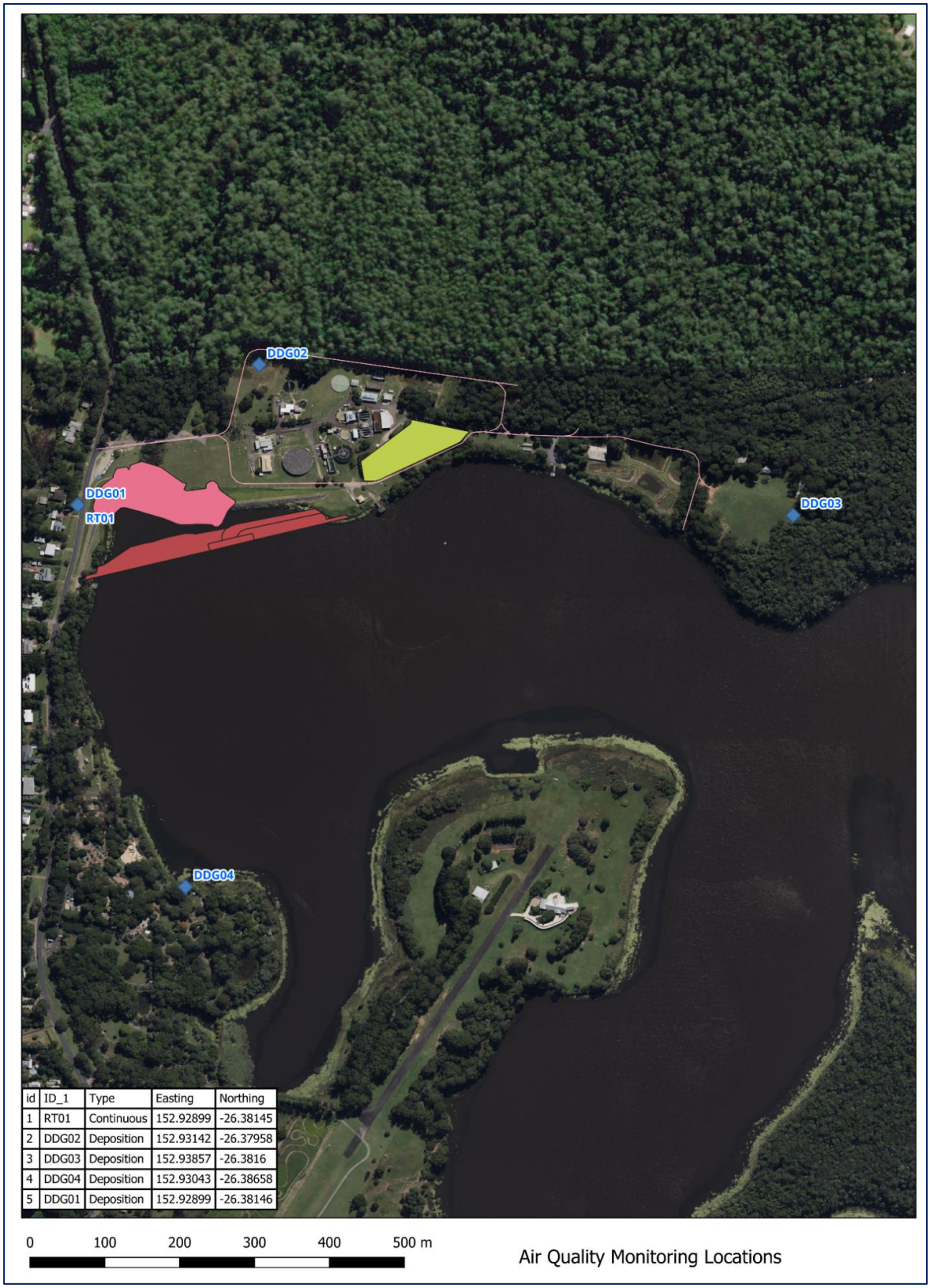
Per Item 2 and Item 3 of Table 8, dust deposition gauges have been in place since October 2024 for monitoring, and meteorological monitoring has been undertaken since 18 December 2024.

9. Monitoring

The details of monitoring program are highlighted in Table 9.

Table 9: Monitoring Program

No.	What	Who	When/Frequency
1.	PM_{10} concentrations will be continuously monitored at sampling location RT01, as shown in Figure 2, which is representative of the nearest sensitive receptors.	ESM	Continuously 1 month prior to commencement and continuously during Project Delivery
2.	Continuous meteorological data will be recorded from an on-site station.	ESM	Continuously during Project Delivery
3.	Dust deposition gauges will be installed and monitored at four locations (DDG01 to DDG04),as shown in Figure 2.	ESM	Continuously from 2 months prior to commencement and continuously during Project Delivery
4.	PM_{10} and dust deposition monitoring at additional specific locations	ESM	In the event of dust complaints and if necessary
5.	Visual inspection for onsite airborne dust and dust deposition will be undertaken daily to assess the effectiveness of dust-suppression controls to monitor compliance with the CEMP	ESM/Sup	Daily during Project Delivery
6.	Visual inspection of airborne dust and dust deposition shall be undertaken as part of the weekly environmental inspection. This weekly inspection shall include regular off-site checks for dust soiling of surfaces (such as street furniture, cars and windowsills) within 100 m of site boundary).	ESM	Weekly during Project Delivery
7.	Vehicles, plant, equipment and machinery shall be regularly inspected to ensure good working order. Daily pre-start checks shall be conducted to identify and address immediate issues before use. Comprehensive inspections shall be performed on a weekly and monthly basis.	Personnel/Sup/CM	Daily (Staff), Weekly (Sup), Monthly (CM) during Project Delivery
8.	Quarterly (internal) and annual (external) audits of this Plan will be undertaken as part of the EMP auditing process.	ESM	Quarterly/Annual during Project Delivery



id	ID_1	Type	Easting	Northing
1	RT01	Continuous	152.92899	-26.38145
2	DDG02	Deposition	152.93142	-26.37958
3	DDG03	Deposition	152.93857	-26.3816
4	DDG04	Deposition	152.93043	-26.38658
5	DDG01	Deposition	152.92899	-26.38146

Figure 2. Air monitoring locations

10. Corrective Actions

Corrective actions to mitigate or reduce the impacts of dust emissions from the construction activities is detailed in Table 10.

Table 10: Corrective actions

Issue/ Event	Event Response
Community concern or complaint received relating to dust and air quality impacts	• All details and any subsequent correspondence with the relevant community member will be logged in Consultation Manager • The CSM must reach out to the community member and determine the specifics of the complaint • ESM to determine specific activities causing the complaints and evaluate the effectiveness of implemented dust or odour mitigation measures • Examine site monitoring data to assess the levels of dust • Implement immediate corrective actions identified before resuming construction activities that caused the complaint • The CSM will notify the community member and advise of the corrective actions taken within 24 hours of the initial notification of the concern or complaint • The CSM will follow-up with the community member 48 hours after the initial notification to seek feedback on the suitability of the corrective actions • If corrective actions **have not** rectified the issue for the community member, determine whether further actions (such as dust monitoring at the specific location of the complaint) can be adopted and continue to liaise with the community member until the issue has been resolved • If corrective actions are suitable document the actions in an update of this Management Plan
Exceedance of airborne or deposited dust based on the site's monitoring data, or observable dust emissions	• ESM to investigate and identify the source of dust exceedance • If it is related to the Project works, appropriate air quality mitigation measures (such as increased frequency of water spraying) must be implemented immediately or as soon as practicable • If exceedance is significant (i.e. where a measurement surpasses the defined performance measures in Table 1 by more than double the prescribed value), immediately suspend activities causing the dust until corrective actions are in place • ESM to review air monitoring results post-mitigation to confirm dust concentrations are below the relevant criteria • Update site practices and procedures in this Management Plan to incorporate more stringent dust control measures
High wind event	• Continuously monitor weather forecasts and onsite wind speed measurements • Suspend dust-generating activities, such as excavation, when wind speeds are projected to impact downwind sensitive receptors • Increase frequency of water spraying on exposed surfaces and stockpiles • Limit movement of construction vehicles • ESM to conduct frequent site inspections during this period to ensure that all dust control measures are effectively implemented • CSM to inform and update the community about the high wind event (when there is sustained wind of at least 63 kilometers per hour or wind gusts of at least 90 kilometres per hour) and the steps being taken to mitigate dust

Issue/ Event	Event Response
Non-conformance with this Management Plan	• Notify the supervisor responsible for the area of non-conformance • ESM will provide the supervisor instructions to resolve the non-conformance • ESM will check the non-conformance is rectified 24 hours after the instruction was given

11. Reporting

The details of the reporting requirements under this Management Plan are outlined in Table 11.

Table 11: Reporting Plan

No.	Reporting Required	By Whom	By When	To Whom
1.	Observations from weekly inspections shall be reported using the Environmental Inspection Checklist. Significant findings will be communicated during pre-starts, toolbox and team meetings as appropriate.	ESM/Sup/CM	Project Delivery	All personnel
2.	A monthly dust monitoring report shall be submitted to Seqwater. The report shall include information on any non-compliances, audits, trainings conducted, and incidents related to dust and air quality.	ESM	Monthly	Seqwater
3.	All complaints and incidents regarding dust and air quality shall be reported immediately.	All personnel / CSM	Within 1 hour of incident or receiving complaint	ESM / CM/ PM / Seqwater
4.	Results of complaint investigations and corrective actions	CSM / ESM	Within 24 hours of the complaint	Complainant / PM
5.	Quarterly report to the CG as per the requirements of schedule 2, condition 2. Report will include: • An evaluation of compliance with the SEMP • Monitoring data required by the Imposed Conditions included in Schedule 2 of the CGCR (2025) for the period and an interpretation of the results • Details of any environmental incident during the reporting period, including a description of the incident, resulting effects, corrective actions (including site remediation activities), revised activity practices to prevent a recurrence, responsibility and timing The reports must be provided to the entity nominated as having jurisdiction for the relevant condition and also be made available on the	Seqwater	Quarterly	Coordinator-General

No.	Reporting Required	By Whom	By When	To Whom
	Project website within 20 business days of the end of the three-month period to which the report relates and continue to be available on the project website for the duration of the Project			

12. Training and Awareness

The training and awareness programs for dust and air quality management at the Project site must include the following:

- Educating on regulatory requirements regarding dust and air quality
- Explaining potential impacts of dust on health and well-being of sensitive receptors
- Providing details of key dust and air quality management measures during Project delivery and completion
- Training on monitoring and reporting requirements to be conducted throughout the Project delivery
- Outlining procedures for dust and air quality related incidents and complaints
- Encouraging feedback on dust and air quality control measures
- Encouraging continuous communication and raising awareness through regular toolbox talks, team meetings, and site-wide posters

13. Review and Continual Improvement

This Management Plan shall be reviewed within the first 3 months of site mobilisation to ensure the plan is fit for purpose and any identified incidents, issues or hazards are addressed in the Management Plan accordingly. Follow up reviews are to be undertaken annually during construction. This Management Plan shall be reviewed, out of the normal cycle, in the event of a legislative breach, incident, community complaint or when a new hazard or impact has been discovered.