Lucas Heights Bioenergy Facility

Construction Environmental Management Plan (CEMP)

Prepared by LMS Energy Pty Ltd

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1. INTRODUCTION

1.1 Background

LMS Energy Pty Ltd (LMS) has an ongoing commitment to protect the environment, as documented in our ISO14001:2015 certified Environmental Management System (EMS). The purpose of this Construction Environmental Management Plan (CEMP) is to provide an environmental management framework for proposed construction and site commissioning works for an approved bioenergy facility at 19 Little Forest Road, Lucas Heights NSW 2234 (hereafter 'the site') (Figure 1). The site is formally described as Lot 102 DP 1009354.

A project CEMP is required when one of the following prerequisites are met:

- Construction development is planned for a new facility.
- When soil (contaminated or otherwise) is expected to be transported off a construction site / land parcel (e.g. this applies to work within existing facilities (brownfield) locations).

An erosion and sediment control plan (ESCP) may also be required where:

- A CEMP is required.
- A project-specific environmental risk assessment (ERA) deems one to be necessary (e.g. when proposed construction works at an existing facility pose unacceptable sedimentation risk to waters etc.).

This CEMP has been prepared to meet relevant Development Consent conditions under SSD 79933225 (APPENDIX A -) and should be read in conjunction with the following documents:

- Environment Protection Licence (EPL) 6345 (APPENDIX B -).
- Bushfire Emergency Management and Evacuation Plan (BEMEP) (20057-RG-004) (APPENDIX C -).
- Construction Noise and Vibration Management Plan (CNVMP) (Reference: 20057-RG-070/ GHD 12649882) (APPENDIX D -).
- Traffic and Pedestrian Management Plan (TPMP) (Reference: 20057-RG-062) (APPENDIX E -). (It is noted that this plan considers both construction and operational environments on site).
- Erosion and Sediment Control Plan (ESCP) (Reference: M025-2695) (APPENDIX F -).
- Community Consultation and Complaints Handling (Section 8).

1.2 Objectives

The scope and application of this CEMP are summarised in Table 1 below and are detailed in Section 2.

Question	Answer
Who?	This CEMP applies to all personnel (staff, contractors and visitors) under the control of LMS (i.e., the Principal Contractor) during construction and site commissioning works at the site.
What?	This CEMP applies to the construction and site commissioning works at the site as described in Section 2. Works related to the establishment of the adjacent Flaring Facility are covered under a separate CEMP (Reference: 20057-RV-005).
When?	This CEMP applies upon LMS' commencement of early works and civil works (stage 1) through to structural, mechanical, piping, electrical and instrumentation phase (stage 2), and construction of the storage shed (stage 3). Works related to decommissioning of the existing power station (stage 4) will be managed under a separate CEMP.
Why?	The purpose of this CEMP is to identify the environmental protection measures, systems and tools to be implemented by LMS and its contractors during construction works at the site in accordance with the Development Consent conditions (APPENDIX A -).
Where?	This CEMP applies to the construction and site commissioning works at the site under the control of LMS within the construction activity zone (CAZ) in (APPENDIX G -).

Table 1 – Scope and implementation of this CEMP

The objectives of this CEMP ensure compliance with applicable environmental legislation and approvals, minimise the potential for pollution, reduce waste, and implement effective controls to mitigate environmental impact. Project specific objectives and controls are principally sourced from:

- Regulatory requirements (Section 4).
- Lucas Heights Bioenergy Facility, SSD 79933225 Environmental Impact Statement (Volumes 1 and 2), GHD. 22 October 2025
- Lucas Heights Resource Recovery Park Project – Contamination Assessment. SITA Australia, August 2015.
- Lucas Heights Bioenergy Facility: Project Construction Management Plan (CMP) 20057-RG-013.
- LMS Energy Pty Ltd: Environment Policy Summary Rev C, October 2024 (APPENDIX H -).
- Environmental Management Guidelines for Construction, Edition 4. NSW Government, June 2020.
- Managing Urban Stormwater: -Soils and Construction - Volume-1 (Fourth Edition), Landcom, March 2004.

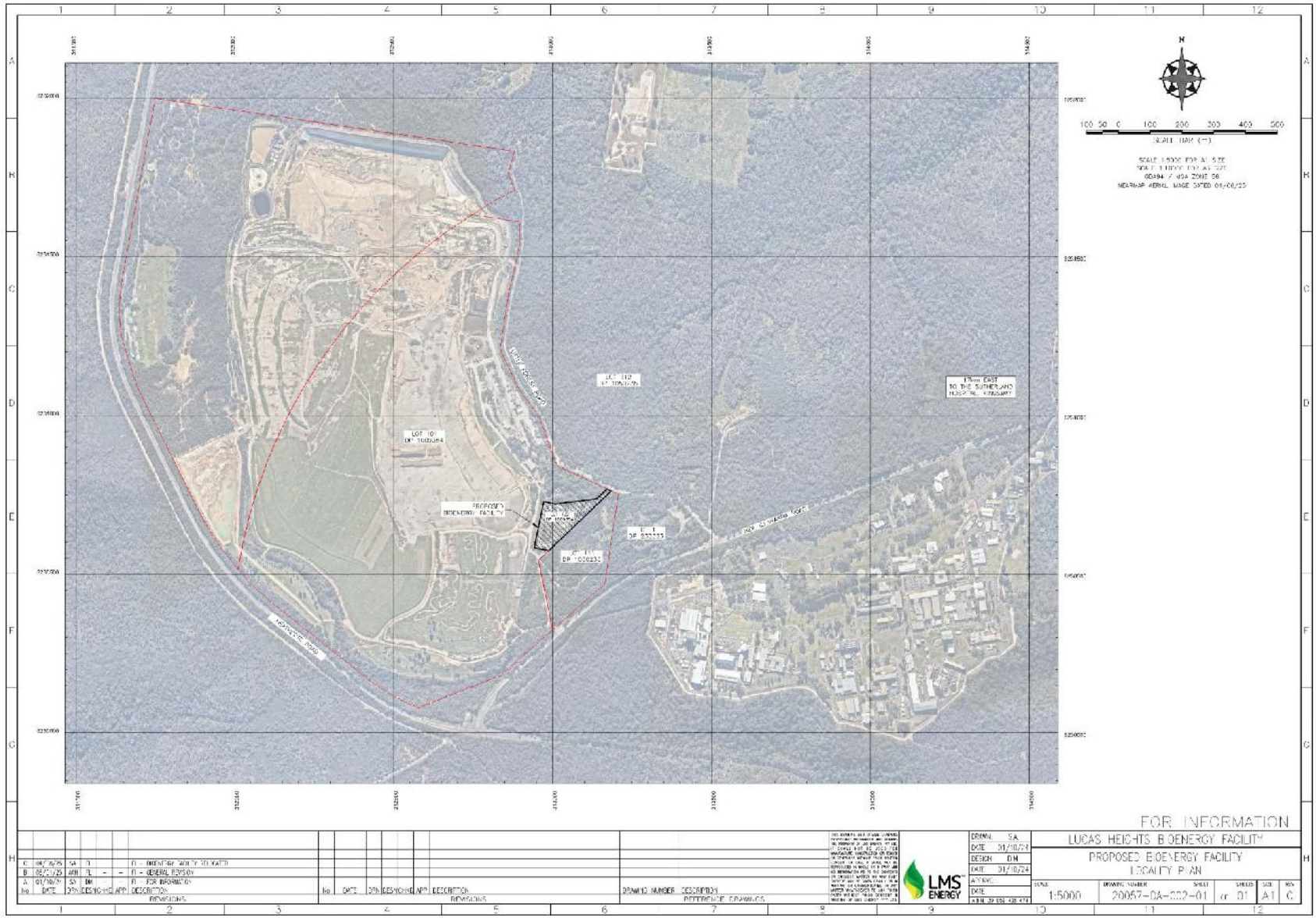

Figure 1 – Site Locality

1.3 Project Approvals and Permits

LMS has a coordinated joint venture with Cleanaway Pty Ltd (CWY) to develop the Lucas Heights Bioenergy Facility at the site to capture and transfer biogas to a power station for electricity generation.

The Department of Planning, Housing and Infrastructure (DPHI) approved the development under the Development Consent (Reference: SSD-79933225), issued 1 April 2026.

This CEMP was prepared to address all relevant conditions under the Development Consent, which are cross-referenced in (APPENDIX A -).

The existing power station at the site operates under Environment Protection Licence (EPL) 6345 (APPENDIX B -). Construction works are regulated through this EPL. Prior to commissioning, LMS will engage with NSW EPA regarding variation of the existing EPL to incorporate the new facility.

2. CONSTRUCTION WORKS DESCRIPTION

Table 2 below provides a summary of the proposed construction works at the site. Figure 2 shows the approved site layout for construction and (APPENDIX G - **)** shows the proposed construction activity zone (CAZ), which includes designated material laydown and storage areas.

Item	Description			
Staging and Construction Works	**Stage**	**Phase**	**Description/Scope**	**Indicative Date**
	1	Early Works and Civils	• Mobilisation of civil plant and equipment. • Minor earthworks for site levelling and compaction. • Installation of piers and footings. • Trenching and installation of buried conduit and services.	22 April 2026 - subject to detailed engineering and contractor program.
	2	SMPEI (Structural, Mechanical, Piping, Electrical and Instrumentation) Works, including Testing, Commissioning and Operation	• Placing major equipment (generators, control room, transformers and skids) on to foundations and footings. • Installation of piping and services (gas, electrical, water, oil, compressed air). • Testing, commissioning, and operational readiness activities to confirm systems performance. • Confirm compliance with approval requirements. • Check safe operation prior to full operation. • Any other infrastructure associated with the approved development (except Storage Shed).	1 June 2026 - subject to detailed engineering and contractor program.
	3	Storage Shed	Civil works and construction for the Storage Shed.	1 March 2027 - subject to commissioning program.
	4	Decommissioning of existing power station	• Progressive or discrete decommissioning activities associated with the existing power station, including shutdown, dismantling, removal of redundant infrastructure.	To be confirmed - subject to operational and decommissioning strategy.
Construction Activity Zone (CAZ)	The CAZ denotes the boundary within which construction activities can occur (APPENDIX G -). Where protected vegetation, heritage sites or culturally significant areas are located within 10m of the CAZ boundary, these will be flagged or be clearly identifiable and recorded as 'No-Go Zones'. Plant and equipment will not be stored near these designated areas. All construction traffic will access the CAZ via the main site entrance from Little Forest Road. As outlined in Section 3.2, the CAZ excludes the following environmental aspects proximate to the site: • Watercourses. • Vegetation. • Protected areas. • Heritage areas.			
Operating hours	The construction works described above will be undertaken in accordance with the hours of work outlined under Condition B8 of the Development Consent: • 7am to 5pm, Monday – Friday. • 8am to 5pm, Saturday and Sunday.			

Item	Description
	If required, works outside of the hours above will be undertaken in the following circumstances in accordance with Condition B9 of the Development Consent: • Works that are inaudible at the nearest sensitive receivers. • Works agreed to in writing by the Planning Secretary. • For the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons. • Where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.
Construction Equipment	The primary plant and equipment that will be used during the construction works is as follows: • Excavators • Concrete trucks • Concrete pumps and agitators • Trucks • Vacuum trucks • Generators • Dozers • Front end loaders • Graders • Mobile cranes (various sizes) • Welding machines • Contractor service vehicles • Rollers • Semi-trailers
Waste Streams	The following waste streams are likely to be generated during the construction works. The management measures are detailed in Section 6.12: • Spoil from minor earthworks activities and trenching. • Chemicals (paints, solvents, oils etc.). • Empty chemical containers. • Hydrocarbons (including oily water). • Wash water and waste concrete generated from concreting works. • Recyclable wastes (e.g. cardboard). • General waste (non-recyclable). • Wastewater (blackwater and greywater from portable amenities).

Table 2 – Summary of Construction Works

Figure 2 – Bioenergy Facility Site Layout

3. RISK ASSESSMENT

3.1 Environmental Aspects, Impacts and Risks

Environmental aspects as referred to in this document are activities associated with the construction works that have the potential to cause, or result in, adverse environmental impacts. Due to the nature of the development, different aspects of the construction works would present different degrees of environmental risk which need to be managed accordingly.

Effective environmental management should be proactive rather than reactive. To facilitate proactive environmental management, a risk management style of assessment has been utilised to identify and assess environmental aspects associated with the construction works, and to implement appropriate mitigation strategies to minimise the likelihood of environmental impacts associated with each aspect. This process involves:

1. Identifying the risk/aspect.
2. Analysing the risk/aspect (determining likelihood and consequence).
3. Evaluating the risk/aspect (what controls can minimise the risk).
4. Treating the risk (implementing controls).

General construction aspects are assessed using the risk matrix displayed in (APPENDIX I -).

The risk assessment is based on (1) the likelihood of an impact occurring as a result of the aspect; and (2) the consequences of the impact if the event occurred. Following this assessment, each impact is assigned a risk category which ranges from 'negligible' (rare likelihood of occurrence and negligible consequence) to 'extreme' (almost certain likelihood of occurrence and extreme consequence).

A risk category identified as having an extreme or high risk (significant impact) may be downgraded if appropriate environmental controls and measures are implemented and maintained. Proactive planning, installation and maintenance of appropriate environmental controls and ongoing monitoring will reduce the risks associated with each environmental impact identified for the construction works.

Section 3.3 provides a summary of the potential impacts to environmental aspects and a summary of the environmental control measures. Refer to Section 6 for detailed environmental control measures.

3.2 Existing Site Condition and Surrounding Environmental Aspects

The relevant environmental values proximate to the construction works are described in Table 3.

Environmental Aspect	Description
Surface water	The CAZ does not contain any permanent or semi-permanent watercourses. The CAZ is located within the Bardens Creek catchment, which is part of the larger Georges River catchment (GHD, 2025). Bardens Creek is an ephemeral second order stream located about 1 km to the northeast, with a small first order tributary about 250 m from the site. Bardens Creek confluences with Mill Creek 3.5 km downstream (GHD, 2025). A review of the Sutherland Shire LEP flood mapping shows that the CAZ and wider LHRRP are not located within a flood prone area as it is located at the highest elevation of the catchment (GHD, 2025).
Groundwater	A total of 19 groundwater bores were identified within 1 km of the CAZ which all serve monitoring purposes for the Lucas Heights Resource Recovery Park (LHRRP). Groundwater investigations by GHD (2019) suggest seasonal perched water tables can occur between 5-8m BGL (GHD, 2025). As construction would not cause any groundwater drawdown, no impacts to these receptors are anticipated, and the project complies with the Level 1 Minimal Impact Considerations of the NSW Aquifer Interference Policy, indicating no anticipated change to groundwater levels (GHD, 2025).
Land	Soils Soils within the project site correspond to Podzolic soils (mapped by the Australian Soil Classification soil type map of NSW). Podzolic soils are typically acidic, low in fertility, and often found in areas with high rainfall. These soils have a low water holding capacity (GHD, 2025). Contaminated land GHD, 2025a prepared a Preliminary Site Investigation (PSI) to assess the likelihood for contamination to exist on the site from past or present activities. The following areas of environmental concern (AECs) (Figure 3) were identified to occur within the CAZ and therefore have the potential to cause harm to construction workers or material harm to the environment: • AEC 01 – Contamination associated with potential imported fill material of unknown origin, quality and extent. • AEC 02 – There could be potential for biogas inhalation and release to the environment due to fugitive leaks from the underground pipework within the footprint of the existing power station, which is adjacent to the CAZ. • AEC 03 – Hydrocarbon impacted soils have been identified on the site and there is the potential for exposure to contamination via direct contact/ingestion of contaminated soil during construction works.
Flora and fauna	Approximately 0.0485 hectares of PCT 3615 *Sydney Hinterland Apple-Blackbutt Gully Forest* is mapped within the site, however, is excluded from the CAZ. The CAZ has been designed to avoid the small patches of native vegetation at the site (GHD, 2025). Based on field surveys, no suitable habitat occurs within the CAZ for threatened and/or migratory fauna species (GHD, 2025).
Bushfire hazard	The CAZ includes Bushfire prone land (vegetation buffer) (Figure 4) (GHD, 2025).
Aboriginal heritage	A search of the Aboriginal Heritage Information Management System (AHIMS) (19 August 2025) did not identify any previously recorded AHIMS sites within the CAZ (GHD, 2025).
Amenity (noise, vibration and air)	Sensitive receivers to potential noise, vibration and fugitive dust emissions during construction works are residential dwellings and non-residential land uses (including education, recreational, commercial and industrial land uses (Figure 5). A total of 10 sensitive receivers were initially identified by GHD, 2025. The nearest sensitive receiver applicable to this CEMP is R09 (Sutherland PCYC MiniBike Club), which is located approximately 150 metres to the southwest within the LHRRP. Note that R08 (future recreational use) was not assessed in the CNVMP as it does not exist yet.

Table 3 – Environmental Aspects

Figure 3 – Areas of Environmental Concern (AEC) within CAZ

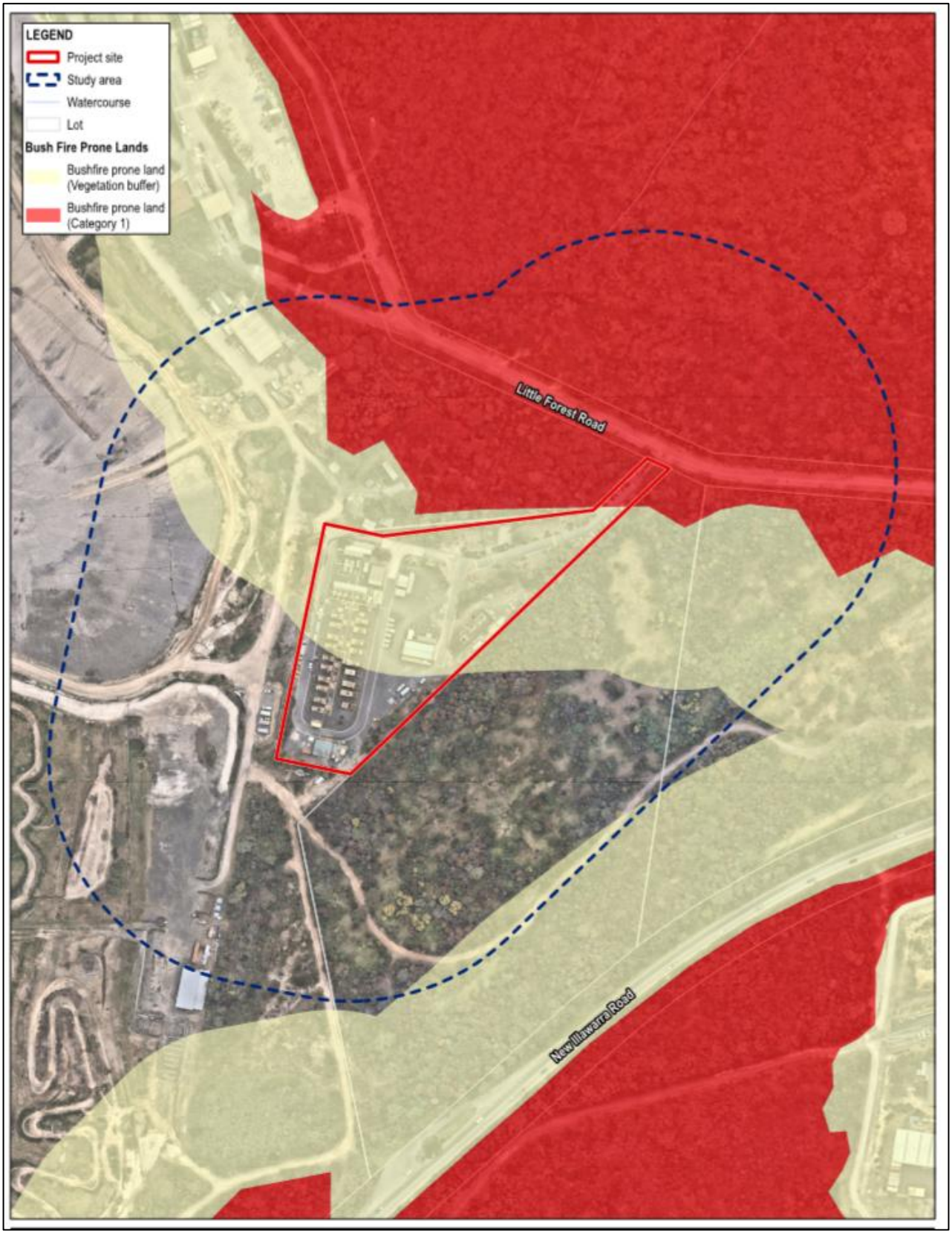

Figure 4 – Bushfire Prone Land (GHD, 2025)

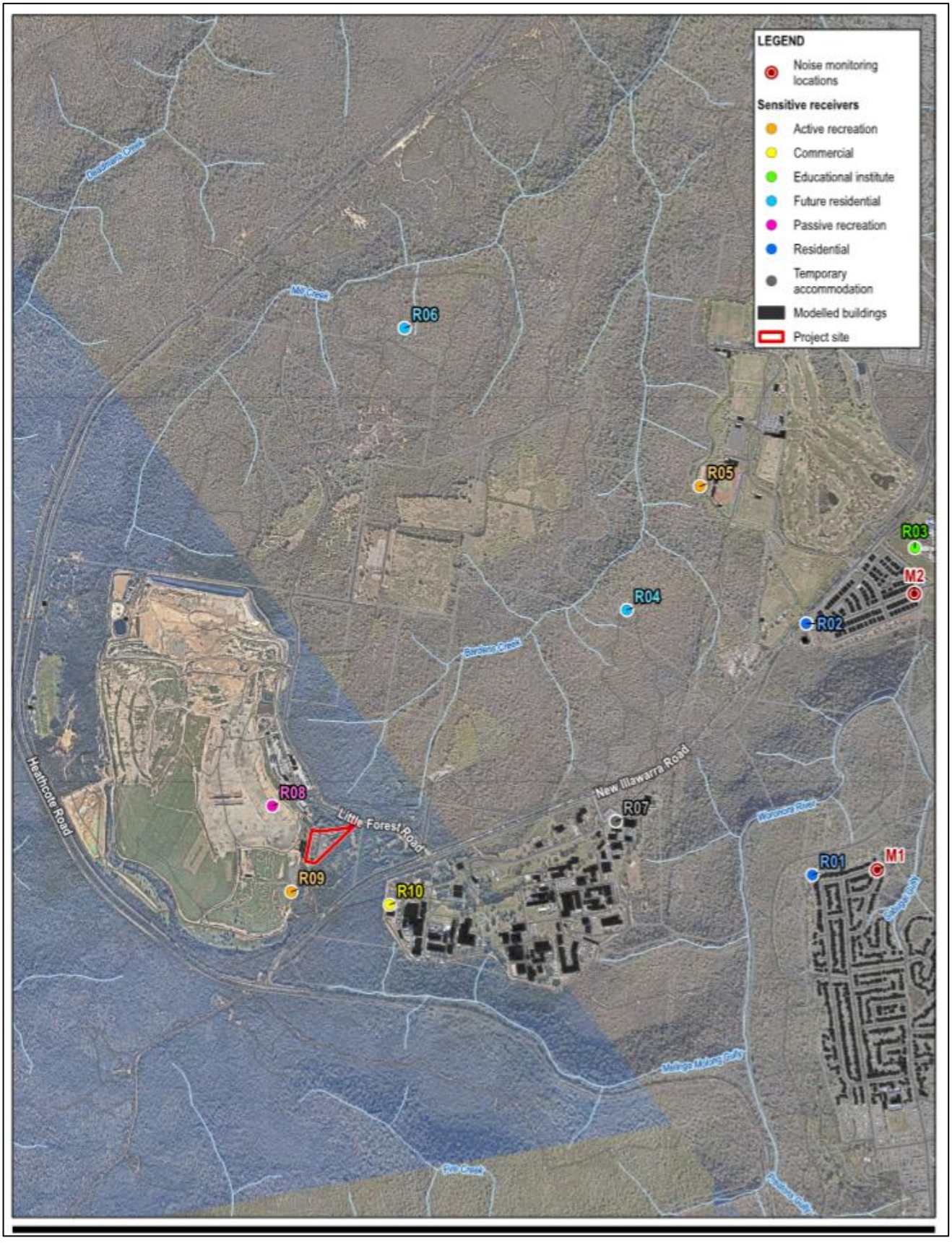

Figure 5 – Sensitive Receivers and Surrounding Land Uses (GHD, 2025)

3.3 Potential Impacts and Summary of Control Measures

A summary of the potential impacts to environmental aspects and a summary of the environmental control measures are shown in Table 4. Refer to Section 6 for detailed environmental control measures.

Environmental Value	Potential Impact	Risk of Impact	Environmental Control Measures
Waters (surface water and stormwater)	• Spills or leaks during construction activities or equipment failure causes a release of contaminants to stormwater or surface water. • Stormwater runoff from the site entrains prescribed water contaminants and impacts offsite environmental aspects. • Poor management of wastes causes a release to waters.	The risk of impact is rated as low based on the following control measures: • Hazardous materials stored within secondary containment. • Erosion and Sediment Control Plan (ESCP). • Routine site inspections.	• Environmental Management System (Section 6.1). • Surface Water and Soil Erosion Management Plan (Section 6.5). • Dangerous Goods and Hazardous Substances Management Plan (Section 6.11). • Waste Management Plan (Section 6.12). • Environmental Incident Management Plan (Section 6.13). • Hazard and Risk Management Plan (Section 6.14).
Land (includes groundwater)	• Spills or leaks during construction activities or equipment failure causes a release of contaminants to land and groundwater. • Poor management of wastes causes a release to land.	The risk of impact is rated as low based on the following control measures: • Hazardous materials stored within secondary containment. • Routine plant and equipment maintenance. • Waste segregation. • Routine site inspections. • Minor earthworks for site levelling and compaction are unlikely to impact seasonal perched water tables (5-8m BGL).	• Environmental Management System (Section 6.1). • Soil and Groundwater Quality Management Plan (Section 6.4). • Dangerous Goods and Hazardous Substances Management Plan (Section 6.11). • Waste Management Plan (Section 6.12). • Environmental Incident Management Plan (Section 6.13). • Hazard and Risk Management Plan (Section 6.14).
Flora, fauna and biosecurity	• Adverse impacts to nearby flora and fauna. • Introduce or spread weeds, pests (rodents) and vectors (mosquitoes).	The risk of impact is rated as low based on the following control measures: • Site fencing. • Traffic control measures. • Flora, fauna and biosecurity awareness training.	• Environmental Management System (Section 6.1). • Vegetation Management Plan (Section 6.6). • Fauna, Heritage and Biosecurity Management Plan (Section 6.7).
Bushfire hazard	• Bushfire starting as a result of landfill gas combustion. • Site to be at risk of damage from bushfires spreading to facility. • Hot works.	The risk of impact is rated as low but with the following aspects to be considered. • Project site is partially located on bushfire prone land. • Bioenergy facilities are considered to have a low vulnerability to bushfire.	• Bushfire Management Plan (Section 6.9). • Bushfire Emergency Management and Evacuation Plan (BEMEP) (APPENDIX C -).

Environmental Value	Potential Impact	Risk of Impact	Environmental Control Measures
Aboriginal heritage	• Disturbance to culturally significant areas or heritage items.	The overall risk is rated as low based on the following reasons: • The site is located within the footprint of the existing facility which was heavily disturbed by previous construction activity. • The EIS (GHD, 2025) did not identify any Aboriginal heritage within the CAZ.	• Unexpected Finds Management Plan (Section 6.10).
Amenity (noise, vibration and air)	• Noise emissions from construction works causes nuisance at sensitive receivers. • Air emissions from plant and equipment and fugitive dust emissions causes nuisance at sensitive receivers.	The risk of impact is rated as low based on the following control measures: • Works will be undertaken within the conditioned construction hours. • All vibration emissions are likely to comply with the relevant Australian Standards and below the levels for human perception and that which may cause structural damage. Watering of disturbed areas will be undertaken as required to reduce fugitive dust emissions.	• Environmental Management System (Section 6.1). • Air Quality Management Plan (Section 6.2). • Noise and Vibration Management Plan (Section 6.3). • Traffic and Site Security Management Plan (Section 6.7). • Environmental Incident Management Plan (Section 6.13). • Hazard and Risk Management Plan (Section 6.14). • External Complaints Management Plan (Section 8).

Table 4 – Potential impacts and summary of environmental control measures

4. ENVIRONMENTAL MANAGEMENT FRAMEWORK

The following sections outline the primary statutory requirements (including relevant subordinate legislation), but not limited to:

- *Environmental Planning and Assessment (EP&A) Act 1979.*
- *Protection of the Environment Operations (POEO) Act 1997.*
- *National Parks and Wildlife (NPW) Act 1974.*
- *Biosecurity Act 2015.*
- *Water Management Act 2000.*
- *Rural Fires Act 1997.*

4.1 LMS' Environmental Management System (EMS)

LMS has developed an EMS based upon, and certified to the ISO14001:2015 standard. This CEMP, and associated procedures and auditing tools, are integral to the EMS, which is based upon the Plan, Do, Check, Act approach to continual environmental improvement.

4.2 Environmental Management

The EP&A Act 1979 enables planning instruments that protect and manage the environment and regulate development, forming the basis for identifying and controlling construction impacts. Within this framework, 'monitoring' refers to collecting data on compliance or environmental impacts, and an 'environmental audit' is a documented evaluation of compliance and environmental performance.

All persons have a 'general environmental duty' to protect, restore, and enhance the environment while promoting pollution prevention, sustainable development, and public participation as detailed further under section 3 of the POEO Act 1997.

LMS is dedicated to conducting business with the utmost consideration for the environment. Beyond this policy, LMS and its employees also have a defined legal obligation to protect the environment. This means a person must not undertake any activity that pollutes, or might pollute, the environment unless the person takes all reasonable and practicable measures to prevent or minimise any resultant environmental harm. This legal obligation applies to **all** LMS staff, contractors and visitors to the Facility.

One method to ensure LMS is meeting its legal obligations is by ensuring the construction works maintains compliance with the procedures outlined in this CEMP. Where it is reasonably within their power, it is the duty of LMS staff and contractors to ensure the construction works complies with these obligations. Where it is not within their direct power, then it is the duty of that staff member to **immediately** report the matter to their supervisor (who may also need to escalate it further), to ensure appropriate and timely actions can be implemented. LMS' incident reporting system is an effective way of communicating these issues and should also be used. Depending on the circumstances, it may be appropriate to report such issues as: environmental hazards, near-misses or incidents.

All environmental incidents that threaten or result in actual harm to the environment must be reported **immediately** (duty of all LMS staff, contractors and visitors). This is important as there can be obligations to report these incidents to regulatory bodies within limited timeframes. Further information on duties to report environmental incidents to regulators are also detailed within the site-specific Emergency Response Plan (ERP), however, it is essential to contact the LMS Environment Team in the first instance.

4.2.1 Duty to Notify of Environmental Harm

All persons have a duty to notify the Department of Climate Change, Energy, the Environment and Water (DCCEEW) of incidents or emergencies that cause or threaten material harm to the environment, which is detailed further in Section 9.1.

4.3 Biosecurity

Under the *Biosecurity Act 2015*, any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised ('General Biosecurity Obligation' (GBO)).

All presence or suspicion of any prohibited matter listed under Schedule 2 of the *Biosecurity Act 2015* identified within the CAZ must be reported **immediately** to NSW Department of Primary Industries by calling 1800 675 888 (24-hour hotline) or Local Land Services on 1300 795 299 (duty to notify).

4.4 Water Management

All persons undertaking activities that may affect a water source has a duty to ensure that water resources are protected, conserved and managed in an ecologically sustainable way under the *Water Management Act 2000*.

4.5 Bushfire Management

All persons undertaking activities within the CAZ has a responsibility to ensure that construction works are planned and carried out in a manner that prevents, mitigates, and minimises bushfire risk under the *Rural Fires Act 1997*.

A site specific Bushfire Emergency Management and Evacuation Plan is provided in (APPENDIX C -).

4.6 Due Diligence Obligations for Aboriginal Heritage

All persons must take all reasonable and practicable steps, in accordance with the Due Diligence Code of Practice, to ensure that any activity does not harm Aboriginal objects or Aboriginal places, and must obtain an Aboriginal Heritage Impact Permit (AHIP) where harm cannot be avoided. The Due Diligence Code of Practice is administered under the NPW Act.

4.7 Compliance Standards and Best Practice Guidance

Construction activities associated with the development will refer to the following standards, including but not limited to the following:

- AS 4482.1-2005 Guide to the investigation and sampling of sites with potentially contaminated soil.
- AS 2436-2010 Guide to noise and vibration control on construction, demolition and maintenance sites.
- AS 5667.1-1998 Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.
- AS 1940-2017 The storage and handling of flammable and combustible liquids.
- AS 2550.10-2025 Cranes, hoists and winches - Safe use - Mobile elevating work platforms.
- AS 2885.1-2018 Pipelines - Gas and liquid petroleum, Part 1: Design and construction.
- AS 3745-2010 Planning for emergencies in facilities.
- Interim Construction Noise Guideline (2009). Department of Environment and Climate Change NSW.
- The Local Government Air Quality Toolkit (2024). Department of Climate Change, Energy, the Environment and Water.
- Landcom: Managing Urban Stormwater: Soils and Construction - March 2004.

5. ROLES AND RESPONSIBILITIES

5.1 Key Personnel

The responsibility and authority pertaining to environmental performance of the project is outlined below in Table 5.

Role	Responsibilities	Report to
Environmental Supervisor	• Develop the Erosion Control and Sediment Plan (ESCP) for the project internally, with external assistance at the discretion of the Project Manager. • Develop and support the implementation of this CEMP. • Conduct (or assist the Project Manager in) environmental briefings and toolbox talks to construction staff. • Conduct environmental site inspections. • Coordinates the development of a Stormwater Plan for supply to the Project Manager (or delegate). • Completes Lucas Heights Project Construction EMS Internal Audit Checklist (FM664) audits. • Identify and report non-conformances. • Monitor the implementation and effectiveness of the CEMP. • Complete environmental reporting requirements. • Provide advice and direction on environmental matters, incident response and corrective actions, and • Review statutory compliance and check all approvals are complied with.	Administering Authority
Project Manager	• Ensure compliance with all applicable legal, approval and project environmental obligations including but not limited to this CEMP. • Ensure all project staff have a clear understanding of the environmental requirements relevant to their area/scope of work. • Ensure all project staff are competent to undertake their duties including fulfilment of their 'general environmental duty' (GED), with regard to appropriate education, training and experience. • Conduct FM664 Lucas Heights Projects Construction EMS Internal Audit Checklist (or delegate). • Ensures the implementation of the Stormwater Plan. • Ensure the necessary resources and processes are in place for implementation of required environmental controls, including coordination of ESCP development (where required). • Ensure all Site Supervisors/Leading Hands are familiar with environmental obligations, project approvals, CEMP and site level plans, relevant environmental management plans and associated documents, and their responsibilities within them. • Participate and provide guidance in the regular review of the CEMP and any associated documents. • Take action in the event of an emergency and allocating the required resources to minimise environmental impact. • Ensure non-conformances are identified, recorded and reported and that required corrective and remedial actions are implemented; and • **Immediately** report any activity that has resulted in an environmental incident to the Environmental Supervisor.	Environmental Supervisor
Site Supervisor	• Ensure all personnel and subcontractors are made aware of the requirements for compliance with this CEMP, environmental obligations and site-specific environmental issues. • Implement all environmental requirements as outlined in this CEMP as required to avoid and minimise actual or potential environmental harm. • Support the Environmental Supervisor in planning and implementing environmental requirements (if required). • Stop works and **immediately** report to the Project Manager when there is an actual or potential risk of environmental harm. • Ensure non-conformances are identified, recorded and reported. • Maintain records regarding details of any infill sources (e.g., during trench backfilling works). • Ensure implementation of preventative and corrective actions.	Construction Manager

Role	Responsibilities	Report to
	• Co-ordinate the implementation and maintenance of environmental control measures. • Provide necessary resources required for implementation of the CEMP. • Co-ordinate action in emergency situations and allocating required resources accordingly. • Ensure that instructions are issued, and adequate information provided to field-based employees which relate to environmental risks on site including via regular toolbox meetings that address environmental issues and controls including the requirements of this CEMP. • Ensures CEMP inspections occur when establishing new sites, and monthly thereafter, and at project completion.	
Other personnel (includes staff, visitors and subcontractors)	• All personnel (including sub-contractors) have a 'general environmental duty' (GED) under the *Protection of the Environment Operations Act 1997* and are responsible for their own environmental performance whilst undertaking construction works. • Support the construction team in planning and implementing environmental requirements. • Regard environmental protection as a central theme in their actions. • Report any defects in plant or equipment. • Keep the construction works area in a tidy state. • Undertake works in accordance with this CEMP. • Assist with environmental incident investigations as required. • Stop works and **immediately** report to the Site Supervisor or Project Manager when there is an actual or potential risk of environmental harm. • Ensure that they attend any environmental training and inductions relevant to their role and responsibilities.	Site Supervisor

Table 5 – Roles and Responsibilities

5.2 Sub-contractors

It is recognised that sub-contractors present the greatest environmental risks to a project due to:

- Their detachment from the main construction delivery teams, and therefore the potential for poor communication regarding environmental risks.
- Sub-contractors having different certification standards for quality assurance and environment.
- The potential for a large number of subcontractors on site.
- Sub-contractors operating under a different management system from the rest of the construction team.

It is LMS' responsibility to ensure that all project personnel, including sub-contractors and their employees, are informed of their GED and the need to comply with the relevant environmental requirements. Sub-contractors must also be inducted appropriately. As a minimum, sub-contractors and their employees will be required to comply with the CEMP and Environmental Policy (PL9) (APPENDIX H -). Other LMS policies include compliance with smoking standards and drug & alcohol standards.

All sub-contractor personnel are considered equivalent to the construction team personnel in all aspects of environmental management and control, and their responsibilities in this respect mirrors those of the construction team personnel.

Sub-contractors working on the Project will be required to comply with the same responsibilities as all other personnel as per Table 5 above.

The Project Manager will ensure that the work of sub-contractors is monitored through the site inspection process. Observations will be made by relevant personnel to assess the effectiveness of the environmental protection measures being used on site by the sub-contractor and to determine compliance with the requirements of the CEMP.

5.1 Project Contacts

The primary contacts for the construction works are outlined in Table 6.

Title	Name	Contact Number
Group Leader - Projects	Ed Styles	0461 538 988
Supervisor - Projects	Sam Davies	0428 118 587
Group Leader - Operations	Lyle Mander	0408 245 056
Group Leader - Health & Safety	Yolanda Sarich	0461 538 988
Safety Advisor	Richard Sargeson	0408 897 368
Group Leader - Engineering	Daf Hayward	0430 948 226
Construction Managers	Ryan Muirhead Henry McLeay	0407 109 324 0437 166 796
Manager – Bioenergy (Lucas Heights)	Daniel Lansdowne	0400 554 366
Supervisor - Environment	Greg Nield	0484 122 676
Shire Snake Wranglers (based at ANSTO) (Snake / fauna relocation)	Tyler Gibbons (Primary)	0428 458 856
Sydney Snake and Wildlife Removal (Snake / fauna relocation)	Austin Pols (alternative (30-minute wait time))	0428 024 561
Cleanaway Lucas Heights Resource Recovery Park - Landfill Manager	LC Chiang	0408 998 292
Cleanaway, Lucas Heights Resource Recovery Park – Assistant Landfill Manager	Cameron Stewart	0452 557 108

Table 6 – Project Key Contacts

6. ENVIRONMENTAL MANAGEMENT PLANS

6.1 Environmental Management System

Policy		
To ensure that construction environmental performance conforms with ISO14001 standard and *Environmental Policy – PL9 (APPENDIX H -).*		
Performance Objectives		
• All LMS staff and contractors have completed their environmental induction and required EMS training modules. • All contractors and visitors have completed a site induction. • LMS staff, contractors and visitors understand the environmental standards required of them under the Development Consent and other obligations. • Key EMS documents are accessible, with records maintained to demonstrate environmental performance. • A site-specific environmental risk assessment (ERA) based on the LMS risk matrix (APPENDIX I -), has been undertaken and the risks are incorporated into the site's procedures. • Site staff are aware of key performance indicators (KPI) pertaining to LMS' environmental performance, and the importance of their actions to achieving these. • Conformance with ISO14001 standards, environmental legislative requirements, planning approvals and environmental authorisations.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
All LMS staff and contractors have completed their environmental induction and required EMS training modules.	Construction Manager	Prior to accessing the site
All contractors and visitors have completed a site induction which includes CEMP obligations.	Construction Manager	Prior to accessing the site
LMS staff, contractors and visitors understand the environmental standards required of them.	All Persons	At all times
Project specific documentation captures jurisdiction specific obligations and relevant planning / approvals. Documents to be managed via Procore or SharePoint.	Projects and Compliance Teams	At all times
A site-specific environmental risk assessment (ERA) based on the LMS risk matrix (APPENDIX I -), has been undertaken and the risks are incorporated into the site's procedures.	Environmental Supervisor / Construction Manager	Prior to commencing construction works
Site staff are aware of KPIs pertaining to LMS' environmental performance, and the importance of their actions to achieving these.	All Persons	At all times
Conformance with the ISO14001 standard.	All Persons	At all times
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist to identify and rectify non-conformances.	Construction Manager	At project commencement, then fortnightly until completion of activities.

Report all environmental complaints, hazards, near-misses and incidents via LMS' online reporting software (Skytrust) or FM3 Workplace Incident Reporting Form when access is limited.	All Persons	Within 24 hours of becoming aware of an incident or hazard
FM131 Projects Training Record is used to ensure all staff are adequately trained.	Construction Manager	At all times
Inspection of general compliance with EMS during internal audit – FM664 – Lucas Height Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Identification of Non-conformances		
Inability to access key EMS documentation on site.	Construction Manager	-
Untreated environmental risk(s) associated with the site's activities.	Construction Manager	-
Poor housekeeping with evidence of unreported spills of chemicals, hydrocarbons etc.	All Persons	-
Inspections either not occurring, or site environmental performance issues not being satisfactorily documented and addressed in a timely manner.	Construction Manager / Environmental Supervisor	-
Bunding/secondary containment systems not being maintained or utilised.	All Persons	-
Internal/external audit findings not being addressed in a timely manner.	Construction Manager / Environmental Supervisor	-
Online incident reporting system not being used for pro-active reporting, complaints and incident management.	All Persons	-
Corrective Actions		
Identification of potential compliance issues will be immediately addressed in consultation with the LMS Environment team (Figure 6), with prompt notification to the landfill representative (as required).	All Persons	Within 24 hours of becoming aware of an incident or hazard
In the event of a confirmed non-conformance, actions arising will be entered into LMS' online reporting system to track corrective response implementation.	All Persons	Within 24 hours of becoming aware of an incident or hazard
Reporting		
FM664 Lucas Heights CEMP Inspection Checklist to identify and rectify non-conformances.	Construction Manager	At project commencement, then fortnightly until completion of activities.
Environmental hazards, near-miss incidents and incidents reported via LMS' online.	All Persons	Within 24 hours of becoming aware of an incident or hazard
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint
Internal reporting via the online incident management system or FM3 Workplace Incident Reporting Form.	All Persons	Within 24 hours of becoming aware of an incident or hazard

Make the following information and documents (as they are obtained or approved) publicly available on the LMS Energy website as per condition C19 of the Development Consent: • The documents referred to in condition A2 of the Development Consent; • All current statutory approvals for the development; • All approved strategies, plans and programs required under the conditions of this consent with the exception of any hazard and risk related documents; • Regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent; • A comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; • A summary of the current stage and progress of the development; • Contact details to enquire about the development or to make a complaint; • A complaints register, updated quarterly; • The Compliance Report of the development; • Audit reports prepared as part of any Independent Audit of the development and the Applicant's response to the recommendations in any audit report;	Compliance Team	At least 48 hours prior to commencing construction

6.2 Air Quality Management Plan

Policy		
To minimise air emissions on the surrounding environment and all sensitive receivers.		
Performance Objectives		
• To ensure there are no significant air quality impacts on nearby sensitive receivers. • To receive no complaints regarding fugitive dust emissions. • To comply with the relevant regulatory requirements for air emissions. • To ensure there are no leaks from the underground pipework within the footprint of the existing power station, which is adjacent to the CAZ.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Landfill gas is managed from the existing power station in accordance with relevant OEMP while construction of the new facility is ongoing to mitigate potential impacts associated with AEC 02 (Table 3).	LMS Manager – Bioenergy (Lucas Heights)	At all times
Construction workers will wear G7 multi-gas detectors to mitigate potential impacts associated with AEC 02 (Table 3).	Construction Manager	At all times
Chemicals and fuel will be stored in an appropriate manner to minimise the release of odours and volatile organic compounds and reduce employee exposure.	Construction Manager	At all times
Heavily trafficked areas will be surfaced and maintained with loose aggregate to minimise fugitive dust emissions.	Construction Manager	At all times
All heavy vehicles entering and exiting the site will cover their loads to minimise fugitive dust emissions.	Truck drivers	At all times
Site speed limits will be adhered to and signed.	All persons	At all times
Fugitive dust emissions from traffic movements, exposed surfaces and stockpiles will be proactively managed to minimise emissions by using water carts to supress fugitive dust emissions.	Construction Manager	As required
Where dust levels are causing nuisance and cannot be effectively controlled, suspension of dust generating activities will occur. Restart to occur only when effective controls are available and / or conditions improve.	Construction Manager	As required
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist to identify and rectify non-conformances.	Construction Manager	At project commencement, then fortnightly until completion of activities.
The Construction Manager is promptly notified of audit non-conformances	All persons	Within 24 hours of becoming aware

Inspection of fugitive dust emissions during internal audit – FM664 – Lucas Height Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Identification of Non-conformances		
Landfill gas not effectively managed in accordance with the approval requirements and OEMP.	LMS Manager – Bioenergy (Lucas Heights)	-
Unresolved complaints.	Compliance Team	-
Visible air emissions or fugitive dust emissions across the site boundary.	All persons	-
Corrective Actions		
Gas management requirements outlined in OEMP to be implemented	LMS Manager – Bioenergy (Lucas Heights)	As required
Prompt internal and external reporting of identified impacts and complaints attributable to the site's activities.	All Persons	At all times
Implementation of dust mitigation measures such as water carts or cessation of works if necessary.	Construction Manager	As required
Reporting		
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.3 Noise and Vibration Management Plan

Policy		
To minimise noise and vibration impacts on the surrounding environment and all sensitive receivers.		
Performance Objectives		
• To minimise noise and vibration generated from construction activities upon sensitive receivers. • To comply with the relevant regulatory requirements for noise and vibration emissions.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Implement the Construction Noise and Vibration Management Plan (APPENDIX D -).	Construction Manager	At all times
Construction works must occur between 7am to 5pm on Monday to Friday, and 8am to 5pm on Saturdays and Sundays. Activities outside these hours must not exceed out of hours protocols (Table 2).	Construction Manager	At all times
The proximity of the CAZ to all sensitive receivers is included in the project environmental induction.	Environmental Supervisor	Prior to commencing construction works
Vibration caused by construction works must comply with the standards and limits outlined under the CNVMP.	Construction Manager	At all times
Noise emissions from construction works must comply with the standards and limits outlined under the CNVMP.	Construction Manager	At all times
Any complaints / feedback from receivers and stakeholders to be recorded in LMS External Complaints Register and addressed according to External Complaint Response Procedure – PR71 (Section 8).	LMS Compliance Team	At all times
Monitoring / Maintenance		
Lucas Heights CEMP Inspection Checklist – FM664 will include an inspection of noise and vibration mitigation controls.	Construction Manager	At project commencement, then fortnightly until completion of activities.
Noise and vibration monitoring is undertaken in accordance with the CNVMP's monitoring program following a complaint.	Construction Manager	As required
Environmental hazards/near misses/incidents will be reported via the online Internal reporting via the online incident management system or Workplace Incident Reporting Form – FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard
The Construction Manager is promptly notified of audit non-conformances.	All persons	Within 24 hours of becoming aware
Inspection of noise and vibration sources and construction practices during internal audit – FM664 – Lucas Height Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Identification of Non-conformances		
Noise complaints received (for immediate investigation/validation).	Environment Team / Compliance Team	-

Perceptible increase in noise emissions and noise characteristics (i.e., tonal or impulsiveness) are not investigated.	Construction Manager	-
Plant and equipment are not adequately maintained in accordance with the manufacturer's specifications.	Construction Manager	-
Corrective Actions		
Review noise attenuation measures and equipment maintenance procedures.	Environment Team / Compliance Team	As required
Review working hours and activities generating elevated noise levels.	Environment Team / Compliance Team / Construction Manager	As required
Reporting		
Complaints to be recorded on the Master External Complaint Register – RG49.	Compliance Team	At all times
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions (Figure 6).	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint

6.4 Soil and Groundwater Quality Management Plan

Policy		
To minimise the risk of adverse impacts to soil and groundwater resources.		
Performance Objectives		
• To have no impacts on existing soil quality. • To have no impacts on existing groundwater quality. • To comply with relevant regulatory requirements.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
The Erosion and Sediment Control Plan (ESCP) (APPENDIX F -) will be implemented and maintained.	Construction Manager	Prior construction works
All chemical storage and use at the site is managed in accordance with the Dangerous Goods and Hazardous Substances Management Plan (Section 6.11).	All Persons	At all times
Pollution Incident Response Management Plan (PIRMP) to be implemented and followed in the event of a hydrocarbon or chemical spill/leak (Section 9.3).	All Persons	At all times
Surplus soil from earthworks and trenching works will be disposed of via the site's landfill (i.e., will not leave the site). No removal of surplus soil from site without relevant waste characterisation / tracking obligations complied with, and approval by the Environmental Supervisor.	Construction Manager / Environmental Supervisor	At all times
Imported fill will meet the following criteria: • Virgin Excavated Natural Material (VENM); • Excavated Natural Material (ENM); or • Other fill material approved in writing by EPA is brought onto the site for use as fill.	Construction Manager	At all times
Contaminated soil or suspected waste will be managed in accordance with the Unexpected Finds Protocol Management Plan (Section 6.10).	Construction Manager	At all times
Soil / material stockpiles are located at least >5m from drainage features with sediment fencing installed at all times	Construction Manager	At all times
Water for construction purposes will be sourced from mains supply with usage minimised as far as practicable.	Construction Manager	At all times
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist includes general site inspection and inspection of dangerous goods/chemical storage areas to ensure storage facilities are adequate.	Construction Manager	At project commencement, then fortnightly until completion of activities.
The Construction Manager is promptly notified of audit non-conformances.	All persons	Within 24 hours of becoming aware
All environmental hazards/near misses/incidents will be reported via the online Incident Management System or if unavailable via Workplace Incident Reporting Form - FM3 and reported to Cleanaway.	All Persons	Within 24 hours of becoming aware of an incident or hazard

Inspection of surface soils during internal audit – FM664 – Lucas Height Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Identification of Non-conformances		
Improper/inadequate storage of dangerous goods, hazardous material or chemicals.	All Persons	-
Evidence of unreported spills/leaks of contaminants.	All Persons	-
Evidence of soil or groundwater contamination or significant disturbance due to construction activities.	All Persons	-
Evidence of soil tracked off site by plant equipment.	All Persons	-
Stockpiled soil / materials stored <5m from drainage features.	All Persons	-
Sediment fencing missing or inadequately installed / maintained.	Construction Manager	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to the site's activities, with prompt notifications to the relevant administering authorities as required.	Environment Team / Compliance Team	As required
Review of LMS' dangerous goods, hazardous material and chemical handling and storage procedures.	Safety Team	As required
Any contamination associated with construction activity is cleaned up in accordance with regulatory requirements and recorded on LMS' Compliance matrix.	Environment Team / Construction Manager / Compliance Team	As required
Evidence of soils tracked off-site to be cleaned and appropriate controls installed to prevent recurrence.	Construction Manager	As required
Stockpiled soil / materials to be moved from drainage features.	Construction Manager	As required
Sediment fencing to be installed / repaired / maintained in accordance with ESCP.	Construction Manager	At all times
Reporting		
The administering authority is notified of actual or potential material harm to the environment on soil / groundwater.	Environment Team / Compliance Team	As required
The administering authority is notified of activities or incidents which are likely to change the contaminated land status of the site.	Environment Team / Compliance Team	As required
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard
Imported fill records (type and volume) will be maintained.	Construction Manager	At all times

6.5 Surface Water and Soil Erosion Management Plan

Policy		
To minimise the risk of adverse impacts from surface soil erosion and impacts to waters (stormwater and surface water) and environmentally sensitive areas.		
Performance Objectives		
• To have no adverse impacts to waters (stormwater and surface water) in accordance with section 120 of the POEO Act. • To minimise soil erosion and sediment transport off site. • To comply with relevant regulatory requirements. • Stormwater Management Plan and Erosion and Sediment Control Plans are implemented and maintained.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Erosion and Sediment Control Plan (APPENDIX F -) controls are implemented and maintained.	Construction Manager	At all times
Where erodible soil is stockpiled for >10 days and / or when >10mm is forecast within a 24hr period, additional stabilisation (mulching / polymer) is to be implemented on a risk basis.	Construction Manager	As required
All heavy vehicles associated with the works will exit the site via the cattle shaker grid to minimise mud being tracked onto public roads. Remove any material spilled or tracked onto public roads.	Construction Manager	At all times
All chemical storage and use at the site are managed in accordance with the Dangerous Goods and Hazardous Substances Management Plan (Section 6.11).	All Persons	At all times
Pollution Incident Response Management Plan (PIRMP) to be implemented and followed in the event of a hydrocarbon or chemical spill/leak (Section 9.3).	All Persons	At all times
Appropriate measures are in place to manage contamination risk in the event of a flood (i.e. Emergency Response Plan, etc.).	Construction Manager / Projects Team / Environment Team	At all times
Where excavations require dewatering, a risk assessment will be undertaken before proceeding. Where practicable water will be reticulated within the CAZ. Alternatively, water will be directed to the leachate management system.	Construction Manager	As required
Land stabilisation works will be undertaken progressively within the CAZ to minimise exposed surfaces to potential erosion impacts.	Construction Manager	As soon as reasonably practicable following completion of works
Refuelling of plant to occur away from drainage features / watercourses	Construction Manager	At all times
Monitoring / Maintenance		
Check the Bureau of Meteorology (BoM) weather forecast and notify the construction team via Toolbox Talk of >10mm rainfall forecast within a 24hr period.	Site Supervisor	Daily
FM664 Lucas Heights CEMP Inspection Checklist includes general site inspection and inspection of the site's erosion and sedimentation control devices to ensure processes are appropriate and maintained.	Construction Manager	At project commencement, then fortnightly until completion of activities.

The Construction manager is promptly notified of audit non-conformances	Site Supervisor	Within 24 hours of becoming aware
All environmental hazards / near misses / incidents will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard
Inspection of surface water and soil erosion management during internal audit – FM664 – Lucas Height Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Identification of Non-conformances		
Observed soil erosion attributable to onsite activities.	Construction Manager	-
Sediment build up within control structures is not readily removed.	Construction Manager	-
Sediment within stormwater infrastructure and offsite which is attributable to onsite activities.	All Persons	-
Observed failure of hydrocarbon / pollutant containment (breaches of bunded areas; staining of hard stand; unexpected loss; pollutant entering surface water systems).	All Persons	-
Dewatering water runs into drainage / off site	All Persons	-
Refuelling of plant observed outside designated refuelling area	All Persons	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to the site's activities, with prompt notifications to the relevant council and administering authorities where required.	Construction Manager / Environment Team / Compliance Team	As required
Action the Pollution Incident Response Management Plan (PIRMP) in the Emergency Response Plan as required.	All Persons	As required
Ensure ESCP controls are in place and effective.	Construction Manager	At all times
Implement improved controls to prevent reoccurrence.	Construction Manager / Environment Team	As required
Construction team to stop refuelling observed outside the designated area and ensure refuelling only occurs in appropriate location	All Persons	As required
Reporting		
Notification to any impacted parties in the case on an environmental incident.	Environment Team / Compliance Team	As required
Notification to the administering authority in accordance with the Development Consent approval conditions.	Environment Team / Compliance Team	As required
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.6 Vegetation Management Plan

Policy		
• To minimise adverse impacts on flora and biosecurity, • To minimise the introduction or spread of weeds.		
Performance Objectives		
• To have no adverse impacts to native vegetation. • To meet LMS' 'general biosecurity duty (GBD)' under the relevant biosecurity legislation by minimising the introduction or spread of weeds. • To comply with relevant regulatory requirements.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Emergency Response Plan and relevant LMS procedures to be implemented and followed in the event of a hydrocarbon, chemical spill/leak, fire, or traffic incident.	All Persons	As required
Clearly delineate Construction Activity Zone (CAZ) with temporary fencing and restrict construction activities to within this zone.	Construction Manager	Controls to be in place when project commences
Vegetation clearance and ecological impacts minimised when selecting final CAZ location.	LMS Projects Team	Prior to project commencement
Employees are made aware of site-specific native / protected / culturally significant vegetation.	Construction Manager/ Environmental Supervisor	At all times
Any protected vegetation or heritage sites located within 10m of the CAZ to be fenced off and demarcated as "NO GO ZONES" (note in the case of tree protection, a Tree-Protection Zone (TPZ) is defined as the canopy dripline plus 1m.	Construction Manager	At all times
No storage of construction materials / equipment within 5m of NO-GO-Zones	Construction Manager	At all times
Weed infestations are managed to meet biosecurity obligations (i.e., GBD) and good environmental practice standards.	Construction Manager	At all times
Plant and equipment are satisfactorily clean from dirt / mud to limit the movement of weeds and seeds offsite.	Construction Manager	At all times
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist assesses vegetation and initiate management controls as required.	Construction Manager	At project commencement, then fortnightly until completion of activities.
The Operations Manager is promptly notified of audit non-conformances.	Construction Manager	Within 24 hours of becoming aware
All environmental hazards/near misses/incidents will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard
Monitoring of vegetation management during internal audit – FM664 – Lucas Heights Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development

Identification of Non-conformances		
Observed failure of hydrocarbon containment (breaches of bunded areas; staining of hard stand or gravelled areas; unexpected loss; pollutants having potential or actual detrimental effects on native or protected vegetation).	All Persons	-
Material / equipment stored within 5m of NO-GO-ZONES	All Persons	-
Unauthorised vegetation disturbance (inclusive of trimming) attributable to LMS' activities.	Construction Manager	-
Damage to protected vegetation attributable to LMS' activities.	Construction Manager	-
Equipment/plant stored or parked in the drip zone of significant vegetation.	All Persons	-
Evidence of poor weed maintenance.	Construction Manager	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to site activities, with prompt notifications to council and applicable regulators where required.	Environment Team / Compliance Team	As required
Significant vegetation impacts to be assessed and reported to applicable regulators in consultation with the Environment and Compliance Teams.	Construction Manager / Environment Team	As required
Material and equipment to be moved away from NO-GO-ZONE and assessment to be made on effectiveness of signage	Construction Manager	As required
Action the Pollution Incident Response Management Plan (PIRMP) in the Emergency Response Plan as required.	All Persons	As required
Undertake review of applicable procedures / EMS documents to prevent reoccurrence.	Construction Manager / Environment Team / Compliance Team	As required
Unexpected finds procedure to be implemented if protected vegetation is discovered within the CAZ (Section 6.10).	All Persons	As required
Routine weed management.	Construction Manager	As required
Reporting		
Notification to the administering authority in accordance with the Development Consent approval conditions.	Environment Team / Compliance Team	As required
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.7 Fauna, Heritage and Biosecurity Management Plan

Policy		
• To minimise adverse impacts on fauna, heritage and biosecurity, • To minimise the introduction or spread of biosecurity threats.		
Performance Objectives		
• To have no adverse impacts to native wildlife. • To have no impacts on heritage sites outside the approved construction activity zone (CAZ) and effectively manage "unexpected finds" during construction activities. • To meet LMS' 'general biosecurity duty (GBD)' under the relevant biosecurity legislation by minimising the introduction or spread of weeds and pests. • To comply with relevant regulatory requirements.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Emergency Response Plan and relevant LMS procedures to be implemented and followed in the event of a hydrocarbon, chemical spill/leak, fire, or traffic incident.	All Persons	As required
Clearly delineate Construction Activity Zone (CAZ) with temporary fencing and restrict construction activities to within this zone.	Construction Manager	Controls to be in place when project commences
Vegetation clearance and ecological impacts minimised when selecting final CAZ location.	LMS Projects Team	Prior to project commencement
Heritage study conducted during planning of project to ensure there is minimal impact to heritage sites / artifacts.	LMS Projects Team	Prior to project commencement
Any protected vegetation or heritage sites located within 10m of the CAZ to be fenced off and demarcated as "NO GO ZONES" (note in the case of tree protection, a Tree-Protection Zone (TPZ) is defined as the canopy dripline plus 1m.	Construction Manager	At all times
No storage of construction materials / equipment within 5m of NO-GO-Zones	Construction Manager	At all times
Unexpected finds procedure to be implemented if heritage items are discovered (Section 6.10).	All Persons	As required
Plant and equipment are satisfactorily clean from dirt / mud to limit the movement of biosecurity threats into or out of the site.	Construction Manager	At all times
Where excavations and trenches must be left open overnight, install temporary fencing (for Worker safety) and provide alternative escape methods (e.g. tree branches, earthen ramps, netting or grip mesh).	Construction Manager	As required
Excavations and trenches that have been left open overnight should be checked immediately the following day.	Construction Manager	As required
Suitably qualified fauna handlers to be engaged to safely remove and relocate to suitable habitat as required.	Construction Manager	As required
Perimeter fencing to exclude macropods / fauna into the CAZ	Construction Manager	At all times
Site speed limit in place to prevent risk of harm to fauna.	All Persons	At all times
Monitoring / Maintenance		

FM664 Lucas Heights CEMP Inspection Checklist assesses fauna, heritage and biosecurity status and initiate management controls as required.	Construction Manager	At project commencement, then fortnightly until completion of activities.
The Operations Manager is promptly notified of audit non-conformances.	Construction Manager	Within 24 hours of becoming aware
All environmental hazards/near misses/incidents will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard
Monitoring of fauna, heritage and biosecurity management during internal audit – FM664 – Lucas Heights Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Identification of Non-conformances		
Observed failure of hydrocarbon containment (breaches of bunded areas; staining of hard stand or gravelled areas; unexpected loss; pollutants having potential or actual detrimental effects on native or protected vegetation).	All Persons	-
Harm to fauna onsite.	All Persons	-
Excavations left overnight with no escape method provided.	All Persons	-
Open excavations not checked at the beginning of the day.	All Persons	-
Unexpected finds procedure not implemented upon the discovery the heritage artifacts / sites.	All Persons	-
Plant and equipment cleanliness are inadequately maintained to a level that allows biosecurity threats to move in and out of the site.	All Persons	-
LMS staff interacting with fauna.	All Persons.	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to site activities, with prompt notifications to council and applicable regulators where required.	Environment Team / Compliance Team	As required
Significant fauna, heritage or biosecurity impacts to be assessed and reported to applicable regulators in consultation with the Environment and Compliance Teams.	Construction Manager / Environment Team	As required
Material and equipment to be moved away from NO-GO-ZONE and assessment to be made on effectiveness of signage	Construction Manager	As required
Action the Pollution Incident Response Management Plan (PIRMP) in the Emergency Response Plan as required.	All Persons	As required
Open excavations to have an alternative escape method provided and checked at the beginning of the day.	All Persons	As required
Undertake review of applicable procedures / EMS documents to prevent reoccurrence.	Construction Manager / Environment Team / Compliance Team	As required
Unexpected finds procedure to be implemented if heritage items / sites are discovered within the CAZ	All Persons	As required

LMS staff to not interact with fauna and to alert licensed fauna catcher (if required).	All Persons	At all times
Speed limit followed to ensure no collision with fauna	All Persons	At all times
Plant and equipment washed and inspected for the present of biosecurity threats.	Construction Manager	As required
Reporting		
Notification to the administering authority in accordance with the Development Consent approval conditions.	Environment Team / Compliance Team	As required
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.8 Traffic and Site Security Management Plan

Policy		
• To minimise nuisance impacts (noise and fugitive dust emissions) to sensitive receivers. • To ensure site remains secure from unauthorised entry		
Performance Objectives		
• To comply with relevant regulatory requirements and applicable Traffic Management Plans. • To ensure access to the site is controlled to prevent loss or damage to plant and to protect the safety of the general public.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Implement the Traffic and Pedestrian Management Plan (APPENDIX E -).	Construction Manager	At all times
Review and implement the requirements of the Traffic Management Procedure - PR46 to ensure traffic proceeds at a safe speed and to minimise nuisance impacts (noise and fugitive dust emissions) to sensitive receivers.	Safety Team	As required
Plant and equipment to avoid using public roads during peak traffic times where possible.	Construction Manager	As required
Heavily trafficked areas to be surfaced with loose aggregate and maintained to minimise fugitive dust emissions.	Construction Manager	At all times
Employees practice safe driving at all times.	All Persons	At all times
Inductions to include the landfill operator's traffic and access requirements.	Construction Manager	As required
Fencing to be erected and maintained and entry/exit points are appropriately controlled.	Construction Manager	At all times
Exterior fencing to implement warning signs of site hazards.	Construction Manager	At all times
Site security measures adopted and maintained, and site securely locked when no personnel are on site.	All Persons	At all times
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist includes inspection of access roads and site security measures.	Construction Manager	At project commencement, then fortnightly until completion of activities.
Incidents of breaches of security, site traffic requirements and/or Traffic Management Procedure - PR46 will be reported as hazards/near misses/incidents via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard
The Operations Manager is promptly notified of audit non-conformances	Construction Manager	Within 24 hours of becoming aware
Identification of Non-conformances		
Unnecessary disturbance of access roads and/or surrounding environment.	All Persons	-
Unnecessary and/or high level of traffic movements or unused plant and equipment operating.	Construction Manager	-

Unacceptable levels of dust generation leaving the facility.	All Persons	-
Unresolved complaints regarding site access and security.	Construction Manager / Environment Team / Compliance Team	-
Unauthorised site access.	All Persons	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to the site's activities, with prompt notifications to the relevant council and administering authorities where required.	Construction Manager / Safety Team	As required
Review and adjust access, inspection and maintenance procedures as required.	Construction Manager	As required
Safety related hazards to be reported to the Safety Team.	All Persons	As required
Reporting		
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.9 Bushfire Management Plan

Policy		
To ensure bushfire management requirements are incorporated into construction management and planning.		
Performance Objectives		
• To ensure bushfire risk is effectively managed, with no events resulting from construction activities. • To ensure industrial hazards are effectively managed and incorporated into construction activities.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Implement the Bushfire Emergency Management and Evacuation Plan (APPENDIX C -).	Construction Manager / LMS Safety Team	At all times
Fire Safety Study conducted prior to project commencement with recommendations implemented into the BEMEP.	LMS Compliance Team / Safety team	Prior to project commencement
Good housekeeping practices to be implemented, with combustible fuel sources on site minimised.	Construction Manager	At all times
Fire-fighting equipment on standby as part of Construction Safety Management Plan (CSMP). No hot works to occur where Total Fire Bans apply.	Construction Manager	Fire-fighting equipment to be available at all times. Hot works limited as required
Where a fire occurs or is threatened, implement the project specific Emergency Response Plan (ERP) or Bushfire Emergency Management and Evacuation Plan (BEMEP).	Construction Manager	As required
Comply with any directions given by emergency services.	All Persons	At all times
Inspections of the site prior to the bushfire danger period in accordance with BEMEP requirements.	Operations Manager	As required
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist includes inspection of bushfire prevention and management procedures.	Construction Manager	At project commencement, then fortnightly until completion of activities.
All relevant hazards / near misses / incidents will be reported via the online incident management system (or if unavailable via Workplace Incident Reporting Form – FM3).	All persons	Within 24 hours of becoming aware of an incident or hazard
Identification of Non-conformances		
BEMEP not implemented when required.	All Persons	-
Staff not aware of requirements during BEMEP implementation.	All Persons	-
Hot works occurring on days of total fire ban.	All Persons	-
Asset Protection Zones (APZ) not to be maintained as per approval, OSMP, and ERP requirements.	Construction Manager	-

Firefighting equipment unavailable / in poor condition.	All Persons	-
Poor housekeeping / significant fuel sources stored within site.	All Persons	-
Corrective Actions		
All persons to be adequately inducted and alerted of their individual requirements if the BEMEP is implemented.	Construction Manager	As required
Hot works to cease.	All Persons	As required
Firefighting equipment to be sources / serviced as required.	Construction Manager	As required
Site to be tidied and fuel sources taken off site to a safe location.	Construction Manager	As require
Reporting		
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.10 Unexpected Finds Management Plan

Policy		
To effectively manage Unexpected Finds (heritage) or encountered contaminated materials during construction activities in accordance with condition B27 of the Development Consent.		
Performance Objectives		
Unexpected Finds are appropriately managed to prevent impacts to heritage and manage potential impacts from encountered contaminated materials in accordance with the POEO Act and it associated regulations.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Undertake all works with a 'cultural heritage duty of care' in accordance with the Due Diligence Code of Practice (Section 4.6).	All persons	At all times
No unauthorised ground disturbing works (or related works) will be undertaken outside of the CAZ (APPENDIX G -).	Construction Manager	At all times
Stop works within 5m of an Unexpected Find (e.g., heritage) and implement the following controls: • Barricade the find with star pickets and barrier mesh to prevent any further entry or disturbance. • Photograph the find and GPS the location. • Immediately notify the Construction Manager.	All persons	At all times
Seek an assessment by a suitably qualified heritage professional to determine the likelihood of the Unexpected Find being of heritage value.	Construction Manager	As soon as practicable after encountering an Unexpected Find
If determined to be of historic significance, a s146 procedure (Heritage Act) is to be forwarded to the NSW Heritage Council who will be consulted on appropriate management measures.	Construction Manager / Environment Team	As required
If the Unexpected Find is assessed as not of heritage significance, works may recommence.	Construction Manager	Following confirmation from a suitably qualified heritage professional
Stop works within 5m of an Unexpected Find related to contamination associated with potential imported fill material of unknown origin (AEC 01 in Table 3) or suspected waste (e.g., asbestos).	All persons	At all times
Seek an assessment by a suitably qualified and experienced contaminated land consultant to characterise material and waste in accordance with the NSW Waste Classification Guidelines (2014) and the POEO Act.	Construction Manager	As soon as practicable after encountering an Unexpected Find and prior to disposal
All Unexpected Find materials/wastes will be contained and disposed of in accordance with the Waste Management Plan (Section 6.12).	Construction Manager	At all times
If human remains are found, immediately cease all works and contact the Police (000 or 112 if mobile reception is poor).	All persons	As required

Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist includes an inspection of excavation activities and establishment of the CAZ.	Construction Manager	At project commencement, then fortnightly until completion of activities.
All environmental hazards/near misses/incidents will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard
Receipts and records will be maintained and recoverable for all regulated waste collections.	Construction Manager / Compliance Team	At all times
Identification of Non-conformances		
Works not stopped proximate to an Unexpected Find and the Construction Manager is not immediately notified.	All Persons	At all times
Staff not adequately trained in environmental management and awareness.	Construction Manager / Learning and Development Team	As required
Unqualified personnel investigate Unexpected Finds.	Construction Manager	As required
Corrective Actions		
Site inductions for LMS staff and contractors to explain precautionary measures and response procedures.	Construction Manager	As required
Effectively isolate an Unexpected Find to prevent impacts and engage suitably qualified persons to determine the risks.	Construction Manager	As required
Reporting		
Notification to the administering authority in accordance with the Development Consent approval conditions.	Environment Team / Compliance Team	Within 6 weeks of becoming aware of the contamination find
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.11 Dangerous Goods and Hazardous Substances Management Plan

Policy		
To ensure that dangerous goods and hazardous substances are managed in a way that minimises their environmental risk and reduces environmental harm in the case of an incident.		
Performance Objectives		
• To comply with storage and handling requirements of dangerous goods and hazardous substances • To ensure that staff and contractors are aware of their requirements of the handling and management of dangerous goods and hazardous substances • To ensure that any incidents are managed in an appropriate manner • To prevent environmental incidents as far as reasonably practicable • To minimise the impact that any environmental incidents have on the environment		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Site staff and contractors are aware of and comply with regulatory requirements associated with Regulated/Trackable Wastes.	All Persons	At all times
Storage and handling of dangerous goods, hazardous material and chemicals will be in accordance with the Australian Standards (e.g. AS1940), and any additional requirements, required by licensing conditions.	All Persons	At all times
The quantities of dangerous goods stored and handled at the site must be below the threshold quantities listed in Appendix 7 of the Department's Hazardous and Offensive Development Application Guidelines – Applying SEPP 33. • E.g., 100,000 kg or L of Diesel (C1 Combustible Liquids stored separately).	Construction Manager	At all times
Site staff and contractors to be made aware of requirements through site inductions / internal training modules.	Construction Manager / Learning and Development Team	As required
An up-to-date SDS Register is accessible for all chemicals onsite with QR code in a visible location.	Construction Manager	At all times
Waste hydrocarbon, hazardous substances and chemicals to be collected for disposal and recycling by licenced regulated waste contractors for appropriate disposal and material recovery.	Construction Manager	As required
All transfers of bulk substances are managed via the Permit to Work – FM637 form, with records maintained.	Construction Manager	At all times
Waste tracking certificates (WTC) / records are maintained and retrievable.	Construction Manager	At all times
Containers used to store dangerous goods and hazardous substances are: ○ Stored on a bund which has a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund. ○ Not linked together forming a single larger container. ○ Free from damage or leaks. ○ Where practicable, bunded storage areas are located >3m from site boundary. ○ Stored on hardstand areas if empty.	Construction Manager	At all times

Spill kits are available on site and are adequately stocked with equipment able to contain site specific substances to mitigate potential impacts associated with AEC 03 (Table 3).	Construction Manager	At all times
Action the Pollution Incident Response Management Plan (PIRMP) (Section 9.3) when applicable.	All Persons	As required
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist includes general site inspection and inspection of chemical/waste storage areas to ensure appropriate storage facilities, as well as suitability of spill kits.	Construction Manager	At project commencement, then fortnightly until completion of activities.
All environmental hazards/near misses/incidents will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard
Receipts and records will be maintained and recoverable for all regulated waste collections.	Construction Manager / Compliance Team	At all times
Inspection of dangerous goods and hazardous substances storage areas during internal audit – FM664 – Lucas Height Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Identification of Non-conformances		
Poor housekeeping.	All Persons	-
Staff not adequately trained in environmental management and awareness.	Construction Manager / Learning and Development Team	-
Staff and contractors being unaware of emergency response procedures and response equipment.	Construction Manager	-
Empty drums not stored on hardstand.	All Persons	-
Wastes not minimised or segregated where possible.	Construction Manager	-
Split, leaking or damaged waste containers.	All Persons	-
Incidents involving dangerous goods and hazardous substances are not reported to the LMS online safety and environment management system	All Persons	-
PIRMP plan not implemented in the event of a spill.	All Persons	-
Regulated waste collection not recorded.	Construction Manager	-
Regulated wastes removed by an unlicensed contractor.	Construction Manager	-
Wastes taken to waste management facility that cannot lawfully receive them.	Construction Manager	-
Corrective Actions		
Site inductions for LMS staff and contractors to explain precautionary measures and response procedures.	Construction Manager	As required

Prompt internal reporting of identified impacts attributable to the site's activities, with prompt notifications to the relevant council and administering authorities where required.	Construction Manager / Environment Team / Compliance Team	As required
Review, and rectify as necessary, relevant waste management practices to ensure compliance and prevent reoccurrence.	Construction Manager / Environment Team	As required
Conduct routine internal auditing to identify and rectify any non-conformities.	Environmental Team	Annually at a minimum.
Training of staff to ensure responsible waste management practices are implemented.	Construction Manager / Learning and Development Team	As required
Reporting		
Notification to the administering authority in accordance with the Development Consent approval conditions.	Environment Team / Compliance Team	As required
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.12 Waste Management Plan

Policy

- To prevent or minimise the generation of waste, where practicable.
- To contain, control and dispose of waste in accordance with responsible waste management practices and compliance obligations.

Performance Objectives

- To manage waste in accordance with the following waste management hierarchy as far as reasonably practicable:
  - Avoidance
  - Waste Minimisation / Reduction
  - Reuse
  - Recycling / Reprocessing
  - Recovery (Including Energy Recovery)
  - Treatment
  - Disposal
- To protect the environment by using best practice storage, handling and disposal methods.
- To receive no complaints in relation to waste management practices.
- To comply with all relevant regulatory requirements.

Implementation Strategy / Mitigation Measures

MANAGEMENT ACTIONS	RESPONSIBILITY	FREQUENCY
Site staff and contractors are aware of and comply with regulatory requirements associated with Regulated/Trackable Wastes.	Construction Manager	As required
Storage and disposal of chemicals and wastes will be undertaken in accordance with Section 6.12.1.	Construction Manager	At all times
Waste receptacles (wheelie bins, skips etc.) to be leak free, and stored on sealed areas to reduce the risk of environmental contamination (where practicable).	Construction Manager	At all times
Sumps / grates connected to bunds or self-bunded tanks are to be maintained with no defects affecting integrity.	Construction Manager	At all times
An up-to-date SDS Register is accessible for all chemicals onsite.	Safety Team	At all times
QR code access to SDS Register is accessible in a prominent location.	Construction Manager	At all times
All transfers of bulk substances are managed via the Permit To Work – FM637 form, with records maintained.	Construction Manager	As required
Where practicable, general waste is segregated into recyclable/non-recyclable streams to maximise recovery (subject to landfill arrangements).	Construction Manager	At all times
Biodegradable degreasers will be used, where possible.	Construction Manager	Where possible
Engine oil and coolant will be delivered in bulk to reduce packaging where practicable.	Construction Manager	Where possible
Waste hydrocarbon, hazardous substances and chemicals to be collected for disposal and recycling by licenced regulated waste contractors for appropriate disposal.	Construction Manager	At all times
Waste tracking certificates (WTC) / records are maintained and retrievable.	Construction Manager / Compliance Team	At all times
Contaminated bund water to be pumped out for appropriate collection / disposal.	Construction Manager	At all times

Action the Pollution Incident Response Management Plan (PIRMP) (Section 9.3) when required.	All Persons	As required
Septic waste disposal records are maintained, and infrastructure is serviceable.	Construction Manager / Compliance Team	At all times
Wastes remain within the lease boundary and are disposed of appropriately.	Construction Manager	At all times
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist includes general site inspection and inspection of chemical/waste storage areas to ensure appropriate storage facilities.	Construction Manager	At project commencement, then fortnightly until completion of activities.
All environmental hazards/near misses/incidents will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard
Receipts and records will be maintained and recoverable for all regulated waste collections.	Construction Manager / Compliance Team	At all times
Inspection of waste generation and associated storage and disposal methods during internal audit – FM664 – Lucas Height Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Identification of Non-conformances		
Poor housekeeping.	All Persons	-
Empty drums not stored on hardstand.	All Persons	-
Wastes not minimised or segregated where possible.	Construction Manager	-
Split, leaking or damaged waste containers.	All Persons	-
Regulated waste collection not recorded.	Construction Manager	-
Regulated wastes removed by an unlicensed contractor.	Construction Manager	-
Wastes taken to waste management facility that cannot lawfully receive them.	Construction Manager	-
Records of trackable waste collection not maintained	Construction Manager	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to the site's activities, with prompt notifications to the relevant council and administering authorities where required.	All Persons	As required
Review, and rectify as necessary, relevant waste management practices to ensure compliance and prevent reoccurrence.	Construction Manager / Environment Team	As required
Training of staff to ensure responsible waste management practices are implemented.	Construction Manager / Learning and Development Team	As required

Records to be maintained in an easily accessible location.	Construction Manager	At all times
Reporting		
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

6.12.1 Generation, Storage and Disposal

A summary of the typical wastes which are generated, and the relevant storage and disposal requirements are outlined below in Table 7.

Potential Contaminant	Storage Conditions	Disposal Method/Contractor
Chemicals.	In accordance with relevant Safety Data Sheet (SDS).	Collection by licensed third party contractor.
Regulated wastes associated with maintenance activities (e.g. absorbent material used to clean spills).	Stored within onsite bins on hardstand areas as a minimum (where feasible within bunding).	Collection by licensed third party contractor.
Condensate.	Not stored or disposed of on site.	All condensate is returned to the landfill and/or the landfill's existing leachate management system.
Hydrocarbons.	Stored within a sealed waste liquid tank in a bunded area.	Collection by a licensed third-party contractor with strict observance of PtW requirements for all transfers, and disposal of hydrocarbon contaminated wastes.
Empty chemical containers.	Stored onsite on hardstand areas (where feasible within bunding).	Collection by licensed third party contractor.
Wash water and waste concrete	Allowed to harden before being collected.	Collection by a licensed third-party contractor.
Recyclable wastes (e.g. paper).	Stored within onsite bins.	Disposal at local waste facility .
General waste (non-recyclable).	Stored within onsite bins.	Disposal at local waste facility by a licensed third-party contractor.
Deposit containers (where applicable).	Stored within onsite bins.	Recovery at local container return depot.
Wastewater (e.g. toilets, hand basin, etc.).	Approved on site chemical toilet or polyethylene pump septic tank.	Collection by a licensed third-party contractor. Tracked as required.

Table 7 – Summary of Waste Generation, Storage and Disposal Requirements

6.13 Environmental Incident Management Plan

Policy		
• To minimise environmental harm caused or threatened by hazards/near misses/incidents. • To meet all applicable external notification obligations.		
Performance Objectives		
• To ensure all environmental performance issues are reported and resolved in a timely manner and captured in Monthly EMS Reporting. • To ensure all relevant parties are made aware of incidents, inclusive of notifications to external regulators (where applicable). • Implementation of the Pollution Incident Response Management Plan (PIRMP) is demonstrated.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Implement the Pollution Incident Response Management Plan (PIRMP) (Section 9.3) and LMS' Spill Response Procedure (PR84).	All Persons	As required
A hard copy of the current Emergency Response Plan will be kept on site and at the landfill weighbridge (where practicable).	Construction Manager	At all times
Site contact details will be provided on signage at the site boundary.	Construction Manager	At all times
The Construction Manager will ensure all employees and contractors undertake necessary training (refer Section 11).	Construction Manager	As required
Employees and contractors will be required to report any incident which causes or threatens to cause material harm to the environment to the Operations Manager/Environment Manager immediately.	All Persons	As required
Employees are aware of how to manage incidents involving sensitive receivers.	All Persons	As required
Standard spill kits are adjacent chemical and oil storage infrastructure.	Construction Manager	At all times
Monitoring / Maintenance		
All emergencies/incidents to be immediately reported to the Operations Manager.	Construction Manager	As required
Incidents which cause or threaten material harm to the environment must be immediately reported to the Environment Team.	All Persons	As required
All costs associated with environmental incidents to be recorded to verify clean-up expenditure (critical to confirm materiality of the event). Recordable costs include: ○ Mobilisation costs of plant to clean up the spill (e.g. Vac trucks etc). ○ Costs of replacement fill (where contaminated materials are removed off-site). ○ Soil / surface water testing costs. ○ All costs associated with contaminated soil / water disposal. ○ Labour / time associated with managing the spill event.	Construction Manager	As required
All environmental hazards / near misses / incidents are to be promptly reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3). Notification of all incidents to compliance@lms.com.au	All Persons	Within 24 hours of becoming aware
Emergency services, the landfill operator and relevant authorities will be notified of significant incidents in accordance with the Emergency Response Plan.	Construction Manager	As required

Incidents which cause or threaten material or serious environmental harm will be formally investigated in accordance with Workplace Incident Reporting and Investigation - PR35.	Construction Manager / Environment Team / Compliance Team	As required
A readily accessible register will be maintained of environmental incidents.	Environment Team	At all times
Identification of Non-conformances		
Environmental hazards/near misses/incidents not internally reported or satisfactorily managed.	All Persons	-
Failure to follow the Pollution Incident Response Management Plan (PIRMP).	All Persons	-
The relevant administering authorities are not notified of notifiable incidents.	Construction Manager	-
Environmental monitoring results and reports are not supplied to the relevant administering authority within the required timeframes.	Construction Manager / Environmental Team	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to the site's activities, with prompt notifications to council and applicable regulators where required.	Construction Manager / Environment Team / Compliance Team	As required
Undertake any clean-up works in accordance with compliance obligations.	Construction Manager	As required
Review PIRMP, *Spill Response Procedure - PR84* and Emergency Response Plan and staff training.	Construction Manager / Safety Team	As required
Review incident reporting and investigation procedures.	Construction Manager / Environment Team / Safety Team	As required
Recording of confirmed contamination on LMS' Compliance Matrix Register.	Environment Team / Compliance Team	As required
Inspection of incident management and associated corrective action implementation during internal audit – FM664 – Lucas Height Construction EMS Internal Audit	Environmental Supervisor	At a minimum of once during project development
Reporting		
Notifiable incidents are reported to the relevant administering authorities within the required timeframes.	Environment Team / Compliance Team	Within 24 hours of becoming aware
Formal reports regarding notifiable incidents are provided to the relevant administering authorities within the required timeframes.	Environment Team / Compliance Team	Within 7 days of becoming aware
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint

A non-compliance notification submitted to the administering authority must include the following information: • Development application number and name. • The condition(s) of the Development Consent that the non-conformance relates to. • The reasons for the non-compliance (if known). • What actions have been undertaken, or will be undertaken, and when, to address the non-compliance.	Compliance Team	All non-compliance notification submissions.

6.14 Hazard and Risk Management Plan

Policy		
To manage environmental hazards and risks related to operational and maintenance activities and minimise impact on sensitive or ecological receivers.		
Performance Objectives		
• To ensure all hazards and risks are identified and controls are implemented manage the risks to an acceptable level. • To ensure all relevant parties and personnel are made aware of hazards and risks.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
All chemical storage and use at the site are managed in accordance with the Dangerous Goods and Hazardous Substances Management Plan (Section 6.11).	All Persons	At all times
Construction of the generation facility regarding LMS' Safety Management System.	All Persons	At all times
Fire-fighting equipment on standby (water tanks, hoses, extinguishers etc.) with no hot works to occur where Total Fire Bans apply. Where a fire occurs or is threatened, implement the site-specific emergency response plan (ERP).	Construction Manager	At all times
Sensitive receivers (e.g. residential properties, public roads, watercourses, native vegetation) are identified, considered and incorporated into the CEMP.	Construction Manager / Environmental Team / Projects Team / Safety Team	Prior to project commencement
Emergency Response Plan and procedures developed and implemented for operation of the generation facility.	Safety Team	As required
All persons will be trained in the Construction Emergency Response Plan and relevant LMS procedures.	Construction Manager	Prior to commencing works
Contingency measures for unexpected finds will be managed in accordance with the Unexpected Finds Management Plan (Section 6.10).	Construction Manager	At all times
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist includes general site inspection and identification of any environmental hazards.	Construction Manager	At project commencement, then fortnightly until completion of activities.
The Operations Manager is promptly notified of audit non-conformances.	Construction Manager	Within 24 hours of becoming aware
All hazards/near misses/incidents will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard
Incidents which cause or threaten material or serious harm will be formally investigated in accordance with Workplace Incident Reporting and Investigation - PR35.	All Persons	As required
Identification of Non-conformances		

Scheduled maintenance or inspection and testing not undertaken.	Construction Manager	-
No hazard audits undertaken.	Construction Manager	-
No remedial actions taken on identified hazards.	Construction Manager	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to the site's activities, with prompt notifications to the relevant council and administering authorities where required.	Construction Manager / Environment Team / Compliance Team	As required
Review and amend maintenance and inspection and testing procedures.	Construction Manager / Operations Team	As required
Review and amend auditing and reporting procedures.	Construction Manager / Environment Team / Compliance Team	As required
Review training and inductions procedures and conduct retraining where required.	Construction Manager / Learning and Development Team	As required
Reporting		
BEF performance is reported daily: FM664 Lucas Heights CEMP Inspection Checklist.	Biogas Supervisor	Daily during installations works
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint

7. CONTINGENCY PLAN

Policy		
To proactively identify, contain, and manage any unpredicted environmental impacts or potential environmental harm during construction works in accordance with condition C1(f).		
Performance Objectives		
The response to unpredicted environmental impacts will meet the following performance objectives: • Immediately activate response procedures and communicate incidents (or potential environmental harm) to the Construction Manager. • Minimise environmental harm as far as reasonably practicable. • Document and communicate unpredicted incidents, hazards and near miss incidents via Skytrust and Toolbox talks and update the relevant management plan(s) in the CEMP to minimise the likelihood of a reoccurrence.		
Activation Triggers		
• Exceedance of impact assessment criteria outlined in the CEMP's Environmental Management Plans or performance objectives. • Visual observation, complaint, or monitoring results that indicate an unpredicted impact. • Unexpected finds (e.g., contamination, heritage).		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Immediately activate response procedures (e.g., spill containment) and communicate incidents (or potential environmental harm) to the Construction Manager.	All persons	At all times
Contaminated soil or suspected waste will be managed in accordance with the Unexpected Finds Protocol Management Plan (Section 6.10).	Construction Manager	At all times
Stop or modify the relevant works if potential environmental harm or actual environmental harm occurs.	All persons	At all times
Identify the source, extent, and the affected environmental values / receivers that have been impacted as soon as reasonably practicable.	Construction Manager	At all times
Prioritise response measures that achieve the fastest reduction below impact assessment criteria or performance objectives.	Construction Manager	At all times
Monitoring / Maintenance		
FM664 Lucas Heights CEMP Inspection Checklist will proactively identify, contain, and manage any unpredicted environmental impacts or potential environmental harm during construction works.	Construction Manager	At project commencement, then fortnightly until completion of activities.
All environmental hazards/near misses/incidents will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3).	All Persons	Within 24 hours of becoming aware of an incident or hazard

Identification of Non-conformances		
Works are not stopped or modified in the event of unpredicted impacts or potential environmental harm and the Construction Manager is not immediately notified – Examples: • Perceptible increase in noise emissions and noise characteristics (i.e., tonal or impulsiveness) are not investigated. • Equipment failures are not investigated. • Harm to flora and fauna is not notified to the Construction Manager. • Encountered groundwater during excavation works is not notified to the Construction Manager. • Delayed responses to inclement weather events (e.g., heavy rain and lightning).	All Persons	At all times
Staff not adequately trained in environmental management and awareness.	Construction Manager / Learning and Development Team	As required
Unqualified personnel investigate unpredicted impacts and do not adequately identify the source, extent, and the affected environmental values / receivers that have been impacted.	Construction Manager	As required
Corrective Actions		
Site inductions for LMS staff and contractors will explain that proactive environmental protection must be regarded as a central theme in all construction works.	Construction Manager	As required
Update the relevant management plan(s) in the CEMP to minimise the likelihood of a reoccurrence.	Construction Manager	As required
Reporting		
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint
Internal reporting via the online incident management system or Workplace Incident Reporting Form - FM3.	All Persons	Within 24 hours of becoming aware of an incident or hazard

8. COMMUNITY CONSULTATION & COMPLAINTS MANAGEMENT

Policy		
• To manage engagement with community and stakeholders • To responsibly manage external complaints and feedback received in relation to operational activities at the Facility.		
Performance Objectives		
• To proactively engage with key stakeholders, environmental interest groups and the wider community • To provide consistent messaging • To receive no external complaints related to operational activities. • To ensure all external complaints are promptly and adequately addressed. • To ensure all relevant parties are made aware of external complaints. • To maintain an open-door approach to external complaint reporting.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Implement the Construction Noise and Vibration Management Plan (APPENDIX D -).	Construction Manager	At all times
Undertake daily operations in accordance with the relevant LMS procedures and relevant regulatory requirements.	All Persons	At all times
Complaints to be dealt with in accordance with External Complaint Response Procedure - PR71.	Construction Manager / Compliance Team	At all times
Site contact details will be provided at the Facility boundary.	Construction Manager	At all times
A telephone complaints line for the purpose of receiving any complaints from members of the public in relation to the Facility will be made available and advertised via LMS's public webpage.	Compliance Team	At all times
Implement the IAP2 Spectrum for Public Participation	Compliance Team	At all times
Provide project updates to key stakeholders and interested parties including the LHRRP Community Reference Group	Project Team / Compliance Team	At project milestones or as required
Monitoring / Maintenance		
All complaints are to be forwarded to the Operations Manager and compliance@lms.com.au for immediate assessment.	Construction Manager / Compliance Team	At all times
A register will be maintained of all complaints received, which will be reported via the online Incident Management System (or if unavailable via Workplace Incident Reporting Form - FM3) within 24 hours.	Compliance Team	Within 24 hours of becoming aware of an incident or hazard
The person making the complaint shall be advised at the completion of the investigation (or at reasonable interim times) of the outcome of the complaint and the remedial actions taken.	Compliance Team	At all times
Relevant administering authorities are notified of complaints.	Compliance Team	As required

A Complaints Register will be maintained documenting date, time, nature of complaint and actions taken.	Compliance Team	At all times
Review feedback and information requests from stakeholders and interested parties to form assessment of further engagement or amendment of management plans	Compliance Team	Continuously
Identification of Non-conformances		
Complaints not adequately documented or reported.	Compliance Team	-
Complaints not adequately investigated or followed up.	Compliance Team	-
Complainants not adequately informed of investigation outcomes.	Compliance Team	-
Administering authorities not notified of complaints where required.	Compliance Team	-
Corrective Actions		
Prompt internal reporting of identified impacts attributable to the site's activities, with prompt notifications to the relevant council and administering authorities where required.	Construction Manager / Environment Team / Compliance Team	As required
Review and amend complaint response and recording procedures as required.	Compliance Team	As required
Review staff training and conduct retraining as required.	Construction Manager / Learning and Development Team	As required
Modify work practices / procedures where investigations indicate this is required.	Construction Manager / Compliance Team / Environment Team	As required
Reporting		
External reporting is undertaken in accordance with the LMS Environmental Incident Management Procedure.	Compliance Team / Environment Team	As required
Non-conformances/complaints will be reported to the relevant administering authority in accordance with the Development Consent approval conditions.	Compliance Team	Within 7 days of becoming aware of a non-compliance or complaint

9. PIRMP, ENVIRONMENTAL INCIDENT MANAGEMENT AND EMERGENCY RESPONSE

9.1 Categories of Environmental Harm

The relevant categories of environmental harm under the POEO Act 1997 (and LMS Environmental Incident Classes) are summarised below in Table 8. The triggers for reporting actual or potential harm are outlined in Figure 6.

Note: All correspondence with sensitive receptors, administering authorities and joint venture partners regarding the following matters must be undertaken in consultation with the Environment Team:

- Actual or potential harm that constitutes external reporting (Table 8).
- Incidents and activities which are likely to change the contaminated land status of the Facility's land parcel may need to be reported, which will be determined by the Environment Team.

Category (POEO Act 1997)	Definition	Internal Reporting Required?	External Reporting Required?
-	**POEO Act 1997** Not applicable **LMS Environmental Incident Classes** **Class 3** – Causes or has the potential to cause damage to the environment which can be easily rectified and results in remediation costs less than the threshold for material harm as defined by the Development Consent ($10,000)	Yes	No
Material harm to the environment	**Development Consent** Material harm, is harm that: a) involves actual harm to the environment that may include (but not be limited to) a leak, spill, emission other escape or deposit of a substance, and as a consequence of that environmental harm (pollution), may cause harm to the health or safety of people; or b) results in actual loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment) **LMS Environmental Incident Classes** **Class 2** – Causes or has the potential to cause damage to the environment which can be rectified and results in remediation costs of >$10,000 to $100,000.	Yes	Yes
	Development Consent As per 'material harm to the environment' above. **LMS Environmental Incident Classes** **Class 1** – Causes or has the potential to cause permanent environmental damage and results in remediation costs of >$100,000.	Yes	Yes

Table 8 – Categories of Environmental Harm

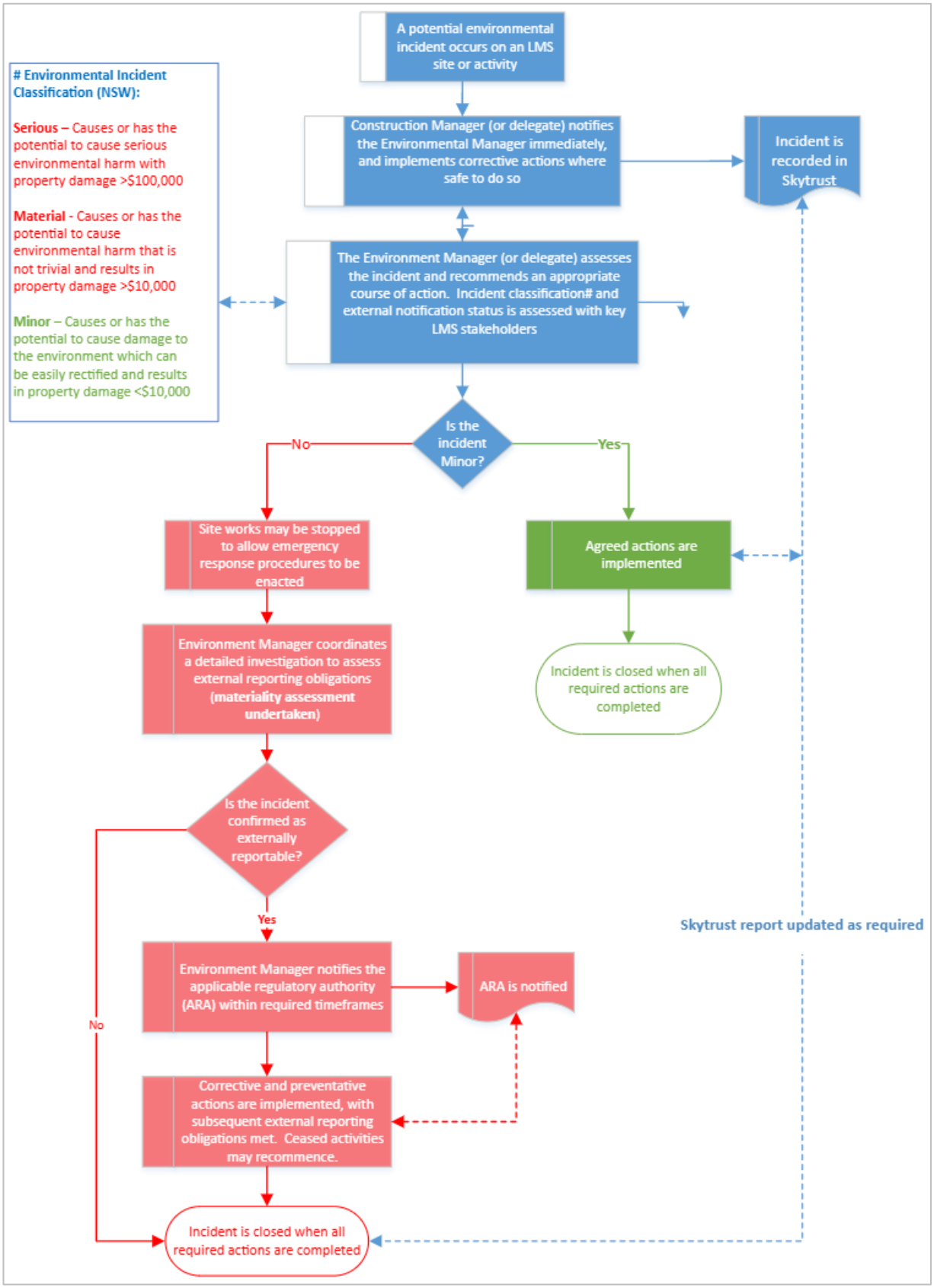

Figure 6 – Environmental Incident Response

9.2 Emergency Planning

Emergency planning and incident management procedures related to environmental matters will be managed in accordance with Figure 6 and are also detailed in the site Emergency Response Plan (ERP).

Emergency contact details will be outlined within the Construction Emergency Response Plan (CERP) as well as details of the site manager detailed on a sign in a prominent position on the work site. The sign is to remain in place until the Occupation Certificate is issued.

9.3 Pollution Incident Response Management Plan (PIRMP)

9.3.1 Spill Response

Pollution incidents must be responded to with the implementation of the Pollution Incident Response Manage Plan (PIRMP and the LMS Spill Response Procedure (PR84). These procedures are integrated into the Emergency Response Plan (ERP). Table 9 provides a summary of a spill response.

Item No.	Action	Comments
1	Stop further leaks	If a leak originates from a drum, take action to stop the leak. For example, roll drum so that the leak area is uppermost, or use Drumseal Putty. If a leak is from a pipe, close the valve.
2	Inform Supervisor/Leading Hand	Stop human and vehicular traffic and isolate the area.
3	Determine the magnitude and destination of the leak	For major spills on site, or if the spill has escaped or threatens to escape off site, contact the Environmental Supervisor immediately.
4	Form a barrier around leak/spill to contain it	Floor sweep, soil or sand can be utilised. Transportable spill kits are available to prevent movement of pollutants to nearby open water bodies or stormwater infrastructure.
5	Empty the spill source	Transfer fuel/oil from the failed container into another fit for purpose drum etc. and stored in a bunded area.
6	Place barriers around drains and outlets	Seal drain entry points by blocking with floor sweep, soil or sand or other available material or spill kit provisions (absorbent pads etc.).
7	Obtain oil spill kit and apply absorbent material	Use 'absorbent' or equivalent. Transportable spill kits are required to be present on LMS sites.
8	Clean up and remove absorbent material to waste bag/bin	Contaminated rags, provisions etc. must be disposed of appropriately in clearly labelled containers. Either shovel or use bob cat loader for larger quantities.
9	Clean up surface soil by excavating	Stockpile contaminated material in a designated area. Validate remediation by sampling where required. Replace with clean fill (soil).
10	Inform Environmental Supervisor and complete incident log	Record incident via online reporting and investigate.

Table 9 – Environmental Incident Management Procedure for Minor Hydrocarbon Spills

9.3.2 Incident Reporting and Records

All incidents will be documented in Skytrust, with investigations conducted and corrective action plans established to prevent a reoccurrence. Where current procedures are found to be ineffective, the OEMP, and any associated documentation, will be revised by the Environmental Supervisor, or delegate, to include improved procedures or requirements.

In complying with the administering authorities' expectations regarding incident reporting, an environmental investigation report is expected to include the following basic elements:

- Incident or activity that has caused contamination or environmental harm.
- Nature of contamination and pollutant/s of concern.
- Area affected (on or off site).
- Aspects of the environment affected.
- Identifying and implementing the necessary corrective actions and the responsible persons.
- Implementing or modifying controls necessary to avoid a repeat occurrence of the incident.

- Recording any changes required in written procedures.

All incident investigation reports, and associated documentation will be forwarded to LMS. The findings, outcomes and corrective actions required will be communicated back to the operations team as to the outcomes of findings.

Incident reporting procedure is summarised in Figure 6.

All incidents will be documented in Skytrust, with investigations conducted and corrective action plans established to prevent recurrence. Prompt communication with Cleanaway is essential.

Where current procedures are found to be ineffective, the CEMP, and any associated documentation, will be revised by the Environmental Supervisor, or delegate, to include improved procedures or requirements.

In complying with the applicable regulatory authority (ARA) expectations regarding incident reporting, an environmental investigation report is expected to include the following basic elements:

- Incident or activity that has caused contamination or environmental harm.
- Nature of contamination and pollutant/s of concern.
- Area affected (on or off site).
- Aspects of the environment affected.
- Any other relevant information.

Further to this, an environmental investigation will also include:

- Identifying and implementing the necessary corrective actions.
- Identifying the workers responsible for carrying out the corrective actions.
- Implementing or modifying controls necessary to avoid a repeat occurrence of the incident.
- Recording any changes required in written procedures.

All incident investigation reports, and associated documentation will be forwarded to LMS. The findings, outcomes and corrective actions required will be communicated back to the construction team as to the outcomes of findings.

10. COMPLIANCE

Policy		
To maintain compliance with all regulatory requirements, internal requirements, best practice guidance and standards.		
Performance Objectives		
No non-conformances regarding compliance requirements.		
Environmental Testing		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Undertake environmental monitoring in accordance with EPL 6345	Environment Team	5 yearly, or as requested by NSW EPA
PIRMP practical testing are undertaken with the relevant teams.	Environment Team	Annually
Tracking of status of Development Consent conditions	Compliance Team	Ongoing
Annual reporting to NSW EPA in accordance with EPL 6345	Environment Team	Annually
Environmental Inspections		
FM664 Lucas Heights CEMP Inspection Checklist includes general site inspection and identification of any environmental hazards.	Construction Manager	At project commencement, then fortnightly until completion of activities.
Internal Lucas Heights Construction EMS Inspection Checklist (FM664) is undertaken during construction development.	Environment Team	At a minimum of once during project development
Identification of Non-conformances		
Repeated deviations from procedures and environmental management practices.	Construction Manager / Compliance Team / Environment Team	-
The level of risk of a non-conformance is not appropriately assessed using the LMS Risk Matrix (APPENDIX I -) and therefore the relevant actions are not undertaken within the required timeframes.	Construction Manager / Compliance Team / Environment Team	-
Corrective Actions		
Prompt internal reporting of identified non-conformances attributable to the site's activities, with prompt notifications to the relevant administering authorities where required.	Construction Manager / Environment Team / Compliance Team	As required
Conduct re-testing to confirm correction of measured parameters	Environment Team	As required

10.1 Lucas Heights CEMP Inspection Checklist (FM664)

The implementation and effectiveness of environmental protection measures will be assessed by the Construction Manager (or delegate) using FM664 Lucas Heights CEMP Inspection Checklist. The FM664 is to be completed as least once during project development.

Note: FM664 can be used to record construction EMS implementation activities in between these times if the Construction Manager (or delegate) deems it necessary. Any non-conformances that are identified will be recorded and addressed as soon as practicably. Records of inspections are to be retained in the relevant Project folder. The audit checklist will remain 'open' until resolved and closed out, with actions tracked via Skytrust as necessary.

11. INDUCTION AND TRAINING MANAGEMENT PLAN

Policy		
To ensure all LMS employees and contractors are provided with the necessary training in environmental management practices and are aware of their responsibilities under relevant government approvals, legislation and standards.		
Performance Objectives		
• All LMS employees and contractors are suitably inducted into LMS' environmental management system (EMS). • Task specific EMS training, as per the departmental training matrix, are completed.		
Implementation Strategy / Mitigation Measures		
MANAGEMENT ACTIONS	**RESPONSIBILITY**	**FREQUENCY**
Ensure site staff undertake adequate training and all personnel accessing the site undergo inductions.	Operations Manager	At all times
Training and inductions include key findings of the following: • Bushfire Emergency Management and Evacuation Plan • Construction Noise and Vibration Management Plan • Traffic and Pedestrian Management Plan • Construction Safety Management Plan (CSMP) • Erosion and Sediment Control Plan (ESCP) • General Environmental Duty • Environmental Policy (PL9) • Cultural heritage duty of care • General Biosecurity Obligation • Construction Emergency Response Plan	Construction Manager	At all times
Monitoring / Maintenance		
A readily accessible register of training and inductions shall be maintained.	Learning & Development Team / Construction Manager	At all times
Identification of Non-conformances		
Personnel on-site who are inadequately trained or have not undergone site inductions.	Construction Manager	-
Training and induction records are not adequately maintained.	Construction Manager / Learning and Development Team	-
Repeated deviations from procedures and environmental management practices.	Construction Manager	-
Training material is not updated to align with changes to regulatory requirements.	Construction Manager / Environment Team / Compliance Team	-
Corrective Actions		
Review and amend training procedures.	Construction Manager / Learning and Development Team	As required

Review and rectify training records.	Learning and Development Team	As required
Conduct further training to regain competency.	Construction Manager / Learning and Development Team	As required

12. RECORDS MANAGEMENT

All environmental and site maintenance records shall be retained and made available upon request by administering authorities.
Examples of records may include, but not be limited to, the following:

- Complaints
- Internal and external audits
- PIRMP testing
- Internal inspections
- Incidents, incident investigations and associated restoration works
- All costs associated with environmental incidents to be recorded to verify clean-up expenditure
- Results of any environmental monitoring
- Correspondence with regulatory authorities or any other party
- Regulated and trackable waste disposal
- Infill sources (e.g., NOx engine tuning records)
- Environmental management performance reviews
- Site emergencies
- Site maintenance (e.g., testo records)
- Training and inductions
- Documentation version control (reports, procedures etc.)
- Contractor works including permits and invoices
- All transfers of bulk substances are managed via the Permit To Work – FM637 form, with records maintained

13. CEMP REVIEW AND IMPROVEMENT

The Environmental Supervisor will periodically review the CEMP and its operation and implementation. Between reviews, a register of issues will be maintained to ensure that any issue raised by internal and external workers associated with the Project are recorded for later inclusion into the CEMP. The purpose of the review is to ensure that the system is meeting the requirements of the standards, policies and objectives and, if not, to amend the CEMP to facilitate continuous improvement. The review will consider:

- Planning Secretary approval
- NSW EPA engagement
- Client's comments
- Site workers comments
- Authority comments
- Audit findings
- Environmental monitoring records
- Complaints
- Details of corrective and preventative actions taken
- Environmental non-conformances
- Incident reports
- Changes in organisation structures and responsibilities
- The extent of compliance with objectives and targets
- The effect of changes in Standards and Legislation

The Environmental Supervisor will review the various policies and objectives and approve any changes in consultation with the LMS Projects and Compliance Team.

14. REFERENCE DOCUMENTS

External

AS/NZ ISO14001:2016 Environmental Management Systems — Requirements with Guidance for Use
AS/NZ 1940:2017 The Storage and Handling of Flammable and Combustible Liquids
Environmental Impact Statement (GHD, 2025)
Preliminary Site Investigation (PSI) (GHD, 2025a)
DPHI Development Consent SSD 79933225
Environment Protection Licence (Reference: 6345)
Other Australian Standards as required (Section 4.7)

Internal

DOCUMENT NO:	DOCUMENT NAME:
Site Specific	Emergency Response Plan
Site Specific	Bioenergy Facility Decommissioning Guideline / Site Decommissioning Plan
FM3	Workplace Incident Reporting Form
FM637	Bulk Liquid Permit To Work
FM664	Lucas Heights CEMP Inspection Checklist
PL9	Environmental Policy
PR35	Workplace Incident Reporting and Investigation
PR46	Traffic Management Procedure
PR71	Complaint Response Procedure
PR84	Spill Response Procedure

APPENDIX A - Development Consent Condition Compliance

Condition	Requirement Summary	Section of CEMP
Compliance		
A20	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Section 6.1 Environmental Management System Section 11 Induction and Training Management Plan
Operation of Plant and Equipment		
A21	All plant and equipment used on site, or to monitor the performance of the development, must be: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Section 6.3 Noise and Vibration Management Plan
Dust Minimisation		
B1	The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.	Section 6.2 Air Quality Management Plan Section 6.5 Surface Water and Soil Erosion Management Plan
B2	During construction of the development, the Applicant must ensure that: (a) exposed surfaces and stockpiles are suppressed by regular watering or other alternative suppression method; (b) all trucks entering or leaving the site with loads have their loads covered; (c) trucks associated with the development do not track dirt onto the public road network; (d) public roads used by these trucks are kept clean; and (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.	Section 6.2 Air Quality Management Plan Section 6.4 Soil and Groundwater Management Plan
Air Quality Discharges		
B3	The Applicant must install and operate equipment in line with best practice to ensure that the development complies with all load limits, air quality criteria/air emission limits and air quality monitoring requirements as specified in the EPL applicable to the site.	APPENDIX B - Environment Protection Licence

<table>
<tr><th>Condition</th><th>Requirement Summary</th><th>Section of CEMP</th></tr>
<tr><td colspan="3">Noise</td></tr>
<tr><td>B8</td><td>The Applicant must comply with the hours detailed in Table 1.
<table>
<tr><th>Activity</th><th>Day</th><th>Time</th></tr>
<tr><td>Construction</td><td>Monday – Friday
Saturday & Sunday</td><td>7 am to 5 pm
8 am to 5 pm</td></tr>
<tr><td>Operation</td><td>Monday – Sunday</td><td>24 hours</td></tr>
</table></td><td>Section 2 Construction Works Description

Section 6.3 Noise and Vibration Management Plan

APPENDIX D - Construction Noise and Vibration Management Plan</td></tr>
<tr><td>B9</td><td>Works outside of the hours identified in condition B8 may be undertaken in the following circumstances:
(a) works that are inaudible at the nearest sensitive receivers;
(b) works agreed to in writing by the Planning Secretary;
(c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
(d) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.</td><td>Section 2 Construction Works Description</td></tr>
<tr><td colspan="3">Dangerous Goods</td></tr>
<tr><td>B14</td><td>The quantities of dangerous goods stored and handled at the site must be below the threshold quantities listed in the Department’s Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 at all times.</td><td>Section 6.11 Dangerous Goods and Hazardous Substances Management Plan</td></tr>
<tr><td>B15</td><td>Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with:
(a) all relevant Australian Standards; and
(b) for liquids:
(i) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
(ii) the NSW EPA’s Storing and Handling of Liquids: Environmental Protection – Participants Manual.</td><td>Section 6.11 Dangerous Goods and Hazardous Substances Management Plan</td></tr>
<tr><td>B16</td><td>In the event of an inconsistency between the requirements of conditions B15(a) and B15(b), the most stringent requirement must prevail to the extent of the inconsistency.</td><td>Section 6.11 Dangerous Goods and Hazardous Substances Management Plan</td></tr>
</table>

Condition	Requirement Summary	Section of CEMP
B17	The Applicant must store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's Storing and Handling of Liquids: Environmental Protection – Participants Manual (Department of Environment and Climate Change, 2007).	Section 6.11 Dangerous Goods and Hazardous Substances Management Plan
Bush Fire		
B21	Prior to the commencement of construction of the development, the Applicant must prepare a Bush fire Emergency Management and Evacuation Plan. The Plan must form part of the CEMP and OEMP required by conditions C2 and C5 and must: (a) be prepared by a suitably qualified and experienced person(s); (b) address the provisions of A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan 2014; (c) include details of: (i) the bush fire emergency responses for both construction and operation phases of the development; (ii) assembly points and evacuation routes; (iii) evacuation and refuge protocols; and (iv) awareness training for employees and contractors.	Section 6.9 Bushfire Management Plan APPENDIX C - Bushfire Emergency Management and Evacuation Plan
B22	The Applicant must: (a) submit a copy of the Bush fire Emergency Management and Evacuation Plan required by condition B21 to the Planning Secretary prior to the commencement of construction; and (b) implement the most recent version of the Bush fire Emergency Management and Evacuation Plan for the duration of the development.	APPENDIX C - Bushfire Emergency Management and Evacuation Plan

Condition	Requirement Summary	Section of CEMP
B24	Prior to the commencement of construction of the development, the Applicant must prepare a Construction Traffic Management Plan (CTMP) for the development. The plan must form part of the CEMP required by condition C2 and must: (a) be prepared by a suitably qualified and experienced person(s), (b) detail the measures that are to be implemented to ensure road safety and network efficiency during construction; (c) detail heavy vehicle routes, access and parking arrangements; (d) include a Driver Code of Conduct to: (i) minimise the impacts of earthworks and construction on the local and regional road network; (ii) minimise conflicts with other road users; (iii) minimise road traffic noise; and (iv) ensure truck drivers use specified routes; (e) include a program to monitor the effectiveness of these measures; and (f) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.	APPENDIX E - Traffic and Pedestrian Management Plan
Contamination		
B27	Prior to the commencement of construction, the Applicant must prepare an unexpected contamination finds procedure to ensure that potentially contaminated material is appropriately managed. The procedure must: (a) form part of the of the CEMP in accordance with condition C2; and (b) ensure any material identified as contaminated is managed in accordance with the POEO Act and its associated regulations. Details of the final management approach and the results of any associated testing must be submitted to the Planning Secretary within six weeks of the Applicant becoming aware of the contamination find, or as otherwise agreed to by the Planning Secretary.	Section 6.10 Unexpected Finds Management Plan

Condition	Requirement Summary	Section of CEMP
Soils, Water Quality and Hydrology		
B28	The Applicant must: (a) ensure that only VENM, ENM, or other fill material approved in writing by EPA is brought onto the site for use as fill; (b) keep accurate records of the volume and type of fill to be used; and (c) make these records available to the Planning Secretary upon request.	Section 6.4 Soil and Groundwater Quality Management Plan
B29	Prior to the commencement of any construction or other surface disturbance for the development, the Applicant must install suitable erosion and sediment control measures on-site, in accordance with the relevant requirements of the Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom, 2004) guideline and the Erosion and Sediment Control Plan included in the CEMP required by condition C2.	Section 6.5 Surface Water and Soil Erosion Management Plan APPENDIX F - Erosion and Sediment Control Plan
B30	The Applicant must maintain the erosion and sediment control measures installed on-site in accordance with condition B29 for the duration of construction of the development.	Section 6.5 Surface Water and Soil Erosion Management Plan APPENDIX F - Erosion and Sediment Control Plan
B31	The development must comply with section 120 of the POEO Act, which prohibits the pollution of waters, except as expressly provided for in an EPL.	Section 6.5 Surface Water and Soil Erosion Management Plan
Environmental Management		
C1	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:	
C1 (a)	a condition compliance table for that plan;	(a) This table (APPENDIX A -)
C1 (b)	detailed baseline data (where required);	(b) Not applicable.
C1 (c)	details of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures and criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures	(c)(i) Section 4 Environmental Management Framework and APPENDIX B - Environment Protection Licence (c)(ii) APPENDIX D - Construction Noise and Vibration Management Plan (c)(iii) All management plans listed under Section 6
C1 (d)	a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	(d) All management plans listed under Section 6
C1 (e)	a program to monitor and report on the: (i) impacts and environmental performance of the development; and effectiveness of the management measures set out pursuant to paragraph (d) above;	(e)(i) and (ii) Inspection forms outlined under all management plans listed under Section 6

Condition	Requirement Summary	Section of CEMP
C1 (f)	a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	(f) Section 7 Contingency Plan
C1 (g)	a program to investigate and implement ways to improve the environmental performance of the development over time;	(g) Section 13 CEMP Review and Improvement
C1 (h)	a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements; and	(h)(i) All management plans listed under Section 6 (h)(ii) Section 8 External Complaints Management Plan (h)(iii) All management plans listed under Section 6
C1 (i)	a protocol for periodic review of the plan.	(i) All management plans listed under Section 6 and Section 13 CEMP Review and Improvement
Construction Environmental Management Plan		
C2	The Applicant must prepare a Construction Environmental Management Plan (CEMP) for the development in accordance with the requirements of condition C1 and to the satisfaction of the Planning Secretary.	This report
C3	As part of the CEMP required under condition C2 of this consent, the Applicant must include the following: (a) Construction Noise and Vibration Management Plan; (b) a copy of the Bush fire Emergency Management and Evacuation Plan (see condition B21); (c) Construction Traffic Management Plan (see condition B24); (d) Erosion and Sediment Control Plan; and (e) Community Consultation and Complaints Handling.	(a) APPENDIX D - Construction Noise and Vibration Management Plan (b) APPENDIX C - Bushfire Emergency Management and Evacuation Plan (c) APPENDIX E - Construction Traffic and Pedestrian Management Plan (d) APPENDIX F - Erosion and Sediment Control Plan (e) Section 8 External Complaints Management Plan and APPENDIX D - Construction Noise and Vibration Management Plan

Condition	Requirement Summary	Section of CEMP
Reporting and Auditing		
C10	The Applicant must notify the Department within 24 hours of becoming aware of an incident. The notification must be made via the NSW planning portal (Major Projects) and address details of the incident including: (a) date, time and location; (b) a brief description of what occurred and why it has been classified as an incident; (c) a description of what immediate steps were taken in relation to the incident; and (d) identifying a contact person for further communication regarding the incident.	Section 6.13 Environmental Incident Management Plan
C11	The Applicant must provide the Department with a subsequent incident report in accordance with the requirements set out in Appendix 3 (Incident Notification and Reporting Requirements).	Section 6.13 Environmental Incident Management Plan
C12	Within seven days of becoming aware of any non-compliance, the Applicant must notify the Department of the noncompliance, in writing, via the NSW planning portal (Major Projects).	Section 6.13 Environmental Incident Management Plan
C13	A non-compliance notification submitted under condition C12 must identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply, the reasons for the non-compliance (if known), and what actions have been undertaken, or will be undertaken, and when, to address the non-compliance.	Section 6.13 Environmental Incident Management Plan
C18	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance reporting and independent auditing.	As required in response to a complaint - External Complaints Management Plan and APPENDIX D - Construction Noise and Vibration Management Plan

Condition	Requirement Summary	Section of CEMP
C19	At least 48 hours before the commencement of construction of the development and for the life of the development, the Applicant must: (a) make the following information and documents (as they are obtained or approved) publicly available on its website: (i) the documents referred to in condition A2 of this consent; (ii) all current statutory approvals for the development; (iii) all approved strategies, plans and programs required under the conditions of this consent with the exception of any hazard and risk related documents; (iv) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent; (v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; (vi) a summary of the current stage and progress of the development; (vii) contact details to enquire about the development or to make a complaint; (viii) a complaints register, updated quarterly; (ix) the Compliance Report of the development; (x) audit reports prepared as part of any Independent Audit of the development and the Applicant's response to the recommendations in any audit report; (xi) any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary.	Section 6.1 Environmental Management System

APPENDIX B - ENVIRONMENT PROTECTION LICENCE

Environment Protection Licence

Licence - 6345

Licence Details	
Number:	6345
Anniversary Date:	01-April

Licensee

LUCAS HEIGHTS BIOENERGY PTY LTD

118 GREENHILL ROAD

UNLEY SA 5061

Premises

LUCAS HEIGHTS 2 LFG POWER STATION

LITTLE FOREST ROAD

LUCAS HEIGHTS NSW 2234

Scheduled Activity

Electricity generation

Fee Based Activity	Scale
Generation of electrical power from gas	0-250 GWh annual generating capacity

Contact Us

NSW EPA

6 Parramatta Square

10 Darcy Street

PARRAMATTA NSW 2150

Phone: 131 555

Email: info@epa.nsw.gov.au

Locked Bag 5022

PARRAMATTA NSW 2124

Environment Protection Licence

Licence - 6345

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Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

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The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

LUCAS HEIGHTS BIOENERGY PTY LTD
118 GREENHILL ROAD
UNLEY SA 5061

subject to the conditions which follow.

Environment Protection Licence

Licence - 6345

1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Electricity generation	Generation of electrical power from gas	0 - 250 GWh annual generating capacity

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
LUCAS HEIGHTS 2 LFG POWER STATION
LITTLE FOREST ROAD
LUCAS HEIGHTS
NSW 2234
LOT 102 DP 1009354

A3 Other activities

A3.1 This licence applies to all other activities carried on at the premises, including:

Ancillary Activity
Chemical Storage Facilities
Waste Activities

A4 Information supplied to the EPA

A4.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:
a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and

b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air

EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G101" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
2	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G102" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
3	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G103" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
4	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G104" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
5	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G105" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
6	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G106" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
7	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G107" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
8	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G108" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
9	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G109" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
10	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G110" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/2025.
11	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G111" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
12	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G112" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
13	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G113" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25

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14	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G114" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
15	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G115" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
16	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G116" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
17	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G117" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
18	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G118" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
19	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G119" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
20	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Gas engine exhaust stack labelled "G120" on drawing number 840-BA-060, Rev 1 (2 of 2) 27/02/25
21	Gas supply monitoring		Landfill gas supply line to gas engines sample point on drawing 840-BA-060, Rev 1 (2 of 2) 27/02/25
22	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Landfill gas flare labelled as "Flare" on drawing number 840-BA-060, Rev 4 (1 of 2) 27/02/25
23	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Landfill gas flare labelled as "Flare 02" on drawing number 840-BA-060, Rev 4 (1 of 2) 27/02/25

3 Limit Conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Concentration limits

L2.1 For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L2.2 Air Concentration Limits

POINT 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period

Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	100	dry, 273 K, 101.3 kPa	7%
Nitrogen Oxides	milligrams per cubic metre	450	dry, 273 K, 101.3 kPa	7%

L2.3 Combustion parameters

For each monitoring/discharge point or utilisation area specified in the tables below (by point number), the parameter must be equal to or greater than the lower limits specified for that parameter in that table.

Point	Parameter	Units of measure	Lower limit	Averaging period
22	Residence time	seconds	0.6	Instantaneous
22	Temperature	°C	760	Instantaneous
23	Residence time	seconds	0.3	Instantaneous
23	Temperature	°C	1000	Instantaneous

L3 Waste

L3.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.

L3.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.

L4 Potentially offensive odour

L4.1 No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:
a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
a) must be maintained in a proper and efficient condition; and
b) must be operated in a proper and efficient manner.

O3 Dust

O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

O4 Other operating conditions

Flare operations

O4.1 The enclosed gas flares must be operating within 2 hours of a planned shutdown of the gas engines and within 48 hours of an unplanned shutdown, for example, due to power outage or plant breakdown at the premises, until electricity production can resume.

5 Monitoring and Recording Conditions

M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.

M1.2 All records required to be kept by this licence must be:
a) in a legible form, or in a form that can readily be reduced to a legible form;
b) kept for at least 4 years after the monitoring or event to which they relate took place; and
c) produced in a legible form to any authorised officer of the EPA who asks to see them.

M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
a) the date(s) on which the sample was taken;
b) the time(s) at which the sample was collected;
c) the point at which the sample was taken; and
d) the name of the person who collected the sample.

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M2 Requirement to monitor concentration of pollutants discharged

M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

M2.2 Air Monitoring Requirements

POINT 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	percent	Special Frequency 1	TM-24
Carbon monoxide	milligrams per cubic metre	Special Frequency 1	TM-32
Dry gas density	kilograms per cubic metre	Special Frequency 1	TM-23
Moisture content	percent	Special Frequency 1	TM-22
Molecular weight of stack gases	grams per gram mole	Special Frequency 1	TM-23
Nitrogen Oxides	milligrams per cubic metre	Special Frequency 1	TM-11
Oxygen (O2)	percent	Special Frequency 1	TM-25
Sulfur dioxide	milligrams per cubic metre	Special Frequency 1	TM-4
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Special Frequency 1	TM-3
Temperature	degrees Celsius	Special Frequency 1	TM-2
Velocity	metres per second	Special Frequency 1	TM-2
Volumetric flowrate	cubic metres per second	Special Frequency 1	TM-2

POINT 21

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	percent	Special Frequency 2	TM-24
Dry gas density	milligrams per cubic metre	Special Frequency 2	TM-23
Moisture content	percent	Special Frequency 2	TM-22
Molecular weight of stack gases	grams per gram mole	Special Frequency 2	TM-23
Oxygen (O2)	percent	Special Frequency 2	TM-25
Temperature	degrees Celsius	Special Frequency 2	TM-2
Velocity	metres per second	Special Frequency 2	TM-2
Volatile organic compounds	milligrams per cubic metre	Special Frequency 2	TM-34
Volumetric flowrate	cubic metres per second	Special Frequency 2	TM-2

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POINT 22

Pollutant	Units of measure	Frequency	Sampling Method
Temperature	degrees Celsius	Special Frequency 1	TM-2
Volumetric flowrate	cubic metres per second	Special Frequency 1	TM-2

POINT 23

Pollutant	Units of measure	Frequency	Sampling Method
Temperature	degrees Celsius	Special Frequency 1	TM-2
Volumetric flowrate	cubic metres per second	Special Frequency 1	TM-2

Note: For the purpose of monitoring points 1 to 20 the words “molecular weight of gases in stack” refer to the “molecular weight of gases in engine exhaust stack” and for monitoring point 21 the words refer to “molecular weight of gases in supply line”.

M2.3 For the purposes of the tables above:

Special Frequency 1 means samples must be collected and analysed at least once every 5 years; and

Special Frequency 2 means samples must be collected and analysed from point 21 on any year whenever any of the points 1 – 20 are collected and analysed.

M2.4 The licensee must keep a legible record of when the flare (monitoring point 22 and 23) is operated including the date, time of flare start-up, time of flare shutdown, the time the gas engines went offline and the time the gas engines went back online.

M2.5 The selection of sampling positions must be carried out in accordance with test method TM-1.

M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

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Note: The *Protection of the Environment Operations (Clean Air) Regulation 2022* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M4 Recording of pollution complaints

M4.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M4.2 The record must include details of the following:
a) the date and time of the complaint;
b) the method by which the complaint was made;
c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
d) the nature of the complaint;
e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
f) if no action was taken by the licensee, the reasons why no action was taken.

M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M5 Telephone complaints line

M5.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

M5.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

M5.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

6 Reporting Conditions

R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,

6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

R1.3 Where this licence is transferred from the licensee to a new licensee:
a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
a) the licence holder; or
b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R2 Notification of environmental harm

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the

requirements of Part 5.7 of the Act.

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
a) where this licence applies to premises, an event has occurred at the premises; or
b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

R3.3 The request may require a report which includes any or all of the following information:
a) the cause, time and duration of the event;
b) the type, volume and concentration of every pollutant discharged as a result of the event;
c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
g) any other relevant matters.

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

R4 Other reporting conditions

R4.1 Records of shutdowns (number and duration), engine tune-ups and routine checks must be kept in a logbook and must be made available to any authorised EPA officer upon request

7 General Conditions

G1 Copy of licence kept at the premises or plant

G1.1 A copy of this licence must be kept at the premises to which the licence applies.

G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.

G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

Environment Protection Licence

8 Special Conditions

E1 Environmental Obligations of Licensee

E1.1 After the premises ceases to be used for the purpose to which the licence relates, or in the event that the licensee ceases to carry out the activity that is the subject of this licence, that licensee must:
a) Remove and lawfully dispose of all liquid and non-liquid waste(s) stored on the premises; and
b) Conduct a Stage 1 - Preliminary site investigation, in accordance with the Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011) to:

- identify all past and present potentially contaminating activities,
- identify potential contamination types
- discuss the site condition
- provide a preliminary assessment of site contamination, and
- assess the need for further investigations.

Environment Protection Licence

Licence - 6345

Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

Environment Protection Licence

Licence - 6345

flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environmen t Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder describe d at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 mo nths. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

Licence - 6345

TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non-putrescible), special waste or hazardous waste
Wellhead	Has the same meaning as in Schedule 1 to the Protection of the Environment Operations (General) Regulation 2021.

Mr Jim Clarence

Environment Protection Authority

(By Delegation)

Date of this edition: 28-September-2000

Environment Protection Licence

Licence - 6345

End Notes

1	Licence transferred through application 140027, approved on 10-Oct-2000, which came into effect on 08-Apr-2000.
2	Licence varied by notice 1002700, issued on 10-Jan-2001, which came into effect on 04-Feb-2001.
3	Licence varied by Change of Contact details, issued on 06-Dec-2001, which came into effect on 06-Dec-2001.
4	Licence varied by notice 1016444, issued on 07-Nov-2003, which came into effect on 02-Dec-2003.
5	Licence varied by notice 1037823, issued on 22-Jul-2004, which came into effect on 16-Aug-2004.
6	Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
7	Licence varied by Correction to EPA Region data record., issued on 28-Jun-2010, which came into effect on 28-Jun-2010.
8	Licence varied by correction to DECCW Region data record, issued on 07-Jul-2010, which came into effect on 07-Jul-2010.
9	Licence varied by notice 1519628 issued on 29-May-2014
10	Licence varied by notice 1531598 issued on 06-Jul-2015
11	Licence varied by notice 1568476 issued on 04-Dec-2018
12	Licence varied by notice 1647049 issued on 04-Mar-2025
13	Licence transferred through application 1653280 approved on 22-Dec-2025 , which came into effect on 31-Dec-2025

APPENDIX C - BUSHFIRE EMERGENCY MANAGEMENT AND EVACUATION PLAN

Lucas Heights Bioenergy Facility

Bushfire Emergency Management and Evacuation Plan (BEMEP)

Report Date:	17/04/2026
Report Reference:	20057-RG-004
Revision:	3

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Client:	Internal

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1. Facility Details

Facility: Lucas Heights Bioenergy Facility

Address: 19 Little Forest Road, Lucas Heights NSW 2234

Site Type: Bioenergy Facility

Bush Fire Prone Land: Category 1 and Vegetation Buffer

1.1. Scope

The scope of this plan is to detail bushfire emergency management and evacuation procedures for LMS' Lucas Heights Bioenergy Facility (BEF) (the Project), during both construction and operational phases, in accordance with the NSW Rural Fire Service document "A guide to developing a Bush Fire Emergency Management and Evacuation Plan".

This document should be read in conjunction with LMS documents:

- Lucas Heights Construction Emergency Response Plan (CERP) and
- Lucas Heights Operations Emergency Response Plan (OERP)

Evacuation procedures are consistent with the LHRRP Emergency Response Plan (Cleanaway, 2025).

This document will be revised as construction works transition to operation.

This plan outlines procedures for Site evacuation to enhance the protection of Workers from the threat of bushfire.

This BEMEP has been reviewed by Letara Judd, BSc (Hons) (Environmental Science), Graduate Certificate in Bushfire Protection, Senior Bushfire Consultant and Bushfire Team Leader, GHD Pty Ltd and Bailey Jones, BSc (Environmental Science), Bushfire & Natural Resource Officer, GHD Pty Ltd.

1.2. Condition Compliance

Condition	Requirement Summary	Where Addressed
Bush Fire		
B20	Notwithstanding the requirements of condition B19, the entire site must be managed as an Inner Protection Area consistent with the requirements of Appendix 4 of *Planning for Bush Fire Protection 2019*	Section 7.1
B21	Prior to the commencement of construction of the development, the Applicant must prepare a Bush fire Emergency Management and Evacuation Plan. The Plan must form part of the CEMP and OEMP required by conditions C2 and C5 and must:	This document. CEMP Appendix C
B21(a)	Be prepared by a suitably qualified and experienced person(s);	Document Control Section 1.1
B21 (b)	Address the provisions of A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan 2014;	Section 2
B21 (c)	include details of: (i) the bush fire emergency responses for both construction and operation phases of the development; (ii) assembly points and evacuation routes; (iii) evacuation and refuge protocols; and (iv) awareness training for employees and contractors.	Section 0 Section 0 and APPENDIX A - and APPENDIX B - Section 7.2 and 7.3 Section 5.2
Management plan requirements		
C1(a)	condition compliance table for that plan	This table (Section 1.2)

C1(c)	(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 1.1 and 11
C1(d)	Description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria	This document
C1 (h)	a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements; and	Section 9
C1(i)	Protocol for periodic review of the plan	Section 0
Construction Environmental Management Plan		
C3	As part of the CEMP required under condition C2 of this consent, the Applicant must include the following: A copy of the Bush Fire Emergency Management and Evacuation Plan	This document CEMP Appendix C

Table 1 – Conditions of Consent

2. Alignment with NSW Guidance

This document aligns with the provisions of the NSW Rural Fire Service (RFS) Guide to Developing a Bushfire Emergency Management and Evacuation Plan by providing a comprehensive overview of the facility, including its location, type, and bushfire risk categorisation.

The inclusion of detailed site information, such as the address and bushfire prone land classification, ensures that the plan meets the Guide's requirement for clearly identifying the site and its potential hazards.
Section 1.1 outlines the purpose and intent of the plan, which is consistent with the Guide's recommendation to define the objectives of bushfire emergency planning. References to relevant supporting documents, such as emergency response plans for both construction and operations phases, and demonstration of compliance with the Guide's emphasis on integrating bushfire planning within broader emergency management frameworks are also included.

Evacuation procedures are explicitly stated to be consistent with the LHRRP Emergency Response Plan, with plans for review and revision as the facility transitions from construction to operations. This approach addresses the Guide's requirement for ongoing review and adaptation of emergency procedures to ensure they remain effective and relevant. Additionally, the plan's focus on safeguarding workers and providing clear information about evacuation routes and refuges further reflects the NSW RFS Guide's core principles for protecting life and ensuring safe evacuation during a bushfire event.

Adherence to the provisions outlined in NSW RFS Planning for Bushfire Protection 2019 (PBP 2019) are incorporated in risk mitigation strategies, such as identifying bushfire-prone areas, specifying clear evacuation routes, and detailing procedures to protect life and property during bushfire events. The integration of site-specific information and ongoing review mechanisms ensures compliance with PBP 2019's requirements for robust emergency planning and adaptive management in bushfire contexts.

3. Primary Action

The primary action to follow in the event of a bushfire warning is to **evacuate** the Site (noting that the site can be operated remotely).

3.1. Site Details

Please refer to the nominated site contact person below for more information:

Site Details		
Contact Person:	Daniel Lansdowne	
Position:	Manager – Bioenergy (Lucas Heights)	
Phone Number:	0400 554 366	
Description of Facility:	Lucas Heights 2 Power Station and Flaring Facility (existing facility operation only)	Lucas Heights Bioenergy Facility (construction)
Work Status:	Operation	Construction
Location:	Part Lot 101 DP 1009354 Lot 102 DP 1009354 Western Side Refer **Error! Reference source not found.**: – red boundary = Operations Area	Lot 102 DP 1009354 Eastern Side Refer **Error! Reference source not found.**: – blue boundary = Construction Area – pink boundary = Construction Admin Area
Number of Buildings:	2 x offices & amenities block 1 x control building 15 generator modules 1 x workshops 5 x flares	1 x control building 20 x generator modules 2 x construction offices 1 x construction lunchroom 1 x construction toilet block 4 x construction storage containers
Number of Workers:	6	15
Number of Occupants:		NA
Number of Occupants with support needs:		NA

Table 2 – Site Details

As identified in Table 2 and APPENDIX A - ACTIVITY ZONES, the Site has both operational and construction environments working side by side.

The emergency response procedures for both the construction and operation phases are implemented in the same way, ensuring consistency across all activities. This means evacuation protocols, assembly points, and staff training apply equally, regardless of whether the site is under construction or fully operational. By using a unified approach, all personnel are familiar with the same emergency actions, reducing confusion and streamlining responses during a bushfire event.

3.2. Assembly Areas

As shown in APPENDIX A - the site has two identified Assembly Areas

- Primary Assembly Area - located on the northern side of the site adjacent the staff parking area
- Secondary Assembly Area–- located on the southern side of the site

The Incident Controller will direct workers to the appropriate location based on the emergency event in accordance with the Site Emergency Response Plan.

3.3. Evacuation Routes

As shown in APPENDIX B - the primary evacuation route is via the main entrance to the Bioenergy Facility, then via Little Forest Road to New Illawarra Road.

Alternative emergency access is available via the main entrance to the landfill

The following outlines who has the responsibility of implementing the emergency procedures in the event of a bushfire (Incident Controller).

Roles and Responsibilities			
Position	**Name**	**Area of Responsibility**	**Mobile**
Chief Warden Manager – Bioenergy (Lucas Heights)	Daniel Lansdowne	Bioenergy Facility	0400 554 366
Deputy Warden	Henry McLeay	Construction Site	0419 025 120

The Fire Wardens and all relevant stakeholders will review the plan before the event. The review process will evaluate the adequacy of the plan and identify potential management issues and mechanisms for improvement. The Fire wardens will keep a register of completed works and amendments to procedures associated with the Plan. The records will include details such as: works completed and amendments, relevant notes to support amendments, completed and approved by, date, time, location and any future work and amendment requirements.

3.4. Emergency Contacts

Emergency Contacts		
Name of Organisation	**Office / Contact**	**Phone Number**
Triple Zero	Emergency Services (Police, Fire, Ambulance)	000
NSW Rural Fire Service	Sutherland Incident Management Facility (126 Wilson Parade, Heathcote NSW 2233)	02 8508 4040
Fire and Rescue NSW	**Sutherland Fire Station** 2 Moore St, Sutherland NSW 2232	02 9293 1046
NSW Rural Fire Service	Bushfire Information Line	1800 679 737 1800 NSW RFS
NSW Rural Fire Service	Website	www.rfs.nsw.gov.au
NSW Rural Fire Service	130 Old Illawarra Rd, Barden Ridge NSW 2234	02 9543 0488
NSW Rural Fire Service	22 Ferntree Rd, Engadine NSW 2233	02 8508 4040
NSW Police Force	Sutherland Police Station	02 9542 0899
Cleanaway – Emergency Controller	Cameron Stewart	0442 557 108
LMS – Incident Controller	Daniel Lansdowne	0400 554 366
Sutherland Shire Council	4-20 Eton Street, Sutherland NSW 2232	02 9710 0333
NSW SES	NSW SES	13 25 00

3.5. Communications

Follow Instructions:

- All personnel shall follow instruction from Supervisor / Emergency Services.

Mobile:

- Mobile reception is generally moderate across all areas of the site – however, mobile communications may be unreliable during bushfire emergencies due to the volume usage.

Radio / Television / Media:

- ABC: 97.3 FM (Illawarra) or 702 AM (Sydney).
- All major TV stations and internet-based news media likely to provide headlines.

4. Alert Levels

After a fire has started, the fire near me website and the 'Hazards Near Me' mobile application will provide information and warnings about bushfires and other incidents attended by the NSW RFS.

Website: https://www.rfs.nsw.gov.au/fire-information/fires-near-me

Use the 'Hazards Near Me' mobile application to help you stay up to date on bushfires in your area.

The following alert levels are provided to give you an indication of the level of threat from a fire: There are three levels of Bush Fire Alerts issued by NSW RFS (https://www.rfs.nsw.gov.au/plan-and-prepare/alert-levels):

	Advice – A fire has started. There is no immediate danger. Stay up to date in case the situation changes.
	Watch and Act – There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family.
	Emergency Warning – An Emergency Warning is the highest level of Bush Fire Alert. You may be in danger and need to take action immediately. Any delay now puts your life at risk.

Figure 1 – Bushfire Alert Levels

4.1. Information

For information on bushfires, call the Bush Fire Information Line: 1800 NSW RFS (1800 679 737).

The two systems used by the Rural Fire Service which provide triggers for evacuation are: The Fire Danger Ratings- used before a fire has started and The Bush Fire Alerts- are used once a fire has started. Both of these warning systems are described below.

In an emergency, ABC Radio can provide up-to-date information. ABC Radio Sydney 702 AM; ABC RN – 576 AM; and ABC NEWS on Radio – 630 AM.

4.2. Fire Danger Rating

It is essential to check the Fire Danger Ratings on a daily. Before a fire starts, monitor the Fire Danger Ratings daily at www.rfs.nsw.gov.au/fdr. The higher the fire danger rating, the more dangerous a fire is likely to be.

These ratings are based on predicted conditions such as the temperature, humidity, wind and dryness of the landscape. It indicates how a bushfire may act, what impacts could occur and the consequences of a bushfire in the identified conditions. The table below and the graph are taken from the RFS Bushfire Survival Plan and show how the fire danger gets higher, so does the potential loss of life and property.

FIRE DANGER RATING	WHAT YOU SHOULD DO
CATASTROPHIC	**For your survival, leave bush fire risk areas.** › These are the most dangerous conditions for a fire. › Your life may depend on the decisions you make, even before there is a fire. › Stay safe by going to a safer location early in the morning or the night before. › Homes cannot withstand fires in these conditions. › You may not be able to leave and help may not be available.
EXTREME	**Take action now to protect your life and property.** › These are dangerous fire conditions. › Check your bush fire plan and ensure that your property is fire ready. › If a fire starts, take immediate action. › If you and your property are not prepared to the highest level, go to a safer location well before the fire impacts. › Reconsider travel through bush fire risk areas.
HIGH	**Be ready to act.** › There's a heightened risk. Be alert for fires in your area. › Decide what you will do if a fire starts. › If a fire starts, your life and property may be at risk. The safest option is to avoid bush fire risk areas.
MODERATE	**Plan and prepare.** › Stay up to date and be ready to act if there is a fire.
NO RATING	› Fire danger ratings are used on days when you need to take action. On days of minimal risk, 'No Rating' will be issued.

Figure 2 – Fire Danger Ratings

4.3. Total Fire Bans

Any hot works permits will cease within the site during Total Fire Bans reported by the NSW RFS. The Chief Warden will monitor the RFS online notifications for Total Fire Bans and communicate these to the project teams as required.

5. Emergency Management

Emergency management is more specifically covered in the following document:

- 20057-RG-064 Construction Emergency Response Plan

5.1. Roles and Responsibilities

Chief Warden (Yellow Hard Hat/Yellow Vest)

The Chief Warden is responsible for organising and supervising the safe movement of workers in an emergency. During emergencies, instructions given by the Chief Warden or Deputy Warden shall take precedence over the normal management structure.

This Plan documents the pre-emergency, emergency and post-emergency duties and responsibilities during a bushfire emergency.

The Chief Warden's role is to liaise with other Wardens and not be impeded by other personnel. On becoming aware of an emergency, the Chief Warden will take the following actions:

- Raise the alarm for an emergency response.
- Contact/communicate with external emergency services and/or agencies as required.
- Advise emergency services on the best gate to access the site to conduct an emergency response and arrange for warden or delegated personnel to meet at this location.
- Coordinate emergency response and monitor the effectiveness.
- Communicate with area wardens, supervisors and area managers.
- Give all clear when authorized to do so by the emergency services, if appropriate.
- Assist with the completion of the incident reporting and notification, in accordance with the legislative requirements.
- Schedule emergency drills and arrange to conduct debriefing of the results

Deputy Warden (Red Hard Hat/Red Vest)

The Warden's role is to manage personnel giving the Chief Warden unimpeded freedom to communicate with external stakeholders, services & assist with decision making.

- The Deputy Warden is responsible for the following: Ensure that a delegate is assigned as a warden during their absence and to cover all shifts.
- Ensure that all personnel in your area are evacuated to the nominated muster point in case of an emergency evacuation or shelter in place.
- Compile a list of all personnel at the muster point with assistance from all supervisors.
- Assist the Chief Warden where required to assist with emergency services access to the site by meeting at the designated access gate or provide additional support to the emergency services.
- Not to stand down evacuation until all clear is given by the Chief Warden.

5.2. Preparation and Training

The Chief Warden is to undertake the following to prepare for potential bushfire events, and to prepare ahead of the bushfire season.

Site Workers:

- Have all site workers details easily identifiable to account for all persons on site, to be used as a register prior to any departure from the property;
- Have informative signage in key locations outlining the emergency management procedures and bushfire protection measures;
- Have a site layout plan that shows the designated assembly areas and evacuation details available on site for all site occupants; and
- Have emergency kits available: Whistle, portable battery radio, waterproof torch, spare batteries, first aid kit and manual, waterproof bag for valuables, emergency contact details, duct and masking tape, non-perishable food and water, and pocket knife;
- This plan will be communicated and made available to all persons responsible for the plan. A copy will be retained in a common area and used to train all staff about bushfire management responsibilities.

Site:

- Ensure the Plan is up to date;
- Ensure any firefighting equipment is serviceable and available. e.g. communication systems are in working order (walkie-talkies), generators are available, bushfire kits, Ladders, spades, shovels, mops, buckets, and hoses;
- Ensure areas around the assets are prepared and maintained;
- Ensure all landscaping around critical assets is maintained;
- Ensure onsite powerlines are maintained, liaise with relevant providers;
- Check and update external emergency contact numbers; and
- Monitoring risks from adjoining private and public land, maintaining communication with adjoining landowners and land managers for any changes in management or increased risks to the site.

Planning:

- Evacuation safety is dependent on several factors, such as fire danger rating, temperature, wind strength and direction. The time to evacuate may take more than expected during weekends or school holidays when traffic is heavy;
- When advised to evacuate, the early departure of all site occupants before emergency services arrive is recommended.

Training:

For the procedures of this plan to be followed in an orderly manner during an emergency, all workers must be familiar with the Plan, procedures, roles and responsibilities. A meeting to discuss procedures and roles should be undertaken as well as training employees on the aspects of the plan. A drill for each scenario should be undertaken to ensure everyone understands their roles in an emergency. As this Plan is for a single event, the plan shall be tested once prior to the event. This Plan shall be supplied to all fire wardens for training and use in an emergency.

For this to occur, it is necessary for the facility to have education on procedures, roles and responsibilities and to undertake exercises to test the emergency procedures.

The Chief Fire Warden is required to ensure the delivery of training for relevant workers. The exercises should test the arrangements and procedures that form the Plan and include the following:

- Responding to alarms or evacuation orders and using communication devices;
- What and where are the evacuation routes and refuges?
- What are the Bush Fire Action Statements?
- Who has responsibility, and for what?
- What specific arrangements have been made for transportation and accommodation (if required)?

Evacuation Management:

The site is located off Little Forest Road, near New Illawarra Road, a main road running north-south within the Sutherland Shire. The road connects to Heathcote Road on the south and Bangor Bypass on the north. It should be noted these road traverse bush fire prone land.

During a bushfire event, emergency services may issue evacuation orders and the DIRECTION of evacuation. For example, a NSW RFS Emergency Warning may say:

'Leave now if the path is clear in an easterly direction towards Engadine'.

Evacuation requires an off-site refuge, which is a building or location some distance away from the property and from the effects of a bush fire that can accommodate all the occupants being evacuated. The direction of the evacuation and designated evacuation point will depend highly on the existing fire conditions. The Chief Warden should liaise with the emergency services to gain situational awareness and directions concerning suitable evacuation routes to the designated Evacuation Centres. It should be noted that any evacuation site or the NSP could be at capacity. The advice of Emergency Services should be followed as to where to evacuate.

An important factor when planning for emergency procedures is that under intense conditions, it is common for people to behave irrationally, and this may increase the time taken to move people. There is a very high risk of entrapment while travelling on roads during a major bushfire event due to bushfire pinch points. The factors affecting potential delays at peak

times would include the increased number of vehicles and congestion on New Illawarra Road with residents from the surrounding communities evacuating. The Site Manager must ensure that access and egress into the site remain unobstructed during an emergency.

An increased flow of traffic may be experience in times of evacuation and can lead to road congestion. Evacuation procedures for the surrounding communities may impact the wider road network's capacity to deal with the timely evacuation residents and responding emergency services. The unpredictable nature of bushfires may result in roads being closed without warning. Where emergency services have issued evacuation orders, leaving early is always the safest option.

6. Immediate Response

The LMS Incident Controller will liaise with the CWY – Emergency Controller to establish the immediate response which may include:

a) Assembly at the Emergency Assembly Area

b) Establishing No Go Zones – exclusion areas

c) Site evacuation to designated off-site refuges

The LMS Incident Controller will be responsible for accounting for all Workers and visitors when transferring to the CWY Emergency Assembly Areas.

On-site sheltering will only be considered as a last resort when all other options have been exhausted and will be undertaken in direct consultation with the NSW Rural Fire Service and Cleanaway.

7. Principal Requirements

In the event of an emergency or unforeseen bushfire incident occurring on site, site personnel are required to initiate evacuation as outlined in Section 5 of this document.

Alert siren

On hearing the alarm, the Chief Warden is to assess the incident and coordinate with key personnel, and inform workers on site. All remaining personnel are to make the job safe and move indoors and switch off air conditioners.

Evacuation Siren

On hearing the evacuation siren, personnel must make their job safe and move to the muster point.

Site Evacuation Procedure

Where Site evacuation is deemed necessary all workers will be directed to the Designated off-site Refuge. The LMS Incident Controller will provide Workers with instruction on which off-site refuge is to be used in consultation with the CWY- Emergency Controller and NSW Rural Fire Services.

All clear

Wardens and Area Supervisors are to give controlled release (verbal authority) for personnel to return to the workplace when the work areas are deemed to be safe for a return to work and the all-clear sirens has sounded.

7.1. Inner Protection Area

The entire site will be managed as an Inner Protection Area (IPA) in accordance with the NSW RFS Planning for Bushfire Protection 2019 by implementing strict controls to minimize bushfire risk and ensure the safety of personnel.

The IPZ approach involves maintaining cleared areas, reducing fuel loads, and ensuring access for emergency services. In accordance with section A4.1.1 of the Planning for Bushfire Protection guideline, the Inner Protection Area (IPA) requirements for vegetation stipulate that trees should be well-spaced and pruned, shrubs should not be located under trees, and grass should be kept short and maintained to minimize fuel loads. These controls are implemented to reduce bushfire risk and support safe site management.

Site personnel follow established emergency procedures, including alert and evacuation sirens, controlled movement to muster points, and direction to designated off-site refuges. Coordination between the LMS Incident Controller, CWY Emergency Controller, and NSW Rural Fire Services ensures that evacuation and sheltering protocols are consistent with the requirements for an IPZ, prioritizing rapid response and safe refuge for all workers.
Wardens and Area Supervisors oversee the all-clear process, confirming safety before personnel return to work.

This document incorporates the identification of nearby Neighbourhood Safer Places and designated off-site refuges, as well as procedures for on-site sheltering in place, all aligned with the NSW RFS guideline to protect life and property within the Inner Protection Zone.

7.2. Designated Off-site Refuges (Neighbourhood Safer Places)

The direction of evacuation will be determined by the location of the bushfire threat and information provided by emergency services. It should be noted that emergency services may direct occupants to an 'Evacuation Centre' identified for the associated bushfire threat.

The following locations are identified as Off-site Refuges, as they have been identified by this plan as locations of radiant heat level of <2kW/m^2 in accordance with the 4.1.4A Neighbourhood Safer Places Management Handbook (NSW RFS , 2025).

a) Open Space The Ridge Golf Course & Driving Range, Barden Ridge (approx. 3.6km drive north of the site)

b) Heathcote Hotel, Cnr Veno Street & The Princes Hwy, 1 Veno St, Heathcote NSW 2233 (approx. 7.9km drive east of the site)

Additionally, the following are the nearby off-site refuges (known as Bushfire Neighbourhood Safer Places by NSW RFS) within close proximity to the Lucas Heights Bioenergy Facility.

c) Anzac Oval, Open Space. Anzac Oval, Engadine (approx. 9.9km drive southeast of the site)

d) Akuna Oval, 100 Menai Road, Bangor (approx. 9.1km drive northwest of the site)

The LMS Incident Controller will be responsible for accounting for all Workers and visitors when transferring to off-site refuges.

7.1. On site Sheltering in Place

Sheltering procedures are important as a back up option. Bush fires can start within close proximity to the site, leaving insufficient time for evacuation. In these circumstances occupants are more likely to be safer remaining in an on-site refuge on site rather than trying to evacuate.

This plan recommends leaving early in all circumstances and monitoring the bushfire threat early. If you cannot leave or receive an Emergency Alert warning that it is too late to leave, all onsite occupants should be shelter within the existing onsite buildings and follow the advice provided by the Wardens. Onsite buildings will be upgraded to a construction standard of BAL 29.

7.2. Primary Off-site Refuge

Name of Location: The Ridge Golf Course, Open Space. The Ridge Golf Course & Driving Range, Barden Ridge
Map reference: 34°01'59.1"S 150°59'57.7"E

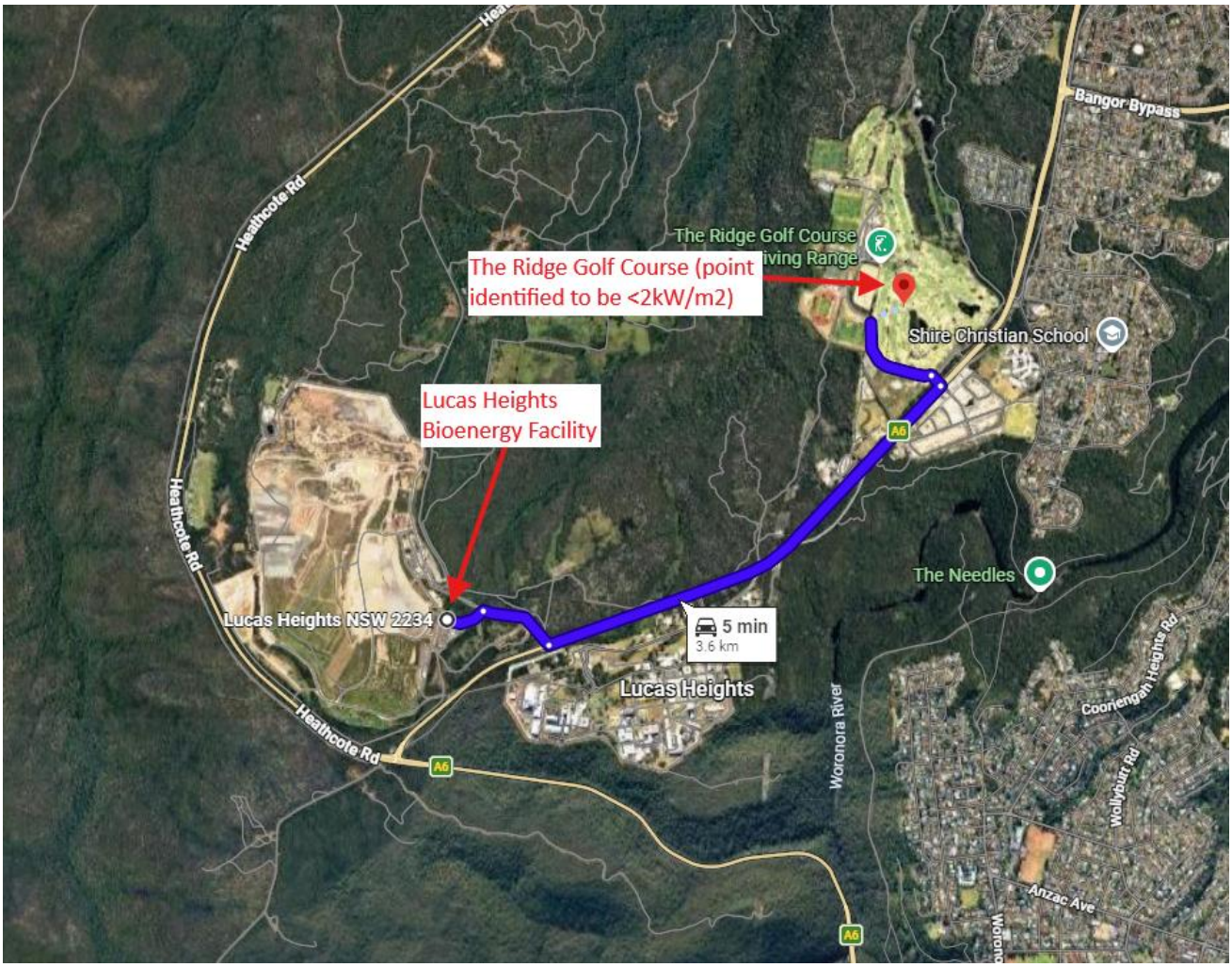


Figure 3 – Primary Off Site Refuge: Directions to The Ridge Golf Course Bushfire Refuge (Source: Google Maps, 2026)

7.3. Secondary Off-site Refuge

Name of Location: Heathcote Hotel, Cnr Veno Street & The Princes Hwy, 1 Veno St, Heathcote NSW 2233
Map reference: 34°05'09.7"S 151°00'33.2"E

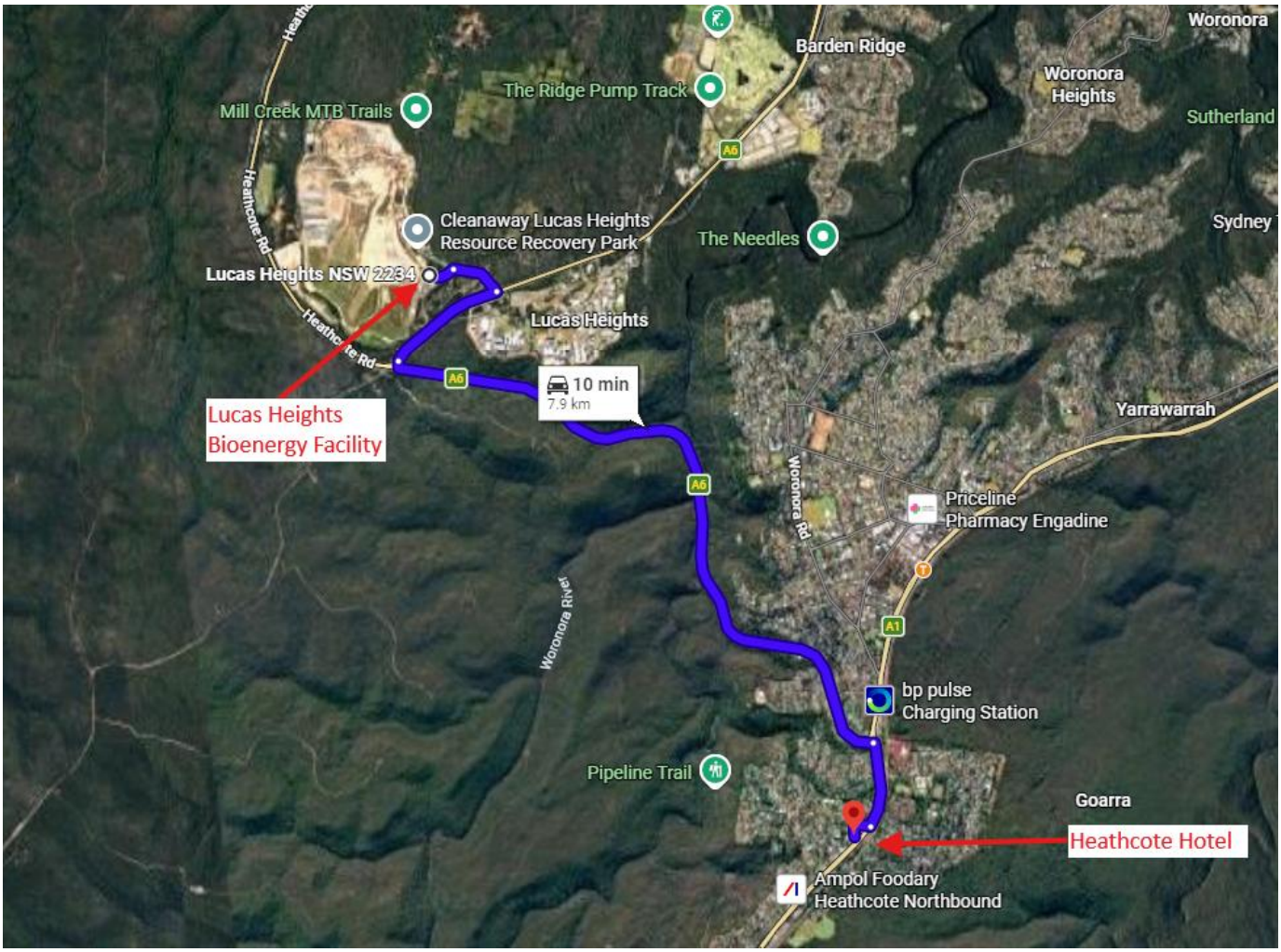


Figure 4 – Secondary Off Site Refuge: Directions to Akuna Oval Bushfire Refuge (Source: Google Maps, 2025)

7.4. Transportation Arrangements

All workers have access to either their own or company issued vehicles to be used for transportation from the Site in the event of an emergency.

Any visitors or contractors who do not have suitable transport will be provided with transportation.

7.1. Actions

<table>
<tr><td colspan="2">EARLY EVACUATION PROCEDURES
This plan recommends evacuating the site when a fire is predicted to impact the site</td></tr>
<tr><td colspan="2">Evacuation Location: North to Open Space. The Ridge Golf Course & Driving Range, Barden Ridge (3.6kms)
Evacuation Location: East to Heathcote Hotel, Cnr Veno Street & The Princes Hwy, 1 Veno St, Heathcote (7.9kms)</td></tr>
<tr><td>Trigger to evacuate</td><td>Actions</td></tr>
<tr><td rowspan="2">An Extreme or Catastrophic Fire Danger Rating is forecast for the next day.

Fire' Watch and Act' Warning is likely to impact the site:

When directed to do so by NSW Police or the NSW Rural Fire Service (RFS)

Fires exist within 10kms

Fires exist within 20km but no risk to site</td><td>The Chief Warden should consult with local emergency services for details on the local designated Safer Places or Evacuation Centres and travel routes;
The Chief Warden should consult the NSW RFS, check the NSW RFS website, call 1800 NSW RFS, or use smartphone applications and local firefighting resources for fire situations and updates;
The Chief Warden is to take control of the bushfire situation. Remain calm and explain to site occupants what is happening:
Inform site occupants of the fire situation;
Assemble all occupants either in the emergency evacuation zone or car park;
Advise occupants on site of the unfolding incident;
Liaise with emergency services.
The Chief Warden is to advise the local emergency service that the site is being evacuated as directed by the emergency services (including how many people and where they are going).
Ensure the Wardens and Site Manager have mobiles and are contactable.</td></tr>
<tr><td>Off-site Evacuation
Arrange for site occupants to make their way to the designated emergency assembly area;
Confirm all persons have been notified;
Make sure all persons have transportation for evacuation;
Identify if any occupant requires medical assistance and arrange for suitable transportation to meet at the emergency assembly areas for persons who require medical assistance;
Monitor the progress of the evacuation;
The Chief Warden is to advise the relevant emergency service that provided the evacuation orders when all persons have been evacuated;
Should the fire services arrive, the Chief Warden will hand control over to the officer in charge and provide an operational brief listing injured or vulnerable persons needing assistance.
Maintain situational awareness through radio, the NSW RFS Website, Fire Near Me App, smartphone applications and local firefighting resources.</td></tr>
</table>

<table>
<tr><td colspan="2">SHELTER IN PLACE
This plan recommends evacuating the site when a fire is predicted to impact the site</td></tr>
<tr><td colspan="2">If you cannot leave or receive an Emergency Alert warning that it is too late to leave, all onsite occupants should be shelter within their location in the existing buildings and follow the advice provided by the Wardens.</td></tr>
<tr><td>Trigger to evacuate</td><td>Actions</td></tr>
<tr><td>If you cannot leave or you receive an Emergency Alert warning that it is too late to leave, OR

When directed to do so by Emergency Services.</td><td>The Chief Warden should consult the NSW RFS, check the NSW RFS website, call 1800 NSW RFS, or use smartphone applications and local firefighting resources for fire situations and updates;

The Chief Warden is to take control of the bushfire situation: Remain calm and explain to all onsite occupants what is happening;
Inform all onsite occupants of the fire situation;
The Chief Warden is to advise the local emergency service that all onsite occupants are sheltering in place.
Ensure the Wardens and Site Manager have mobiles and are contactable.
Should the fire services arrive, the Chief Warden is to hand control over to the officer in charge and provides an operational brief, listing injured or vulnerable persons needing assistance.
Notify all onsite occupants of the need to 'Shelter in Place' in the existing buildings, and confirm all persons have been notified;</td></tr>
</table>

	• Move all people with the grounds to the existing buildings • Monitor the progress of the relocation of all occupants; • Chief Warden to advise the emergency service on the total number of persons remaining onsite, where they are located and if anyone requires medical assistance.

7.2. Before and at the commencement of the Bushfire Danger Period we will:

a) Ensure that all Workers are aware of the requirements in accordance with this Bushfire Emergency Management and Site Emergency Response Plan.

b) Ensure that all Workers and visitors are informed of onsite Emergency Assembly Areas and off-site Refuges.

c) Complete HV Bushfire Preparedness inspections including engaging an independent third party to conduct inspections

d) Inspect the facility for debris and vegetation (inner protection zone), including the area to the north for a distance of 29m

e) Ensure site fire extinguishers are serviced

7.3. After the Bushfire Event

a) Clearance to return to Site is to be gained from the NSW Rural Fire Service.
b) The LMS Incident Controller to liaise with the CWY Emergency Controller before workers return to Site.
c) If property damage has occurred, the workplace will need to be inspected and assessed to confirm steps required prior to a full return of workers to Site. A risk assessment may be required prior to any return to Site.
d) The LMS Incident Controller is to account for all Workers when returning to Site, only when deemed safe to do so and after all assessments have been completed.

8. Location and Communication of this BEMEP

There must always be a current copy of this plan:

- In the project folder (electronically for current revision).
- In the project site office/s or noticeboard.

Upon change to this document, the nominated person is to ensure that all superseded versions issued, issued (including in the places listed above) are removed from those points of issue and replaced.

This BEMEP will be communicated via project inductions and will include evacuation procedure, sirens, warning signals, where the muster point locations for first air and firefighting equipment.

Relevant details of this plan will be displayed in prominent locations and explained at the project specific or visitor induction.

The key BEMEP information must be displayed at the site office. They key BEMEP information to be displayed includes:

- Contact numbers for the Chief Warden/Supervisors, and Emergency Services.
- Emergency evacuation routes.

9. Managing and Reporting

All bushfire-related incidents and non-compliances will be recorded in the company's incident management tracking system. This includes immediate notification and documentation of the event, followed by investigation and corrective actions as required.

Any failure to comply with statutory requirements will be reported promptly within Skytrust and escalated to the relevant authorities or regulatory bodies as necessary. All records and actions taken will be reviewed regularly to ensure compliance and continual improvement.

10. Review Protocol

In accordance with Condition C1(i), this BEMEP will be reviewed:

- Following any incident or non-compliance reported
- Following approval of any modification to the conditions of consent
- Following issue of a direction by the Planning Secretary.

Where a review identifies the need for improvements or updates, a revised BEMEP will be prepared and submitted to the Planning Secretary for approval prior to implementation. Updated versions, once approved, supersede previous versions and must be implemented in accordance with Condition B21.

11. References

AEMC - National Bushfire Warnings Taskforce (2009) Australia's revised arrangements for bushfire advice and alerts - 2009/2010 Fire Season, Version 1.1

Australian Building Codes Board (2014) *Design and Construction of Community bushfire Refuges, Information Handbook*

Matthews S, Fox-Hughes P, Grootemaat S, Hollis JJ, Kenny BJ, Sauvage S (2019) *Australian Fire Danger Rating System: Research Prototype, NSW Rural Fire Service, Lidcombe, NSW*

NSW Department of Planning and Environment. Planning Portal. Accessed at: https://www.planningportal.nsw.gov.au/

NSW Rural Fire Service (2019). *Planning for Bushfire Protection. A Guide for Councils, Planners, Fire Authorities and Developers. November 2019*

NSW Rural Fire Service (2014) *Development Planning, A guide to developing a Bush Fire Emergency Management and Evacuation Plan*

Standards Australia (2018). *AS3959, Construction of buildings in bushfire-prone areas.*

Tozer MG, Turner K, Keith DA, Tindall D, Pennay C, Simpson C, MacKenzie B, Beukers P, Cox S (2010). *Native Vegetation of southeast NSW: a revised classification and map for the coast and eastern tablelands. Cunninghania 11:359-406.*

APPENDIX A - ACTIVITY ZONES

N

10 5 0 10 20

SCALE BAR (m)

SCALE 1:500 FOR A1 SIZE
SCALE 1:1000 FOR A3 SIZE
GDA94 / MGA ZONE 56
NEARMAP AERIAL IMAGE DATED 16/03/2026

LEGEND

- CONSTRUCTION AREA
- CONSTRUCTION ADMIN
- OPERATIONS AREA
- OVERFLOW PARKING

APPROVED FOR USE

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION
2	09/04/26	TW	NL			AFU – REVISED POST EXTERNAL REVIEW
1	20/01/26	SA	WB	TC	NMcL	AFC – AREAS DEFINED
0	17/12/25	SA	DL	ES	DL	AFC – APPROVED FOR CONSTRUCTION

REVISIONS

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION

REVISIONS

DRAWING NUMBER	DESCRIPTION

REFERENCE DRAWINGS

LMS ENERGY

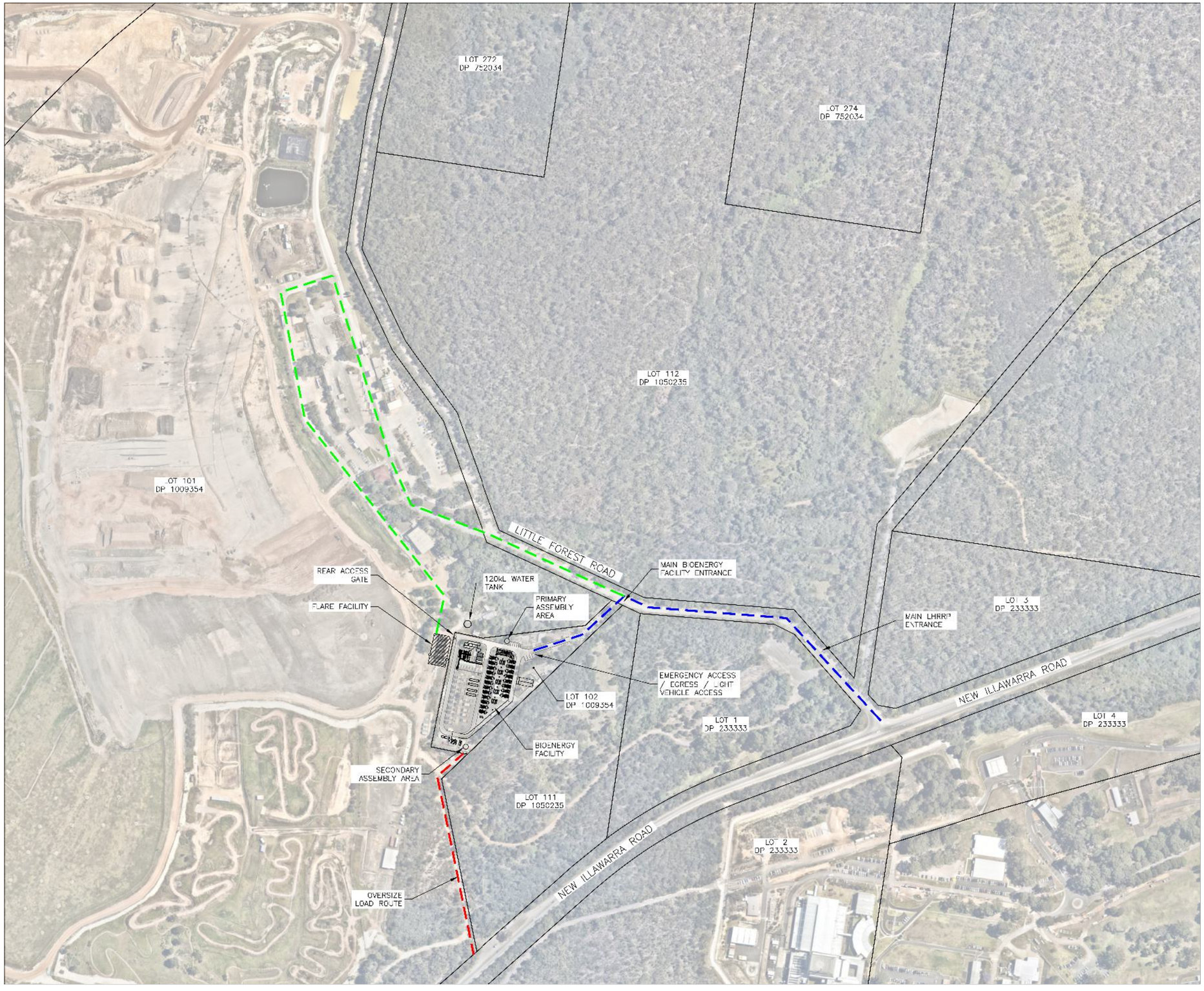
DRAWN:	MBR
DATE:	31/10/25
DESIGN:	D.L.
DATE:	31/10/25
APPRVD:	E.S.
DATE:	17/12/25
A.B.N. 39 059 428 474	

LUCAS HEIGHTS BIOENERGY FACILITY

BIOENERGY FACILITY
ACTIVITY ZONE

SCALE	DRAWING NUMBER	SHEET	SHEETS	SIZE	REV
1:500	20057-GA-057-01	OF 01		A1	2

APPENDIX B - TRAFFIC ACCESS PLAN



N

80 40 0 50 100 150 200

SCALE BAR (m)

SCALE 1:2500 FOR A1 SIZE
SCALE 1:5000 FOR A3 SIZE
GDA94 / MGA ZONE 56
NEARMAP AERIAL IMAGE DATED 19/11/25

LEGEND

- HEAVY LOADS ROUTE
- OVERSIZE LOADS ROUTE
- CONSTRUCTION VEHICLES ROUTE
- PRIMARY EVACUATION ROUTE

- OVERSIZE LOADS ROUTE
- PLANT EQUIPMENT ROUTE

ALTERNATIVE EMERGENCY ACCESS ROUTE

APPROVED FOR CONSTRUCTION

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION
2	10/04/26	MB	FL			AFC – LEGEND UPDATED, ADDED ASSEMBLY POINTS
1	30/01/26	SA	FL	FL	ES	AFC – ALT. EMERGENCY ACCESS ROUTE & LABELS ADDED
0	17/12/25	SA	ES	FL	ES	AFC – APPROVED FOR CONSTRUCTION

REVISIONS

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION

REVISIONS

DRAWING NUMBER	DESCRIPTION

REFERENCE DRAWINGS

LMS ENERGY

DRAWN:	S.A.
DATE:	18/08/25
DESIGN:	F.L.
DATE:	18/08/25
APPRVD:	F.L.
DATE:	17/12/25
A.B.N. 39 059 428 474	

LUCAS HEIGHTS BIOENERGY FACILITY

BIOENERGY FACILITY TRAFFIC ACCESS PLAN

SCALE	DRAWING NUMBER	SHEET	SHEETS	SIZE	REV
1:2500	20057-GA-016-01	OF 01		A1	2

APPENDIX C - QUICK REFERENCE TABLE

1. LOCATION DETAILS

Infrastructure type
The Lucas Heights Bioenergy Facility is an energy production facility part of the Lucas Heights Resource Recovery Park comprising of structures including: Generator units, office buildings, and storage facilities.

Location
The Lucas Heights Bioenergy Facility is located approximately 30 km southwest of the Sydney central business district within the suburb of Lucas Heights.

Access
The primary Lucas Heights Bioenergy Facility access is via Little Forest Road, off New Illawarra Road.

Evacuation
On-site assembly/emergency point for both occupants and visitors closest to the Lucas Heights Bioenergy Facility is located outside of the landfill office at the Lucas Heights Resource Recovery Park site entrance.

Fire Weather District (BOM)
Sutherland Shire (NSW)

2. Communications

Follow Instructions
All personal shall follow instruction from Supervisor / Emergency Services

Mobile
Mobile reception is generally moderate across all areas of the site – however, mobile communications may be unreliable during bushfire emergencies due to the volume usage.

Radio
ABC: 97.3 FM (Illawarra) or 666 AM (Sydney)
All major TV stations and internet based news media likely to provide headlines.

3. CONTACTS

Fire, Police and Emergency Reporting	**000**
Sutherland Fire Control Centre	02 8508 4040
Fire and Rescue NSW Sutherland Fire Station	02 9293 1046

4. SUMMARY OF BUSHFIRE RISK FACTORS AND MITIGATION STRATEGIES

Risk: The principal risk of fire within the Lucas Height Bioenergy Facility is a forest fire, from Class 1 vegetation north and southeast of the site. Smoking, ignition risk from hot works, slashing, and from the highway (accidents, arson, cigarette butts) are also fire risks. The main

Objectives: The objectives of bushfire management and mitigation are:

a. *protect human life:*
b. *protect assets; and*
c. *minimise the physical and environmental impacts of bushfires.*

Strategies: Management of the site to Asset Protection Zone standards to establish and maintain defendable space from classifiable vegetation. Maintain trafficability of access roads, and management of vegetation encroaching on access tracks. Site user and visitor awareness of bushfire risks and management for any users/visitors of the site. Good relations with local fire agencies and neighbouring properties. Ignition source mitigation controls.

5. BUSHFIRE PREPAREDNESS MATRIX

Action	**No rating**	**Moderate**	**High**	**Extreme**	**Catastrophic**
Site Supervisor to perform daily check (after 4pm) on the RFS and BOM websites to determine the Fire Danger Rating (FDR) for the following day and weekly prediction. Update workers and visitors if there is a likelihood of the site being closed due to FDR.					
Site Supervisor to monitor HazardsNearMe app or radio for fire incidents		Min. 1pm	Min. 1pm, 3pm	Hourly from 9am – 7pm	All actions as per extreme. Additionally, restrict use to essential activities until FDR is reduced to Extreme of less.
Maintain register of all persons present on site, including daily movement plans and point of contact	Yes	Yes	Yes	Yes	
Additional actions			No open fires, no driving off formed tracks.		

6. BUSHFIRE EVACUATION MATRIX

Risk Status	**Moderate**	**High**	**Extreme**	**Catastrophic**
Fire predicted to impact site or egress (i.e. Emergency warning)	Evacuate to off-site evacuation point unless otherwise advised by Emergency Services. Follow Evacuation Actions. Evacuation briefing to be conducted at Assembly Area.			Site restricted to essential staff until FDR is Extreme of less. Evacuate to off-site evacuation point unless otherwise advised by Emergency Services. Follow Evacuation Actions.
Time to fire impact is <time available to evacuate	If safe to do so; move directly to On-site assembly/emergency shelter location.			
Fires exist within 10km radius	Monitor fires on HazardsNearMe app hourly.	Continue monitoring and consider evacuation if the direction of the fire spread is towards the site.	No staff or visitors to enter site. Evacuate to off-site evacuation point unless otherwise advised by Emergency Services. Follow Evacuation Actions.	
Fires exist within 20km but no risk to site	Monitor fires on HazardsNearMe app every 3 hours.	Monitor fires on RFS current incidents website hourly.	Continue monitoring and seek Emergency Services advice on whether to close/evacuate the site. Evacuate to off-site evacuation point unless otherwise advised by Emergency Services. Follow Evacuation Actions.	
Fire' Watch and Act' Warning is likely to impact the site.	Monitor fires on HazardsNearMe app hourly.	Continue monitoring and consider evacuation if the direction of the fire spread is towards the site.	No staff or visitors to enter site. Evacuate to off-site evacuation point unless otherwise advised by Emergency Services. Follow Evacuation Actions.	
No fires	Maintain appropriate monitoring as per Bushfire Preparedness Matrix.			

Bushfire Warning	**Information Type**	**Action Required**
Advice	*Provides information on where the fire is plus related general information. No immediate danger.*	Chief Warden to monitor location of the fire events on RFS Current incidents site, and initiate actions in accordance with the bushfire evacuation matrix (above)
Watch and Act	*A fire is approaching. There is a threat to life and property. Take action to protect yourself and others.*	Chief Warden should contact all staff and visitors on site and advise them to evacuate the site.
Emergency Warning	*The highest level of alert. You are in immediate danger and need to take immediate action.*	If it has not yet occurred, Chief Warden should contact all staff and visitors and advise them to evacuate the site. Any directions of Emergency Services should be followed, including any emergency warnings received via text message directly to individuals.

7. WHAT TO DO IF CAUGHT IN A BUSHFIRE

The following provide current guidance on what to do if caught in a bushfire in a building or on foot. Each requires a different response involving critical decisions for your survival.

In or around Site Office

- Ensure you drink plenty of water so you do not dehydrate.
- Block any downpipes if possible, (a sock full of sand/soil will help) and fill gutters with water.
- Move flammable items such as outdoor furniture.
- Gas cylinders should have the valve facing away from the building. Shut off gas at the meter or bottle if safe to do so.
- Patrol the outside of the building, putting out any embers and spot fires that may start.
- Move any firefighting equipment to a place where it will not get burnt.
- Remember – if your life is at risk, call 000 immediately.

What to do if caught in a bushfire on foot

- Try to move on to a bare or burnt ground at least 100m from where fire is likely to burn, if this is not feasible find the largest bare or burnt ground possible.
- Do not run uphill or away from the fire unless you know a safe refuge can be reached before the fire arrives. Try and position yourself downhill of the on-coming fire.
- Move across the slope out of the path of the fire front and work your way downslope towards the back of the fire or onto burnt ground.
- Do not attempt to run through flames unless you can see clearly behind them. This generally means that the flames are less than 1 metre high and less than 1 to 2 metres deep at the back or on the flanks of the fire.
- Lulls in the fire often result in the flames in these parts being low enough to step or run through to the burnt ground beyond.
- When conditions become severe, use every possible means to protect yourself from radiant heat. On bare ground cover yourself, use wheel ruts, depressions, large rocks or logs to give protection.
- Take refuge in ponds, running streams or culverts, behind solid objects such as a rock.
- Remain calm and to not run blindly from the fire. If you become exhausted you are much more prone to heat stroke and you may easily overlook a safe refuge.

8. RISK CONTROL MEASURES (PRIOR TO AND DURING FIRE SEASON):

- In advance of and during the fire season, all access roads and tracks are to be maintained clear of obstructions to a width of 4m, with no overhanging branches to a vertical clearance of 4m to allow the safe passage of tankers.
- Maintain defendable space within and around the site clear of obstacles to provide access for NSW RFS and FRNSW fire-fighting appliances and personnel.
- Inspection/maintain fuel storage tanks, bunds and equipment, so as not to serve as an unacceptable risk to adjacent buildings and surrounding vegetation.
- Monitor fuel loads, if >High (very high or extreme) consider mechanical fuel removal and/or engagement with RFS about conducting a low intensity hazard reduction burn to reduce fuel loads to maximum high prior to the fire season.
- Conduct Preparedness checks before bushfire season annually including:
- Maintenance of APZ in accordance with standards.
- Access free from obstructions with a width of 4m.
- Inspect / maintain operability of water supplies.
- Inspect / maintain all suppression equipment.
- Check and clear all gutters on buildings.

APPENDIX D - CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN

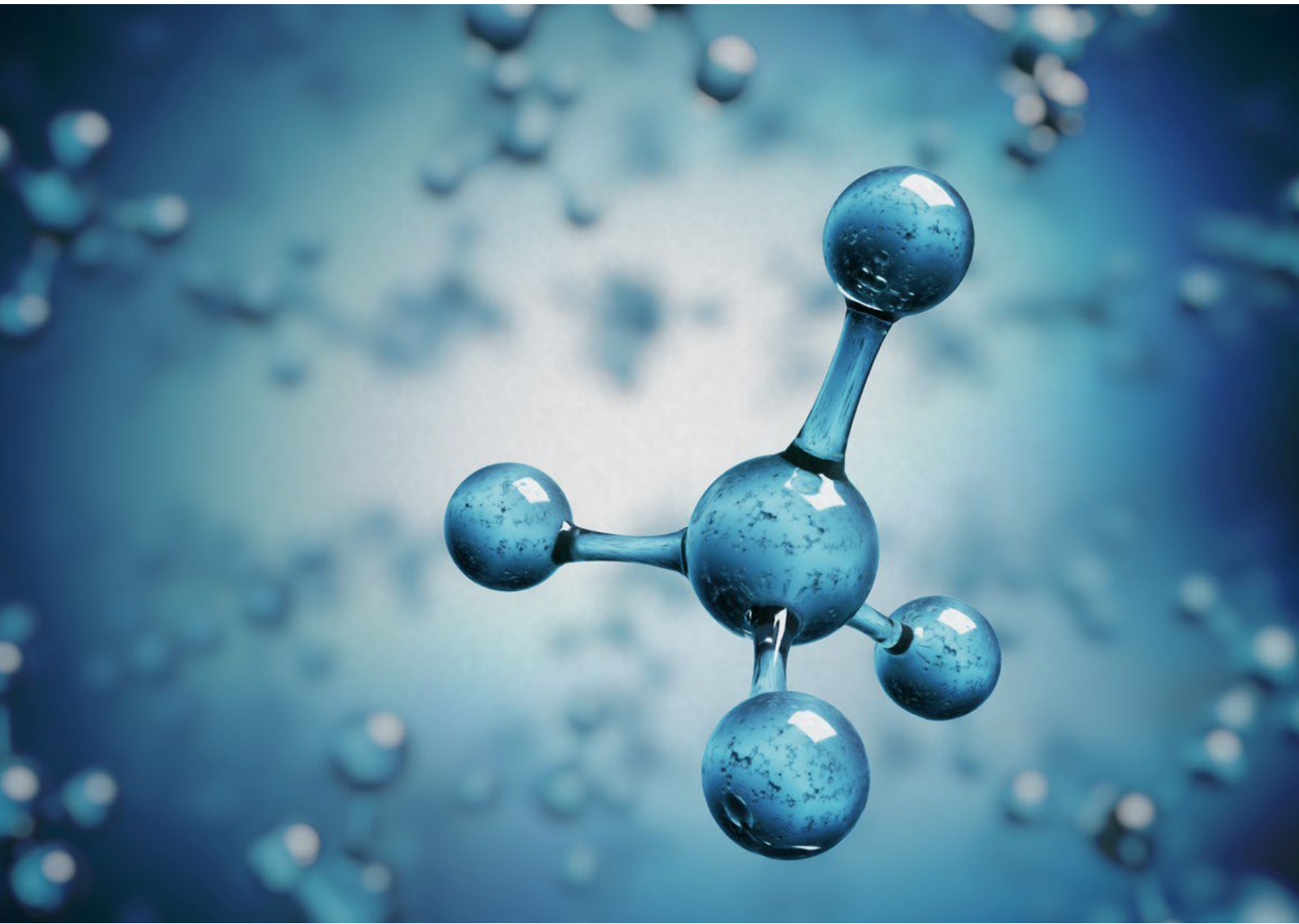
Lucas Heights Bioenergy Facility

Construction Noise and Vibration Management Plan

LMS Energy Pty Ltd

9 April 2026

→ The Power of Commitment



Project name		Lucas Heights Bioenergy Facility					
Document title		Lucas Heights Bioenergy Facility | Construction Noise and Vibration Management Plan					
Project number		12649882					
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1. Introduction

1.1 Purpose of this report

This Construction Noise and Vibration Management Plan (CNVMP) has been prepared for the Lucas Heights Bioenergy Facility (the development) in accordance with Condition C3 of the State Significant Development Consent SSD-79933225 (the Consent). The consent was granted by the NSW Department of Planning, Housing and Infrastructure (DPHI) for the construction and operation of a bioenergy facility at Lucas Heights, NSW.

The development involves the construction and operation of a bioenergy facility that will combust biogas received from the Lucas Heights Resource Recovery Park (LHRRP) landfill for the purpose of electricity generation.

This CNVMP has been prepared to:

– Form part of the Construction Environmental Management Plan (CEMP) required by Condition C3.
– Describe procedures for achieving the noise management levels in the EPA's Interim Construction Noise Guideline (ICNG) (DECC, 2009)
– Include noise management and mitigation measures, including those described in Appendix 3 of the Consent
– Describe measures to manage high noise generating works (such as piling) in close proximity to sensitive receivers
– Include a complaints management system for the duration of construction.

This CNVMP has been prepared by Evan Milton, of GHD who is a member firm of the Australasian Association of Acoustic Consultants (AAAC) and Evan Milton is also a member of the Australian Acoustical Society.

1.2 Scope

This CNVMP applies to all construction activities associated with the Lucas Heights Bioenergy Facility, including:

– demolition and removal of existing buildings or works
– site levelling, import and compaction of fill material
– excavation for installation of drainage and services
– erection of generator units and ancillary infrastructure
– installation of HV Switchroom / Control room
– associated construction traffic movements on-site.

1.3 Objectives

The objectives of this CNVMP are to:

– minimise construction noise and vibration impacts on sensitive receivers
– management construction noise levels in line with the ICNG
– comply with vibration criteria for both structural damage and human exposure
– ensure all reasonable and feasible measures are implemented to prevent and minimise material harm to the environment (Condition A1)
– provide a framework for monitoring, reporting and continual improvement
– establish a responsive complaints management system.

2. Conditions of approval

Table 2.1 provides the relevant conditions of approval from the Consent regarding the management of noise and vibration and demonstrates how this CNVMP addresses each of them.

Table 2.1 Conditions of consent

Condition	Requirement summary	Where Addressed
Obligation to minimise harm to the environment		
A1	All reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	Section 9
Compliance		
A20	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Section 9.1
Operation of plant and equipment		
A21	All plant and equipment used on site, or to monitor the performance of the development, must be: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Sections 9
Hours of work		
B8	The Applicant must comply with the hours detailed in the Consent.	Section 6.1
B9	Works outside of the hours identified in condition B8 may be undertaken in the following circumstances: (a) works that are inaudible at the nearest sensitive receivers; (b) works agreed to in writing by the Planning Secretary; (c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or (d) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.	Section 6.2
Management plan requirements		
C1(a)	condition compliance table for that plan	This table (Section 2)
C1(c)	(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures and criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Sections 3
C1(d)	Description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria	Section 9
C1(e)	A program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of the management measures set out pursuant to paragraph (d) above;	Section 9.5
C1(f)	Contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible	Section 11

Condition	Requirement summary	Where Addressed
C1(g)	Program to investigate and implement ways to improve the environmental performance of the development over time	Section 11
C1(h)	a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements; and	Sections 10
C1(i)	Protocol for periodic review of the plan	Section 11
Construction environmental management plan		
C3	As part of the CEMP required under condition C2 of this consent, the Applicant must include the following: (a) Construction Noise and Vibration Management Plan	This document

3. Regulatory framework

3.1 Statutory requirements

Table 3.1 summarises the statutory requirements, guidelines and standards that are relevant to the management of construction noise and vibration for this development.

Table 3.1 Relevant statutory requirements

Document	Relevance
Environmental Planning and Assessment Act 1979 (EP&A Act)	Overarching planning legislation
Protection of the Environment Operations Act 1997 (POEO Act)	Regulation of noise emissions
SSD-79933225 Conditions of Consent	Specific conditions B8 & B9, C1 & C3
Lucas Heights Bioenergy Facility Noise Impact Assessment (GHD, 17 October 2025)	Noise impact assessment for the development
Lucas Heights Bioenergy Facility Environmental Impact Statement (GHD, 22 October 2025)	EIS including noise chapter

4. Project description

4.1 Construction overview

The development involves the construction of a bioenergy facility at Lucas Heights, NSW. The facility will combust captured biogas extracted from the LHRRP landfill for the purpose of electricity generation. Construction activities expected are summarised in Table 4.1.

Table 4.1 Construction staging

Construction stage	Activities
Early works and Civils	– Mobilisation of civil plant and equipment – Minor earthworks for site levelling and compaction – Installation of piers and footings – Installation of buried conduit and services
SMPEI (Structural, Mechanical, Piping, Electrical and Instrumentation) Works, including Testing, Commissioning and Operation	– Placing major equipment (generators, control room, transformers and skids) on to foundations and footings. – Installation of piping and services (gas, electrical, water, oil, compressed air) – Testing, commissioning, and operational readiness activities to confirm systems performance – Confirm compliance with approval requirements – Check safe operation prior to full operation. – Any other infrastructure associated with the approved development (except Storage Shed).
Storage Shed	– Civil works and construction for the storage shed
Decommissioning of existing power station	– Progressive or discrete decommissioning activities associated with the existing power station, including shutdown, dismantling, removal of redundant infrastructure

4.2 Construction plant and equipment

Anticipated noise levels from the associated construction equipment have been sourced from the *AS2436 – Guide to Noise Control on Construction, Maintenance and Demolition Site* (Australian Standard, 2010) and are summarised in Table 4.2. These have been provided for guidance on typical noise levels.

Table 4.2 Indicative construction equipment list

Equipment	Equipment SWL, dBA
Excavator	113
Grader	113
Dump truck	112
Compactor / roller	110
Concrete agitator truck	109
Concrete pump truck	108
Dozer	106
Mobile crane	105
Road truck	108
Powered hand tools	105

5. Existing environment

5.1 Sensitive receivers

5.1.1 Noise sensitive land use

Noise sensitive land uses are defined based on the type of occupancy and the activities performed in the land use. Receivers sensitive to noise and vibration can be categorised as:

– residential dwellings
– non-residential land uses:
  - educational institutes and classrooms at schools
  - hospital wards and operating theatres
  - places of worship
  - passive and active recreational areas such as parks, sporting fields, golf courses. Note that these recreational areas are only considered sensitive when they are in use or occupied
  - hotels and other temporary accommodation buildings
  - commercial buildings including businesses, retail, offices, sports centres, bars/cafes etc.
  - industrial premises.

Sensitive land uses in the study area include both residential and non-residential based on a desktop review using aerial imagery. Non-residential land uses include educational institutes, passive and active recreation, temporary accommodation and commercial premises.

5.1.2 Identified sensitive receivers

A total of 10 noise sensitive receivers were identified in the Lucas Heights Bioenergy Facility Noise Impact Assessment (GHD, 2025). These receivers are listed in Table 5.1 and shown in Figure 5.1. Note that R08 (future recreational use) was not assessed in this CNVMP as it does not exist yet.

Table 5.1 Sensitive receivers

ID	Location	Type	Source-to-receiver direction
R01	Engadine residences (NCA1)	Residential (suburban)	ESE
R02	The Ridgeway residences (NCA2)	Residential (suburban)	NE
R03	Lucas Heights Community School	Educational institute	NE
R04	Gandangara (NCA3)	Existing: Passive recreation area Future: potential residential development	NE
R05	The Ridge Sports Complex	Active recreation	NE
R06	Gandangara North (NCA3)	Existing: Passive recreation area Future: potential residential development	NNE
R07	Lucas Heights Motel	Temporary accommodation	E
R08	Future recreational use	Passive recreation	NW
R09	Sutherland PCYC MiniBike Club	Active recreation	SW
R10	ANSTO, Lucas Heights	Commercial	SE

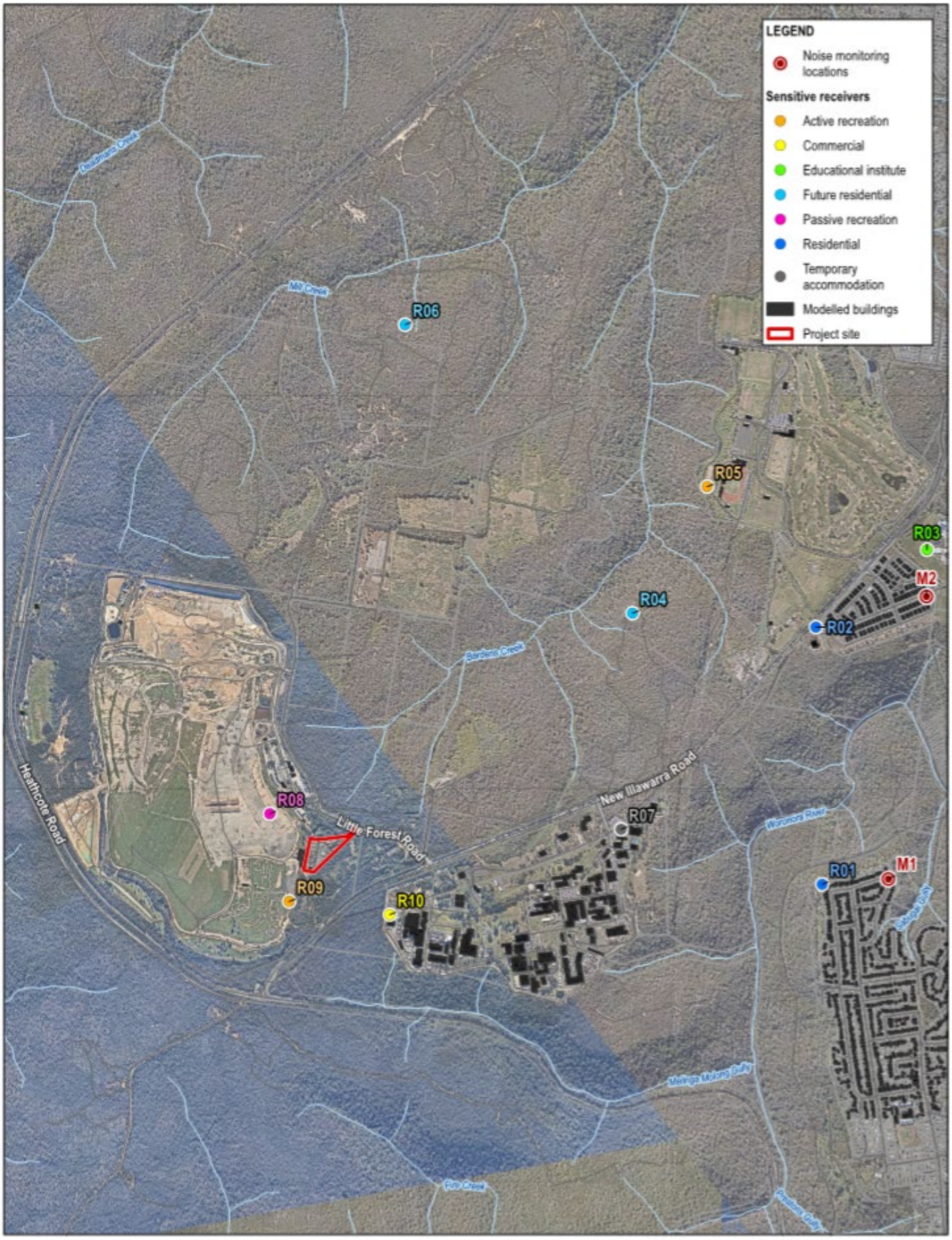

Figure 5.1 *Sensitive receivers*

6. Construction hours

6.1 Standard construction hours

Construction activities are to be undertaken within the hours described in Table 6.1.

Table 6.1 Hours of work

Day	Time
Monday to Friday	7:00 am to 5:00 pm
Saturday and Sunday	8:00 am to 5:00 pm

6.2 Out-of-hours work

Construction works may be undertaken outside of standard hours in the following circumstances described in Table 6.2.

Table 6.2 Out-of-hour work allowed circumstances

Provision	Description
B9(a)	Works that are inaudible at the nearest sensitive receivers
B9(b)	Works agreed to in writing by the Planning Secretary
B9(c)	Delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons
B9(d)	Where required in an emergency to avoid the loss of lives, property, or to prevent environmental harm

7. Construction noise

7.1 Interim Construction Noise Guideline (ICNG)

The noise management levels (NMLs) established for the project follow the guidance ICNG. As such they were established based on the Rating RBL at the respective locations for the receiver.

7.1.1 Rating background level

The RBL was obtained from the EIS at two residential locations, the findings from these are displayed in Table 7.1.

Table 7.1 Rating background noise levels

Location	Dates	Raing background levels[1], La90(Period), dBA			Ambient noise descriptors		
		Day	Evening	Night	Day	Evening	Night
28 Andromeda Crescent, Engadine	25/03/2025 – 06/04/2026	35 (34)[2]	31	30 (28)[2]	54	51	52
56 Namatjira S, Barden Ridge	12/03/2025 – 25/03/2025	37	37	33	55	53	45

Note 1. The *Noise Policy for Industry (NPfI)* (EPA, 2017) defines day, evening and night-time periods as:

– Day: 7am to 6pm Monday to Saturday and 8am to 6pm Sunday
– Evening: 6pm to 10pm
– Night: 10pm to 7am Monday to Saturday and 10pm to 8am Sunday.

Note 2. Where the measured background level is above the minimum RBL provided in Table 2.1 of the NPfI, the minimum RBL is adopted in accordance with the NPfI.

7.2 Noise management levels

The NMLs during the approved hours represent a noise level that, if exceeded, would require management measures including:

– reasonable and feasible work practices
– contact with the residences to inform them of the nature or works to be carried out, the expected noise levels and durations and contact details.

The determination of the NML is dependent on the time of day and the RBL at the residential receiver locations. This is explained in detail in Table 7.2 including a description of each relevant NML.

Table 7.2 Residential construction noise management levels

Time of day	Noise management level, $L_{Aeq,15\ min}$	Application notes
Recommended standard hours	Noise affected: RBL + 10 dB(A)	The noise affected level represents the point above which there may be some community reaction to noise. Where the predicted or measured $L_{Aeq,15\ min}$ is greater than the noise affected level, the proponent should: – apply all feasible and reasonable work practices to meet the noise affected level – inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.

Time of day	Noise management level, $L_{Aeq,15\ min}$	Application notes
	Highly noise affected: 75 dB(A)	The highly noise affected level represents the point above which there may be strong community reaction to noise. Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account: – Times identified by the community when they are less sensitive to noise (such as before and after school, or mid-morning or mid-afternoon for works near residences). – If the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
Outside recommended standard hours	Noise affected: RBL + 5 dB(A)	A strong justification would typically be required for works outside the recommended standard hours. The proponent should apply all feasible and reasonable work practices to meet the noise affected level. Where all feasible and reasonable measures have been applied and noise is more than 5 dB(A) above the noise affected level, the proponent should negotiate with the community.

7.3 Receiver-specific noise management levels

The construction noise management levels for all sensitive receivers are presented in Table 7.3 during work hours.

Table 7.3 Noise management levels for sensitive receivers during work hours

Receiver type	Receivers	Standard construction hours		Outside standard construction hours[1]		
		Noise affected	Highly noise affected	Day	Evening	Night
Engadine residences (NCA1)	R01	45	75	40	36	35
Ridgeway Residences (NCA2)	R02	47	75	42	42	37
Lucas Heights Community School	R03	55 (external – when in use) for classrooms				
The Ridge Sports Complex Sutherland PCYC Minibike Club	R05 R09	65 (when in use) for active recreation areas				
Gandangara Gandangara North	R04 R06	60 (when in use) for passive recreation areas				
Lucas Heights Motel ANSTO, Lucas Heights	R07 R10	70 (when in use) for commercial premises				

Note: 1. Works outside standard construction hours are not proposed during the evening or night period.

7.4 Noise sources

The noise levels for the construction equipment have been sourced from the AS2436 – Guide to Noise Control on Construction, Maintenance and Demolition Site (Australian Standard, 2010). The plant and equipment modelled for each construction scenario, and their respective Sound power level (SWL) are shown in Table 7.4.

Table 7.4 Indicative construction equipment and SWL

Equipment	SWL, dBA	Construction activities		
		Site establishment	Project construction	Testing and commissioning
Excavator	113	X	-	X
Grader	113	X	-	-
Dump truck	112	X	-	X
Compactor /roller	110	X	-	-
Concrete agitator truck	108	X	-	-
Concrete pump truck	108	X	-	-
Dozer	106	X	-	X
Mobile crane	105	-	X	X
Road truck	108	-	X	X
Powered hand tools	105	X	X	X
Overall scenario SWL		**119**	**111**	**117**

7.5 Predicted construction noise impacts

The predicted noise levels from the modelled construction scenarios are presented in Table 7.5. The results indicate that construction works are not predicted to exceed the standard hours NML or, if undertaken, OOHW NML at any sensitive receiver.

Table 7.5 Predicted Construction noise levels

Receiver ID	Location	Noise affected NML, $L_{Aeq,15min}$, dBA	Predicted noise level, $L_{Aeq,15min}$, dBA		
			Site establishment	Project construction	Testing and commissioning
R01	Engadine residences	45 (Standard) 40 (Day OOH)	30	22	28
R02	The Ridgeway residences	47 (Standard) 42 (Day OOH)	28	20	27
R03	Lucas Heights Community School	55	25	17	23
R04	Gandangara	60	34	26	32
R05	The Ridge Sports Complex	65	29	21	27
R06	Gandangara North	60	29	21	27
R07	Lucas Heights Motel	70	36	28	34

Receiver ID	Location	Noise affected NML, $L_{Aeq,15min}$, dBA	Predicted noise level, $L_{Aeq,15min}$, dBA		
			Site establishment	Project construction	Testing and commissioning
R09	Sutherland PCYC MiniBike Club	65	56	48	54
R10	ANSTO, Lucas Heights	70	51	43	49

Construction noise impacts were predicted following the *ISO 9613-2:2024 'Acoustics – Attenuation of sound during propagation outdoors*' (ISO, 2024) standard for predicting environmental noise propagation in outdoor conditions and are predicted as a worst-case scenario. Further details of the modelling methodology are available in the Lucas Heights Bioenergy Facility Noise Impact Assessment (GHD, 2025). During work hours construction noise is expected to comply with the noise management levels. For out of hours work, construction noise is unlikely to be audible at any residential receiver (R01 and R02) based on the general understanding that a subject noise source will not significantly contribute to the ambient noise environment when the source level is 10 dB or more below the RBL (NSW *Interim Construction Noise Guideline* (DECC, 2009).

8. Construction vibration

8.1 Structural damage to buildings

Vibration caused by construction at any structure outside site must be in accordance with *DIN 4150-3 (2016-12) Vibrations in Buildings – Part 3: Effects on Structures.*

The guideline values for vibration to ensure minimal risk of structural damage to residential and industrial buildings are presented in Table 8.1.

Table 8.1 Transient vibration guide values – minimal risk of cosmetic damage

Type of Structure	PPV at Foundation 1–10 Hz (mm/s)	PPV at Foundation 10–50 Hz (mm/s)	PPV at Foundation 50–100 Hz (mm/s)	PPV at Top Floor (all freq) (mm/s)
Commercial / Industrial buildings	20	20 to 40	40 to 50	40
Residential buildings	5	5 to 15	15 to 20	15
Structures sensitive or heritage-listed	3	3 to 8	8 to 10	8

8.2 Human comfort

Vibration for human exposure must comply with the acceptable vibration levels Table 8.2. Guidance for acceptable vibration levels for human comfort is based on *Assessing Vibration: A Technical Guideline* (AVTG) (DEC, 2006) which references *BS6472-1: Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)* (British Standards, 1992).

AVTG provides three assessment methods, depending on whether the vibration source is continuous, impulsive, or intermittent. These can be defined as:

– Continuous vibration – normally generated by fixed plant (such as generators and fans) where the vibration emissions could continue uninterrupted throughout the day and night periods.
– Impulsive vibration – normally generated by short duration (i.e. less than two seconds) events with no more than three occurrences in an assessment period (e.g. ground compaction by dropping a large mass).
– Intermittent vibration – normally generated by continuous vibration sources that may be interrupted (e.g. vibratory rolling, rock breaking and truck passbys) or continuous periods of impulsive vibration (e.g. impact piling). For intermittent vibration, human comfort levels are assessed on the basis of Vibration Dose Value, or VDV, based on the level and duration of the vibration events.

Table 8.2 Acceptable Vibration Dose Values for Human Comfort (BS 6472-2008)

Receiver	Assessment Period	x, y and z axes	
		Preferred values ($m/s^{1.75}$) Day	Maximum values ($m/s^{1.75}$) Day
Critical areas	Day or night	0.10 $m/s^{1.75}$	0.20 $m/s^{1.75}$
Residential	Day	0.20 $m/s^{1.75}$	0.40 $m/s^{1.75}$
	Night	0.13 $m/s^{1.75}$	0.26 $m/s^{1.75}$
Offices, schools, educational institutes and places of worship	When in use	0.40 $m/s^{1.75}$	0.80 $m/s^{1.75}$
Workshops	When in use	0.80 $m/s^{1.75}$	1.60 $m/s^{1.75}$

8.3 Safe working distances

The recommended minimum safe working distances for vibration-intensive equipment are presented in Table 8.3. If activities are located within the human comfort safe work distances, vibration monitoring would be undertaken and the activity would be scheduled during work hours unless approved by the Planning Secretary. If the activities are located within the structural damage safe work distances, vibration monitoring would be undertaken including dilapidation surveys.

Table 8.3 Recommended safe working distances for vibration

Equipment	PPV Safe Distance – Structural damage (Residential)	PPV Safe Distance – Human Comfort (Residential)
Vibratory roller (< 7t)	5 m	15 m
Vibratory roller (7–13t)	6 m	20 m
Vibratory roller (13–18t)	12 m	40 m
Vibratory roller (> 18t)	15 m	100 m
Small hydraulic hammer (< 5t excavator)	2 m	7 m
Medium hydraulic hammer (5–12t excavator)	7 m	23 m
Large hydraulic hammer (12–18t excavator)	22 m	73 m
Vibratory pile driver (sheet piles)	2–20 m	20 m
Pile boring	2 m (nominal)	10 m
Impact piling	15–25 m	50–100 m
Jackhammer	1 m (nominal)	5 m

No sensitive receivers are located within 100 metres of the project site. Given that the safe working distances for human comfort, as outlined in Table 8.2, indicate a safe working distance of 100 metres for the largest vibratory rollers, no exceedances of human comfort vibration criteria are anticipated.

Additionally, the safe working distances for cosmetic damage to structures range from 5 to 20 metres, which further confirms that no buildings or sensitive receivers will be affected by structural vibration damage during construction. As a result, the proposed works are not expected to generate any adverse vibration impacts in terms of structural damage.

9. Management and Mitigation Measures

9.1 Training and awareness

All employees, contractors and sub-contractors must be made aware of, and instructed to comply with, the conditions of this consent relevant to their activities.

9.1.1 Induction

All personnel will receive a site induction that includes:

– an overview of this CNVMP and its requirements
– approved construction hours
– location of sensitive receivers
– key noise and vibration management measures
– procedures for reporting noise or vibration complaints
– requirements for maintaining plant and equipment
– consequences of non-compliance with noise and vibration conditions.

9.1.2 Toolbox talks

Toolbox talks will include noise and vibration management as a topic, particularly:

– prior to the commencement of high noise generating works
– following any noise or vibration complaint
– following any identified exceedance of noise or vibration criteria.

9.1.3 Records

Records of all inductions and toolbox talks (including attendance records) will be maintained and made available to the Planning Secretary upon request.

9.2 Standard mitigation and management measures

The following general noise and vibration management measures will be implemented for all construction activities:

– Plant and equipment will be selected to minimise noise emissions where reasonable and feasible alternatives are available.
– Plant and equipment will be fitted with manufacturer-standard mufflers and silencers and maintained in good working order.
– Reversing alarms on mobile equipment will use broadband (non-tonal) "quacker" type alarms where safe to do so.
– Stationary noise-generating equipment (e.g. generators, compressors, pumps) will be located as far as practicable from sensitive receivers and oriented / shielded to direct noise emissions away from receivers.
– Plant not in use will be turned off rather than left idling.
– Air compressor intakes will face away from sensitive receivers.
– Construction activities will only be undertaken during the approved hours specified in Section 6.1, except where permitted under Section 6.2.
– Truck drivers will be instructed to avoid unnecessary idling, engine braking, use of compression brakes and horn use within and near the site.
– On-site speed limits will be enforced to minimise noise from vehicle movements.

9.3 Specific mitigation measures

If piling or other high noise generating work is required that could exceed the noise management levels, the following measures will be implemented:

– Bored piling will be used in preference to impact/driven piling where geotechnically feasible.
– If impact piling is required, it will be confined to the most restricted time windows and scheduled when least sensitive.
– A respite period regime will be implemented if impact piling is required.

9.4 Consent required mitigation measures

The following mitigation measures, Table 9.1 are relevant to the management and mitigation of noise and vibration impacts during construction and are required as part of Appendix 3 of the Consent.

Table 9.1 Applicant's Management and mitigation measures – Noise and vibration

ID	Environmental aspect	Mitigation measure	Responsibility	Timing	Where in this report
Noise and vibration					
NV1	Construction noise and vibration management	The CEMP will detail processes, responsibilities and measures to manage noise and vibration and minimise the potential for impacts, including mitigation measures and the management measures. Measures that mitigate potential noise and vibration at the source will be prioritised.	Contractor	Pre-construction / Construction / Operation	Section 9
NV2	Plant noise levels	The noise levels of plant and equipment should have an operating sound power lower to the levels presented in Table 5.1 of Technical Report 2 or similar.	Contractor	Pre-construction / Construction	Section 7.4
NV3	Maintain equipment	Regularly inspect and maintain equipment to ensure it is in good working order, to prevent excessive noise emissions from deteriorating or faulty components, particularly for critical noise sources such as radiator fans, alternators, and exhaust openings. Equipment must not be operated until it is maintained or repaired, where maintenance or repair would address the annoying character of noise identified. All construction plant and equipment will be maintained in proper and efficient condition and operated in a proper and efficient manner, in accordance with Condition A21.	Contractor	Construction	Section 9

9.5 Monitoring program

Noise and vibration monitoring would be undertaken if the following occur:

– if substantiated complaints are received for a construction activity that occurs onsite
– if activities are located within the human comfort safe work distances vibration monitoring would be undertaken.
– if the activities are located within the structural damage safe work distances vibration monitoring would be undertaken including dilapidation surveys.
– if noise levels have the potential to be audible during out of hours work.

Table 9.2 and Table 9.3 provide a summary of monitoring specification that may be required for monitoring construction noise.

Table 9.2 Noise monitoring details

Parameter	Detail
What	Construction noise levels (L_{Aeq} (15min), L_{A90}, L_{Amax})
Where	At or representative of the nearest affected sensitive receivers (R01, R02, R04, R06 as a minimum)
Method	Attended measurements using a Class 1 or Class 2 sound level meter compliant with AS IEC 61672.1
Record Keeping	All monitoring results will be recorded, including date, time, duration, location, equipment in use on-site, weather conditions, and measured levels

Table 9.3 Vibrational monitoring details

Parameter	Detail
What	Peak Particle Velocity (PPV) and vibration dose values (VDV)
Where	Nearest affected structure to vibration-intensive works
Method	Triaxial geophone/accelerometer system
Record Keeping	Date, time, PPV levels (in 3 axes), source activity, distance, and ground conditions

9.6 Out of hours work

Where out-of-hours work is required, the Applicant will comply with the requirements of Condition B9:

B9. Works outside of the hours identified in condition B8 may be undertaken in the following circumstances:

(a) works that are inaudible at the nearest sensitive receivers;

(b) works agreed to in writing by the Planning Secretary;

(c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or

(d) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.

10. Complaints Management System

The following complaints management system will be implemented for the duration of construction.

10.1 Community contact details

Contact details will be displayed on signage at the site entrance and on LMS's public web page in accordance with condition 19(viii) which requires publication of contact details to enquire about the development or to make a complaint. Similarly LMS will continue to engage with interested stakeholders including the LHRRP Community Reference Group regarding status and progress of the project.

10.1.1 Complaints handling procedure

All noise and vibration complaints will be managed in accordance with LMS Procedure PR71 – External Complaint Handling, which generally follows the below process:

1. Receive — All complaints received will be logged in the Complaints Register within 24 hours of receipt.
2. Acknowledge — The complainant will be acknowledged within 1 business day of receipt (or the next business day if received outside business hours).
3. Investigate — The complaint will be investigated by the Environmental Supervisor within 48 hours. The investigation will include: review of operational and/or construction activities at the time; review of any monitoring data; if necessary, attended noise and/or vibration monitoring at the complainant's location; identification of the likely cause.
4. Respond — The complainant will be provided with a response within 7 days, outlining the findings and any corrective actions to be implemented.
5. Action — If the complaint is substantiated, additional mitigation measures will be implemented as appropriate.
6. Close-out — The complaint will be closed out in the Complaints Register, recording the resolution and any follow-up actions.

10.2 Complaints register

A Complaints Register will be maintained, recording:

– date and time of complaint
– complainant name and contact details (where provided)
– nature and details of the complaint
– construction activities at the time
– weather conditions
– investigation findings
– corrective actions taken
– date of response to the complainant
– date of close-out.

The Complaints Register will be:

– updated quarterly on the project website in accordance with Condition C19(a)(viii)
– made available to the Planning Secretary upon request.

A template of a complaints register is provided in Appendix A.

11. Contingency, Improvement and Review

11.1 Contingency Plan

In accordance with Condition C1(f), the following contingency measures will be implemented in the event of unpredicted noise or vibration impacts:

1. **Identify** — Where monitoring, complaints or observations indicate that noise or vibration impacts are not anticipated by the predictions in Section 7.5, the source and cause will be investigated promptly.
2. **Respond** — The activity causing the impact will be ceased or modified until the issue is assessed. This may include relocating equipment, installing temporary barriers, changing work methods or substituting equipment.
3. **Assessment** — Additional attended noise or vibration monitoring will be conducted to quantify the impact and compare against the NMLs (Section 7.3) and vibration criteria (Section 8).
4. **Corrective action** — Revised mitigation measures will be developed and implemented to reduce impacts below the relevant criteria as quickly as practicable. This may include revised scheduling, alternative construction methodologies, additional screening, or equipment changes.
5. **Notification** — Where impacts affect sensitive receivers, those receivers will be notified of the issue, the measures being taken, and the expected duration of the works.
6. **Escalation** — If impacts cannot be reduced below the relevant criteria despite all reasonable and feasible measures, the Planning Secretary will be consulted regarding further actions.

11.2 Continual Improvement Program

In accordance with Condition C1(g), the following program will be implemented to investigate and implement ways to improve the environmental performance of the development over time:

– Regular review of noise and vibration monitoring data, where available, to identify trends, recurring impacts or areas for improvement
– Review of complaints data to identify systemic issues and assess the effectiveness of current mitigation measures
– Post-activity review of high noise generating works to capture lessons learned
– Investigation of new or improved noise and vibration control technologies and work practices as they become available
– Benchmarking against industry best practice for comparable construction projects
– Incorporation of improvement actions into revised versions of this CNVMP.

11.3 Review Protocol

In accordance with Condition C1(i), this CNVMP will be reviewed:

– Following any incident or non-compliance reported
– Following approval of any modification to the conditions of consent
– Following issue of a direction by the Planning Secretary.

Where a review identifies the need for improvements or updates, a revised CNVMP will be prepared and submitted to the Planning Secretary for approval prior to implementation. Updated versions, once approved, supersede previous versions and must be implemented in accordance with Condition A12.

Appendices

Appendix A

Complaints register template

Table A.1 Complaints register template

Date/Time Received	Complainant	Contact Details	Nature of Complaint	Activity at Time	Weather	Investigation Findings	Actions Taken	Response Date	Close-out Date

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APPENDIX E - TRAFFIC AND PEDESTRIAN MANAGEMENT PLAN

Lucas Heights Bioenergy Facility

Traffic and Pedestrian Management Plan (TPMP)

(Operations and Construction)

Report Date:	17/04/2026
Report Reference:	20057-RG-062
Revision:	2

LMS ENERGY Pty Ltd

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Plan Title:	Traffic and Pedestrian Management Plan (TPMP)
Plan Reference:	20057-RG-062
Written/Submitted By:	Yolanda Sarich Group Manager – Health and Safety
Reviewed/Approved By:	Daniel Lansdowne Manager - Bioenergy (Lucas Heights) Edward Styles Group Manager – Projects
External Review/Approved By:	Sean Clarke Technical Director – Traffic Engineering and Transport Planning GHD Pty Ltd Mark Lucas Technical Director – Transport Planner GHD Pty Ltd
Client:	Internal
Client / Strategic Partner	Cleanaway (CWY)
Site:	Lucas Heights Bioenergy Facility
Purpose of the Document	This document outlines the traffic and pedestrian management for the Lucas Heights Bioenergy Facility Lucas Heights SSD-79933225 (Power Station).

Document Control

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1. Purpose

The purpose of this document is to establish a comprehensive framework for managing construction traffic, site access, safety, and operational requirements throughout the development of the Lucas Heights Bioenergy Facility. It outlines the roles and responsibilities, risk management procedures, site layout, and the protocols for vehicle and pedestrian movement, ensuring compliance with relevant standards and minimising impacts on the surrounding community and road network.

1.1. Condition Compliance

Table 1 provides the relevant conditions of approval from the Consent regarding the management of traffic and pedestrian movements at the site, and where this TPMP addresses each of them.

Table 1 – Conditions of Consent

Condition	Requirement Summary	Where Addressed
Construction Traffic Management Plan		
B24	Prior to the commencement of construction of the development, the Applicant must prepare a Construction Traffic Management Plan (CTMP) for the development. The plan must form part of the CEMP required by condition C2 and must:	This document CEMP Appendix E
B24 (a)	Be prepared by a suitably qualified and experienced person(s)	Document Control Section 1.1
B24 (b)	Detail the measures that are to be implemented to ensure road safety and network efficiency during construction	Sections 9–22
B24 (c)	Detail heavy vehicle routes, access and parking arrangements	Sections 9, 16, 17and APPENDIX A - and APPENDIX C -
B24 (d)	Include a Driver Code of Conduct to: (i) minimise the impacts of earthworks and construction on the local and regional road network; (ii) minimise conflicts with other road users; (iii) minimise road traffic noise; and (iv) ensure truck drivers use specified routes	APPENDIX D -
B24 (e)	Include a program to monitor the effectiveness of these measures	Section 26
B24 (f)	If necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes	Section 6.1
Parking		
B26	The Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that traffic associated with the development does not utilise public and residential streets or public parking facilities	Sections 15.2, 16 and 21
Management Plan Requirements		
C1(a)	condition compliance table for that plan	This table (Section 1.1)
C1(c)	(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions)	Section 29
C1(c)	(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures	Sections 9–22
C1(d)	a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria	Sections 9–22

Condition	Requirement Summary	Where Addressed
C1(e)	a program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of the management measures set out pursuant to paragraph (d) above	Section 26
C1(h)	a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements	Section 25
C1(i)	a protocol for periodic review of the plan	Section 26

This TPMP has been reviewed by Sean Clarke, Technical Director - Traffic Engineering and Transport Planning, GHD Pty Ltd, and Mark Lucas, Technical Director - Transport Planner, GHD Pty Ltd.

This TPMP will:

- Provide directions and guidance on the location of Site facilities, and access points for deliveries, and
- Specify the traffic management requirements at Site, and
- Enable compliance with applicable legislation and Codes of Practice.

In this document:

- Site refers to Lot 101 and Lot 102 Little Forest Road, Lucas Heights, NSW, which is located outside the Cleanaway Lucas Heights Resource Recovery Park.
- Traffic, wherever used in this TPMP, encompasses both vehicles (light and heavy), mobile plant and pedestrian movements.

2. Scope

This TPMP applies to all workers, delivery drivers and visitors entering the Site and outlines the requirements for the controlled movement of vehicles, mobile plants and pedestrians, while considering activities such as the loading/unloading of goods and designated parking areas.

This document does not apply to works undertaken within the CWY Lucas Heights Resource Recovery Park (LHRRP).

3. General Requirements

This TPMP considers risks and hazards presented by traffic and movement of plant, vehicles and pedestrians and aims to achieve several key requirements, including but not limited to:

- Provide a convenient, safe and appropriate environment for pedestrians, including signage, and visibility,
- Manage and control traffic/mobile plant movements and Site parking,
- Maintain access to other properties adjacent to the Site,
- Maintain safety for all workers, delivery drivers and visitors,
- The workplace layout and Site plan includes traffic volumes routes, priorities and exclusion zones,
- Maintain Loading and Unloading Exclusion Zones (LUEZ),
- The use of suitably competent operators for any transport vehicle or mobile plant operations,
- Ensuring supervision in controlling the task and risks,
- Ensure the loading of vehicles complies with Chain of Responsibility (CoR) mass and dimension obligations, and loads are evenly distributed, and
- Drivers and operators are responsible for securing their load before moving.

4. Risk Management

4.1. Risk Registers

The Site Health and Safety (H&S) Risk Register and Construction H&S Risk Registers capture the risks and control measures associated with the management of traffic on Site.

4.2. Risk Assessment

The TPMP risk assessment (20057-RG-068 Lucas Heights Traffic Management Risk Assessment) document and takes into account the following risk factors:

- The actual or predicted path of pedestrian and traffic movement,
- The risk of interaction of vehicles/mobile plant and pedestrians (frequency and exposures),
- The strategy for placement of signage, barriers, or other traffic guides,
- Short term traffic management,
- Training and competency requirements, and
- Emergencies.

The TPMP risk assessment will be reviewed regularly throughout the Construction of Bioenergy Facility and at least annually, thereby ensuring:

- Minimum mandatory requirements for mobile plant and people interaction are met,
- The hierarchy of control is applied,
- Best practice principles are adopted where reasonably practicable,
- Practical and effective critical risk control measures are implemented,
- A management of change process is applied to capture any lessons learnt,
- The Site traffic and pedestrian management map (20057-GA-057_Rev 1 – Bioenergy Facility Construction Activity Zone) reflects the infield controls, and
- Consultation with Health & Safety Representatives (HSR's) where applicable.

Common hazards that will be considered as part of the risk assessment include, but are not limited to (Table 2):

Table 2 – Common Hazards

Potential Site hazard	Relevant areas, associated plant/Site structures
Vehicle/pedestrian interaction	• Road crossings/vehicle access
Shared roadways/work areas	• Light/heavy/mobile plant travel paths
'Blind' corners/crest	• Entering/exiting vehicles
Loading/unloading activities	• Mobile plant operation
Traffic flow	• Pedestrian access
Reversing vehicles	• Parking areas
Inducted visitors	• Site induction/Site access/exit points
Building/drains	• Work areas/access points
Inclement weather/road conditions	• Site speed limits

4.3. Mobile Plant Risk Assessment

A mobile plant risk assessment shall be completed for all purchased or hired mobile plant on Site. Where mobile plant is brought to Site by a contractor they will be required to provide a copy for review by a LMS and/or H&S Team representative prior to use on Site.

4.4. Safe Work Method Statement (SWMS)

All works involving high-risk construction work will require a Safe Work Method Statement (SWMS) which is reviewed by a LMS representative and H&S Team member prior to commencement of works on Site.

When developing SWMS and implementing controls for traffic, mobile plant and pedestrian risks, the hierarchy of control will be applied in order of effectiveness (Figure 1): Elimination, Substitution, Engineering controls, Administrative controls, and Personal Protective Equipment (PPE). Elimination and engineering controls are preferred where reasonably practicable, with administrative controls and PPE used to supplement higher-order controls.

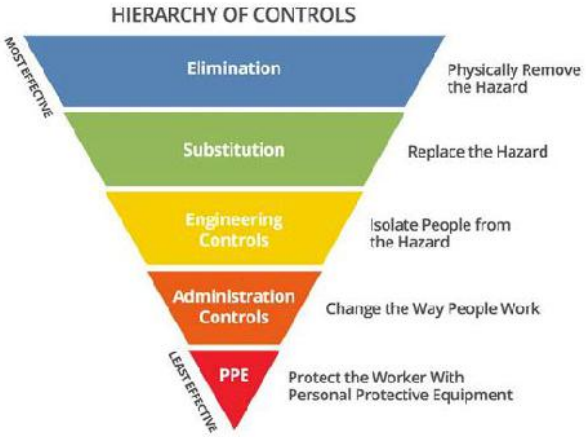


Figure 1 – Hierarchy of Controls

5. Roles and Responsibilities

All workers, delivery drivers and visitors working on or visiting the Site have an obligation to appropriately manage safety and have a responsibility to take care of their own health and safety and that of others that may be affected by their actions or omissions.

All workers, delivery drivers and visitors must comply with applicable road laws. The primary roles and responsibilities are outlined in Table 3.

Table 3 – Roles & Responsibilities

Roles	Responsibilities
Site Manager	• Overall implementation of this TPMP on Site. • Regularly interface with the Construction Supervisor to unsure traffic risks associated with vehicular movements are identified and controls implemented for construction works undertaken outside the fenced Construction Zone. • Review the TPMP risk assessment regularly to ensure risks are identified and appropriate controls are implemented and updates documented in this TPMP. • Undertake regular infield checks to ensure controls are in place and working effectively. • Ensure all workers, delivery drivers and visitors entering the Site are provided with information, training instruction and supervision regarding the requirements contained in this TPMP and the associated risk assessment to ensure their safety while on Site. • Ensure workers and delivery drivers are aware of their duties in relation to Chain of Responsibility (CoR).

Roles	Responsibilities
Construction Supervisor	• Overall implementation of this TPMP associated with construction works. • Regularly interface with the Site Manager to unsure traffic risks associated with vehicular movements are identified and controls implemented for construction works undertaken outside the fenced Construction Site. • Review the TPMP risk assessment regularly to ensure risks are identified and appropriate controls are implemented and updates documented in this TPMP as construction works progress. • Undertake regular infield checks to ensure controls are in place and working effectively. • Ensure all workers, delivery drivers and visitors entering the Site are provided with information, training instruction and supervision regarding the requirements contained in this TPMP and the associated risk assessment to ensure their safety while on Site. • Ensure workers and delivery drivers are aware of their duties in relation to Chain of Responsibility (CoR).
Workers	• Adhere to the traffic and pedestrian management processes outlined in this TPMP. • Report immediately to the Site Manager or Construction Supervisor when issues arise in relation to the in-field controls. • Ensure they are fit-for-duty and not influenced by fatigue and/or alcohol or other drugs including (prescriptive and non-prescriptive medications) while on Site. • Construction Induction (White Card)
Delivery Drivers	• Adhere to the Site signage and direction of inducted Site workers for undertaking deliveries. • Adhere to the PPE requirements for undertaking Site deliveries. • Remain in the designated delivery area. Do not enter the operational plant unless the scope of works requires access.
Spotter	• Wear high-visibility PPE. • Stay outside the exclusion zone and never walk backwards while guiding vehicles or mobile plant. • Maintain clear communication with the plant operator using agreed hand signals and/or two-way radios. Maintain eye contact with the plant operator wherever possible. • Ensure visibility to the plant operator by positioning themselves where they can see both the plant operator and the path of travel, while staying out of the danger zone. • Watch for hazards the plant operator cannot see and communicate to the plant operator as necessary. • Stop unauthorised workers and/or visitors from entering the exclusion zone. • Stop any unsafe operations.
Mobile Plant Operator	• Undertake risk assessments prior to commencement of work and monitor control effectiveness. • Operate plant in line with manufacturers recommendations. • Maintain currency of high-risk licences (as applicable) and complete verifications of competencies prior to operation of mobile plant. • Undertake inspections prior to use, maintain logbooks and maintain servicing and registration as applicable. • Ensure exclusion zones are demarcated and maintained while operating mobile plant. • Maintain effective communication (hand signals and/or radio) with the Spotter. • Report all incidents, near misses and hazards in relation to work on Site. • Ensure emergency preparedness for example fire extinguishers, first aid equipment and emergency protocols and known and understood.

Roles	Responsibilities
Traffic Controller	• Set up, maintain and remove traffic control devices like signs, cones or barriers. • Direct traffic and pedestrians safely through or around work zones. • Ensure communication with the Site Manager, Construction Supervisor, Workers, Spotters to ensure safe operations. • Ensure compliance with this TPMP. Hold at a minimum Traffic Controller (TC) training (previously known as Blue Card), and where relevant Implementation Traffic Control Plans (IMP) training (previously known as Yellow Card), and Prepare Work Zone Traffic Management Plan (PWZTMP) training (previously known as Red Card).
Visitors	• Ensure the health and safety of themselves and all others who may be affected by their acts or omissions. • Comply so far as is reasonably practicable, with any reasonable instruction given by their inducted Site escort person. The escort person must be an inducted Site worker; and hold a Construction Induction (White Card) if escorting a visitor within the Construction Site. • Ensure they are fit-for-duty and not influenced by fatigue and/or alcohol or other drugs including (prescriptive and non-prescriptive medications) while on Site.

6. Consultation and Communication

Construction and operational activities within the Site are not expected to adversely affect access routes on the public road network. All work will take place within the Site, and no parking, queuing or storage of plant / equipment / material is allowed on New Illawarra Highway or Little Forest Road (refer to Section 9.1). Should, in the unlikely event, alterations to works require operating within the public road environment, appropriate permits and notification processes will be obtained via Transport for NSW and/or Sutherland Shire Council, where required.

Site Health and Safety Representatives (HSR's), plant operators, regular delivery drivers, and representatives from Operations, Construction and Biogas will be consulted in relation to the traffic management risk assessment, development and any changes to this TPMP.

Updates or changes to the traffic management risk assessment and/or this TPMP will be communicated to all workers via Site Toolbox meetings. The site traffic and pedestrian management diagrams will always be displayed on the H&S Notice Board and updates made to Site inductions as applicable.

6.1. Notification of Potential Route Disruptions

Construction and operational activities are planned to occur within the Site boundary and are not expected to adversely affect public road access routes. No parking, queuing, or storage of plant/equipment/material is permitted on New Illawarra Road or Little Forest Road, and heavy vehicles are required to use approved routes and site access arrangements. Accordingly, routine community notifications of route disruptions are not expected unless works extend into the public road environment or permits/approvals impose specific notification conditions.

Where activities have the potential to disrupt normal travel routes or access on public roads (including temporary lane closures, traffic control on public roads, altered heavy vehicle routes, or restricted access to adjacent properties), LMS will implement the following notification procedure.

1. **Identify trigger and impacted parties:** The Site Manager/Construction Supervisor confirm whether activities will occur in the public road environment and identifies affected stakeholders (adjacent residents, local schools, Sutherland Shire Council, Transport for NSW, Cleanaway and other nearby land users).
2. **Confirm approvals/permits:** Obtain required approvals and/or permits (e.g., TfNSW, Council) and confirm any Traffic Guidance Scheme/Traffic Control Plan requirements before issuing notifications.
3. **Prepare the notification:** Include (as applicable) location and nature of disruption, expected dates and times, duration, alternate routes/arrangements, site contact details for enquiries/complaints, and a statement that emergency access will be maintained.
4. **Issue notifications:** Provide notice as early as practicable and at least 5 business days prior to planned disruptions (or as otherwise required by permit/approval conditions). Use appropriate channels such as email/phone contact to

local schools, and direct notification to Council/TfNSW/other stakeholders where relevant. For urgent/unplanned disruptions, notify as soon as practicable.

5. **On-ground communication:** Install temporary signage on affected approaches in accordance with approved traffic control documentation, and brief relevant workers, traffic controllers, and delivery/OSOM contractors on the agreed route and controls.
6. **Recordkeeping and close-out:** Retain copies of notifications, stakeholder contact logs, permits/approvals, and any complaints and responses within the site record/incident management system. Review feedback and update controls where required.

7. Information, Training, Instruction and Supervision

7.1. General Information and Training

All workers must complete the Lucas Heights Operational Induction or the Construction Induction (based on their engagement for works on Site) prior to attendance to familiarize themselves with the access, parking, pedestrian, PPE, exclusion zones and speed limit requirements for the Site.

Delivery drivers will be provided with information on the Site access requirements and any restrictions associated with vehicle sizes or types, entries and exits and any other safety procedures or processes before entering.

Visitors will be fully escorted by an inducted worker and will be provided with traffic management information as part of the Visitor induction.

7.2. Specific Training and Licences

All workers who operate mobile plant will hold a current high-risk licence (as applicable) in accordance with State regulations and have completed a Verification of Competency (VOC) for the mobile plant in use on Site. No mobile plant is to be operated unless the worker is licensed and deemed competent. Trainee Workers may only operate equipment under the direct supervision of a Trainer Worker or Assessor and only after approval for the task has been authorized in writing by the Site Manager.

It is the responsibility of every worker to ensure the currency of all licenses and if their circumstances change, they must inform the Site Manager. All licenses and verification of competencies (VOC) for LMS workers shall be maintained in ELMO by the P&C Team. Contractors' licenses and verification of competencies associated with Construction works will be maintained in 1Breadcrumb.

Where traffic controllers are required, they will hold the Nationally Recognised Training of Competency for Traffic Controllers provided by a Registered Training Organisation (RTO).

7.3. Supervision

An LMS representative will be present on Site to ensure adequate supervision of contractors while undertaking loading/unloading activities and operation of mobile plant.

8. Site Layout

Lucas Heights Bioenergy Facility will be divided into three (3) zones:

- Operations Zone which will also encompass the Flaring compound (Red Area, 20057-GA-057_Rev1 – Bioenergy Facility Construction Activity Zone),
- Construction Zone (Light Blue, 20057-GA-057_Rev1 – Bioenergy Facility Construction Activity Zone), and
- Construction Administration Zone (Pink, 20057-GA-057_Rev1 – Bioenergy Facility Construction Activity Zone).

Refer **Appendix B** – Activity Zones.

9. Site Access & Hours of Operation

9.1. LMS Site Access

All workers, delivery drivers and visitors shall use Little Forest Road, Lucas Heights to access the Site. Only approved workers can access the Site via the Landfill Gate with Site Manager approval. Under no circumstances are vehicles to queue or park

along New Illawarra Road or Little Forest Road or store plant / equipment / material. The entrance of the Site must be 'Kept Clear' at all times.

The exact route for oversized loads has not been finalised, and will be determined in coordination with the supplier and Cleanaway closer to the delivery date, ensuring all requirements and site conditions are appropriately addressed. Refer Section 16 and 17.

Drivers are to drive to conditions and adhere to sign posted speed signs. That is, 40 km/hour along Little Forest Road; and 20 km/hour to the LMS Inner Gate. The internal Site speed limit is 10km/hour and reduce speed to walking pace near pedestrian crossings.

Refer **Appendix A** – Traffic Management Overview and **Appendix C** – Traffic Management Plan.

9.2. Lucas Heights Resource Recovery Park (LHRRP) Access

Cleanaway (CWY) close the inbound gate located on Little Forest Road between 4pm and 3am. The outbound gate remains open during this period. If access to the LMS Site is required outside these hours workers are to enter through the outbound gate. If assistance is required to access the Site workers are to contact CWY Security on 0475 042 851.

Refer **Appendix A** – Traffic Management Overview for identification of CWY entrance.

9.3. Hours of Operation and Gate Access

Operational workers will open and close the LMS Outer Gate upon their first arrival to Site and last departure. Typically, at 6:30am and 5:00pm. If access is required outside these times, Site Manager approval is required. The Inner Gate is automated, and the access code shall only be provided to approved workers. Upon arrival all other workers, delivery drivers and/or visitors are to contact the applicable contact as signed i.e. operations or construction (Refer to Figure 2). Access through the automatic gate will be provided by the applicable representative. The Inner Gate will automatically close following entry.

Figure 2 – Inner Gate Signage (Operations)

The Landfill Gate will be opened by operations upon their first arrival to Site and last departure i.e. 6:30am and 5:00pm. This gate is to be used to access the landfill area and the flare compound. It is not to be used for general access.

All workers accessing the landfill area are required to:

- Complete the CWY Inductions including CWY Driver Code of Conduct.
- Vehicles accessing the CWY site must have an operating flashing light and a flag.
- Use the applicable CWY UHF channels (Refer to Section 11 below).
- Park in the designated parking areas.
- Comply with site speed limits and directions.

- Be vigilant as large vehicles operate across the landfill facility.

The Bioenergy Facility Western Gate and Southern Gate are normally closed during operational hours, but will be opened for Installation and Operations access to biogas system.

Refer **Appendix B** – Activity Zones for location of gates.

10. Personal Protective Equipment (PPE)

The area between the visitor car park (inside the Inner Gate) and Site Offices for Operations and Construction is a Personal Protective Equipment (PPE) free zone (refer **Appendix B** - Activity Zone).

All workers, delivery drivers and visitors must wear the required Site PPE beyond this area, refer to:

- Section 28.13 Personal Protective Equipment – (Operations) Safety Management Plan 20054-RG-012, or
- Section 28.14 Personal Protective Equipment - Construction Safety Management Plan 20057-RG-063.

PPE requirements shall be communicated to delivery drivers, heavy vehicle/mobile plant operators and visitors prior to their Site attendance.

All Workers working in and entering Operational and Construction Zones are required to wear high visibility clothing/vest with reflective tape. PPE with high visibility strips must be worn when accessing Site at night.

11. Communication

UHF radios will be used to communicate heavy vehicle/mobile plant movements on Site. The following channels shall apply:

- Operations – UHF 7
- Biogas
  - UHF 41 within the LMS Site
  - UHF 13 Clay/Sandstone S/P – Mulgoa
  - UHF 27 Tip face
  - UHF 24 GO Operation
  - UHF 10 Morris Civil
- Construction – UHF 5

12. Pedestrian Movement

Pedestrians have right of way on Site, however, must remain vigilant and alert of heavy vehicle/mobile plant movements. Pedestrians must stick to the green line when moving from the Visitors Car Park to the Operational and/or Construction Offices. Pedestrians are to use the pedestrian crossings located in front of the Amenities/Workshop area to access to/from the Operational Site Office.

Where an area is barricaded for works pedestrians should only access the area by signing onto the work permit and when authorised by the Works Supervisor. Exclusion zones are to be clearly marked with signage and hard/temporary barricading. Pedestrians are not to enter exclusion zones unless approved by the Spotter and involved in the scope of works.

Pedestrians must ensure their personal safety on Site by staying out of the path of moving vehicles and/or mobile plant.

Pedestrian interaction safety measures must be considered where pedestrians are working with or near vehicles and powered mobile plant, for example forklifts, cranes, loading and unloading trucks:

- Pedestrians must always ensure positive visual contact with Drivers/Operators when moving within the vicinity of mobile plant.
- Workers are not permitted in a three-meter clearance between any small mobile plant e.g. forklift or telehandler and a ten-meter clearance for any operating Heavy Vehicle/Equipment e.g., truck.
- Maximising the separation distance between vehicles / mobile plant and pedestrians is always the preferred option
- To ensure the separation of vehicles/mobile plant and pedestrians (particular within the Construction Zone) a combination of hard barricades (fencing, bollards etc) and temporary/soft barricades (chains, bunting, cones etc).
- Physical barriers (preferably hard barricading) around exclusive pedestrian walkways and mobile plant and pedestrian exclusion zones

- The Worker acting as a Spotter to maintain direct contact with the mobile plant operator (where a Spotter is a trained Worker responsible for assisting in the safe movement of vehicles or mobile plant).

Workers or visitors using the Smoking Area must stay within the designated area and avoid spilling onto the roadway.

13. Cyclist Movement

13.1. Internal (within the site) Cycle Movement

Any workers intending to attend the site on bicycle, must seek prior approval of the Site Manager / Construction Supervisor, who will confirm storage location for cycles.

Cyclists entering the Site are required to dismount and proceed on foot for the duration of their movement within the Site to minimise conflicts with construction vehicles, plant and pedestrians. Once dismounted, cyclists are to follow the same controlled movement pathways and protocols established for pedestrians in accordance with Section 12. This includes use of designated walkways, compliance with site signage and instructions from traffic controllers, and maintaining situational awareness at all times. By integrating cyclist movements with established pedestrian management measures, the risk of interaction between vulnerable road users and construction activities is reduced, ensuring a consistent and safe approach to site access and internal circulation.

13.2. External (outside the site) Cycle Movement

Drivers accessing and travelling along Little Forest Road are to be made aware of the nearby Mill Creek mountain biking trails, which generate regular cyclist activity in the area. A public car park servicing the trail network is located on the western verge of Little Forest Road approximately 100 meters north of the intersection with New Illawarra Road (refer to Figure 3).

Construction drivers should anticipate increased cyclist movements in the vicinity of this car park, particularly during weekends and peak recreational periods. Cyclists may cross Little Forest Road near the car park access point to enter or exit the trail network. All construction vehicle drivers are required to reduce speed, remain vigilant, and give way where required to cyclists and other vulnerable road users in this area. Appropriate driver inductions will highlight this location as a cyclist interaction zone to minimise the risk of conflict and ensure safe operation of construction traffic.

Figure 3 – Mill Creek Mountain Bike Trail Car Park Location

14. Traffic Flow

Vehicular traffic flow is indicated in **Appendix C** - Traffic Management Plan. Light and heavy vehicles are to use the same directional flow on Site as signposted and marked on the roadway. Where mobile plant is operated in the opposite direction on internal roads portable traffic barricading is to be applied around the work area to restrict access by other vehicles and pedestrians. Traffic barricades are to be positioned to ensure they are clearly visible to approaching traffic and, where necessary, under the management of trained traffic controllers.

15. Light Vehicle Access

15.1. General Requirements

All Workers accessing the Site must adhere to the site traffic requirements when travelling in the common areas at the Lucas Heights Bioenergy Facility and apply the 'right of way' principle. These rules include:

- Reversing trucks, forklifts/telehandlers have overall right of way over all vehicles and pedestrians.
- Operational areas to be free of pedestrians prior to commencement of vehicle/mobile plant activity.
- All vehicles must give way to pedestrians.
- Vehicles parking have right of way over all other vehicles/mobile plant entering / leaving the car park.
- All forklifts must have working reverse alarms, reverse lights and flashing beacon lights.
- Operating mobile plant at or below 5km/hr.
- Applying walking speed in or around pedestrian crosswalk areas.
- Adhere to advisory speed limits as signed at various locations.

Any non-adherences will be investigated, and disciplinary actions may be taken for any Worker not adhering to the Site rules.

All Workers accessing Site must be fit-for-duty and not influenced by fatigue and/or alcohol or other drugs including (prescriptive and non-prescriptive medications).

If significant traffic is expected, out-of-hours access may be permitted by prior agreement with the Site Manager and/or Construction Supervisor, and in accordance with Condition B9 of the Development Consent - Hours of Work.

> *B9. Works outside of the hours identified in condition B8 may be undertaken in the following circumstances:*
>
> *(a) works that are inaudible at the nearest sensitive receivers;*
>
> *(b) works agreed to in writing by the Planning Secretary;*
>
> *(c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or*
>
> *(d) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.*

15.2. Parking

The following minimum controls apply to parking on Site:

- Vehicles must be reverse parked 'Rear Parking' on Site to enable their first movement to be in a forward motion. In the event of restricted access or limited visibility a Spotter is to be used.
- Drivers are to use the designated parking bays where possible to maximise parking availability on Site.
- Parked vehicles shall be turned off when unattended, in gear or park (P) and with the handbrake engaged.
- Drivers must not park across parking bays blocking access for other vehicles.
- Parking areas must not be used as thoroughfare.
- Worker and visitor parking must only be in the designated parking areas (Refer **Appendix B** - Activity Zones):
    - Visitors - Inside the LMS Inner Gate,
    - Power Station Operators – Inside the LMS Inner Gate and/or along the fence between the power station and the LMS flares,
    - Construction Workers – within the Construction Administration Zone.
- Access to and from the parking areas should be along designated walkways (green line).
- Light vehicles are not to be left unattended on the roadway restricting heavy vehicle/mobile plant movements.
- Light vehicles must not be parked in areas required for heavy vehicle/mobile plant movements.

15.3. Visitors

All Visitors are to advise the Site Manager and/or Construction Supervisor of their anticipated Site arrival time and are required to complete the Site Visitor Induction.

Visitors are not permitted to perform work and/or operate LMS/Contractor plant or equipment on Site.

15.4. Delivery Driver Access

All delivery drivers operating vehicles with a Gross Vehicle Mass or aggregate trailer mass of less than 4.5 tonnes will be required to:

- Follow the direction of a LMS representative for the location of deliveries,
- Comply with the PPE requirements (Section 10 of this TPMP).

The following deliveries occur regularly on Site:

- Oil delivery and removal – monthly
- Waste removal – weekly

15.5. Service Vehicle Access

The Site Manager is to be advised if a service vehicle is required to attend Site to assist with light or heavy vehicle breakdowns. Prior to works commencing a Personal Risk Assessment/Take 5 is to be undertaken as a minimum to establish controls and determine if a more detailed risk assessment is required.

16. Heavy Vehicle Access (including Mobile Plant)

A Heavy Vehicle is defined as a vehicle that has a gross vehicle mass (GVM) or aggregate trailer mass (ATM) of more than 4.5 tonnes. The Site Manager and/or Construction Supervisor are to be advised in advance (where reasonably practicable) of all anticipated arrival times for Heavy Vehicles.

Heavy vehicles are to use Little Forest Road, Lucas Heights to access the Site. Under no circumstances are vehicles to queue along New Illawarra Road or Little Forest Road. The entrance of the Site road must be 'Kept Clear' at all times.

Heavy vehicle drivers and mobile plant operators must maintain a high level of professional conduct on Site and must:

- Use the horn only as a warning device,
- Allow enough room between vehicles for movement to occur without adverse interactions, and
- Respect and be watchful for pedestrians and other drivers on Site.

For Heavy Vehicle loading and unloading refer to Section 21 of this TPMP.

17. Over Size / Over Mass (OSOM) Vehicles

The transport of oversized equipment requiring Oversize Overmass (OSOM) vehicles, including vehicles up to approximately 26 metres in length, will be undertaken in accordance with the Heavy Vehicle National Law and the requirements of the National Heavy Vehicle Regulator (NHVR). All OSOM movements will be subject to the appropriate NHVR permits, which will define approved routes, travel times, vehicle configurations, escort requirements, and any associated operational conditions. OSOM vehicles will utilise approved routes identified through the NHVR network or via route-specific assessments where required. OSOM movements will be managed to minimise impacts on the surrounding road network and ensure the safety of all road users. This includes scheduling movements outside peak traffic periods where practicable, complying with permit conditions, and implementing pilot or escort vehicles as required by the NHVR and traffic control. All drivers and escort personnel will be inducted on the approved route, site access arrangements, and relevant traffic management measures prior to undertaking OSOM deliveries, ensuring consistent compliance with regulatory and safety requirements.

Initial investigations have indicated that OSOM vehicles will be required to traverse opposing travel lanes when travelling between Little Forest Road and the Site access road (refer to Lucas Heights Bioenergy Facility Traffic Impact Assessment (Rev 0) dated 1 October 2025). During the schedule deliveries equipment of using OSOM vehicles traffic control will be set up at the intersection in line with Transport for NSW Traffic Control at Worksites Manual to safety manage the access and egress of the OSOM vehicle and other road users. To convey information to the road users temporary traffic signage will be set up in line with a Traffic Guidance Scheme (TGS) (refer to Figure 4) with necessary permits obtained. Traffic Controller must hold appropriate training accreditation and be able to communicate to one another via two way radio to safety manage the access and egress of the OSOM vehicles

An appropriate OSOM transport plan is to be prepared by the engaging transport company prior to transportation of the OSOM vehicle commencing and include where necessary other applicable traffic management such as pilot vehicles to convey the OSOM vehicle on the road network accessing and leaving the Site access road (including the New Illawarra Road which requires traversing opposing travel lanes).

LMS will inform and involve Cleanaway to ensure transport plans consider other activity in the area.

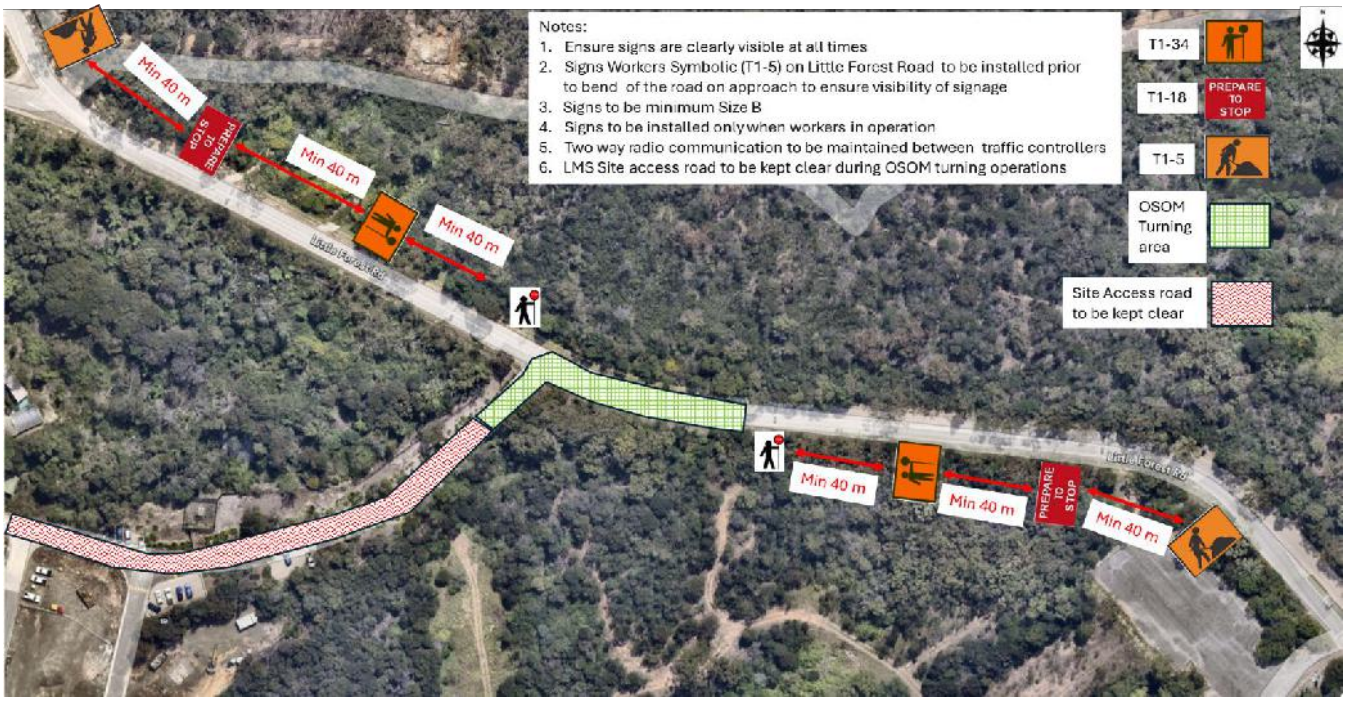


Figure 4 – Preliminary Traffic Guidance for OSOM Vehicle Deliveries

18. Lighting

If night deliveries, heavy vehicle loading/unloading or mobile plant operation is required a task specific risk assessment shall be conducted to establish if additional portable lighting is required in line with AS/NZS 3012:2019 Amd 2:2024 Electrical Installations – Construction and demolition sites.

19. Mobile Plant

The following applies to all mobile plant operated on Site:

- Pre-start and post inspection checks must be completed before and after use.
- All Mobile Plant entering the Site must comply with the applicable road rules, vehicle/plant registration standards and maintain up-to-date logbooks.
- Refuelling will be undertaken in a designated area to minimise loss of product to ground.
- No maintenance activities will be undertaken on Site except for emergency breakdowns (refer to Section 14.5). Risk assessments will need to be conducted as appropriate prior to maintenance/service work being undertaken.
- 2-way radio communication is the preferred method for positive communications between Plant Operators and Spotters (refer to Section 11 of this TPMP for UHF Channels).

20. Reversing Vehicles/Equipment

When reversing, workers must:

- Plan to use the shortest possible reversing distance,
- Get out and have a look if you are not sure what is behind you,
- Activate hazard warning lights, reverse sensors or audible reversing alarms, rotating lights/flashing beacons,
- Reverse slowly, use the mirrors, cameras, and check both sides,
- Remain stationary and give way if a Vehicle/mobile plant approaches from behind,
- Use the Vehicle/mobile plant horn to warn pedestrians if reversing across an obscured area, and
- Use a Spotter where:

- Visibility is restricted.
- When reversing heavy vehicles or trailers.

21. Loading And Unloading Exclusion Zones

All workers or visitors other than the loading / unloading operator must NOT be within the Loading and Unloading Exclusion Zone (LUEZ) during the process of loading / unloading. The only exception being, where an authorized worker is being used as a Spotter to assist in the task (the person must always be in view of the worker acting as the Mobile Plant Operator and the Spotter is not in a position where they can be affected by the task (i.e. trapped, struck, falling objects etc.)).

Where an unauthorized worker or visitor is identified within the Loading and Unloading Exclusion Zone, the operation shall be immediately ceased until those unauthorized persons are removed.

The following apply to Loading and Unloading Exclusion Zones (LUEZ):

- A LUEZ must be set up when there is loading and/or unloading activities being undertaken at the Site.
- Clear demarcation of a LUEZ using physical barricading (such as bollards, flagging etc).
- The Worker setting up the LUEZ is required to remove the LUEZ once all activities are completed. This includes making any changes to the set up if required.
- No other unauthorised vehicles shall enter the LUEZ during loading and unloading.
- When loading, drivers can only remain inside the vehicle if the driver can be protected from the risk of falling objects/materials. Positive communications must be established to ensure there is no entry into LUEZ during loading / unloading activities.
- Where a Spotter is required, spotter zones must be established prior to commencing the task and stay in that zone until the task has been completed.

The worker operating the mobile plant on Site such as forklifts, telehandler, Manitou or Hiab should control the exclusion zone and is responsible for:

- Displaying signage to warn other pedestrians and Driver/Operators of the danger e.g., Loading Zone DO NOT ENTER.
- Establishing a safe zone in full view of the Driver/Operator for the driver and other pedestrians.
- Ensuring the driver remains in a safe zone whilst loading or unloading operations are being conducted.
- Stopping the task if the driver cannot be seen or needs to enter the exclusion zone.
- Stopping if a pedestrian enters the exclusion zone.
- Reporting to the Site Manager or Construction Supervisor if the exclusion zone is breached.
- Being vigilant at all times of workers working/walking in the surrounding areas.
- Ensuring all loads are correctly attached or restrained to the mobile plant.
- Paperwork is completed after loading and signed by the driver.

22. Three and Ten Meter Rule

To minimise the potential for personal injury, no one shall enter a three-meter radius around any operating vehicle/mobile plant e.g., forklift, telehandler.

Figure 5 – Three Metre Rule

For Heavy Vehicles, no one shall enter a ten-meter radius around any operating Heavy Vehicle e.g., trucks. Where the ten-meter rule is not possible, alternate controls must be implemented to create an exclusion zone following a task specific risk assessment.

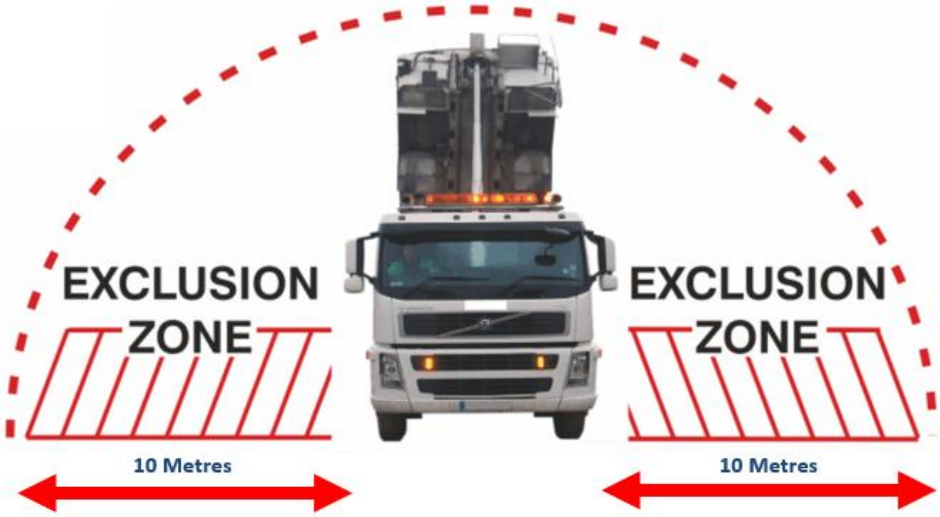


Figure 6 – Ten Metre Rule

In all cases, workers must:

- Gain the attention of the Vehicle/Equipment Driver/Operator.
- Wait for the machinery to come to a complete stop.
- Wait for the Driver/Operator to turn off their machinery and engage the handbrake.
- Wait for the Driver/Operator to give you permission to approach safely.

23. Signage

Traffic control signage is displayed throughout the Site and is to be adhered to at all times. These signs serve as a constant reminder to all vehicles / mobile plant operators, workers and pedestrians of the conditions and requirements when accessing various areas on the Site.

The following lists general and specific comments on the traffic control signage.

- All drivers are to follow instructions from LMS inducted workers.
- Speed is controlled around the Site by signage indicating the allowed speed limit per area.
- Traffic flow within the Site is controlled by directional arrows and "Exit" signs.
- All Workers are to drive in a safe manner whilst on Site and on the local approach road.
- Use of a mobile phone and talking on a mobile phone while driving is not permitted.
- "STOP" and "Give Way" signs are also in place to manage vehicular interactions.

24. Emergency Management

In the case of an emergency evacuation the LMS Incident Controller will provide instructions to workers and visitors in line with the Site Emergency Response Plan(s):

- 20054-RG-010 – Emergency Response Plan (ERP)
- 20057-RG-064 – Construction Emergency Response Plan (CERP)

In the event of an emergency response the Site Manager will issue instructions for the management of the site gates to facilitate access by emergency services.

25. Managing and Reporting

All traffic and pedestrian related complaints, incidents and non-compliances will be recorded in the company's incident management tracking system. This includes immediate notification and documentation of the event, followed by investigation and corrective actions as required.

Any failure to comply with statutory requirements will be reported promptly within Skytrust and escalated to the relevant authorities or regulatory bodies as necessary. All records and actions taken will be reviewed regularly to ensure compliance and continual improvement.

26. Monitoring & Review

As a minimum this TPMP will be reviewed annually. During the Construction of the Bioenergy Facility Lucas Heights SSD-79933225 (Power Station) within the Lucas Heights Bioenergy Facility additional reviews will be regularly undertaken and as minimum in the following circumstances:

- When the scope of work changes directly impacting the Site vehicular access or pedestrian movements around the Site.
- Following a near miss or incident involving traffic or pedestrian management.
- Where a new risk is identified in relation to traffic or pedestrian management.
- Following feedback from Workers or drivers (Heavy Vehicle or delivery drivers).

26.1. Mitigation Monitoring

Mitigation measures will be managed through inductions and contractor engagement procedures. Tracking will occur through regular site inspections, and incident reporting. Site managers will use the company's incident management system to record all complaints, incidents, and non-compliances related to traffic and pedestrian controls. Data collected will be reviewed to identify trends and potential areas for improvement.

The effectiveness of mitigation measures will be assessed based on incident frequency, compliance with statutory requirements, and feedback from workers and drivers. Evaluation will include investigation of near misses and incidents, analysis of recorded data, and consideration of newly identified risks. Measures that fail to meet performance standards will be flagged for corrective action.

All findings will be documented within the incident management system and reviewed as part of the site's annual TPMP review. Additional reviews will be triggered by changes in site scope, incidents, or feedback from stakeholders. Records and actions taken will be reviewed to ensure compliance and inform future reviews.

27. Document & Record Management

If a conflict is found between this document and the other site, construction specific documents or LMS procedures/processes, then the highest form of safety protocol shall take precedence. Following its discovery, the matter shall be reviewed by LMS and all relevant stakeholders and where necessary the resolution process applied.

28. Definitions

Table 4 – Definitions

Term	Definition
Chain of Responsibility (CoR)	Applies any time goods or people are sent or received by road using a heavy vehicle with a Gross Vehicle Mass or aggregate trailer mass of more than 4.5 tonnes. The primary duty of care defined in the Heavy Vehicle National Law (HVNL) is that everyone in the CoR has a shared responsibility, so far as is reasonably practicable, to the safety of transport activities. This includes an obligation to eliminate or minimise public risks and a prohibition against directly or indirectly causing or encouraging a driver or other person, including a party in the CoR to contravene the HVNL.
Exclusion Zone	A specifically demarcated area where only trained or approved workers are allowed to enter; unauthorized workers/visitors are strictly prohibited.
Hard Barricades	Those which provide a physical barrier, are erected or placed to restrict entry of persons to an area, and where designed to, may provide physical or impact protection.
Heavy Vehicle	A vehicle with a gross vehicle mass (GVM) or aggregate trailer mass greater than 4.5 tonnes.
High-Risk Construction Work	Work which involves: • A risk of a person falling more than 2 metres • Work on a telecommunication tower • Demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure • Or is likely to involve, the disturbance of asbestos • Work involving structural alterations or repairs requiring temporary support to prevent collapse • Work carried out in or near a confined space • Work carried out in or near a shaft or trench with an excavated depth greater than 1.5 metres or is carried out in or near a tunnel • Work involving the use of explosives • Work on or near pressurised gas pipes or mains • Work on or near chemical, fuel or refrigerant lines • Work on or near energised electrical installations or services ('Near' means close enough that there is a risk of hitting or puncturing the mains, conduit, electrical installation or service) • Work carried out in an area that may have a contaminated or flammable atmosphere • Work involving tilt-up or precast concrete • Work carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians • Work carried out in an area at a workplace in which there is any movement of powered mobile plant • Work carried out in an area in which there are artificial extremes of temperature • Work carried out in or near water or other liquid that involves a risk of drowning • Work involving diving work
Light Vehicle	A light vehicle is defined as a vehicle of less than 4.5 tonnes Gross Vehicle Mass (GVM) or aggregate trailer mass (ATM).
Signage	Approved traffic and pedestrian control signs used to direct vehicles, Workers and Visitors.
Soft Barricades	Those that use an approved tape, bunting or mesh and are typically connected or suspended to structures to prevent or restrict access to an area. Soft barricades are suitable in situations where physical protection by use of a safety barrier system is not warranted.

Term	Definition
Spotter	Means a trained Worker responsible for assisting in the safe movement of vehicles or mobile plant and who must: • Ensure a temporary LUEZ is maintained whilst loading/unloading processes are undertaken. • Remain at a safe distance from the loading/unloading activity. • Maintain clear communication with the Loader/Unloader.
Traffic	Encompasses both vehicles/mobile plant and pedestrian movement.
Traffic Controller	A trained and authorised worker responsible for directing and management the movement of vehicles and pedestrians on Site in accordance with the TPMP.
Visitor	Any person attending the Site who is not considered to be a Worker. A person who is not familiar with the operations of the Site, attends once-off, or their attendance is infrequent. A Visitor is not to perform work at the Site and must always be accompanied by a fully inducted Worker at all times.
Worker	An employee, contractor, subcontractor, self-employed person, outworker, apprentice or trainee, work experience student, employee of a labour hire company placed with a 'host employer' and volunteers.
Works Supervisor	A worker who is in control of a job and is undertaking a supervisory function.

29. Reference Documents

LMS Documents

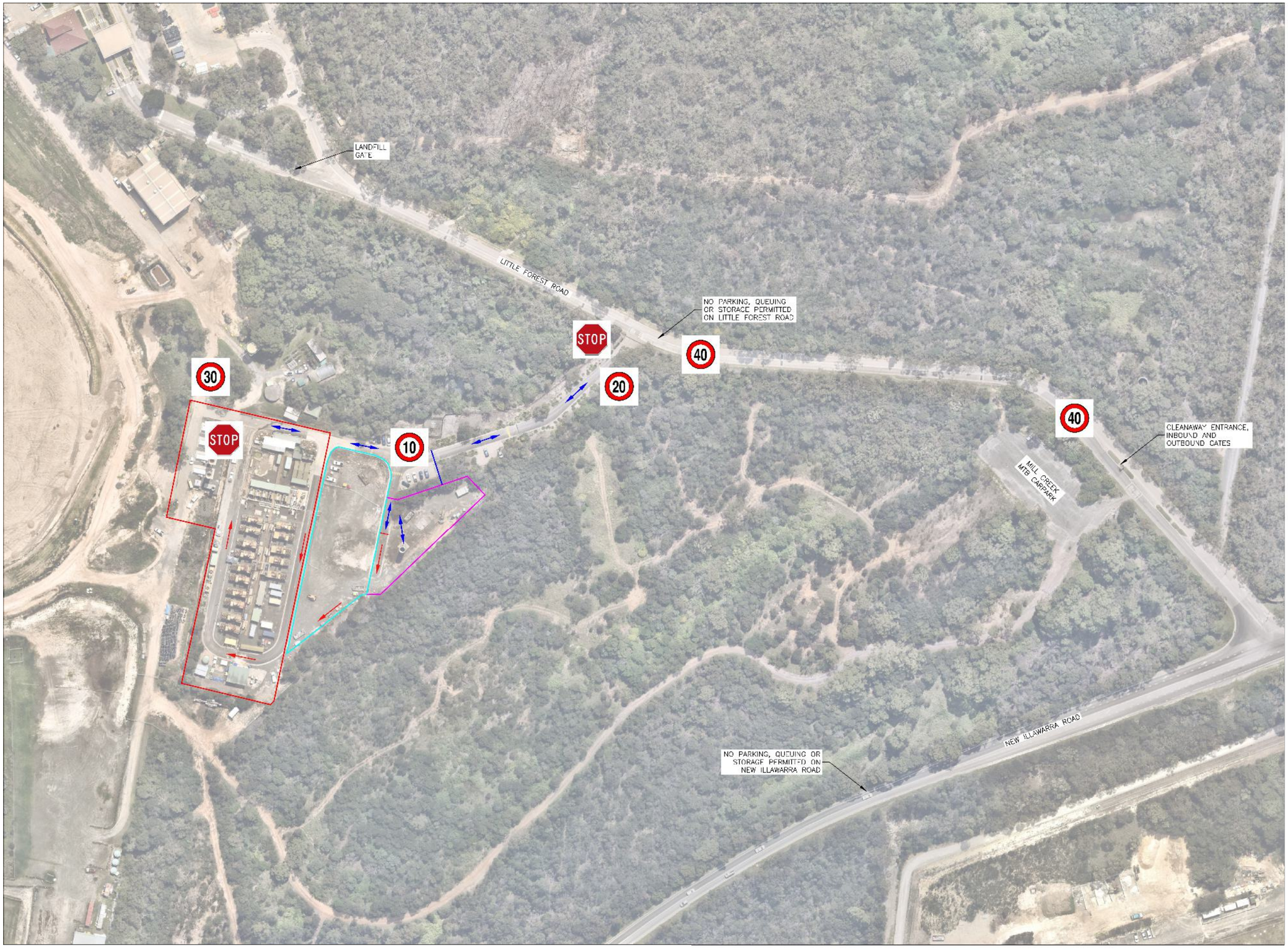
- PL8 – Work Health Safety (WHS) Policy
- Work Health & Safety Policy Summary Rev I
- PL3 – Fitness for Work Policy
- PL4 – Vehicle Policy
- PR35 – Workplace Incident Reporting and Investigation
- PR553 - Chain of Responsibility (CoR) Procedure
- PR554 – Light Vehicle Procedure
- PR555 – Lucas Heights Bioenergy Facility Drugs and Alcohol Testing
- PR54 – Contractor Management Procedure
- PR523 – Contractor Disciplinary Procedure
- FM656 – Loading / Unloading Checklist
- FM121 – Fatigue Assessment
- FM22 – Contractor HSE Management Checklist
- FM66 – Forklift Pre-Operational Checklist
- FM679 – Telehandler Daily Pre-Start
- FM84 – Crane Lift Checklist (Medium to High Risk)
- 20054-RG-010 - Emergency Response Plan (ERP)
- 20054-RG-012 - Safety Management Plan (SMP)
- 20057-RG-063 - Construction Safety Management (CSMP)
- 20057-RG-064 - Construction Emergency Response Plan (CERP)
- 20057-RG-068 - Traffic Management Risk Assessment
- 20057-GA-057 - Bioenergy Facility Construction Activity Zone
- 20057-GA-059 - Bioenergy Facility Traffic Management Overview
- 20057-GA-058 - Bioenergy Facility Traffic Management Plan

External Documents

- Safe Work Australia – Managing the Risks of Plant in the Workplace (November 2024)

- Safe Work Australia – Workplace Traffic Management, Guidance Material (April 2021)
- Safe Work Australia – Traffic Management: Guide for Construction Work (April 2021)
- NSW Speed Zoning Standard (Reference: TS 03631:2.0) (September, 2025)

APPENDIX A - TRAFFIC MANAGEMENT OVERVIEW



N

20 10 0 25 50 75 100

SCALE BAR (m)

SCALE 1:1000 FOR A1 SIZE
SCALE 1:2000 FOR A3 SIZE
GDA94 / MGA ZONE 56
NEARMAP AFRIAL IMAGE DATED 16/03/2026

LEGEND

- ONE WAY TRAFFIC LIGHT / HEAVY
- TWO WAY TRAFFIC ALL VEHICLES
- CONSTRUCTION AREA
- CONSTRUCTION ADMIN
- OPERATIONS AREA
- OVERFLOW PARKING

APPROVED FOR CONSTRUCTION

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION
1	09/04/26	TW	NL			AFC – REVISED POST EXTERNAL REVIEW
0	03/03/26	SA	YS	MH	ES	AFC – APPROVED FOR CONSTRUCTION
A	22/01/26	SA	YS	–	–	DIP – DESIGN IN PROGRESS

REVISIONS

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION

REVISIONS

DRAWING NUMBER	DESCRIPTION

REFERENCE DRAWINGS

LMS ENERGY

DRAWN:	S.A.
DATE:	22/01/26
DESIGN:	H.M.
DATE:	22/01/26
APPRVD:	E.S.
DATE:	11/03/26

A.B.N. 39 059 428 474

LJCAS HEIGHTS BIOENERGY FACILITY

BIOENERGY FACILITY
TRAFFIC MANAGEMENT OVERVIEW

SCALE	DRAWING NUMBER	SHEET	SHEETS	SIZE	REV
1:1000	20057-GA-059-01	OF 01		A1	1

APPENDIX B - ACTIVITY ZONES

N

10 5 0 10 20

SCALE BAR (m)

SCALE 1:500 FOR A1 SIZE
SCALE 1:1000 FOR A3 SIZE
GDA94 / MGA ZONE 56
NEARMAP AERIAL IMAGE DATED 16/03/2026

LEGEND

- CONSTRUCTION AREA
- CONSTRUCTION ADMIN
- OPERATIONS AREA
- OVERFLOW PARKING

APPROVED FOR USE

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION
2	09/04/26	TW	NL			AFU – REVISED POST EXTERNAL REVIEW
1	20/01/26	SA	WB	TC	NMcL	AFC – AREAS DEFINED
0	17/12/25	SA	DL	ES	DL	AFC – APPROVED FOR CONSTRUCTION

REVISIONS

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION

REVISIONS

DRAWING NUMBER	DESCRIPTION

REFERENCE DRAWINGS

LMS ENERGY

DRAWN:	MBR
DATE:	31/10/25
DESIGN:	D.L.
DATE:	31/10/25
APPRVD:	E.S.
DATE:	17/12/25
A.B.N. 39 059 428 474	

LUCAS HEIGHTS BIOENERGY FACILITY

BIOENERGY FACILITY
ACTIVITY ZONE

SCALE	DRAWING NUMBER	SHEET	SHEETS	SIZE	REV
1:500	20057-GA-057-01	OF 01		A1	2

APPENDIX C - TRAFFIC MANAGEMENT PLAN

N

10 5 0 10 20

SCALE BAR (m)

SCALE 1:400 FOR A1 SIZE
SCALE 1:800 FOR A3 SIZE
GDA94 / MGA ZONE 56
NEARMAP AERIAL IMAGE DATED 16/03/2026

LEGEND

- ONE WAY TRAFFIC LIGHT / HEAVY
- TWO WAY TRAFFIC ALL VEHICLES
- CONSTRUCTION AREA
- CONSTRUCTION ADMIN
- OPERATIONS AREA
- OVERFLOW PARKING

APPROVED FOR CONSTRUCTION

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION
1	09/04/26	TW	NL			AFC – REVISED POST EXTERNAL REVIEW
0	03/03/26	SA	HM	MH	ES	AFC – APPROVED FOR CONSTRUCTION
A	20/01/26	SA	HM	–	–	DIP – DESIGN IN PROGRESS

REVISIONS

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION

REVISIONS

DRAWING NUMBER	DESCRIPTION

REFERENCE DRAWINGS

LMS ENERGY

DRAWN:	S.A.
DATE:	20/01/26
DESIGN:	H.M.
DATE:	20/01/26
APPRVD:	E.S.
DATE:	11/03/26

A.B.N. 39 059 428 474

LJCAS HEIGHTS BIOENERGY FACILITY

BIOENERGY FACILITY
TRAFFIC MANAGEMENT PLAN

SCALE	DRAWING NUMBER	SHEET	SHEETS	SIZE	REV
1:400	20057-GA-058-01	OF 01		A1	1

APPENDIX D - LUCAS HEIGHTS BIOENERGY FACILITY DRIVERS CODE OF CONDUCT

Purpose

This Driver's Code of Conduct establishes the mandatory standards of behaviour, responsibility and safety for all drivers operating vehicles on or accessing the Lucas Heights Bioenergy Facility. This Code applies to all light vehicles, heavy vehicles and mobile plant drivers, including employees, contractors, delivery drivers and visitors, and supports the objectives of the Traffic and Pedestrian Management Plan (TPMP).

All drivers have a duty to protect their own safety and the safety of workers, pedestrians, visitors and other road users while operating vehicles on and around the Site.

Construction and operating hours

Operational workers will open and close the LMS Outer Gate upon their first arrival at the Site and upon their last departure, typically at 6:30 am and 5:00 pm. If access is required outside these times, Site Manager approval is required. The Inner Gate is automated, and access code shall be provided only to approved workers. Upon arrival, all other workers, delivery drivers, and/or visitors are to contact the applicable representative as signed, (refer to Figure D.1). The applicable representative will provide access through the automatic gate. The Inner Gate will automatically close following entry.

Figure D.1 – Inner Gate signage (Operations)

Designated routes

Heavy delivery vehicles travelling to and from the Site must only use the routes from *"Combined Higher Mass Limits (HML) and Restricted Access Vehicle (RAV) routes"* map (refer to National Heavy Vehicle Regulator (NHVR) Route Planner).

Drivers are not to queue or park along New Illawarra Road or Little Forest Road.

General driver obligations

All drivers must:

- Comply with the requirements of the Traffic and Pedestrian Management Plan (TPMP), Site signage and instructions from LMS Energy representatives.
- Comply with all applicable NSW road laws and Chain of Responsibility (CoR) obligations.
- Be fit for duty and not affected by fatigue, alcohol or drugs (including prescription or non-prescription medications that may impair driving).
- Operate vehicles in a safe, professional and courteous manner at all times.
- Remain vigilant for pedestrians, mobile plant and changing site conditions.

- Follow the instructions of the site personnel and remain on designated routes.

Speed limits

Strict adherence to posted speed limits is mandatory at all times.

Approved speed limits

Drivers must observe the following speed limits:

- **40 km/h** on Little Forest Road (approach road)
- **20 km/h** between the Site entrance and the LMS Inner Gate
- **10 km/h** within the internal Site road network
- **Walking pace** in the vicinity of pedestrian crossings, work zones and congested areas

Speed limits are enforced through signage and apply to all vehicles without exception.

Speed management expectations

Drivers must:

- Drive to conditions, including weather, visibility and surface conditions.
- Reduce speed near pedestrians, blind corners, crests and active work zones.
- Immediately slow to walking pace when pedestrians are present nearby.
- Never exceed advisory or posted speed limits.

Driver responsibility and safety

Vehicle operation

Drivers are responsible for ensuring that:

- Vehicles are roadworthy, registered and suitable for Site access.
- Pre-start checks are completed where required.
- Loads are secured correctly and comply with mass, dimension and restraint requirements under Chain of Responsibility obligations.
- Obey road rules and be courteous towards other road users and pedestrians.
- Vehicles are parked only in designated areas and reverse parked where practicable.
- All loads are to be covered so that material/dust is not lost from the load.
- While heavy vehicles are on designated routes, the use of exhaust brakes will be avoided wherever practicable.
- Vehicles must not be left unattended with engines running and must not obstruct traffic routes, emergency access or work areas.

Pedestrian/Cycle interaction

Pedestrians and cyclists have priority on the Site.

Drivers must:

- Give way to all pedestrians/cyclists at all times.
- Maintain clear separation from pedestrians/cyclists wherever practicable.
- Never enter pedestrian walkways or exclusion zones unless authorised.
- Ensure positive visual contact with pedestrians/cyclists and spotters before proceeding.
- Drivers must comply with the **Three-Metre Rule** for light mobile plant and the **Ten-Metre Rule** for heavy vehicles unless alternate controls are formally implemented.
- Drivers must be aware of potential higher cyclist activity of Little Forest Way, particularly on weekends.

Reversing and manoeuvring

When reversing or manoeuvring, drivers must:

- Minimise reversing distances wherever possible.
- Use mirrors, cameras and reversing alarms.
- Sound the horn only as a warning device when necessary.
- Use a Spotter where visibility is restricted or when reversing heavy vehicles or trailers.
- Stop operations immediately if visual contact with a Spotter is lost.

Emergency management

Driver actions during emergencies

In the event of an emergency, drivers must:

- Immediately follow instructions from the LMS Incident Controller or Site Manager.
- Stop work if directed and make vehicles safe.
- Keep all access roads, gates and emergency routes clear.
- Assist emergency services by complying with traffic control directions.
- Drivers must not self-evacuate unless instructed to do so.

Emergency access

Drivers must ensure that:

- Site entrances, internal roads and gates remain unobstructed at all times.
- Vehicles are not parked in areas designated for emergency access.

Communication and compliance

Communication requirements

Drivers must:

- Use UHF radios where required to communicate vehicle and mobile plant movements.
- Follow directions given by inducted LMS workers, traffic controllers and spotters.
- Immediately report hazards, near misses or incidents involving traffic movements.
- Mobile phone use while driving on the Site is strictly prohibited.

Compliance and enforcement

Compliance with this TMPM and Code is mandatory. LMS Energy reserves the right to:

- Suspend or revoke Site access for non-compliance.
- Investigate any breach of traffic or safety requirements.
- Apply disciplinary actions in accordance with Site procedures.

Acknowledgement

All drivers accessing the Lucas Heights Bioenergy Facility acknowledge that they have read, understood and agree to comply with this Drivers Code of Conduct and the TPMP as a condition of Site access.

Name	Signature

Table D.1 – Driver Acknowledgement

APPENDIX F - EROSION AND SEDIMENT CONTROL PLAN

EROSION & SEDIMENT LEGEND

- WIND EROSION FENCE - MIN. 2.0m HIGH
- EROSION PROTECTION GEOTEXTILE SILT FENCE
- DRAINAGE DIVERSION CHANNEL
- EROSION PROTECTION SILT SOCK
- EROSION PROTECTION STRAW BALE BARRIER
- SURFACE GRADING DIRECTION
- EROSION PROTECTION SILT BASIN
- STABILISED SITE ACCESS

EROSION & SEDIMENT CONTROL PLAN NOTES

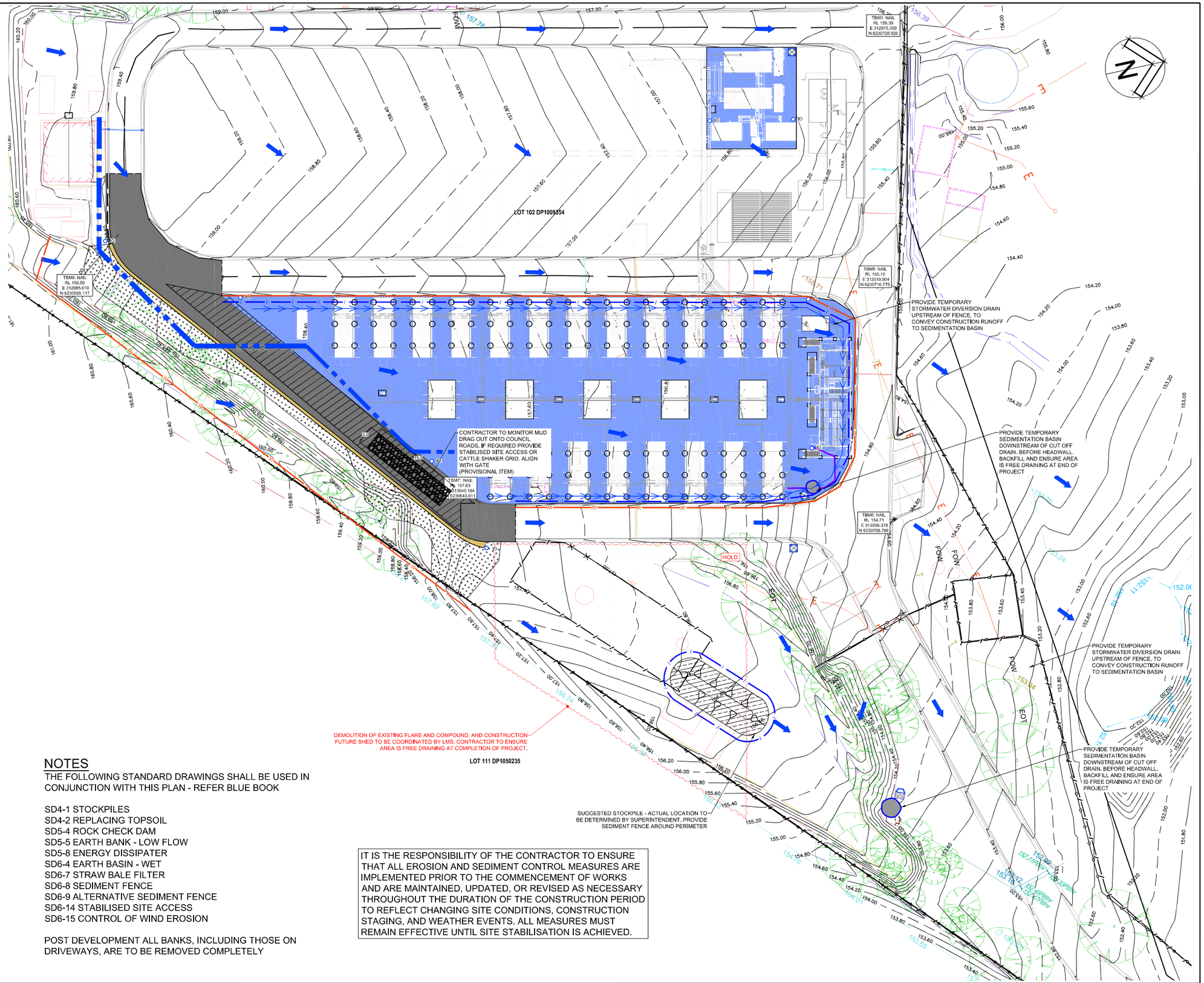
SITE DETAILS

DISTURBED AREA: 0.63 ha
SLOPE: LOW (2–5%)
SOIL TYPE: SANDY CLAY (MODERATE EROSION RISK)
5-DAY RAINFALL DEPTH RAINFALL: 54.6mm (90th %ile - BLUE BOOK)

1. EROSION AND SEDIMENT MANAGEMENT PRACTICES AND CONTROLS TO BE IN ACCORDANCE WITH NSW MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION VOLUME 1 FOURTH EDITION "BLUE BOOK"
2. A COPY OF THE APPROVED ESCP MUST BE KEPT ON SITE AND BE AVAILABLE TO REGULATORY AUTHORITIES AT ALL TIMES.
3. EROSION SEDIMENT CONTROL PLAN (ESCP) TO BE READ IN CONJUNCTION WITH GEOTECHNICAL INVESTIGATIONS
4. THE PRINCIPAL CONTRACTOR SHALL APPOINT A NOMINATED ENVIRONMENTAL SITE SUPERVISOR RESPONSIBLE FOR DAILY IMPLEMENTATION AND MONITORING OF THE ESCP.
5. SEQUENCE OF WORKS
   - 5.1. INSTALL PERIMETER SEDIMENT FENCING AND VEHICLE ACCESS CONTROL.
   - 5.2. CONSTRUCT DIVERSION DRAINS AND SEDIMENT BASIN.
   - 5.3. CLEAR AND GRUB SITE IN STAGES.
   - 5.4. BULK EARTHWORKS AND ROAD GRADING.
   - 5.5. INSTALL DRAINAGE AND SERVICE INFRASTRUCTURE.
   - 5.6. FINAL SITE STABILISATION WITH COMPACTED EARTH.
5. ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY EARTHWORKS OR VEGETATION CLEARING.
6. CLEAN SEDIMENT BASINS BEFORE THEY REACH 60% CAPACITY.
7. DOCUMENT ALL INSPECTIONS AND MAINTENANCE ACTIONS
8. ALL CONTROLS ARE TO BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL DISTURBED AREAS ARE STABILISED.
9. EROSION AND SEDIMENT CONTROLS ARE TO BE REGULARLY INSPECTED, PARTICULARLY:
   - 9.1. AFTER RAINFALL EVENTS (>10 MM IN 24 HOURS),
   - 9.2. AT LEAST WEEKLY DURING ACTIVE CONSTRUCTION,
   - 9.3. IMMEDIATELY AFTER ANY SIGNIFICANT CHANGE IN SITE CONDITIONS.
   - 9.4. ALL SEDIMENT COLLECTED IN BASINS, FENCES, AND INLET TRAPS SHALL BE REMOVED WHEN IT REACHES 60% OF THE DEVICE'S CAPACITY.
10. DIVERSION BANKS, CONTOUR DRAINS, AND BUNDS SHALL BE CONSTRUCTED TO DIRECT CLEAN WATER AWAY FROM DISTURBED AREAS.
11. RUNOFF FROM DISTURBED AREAS SHALL BE DIRECTED TO SEDIMENT CONTROL STRUCTURES SUCH AS SEDIMENT FENCES, BASINS, OR SEDIMENT TRAPS.
12. ACCESS POINTS TO THE SITE SHALL BE STABILISED WITH AGGREGATE OR A SHAKER GRID TO PREVENT SEDIMENT TRACKING ONTO PUBLIC ROADS. ACCESS SEDIMENT CONTROL TO BE A PROVISIONAL ITEM TO BE CONFIRMED BY CONTRACTOR AND CLIENT
13. ANY SEDIMENT DEPOSITED ON ROADWAYS OR DRAINAGE STRUCTURES SHALL BE REMOVED IMMEDIATELY.
14. DISTURBED AREAS SHALL BE PROGRESSIVELY STABILISED BY RE-VEGETATION, MULCHING, HYDROSEEDING, OR OTHER SUITABLE METHODS AS SOON AS PRACTICABLE.
15. NO STOCKPILING OF MATERIALS IS PERMITTED WITHIN DRAINAGE LINES OR IN AREAS LIKELY TO CAUSE OFF-SITE SEDIMENTATION.
16. NO STOCKPILES WITHIN 5m OF DRAINAGE LINES
17. EMERGENCY SPILLWAY AND PRIMARY OUTLET STRUCTURES OF SEDIMENT BASINS SHALL BE INSPECTED FOR BLOCKAGES AND DAMAGE FOLLOWING EACH STORM EVENT.
18. THE SEDIMENT BASIN SHALL BE DECOMMISSIONED ONLY AFTER ALL CATCHMENT AREAS ARE STABILISED AND APPROVED BY THE SITE ENGINEER OR AUTHORITY.
19. TOPSOIL STOCKPILES TO BE IN ACCORDANCE WITH BLUE BOOK STANDARD DRAWING 4-1
20. DUE TO THE CONSIDERABLE DISTANCE TO THE ULTIMATE STORMWATER OUTLET, FLOW ATTENUATION OR RESTRICTION MEASURES HAVE NOT BEEN PROVIDED AS PART OF THIS EROSION AND SEDIMENT CONTROL STRATEGY. THE EXTENDED FLOW PATH ALLOWS FOR NATURAL DISSIPATION OF STORMWATER ENERGY AND PROVIDES SUFFICIENT OPPORTUNITY FOR SEDIMENT DEPOSITION ALONG THE CONVEYANCE ROUTE PRIOR TO DISCHARGE.
21. PIPES, CHANNELS AND BASIN DESIGNED TO 10-YEAR ARI STORM EVENT
22. POST-DEVELOPMENT WATER QUALITY MEASURES TO ACHIEVE BEST PRACTICE REQUIREMENTS IN ACCORDANCE WITH EPA MANAGING URBAN STORMWATER: TREATMENT TECHNIQUES AND NSW BLUE BOOK (BLUE BOOK TO TAKE PRECEDENCE)

SEDIMENTATION POND NOTES

1. SEDIMENT BASINS CAN BE CONSTRUCTED FROM EARTH, ROCK OR SUITABLE CRUSHED CONCRETE PRODUCTS WHERE FORMED AS ABOVEGROUND PONDS
2. THE LOWER LEVEL OF THE SETTLING ZONE SHOULD BE IDENTIFIED WITH A PEG OR OTHER MARKER THAT SHOWS CLEARLY THE LEVEL ABOVE WHICH THE DESIGN CAPACITY IS AVAILABLE. STORED SEDIMENT SHOULD NOT ENCROACH INTO THE SETTLING ZONE.
3. SEDIMENT REMOVED FROM SEDIMENT BASINS SHOULD BE DISPOSED IN PLACES THAT WILL NOT RESULT IN A FUTURE EROSION OR POLLUTION HAZARD (SEE SECTION 4.3.2 (H) OF NSW BLUE BOOK), NOTE THAT FINE AND/OR FLOCCULATED SEDIMENT REMOVED FROM WET BASINS MIGHT REQUIRE CONSIDERABLE TIME TO DRY TO A LEVEL WHERE IT CAN BE HANDLED WITH RELATIVE EASE.



NOTES

THE FOLLOWING STANDARD DRAWINGS SHALL BE USED IN CONJUNCTION WITH THIS PLAN - REFER BLUE BOOK

SD4-1 STOCKPILES
SD4-2 REPLACING TOPSOIL
SD5-4 ROCK CHECK DAM
SD5-5 EARTH BANK - LOW FLOW
SD5-8 ENERGY DISSIPATER
SD6-4 EARTH BASIN - WET
SD6-7 STRAW BALE FILTER
SD6-8 SEDIMENT FENCE
SD6-9 ALTERNATIVE SEDIMENT FENCE
SD6-14 STABILISED SITE ACCESS
SD6-15 CONTROL OF WIND EROSION

POST DEVELOPMENT ALL BANKS, INCLUDING THOSE ON DRIVEWAYS, ARE TO BE REMOVED COMPLETELY

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL EROSION AND SEDIMENT CONTROL MEASURES ARE IMPLEMENTED PRIOR TO THE COMMENCEMENT OF WORKS AND ARE MAINTAINED, UPDATED, OR REVISED AS NECESSARY THROUGHOUT THE DURATION OF THE CONSTRUCTION PERIOD TO REFLECT CHANGING SITE CONDITIONS, CONSTRUCTION STAGING, AND WEATHER EVENTS. ALL MEASURES MUST REMAIN EFFECTIVE UNTIL SITE STABILISATION IS ACHIEVED.

ISSUE	DESCRIPTION	DRAWN	DESIGNED	CHECKED	APPROVED	DATE
0	ISSUED FOR CONSTRUCTION	MR	MR	BS	RM	10.03.2026

SCALE: 1:300 @ A1 (0 3 6 12 18m)

CLIENT: LMS ENERGY™

mlei CONSULTING ENGINEERS
Level 14, Suite 2, 379 Collins Street Melbourne VIC 3000
03 9923 7455 mlei.com.au

LMS ENERGY STATION
LUCAS HEIGHTS
PROPOSED SITE CIVIL WORKS - STAGE 2
EROSION AND SEDIMENT CONTROL PLAN

ISSUED FOR CONSTRUCTION
FOR CONSTRUCTION

DRAWN	DESIGNED	DWG No.	SHEET	REV
M.READE	M.READE	M025-2695	C140	0

APPENDIX G - CONSTRUCTION ACTIVITY ZONE (CAZ)

N

10 5 0 10 20

SCALE BAR (m)

SCALE 1:500 FOR A1 SIZE
SCALE 1:1000 FOR A3 SIZE
GDA94 / MGA ZONE 56
NEARMAP AERIAL IMAGE DATED 16/03/2026

LEGEND

- CONSTRUCTION AREA
- CONSTRUCTION ADMIN
- OPERATIONS AREA
- OVERFLOW PARKING

APPROVED FOR USE

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION
2	09/04/26	TW	NL			AFU – REVISED POST EXTERNAL REVIEW
1	20/01/26	SA	WB	TC	NMcL	AFC – AREAS DEFINED
0	17/12/25	SA	DL	ES	DL	AFC – APPROVED FOR CONSTRUCTION

REVISIONS

No	DATE	DRN	DESN	CHKD	APP	DESCRIPTION

REVISIONS

DRAWING NUMBER	DESCRIPTION

REFERENCE DRAWINGS

LMS ENERGY

DRAWN:	MBR
DATE:	31/10/25
DESIGN:	D.L.
DATE:	31/10/25
APPRVD:	E.S.
DATE:	17/12/25
A.B.N. 39 059 428 474	

LUCAS HEIGHTS BIOENERGY FACILITY

BIOENERGY FACILITY
ACTIVITY ZONE

SCALE	DRAWING NUMBER	SHEET	SHEETS	SIZE	REV
1:500	20057-GA-057-01	OF 01		A1	2

APPENDIX H - ENVIRONMENTAL POLICY SUMMARY

ENVIRONMENTAL POLICY SUMMARY

LMS Energy is a proudly Australian owned and operated bioenergy and methane abatement company, first established in 1996.

Our philosophy is centred upon the Circular Economy model, where humanity transitions away from a "take, make, use and dispose" linear economy, to one where resources are valued and regenerated.

LMS' vision is to become the world's leading bioenergy and methane abatement company, powering the circular economy through all bioenergy activity lifecycle phases from initial design through to construction, operation, maintenance and facility decommissioning.

Our purpose is:

- To protect the environment from the impact of waste;
- To be a great company for our people, our clients, and the community; and
- To constantly challenge the status quo through innovation.

To achieve our vision and purpose, LMS is committed to:

- Operating standards that as a minimum meet, and where practicable exceed, our general environmental duty (GED) and compliance obligations while protecting the environment and preventing pollution;
- Implementing and continually improving the environmental management system (EMS), which is certified to the ISO14001 standard, and systematically identifying and addressing performance non-conformities;
- Developing sound EMS competency in its employees, and partnering with like-minded contractors;
- Applying a lifecycle approach to its activities, which considers and mitigates potentially harmful impacts on the environment and heritage, particularly effects on soil, water, air, acoustics, amenity, biodiversity and climate change;
- Maximising greenhouse gas abatement by creating verifiable and accredited offsets of greenhouse gas emissions, while meeting mandatory climate-related financial disclosure (MCFD) reporting obligations; and
- Developing innovative solutions, technologies and processes that benefit the environment within a wider Environment, Social and Governance (ESG) Framework, inclusive of external reporting to stakeholders.

LMS monitors its performance to verify and enhance continual environmental improvement, and is committed to achieving its corporate objectives.

John Falzon
Chair
October 2024

Jon Varcoe
Chief Scientist
October 2024

APPENDIX I - RISK MATRIX

Risk Matrix

Likelihood	Consequence (Negative)				
	Minor - (I)	Moderate - (II)	Major - (III)	Severe - (IV)	Catastrophic - (V)
Almost Certain - (A)	Medium M2	Medium M6	High H3	Extreme E1	Extreme E2
Likely - (B)	Medium M1	Medium M4	High H2	High H4	Extreme E1
Possible - (C)	Low L3	Medium M3	Medium M5	High H2	High H3
Unlikely - (D)	Low L2	Low L4	Medium M3	Medium M4	High H1
Rare - (E)	Low L1	Low L2	Low L3	Medium M1	Medium M2

Likelihood Criteria

Likelihood	Probability (single occurrence)	Qualitative Guide
Almost Certain - (A)	>95% chance of occurring	There is little doubt that the risk will occur. History of regular occurrence.
Likely - (B)	65-95% chance of occurring	There is a strong possibility that the risk will occur. History of frequent occurrence.
Possible - (C)	20-65% chance of occurring	There is a possibility that the risk will occur. History of casual occurrence.
Unlikely - (D)	5-25% chance of occurring	There is a slight possibility that the risk will occur.
Rare - (E)	<5% chance of occurring	The risk may only occur in exceptional circumstances.

Velocity Criteria

Velocity	Description		
Immediate		The impact of the risk event would be evident within 1 week	No warning
Very Rapid		The impact of the risk event would be evident in 1 – 12 weeks	Minimal warning
Rapid		The impact of the risk event would be evident in 3 – 6 months.	Some warning
Slow		The impact of the risk event would be evident in 6 – 12 months	Good warning
Very Slow		The impact of the risk event would be evident after 1 year	Plenty of warning

Escalation

Residual Risk Rating		Extreme	High	Medium	Low
Newly identified risk or change identified to existing risk	Notification	Immediate escalation to the Board	Escalation to Chief Officer and CEO within 24 hours	Escalation to Group Manager within 48 hours	No escalation required
	Action	Board approval required to proceed	Chief Officer and CEO approval required to proceed	Supervisor and Group Manager informed prior to proceeding	No approval required
Reporting on established risk		Monthly status report to Board	Quarterly 'changed status' report to Chief Officer and CEO	Quarterly 'changed status' report to Group Manager	No reporting required

Consequence Criteria

	Consequence (Negative)				
	Minor	Moderate	Major	Severe	Catastrophic
People (P)	- Report only injury / illness (no specific treatment) - Injury / illness requiring First Aid Treatment (FAI)	- Injury /illness requiring medical treatment (MTI) - Injury / illness requiring short term (<2 weeks) alternative / restricted duties	- Injury / illness resulting in lost time of one or more full shift (LTI) - Injury / illness requiring (2-6 weeks alternative / restricted duties	- Injury / illness requiring hospitalisation - Serious injury without permanent impairment, or serious injures to multiple persons - Trauma, adverse wellbeing case or chronic health condition with >2-month work absence	- Fatality / multiple fatalities - Permanent impairment / significantly prolonged / terminal health issue
Environment (E)	"- Minor on-site unplanned contaminant release that is contained and fully managed in <1 day (no ongoing management or remediation). No material environmental harm nor associated threat thereof - Unplanned disturbance or entrapment of listed flora or fauna (no injury or death) - immediately 'reversed' - Isolated cases of prohibited matter/flora on site	"- Unauthorised contaminant release that affects on-site area, with associated material harm or threat thereof confirmed. Regulatory notifician triggered - Unauthorised ground disturbance, clearing or removal - Minor, localised outbreaks of prohibited matter/flora on site"□	"- Unauthorised contaminant release that affects off-site areas, inclusive of surface/groundwater, with associated serious environmental harm confirmed. Remediation <5 years - Unauthorised death and/or disturbance of listed flora, fauna and/or a species of interest or concern - Localised outbreaks of prohibited matter/flora in off-site areas (emanating from LMS activities) - Minor / localised unplanned disturbance of cultural heritage site or artefact"□	- Unauthorised contaminant release with long term remediation required (> 5 years) in area of high conservation or special - Disturbance of flora, fauna and/or deaths of a species of interest or concern in multiple on or off-site areas - Localised outbreaks of prohibited matter/flora in areas of high conservation value or of a special significance - Harm to significant cultural heritage location, site or artefact with substantial remediation required	- Unauthorised contaminant release causing irreversible harm in area of high conservation or special significance - Widespread impact of flora, fauna and/or deaths of a species of interest or concern in multiple off-site areas - Widespread outbreaks of prohibited matter/flora in areas of high conservation value or of a special significance - Irreversible harm to significant cultural heritage location, site or artefacts
Financial (A)	<$50K	$50K to $250K	$250K to $500K	$550K to $1M	>$1M
Reputation (R)	- Substantiated concern or complaint from customer / host community / stakeholder which is managed by internal processes - No reputational damage	- Substantiated concern or complaint from customer / host community / stakeholder that has the potential to accumulate, attract media attention or cause reputational damage - Requires action plan to address the issue and mitigate potential reputation damage	- Substantiated concern or complaints from customer / host community / stakeholder that has some impact on their confidence. May cause delay in meeting strategic objectives - Negative external (e.g. media, social media) and internal commentary of any duration, requiring leadership team intervention - Minor reputation damage, despite action to address the issue	- Negative media coverage (including social media) or complaints to Regulatory Authorities, leading to loss of shareholder / market or customer confidence / increased oversight / delays to strategic objectives	- Extensive and ongoing negative media coverage (including social media) or complaints to Regulatory Authorities,leading to substantial loss of stakeholder confidence - Revocation of mandate, changes to corporate policy or operational policy imposed, or curtailment of operations
Legal & Compliance (L)	Licencing, regulatory or legislative infringement that can be managed by routine procedures. Unintentional policy or procedural breach. Evidence of good faith. Low level legal issue.	Non-compliance with an external requirement that if remediated does not result in a penalty including impact on ability to trade or operate. Formal investigation or performance review initiated. Threat of prosecution. Regulatory notice and investigation.	Failure to adhere to licence requirements or legislative obligations, material disclosure breach or error/omission in public documents, or multiple non-systemic compliance incidents or breaches leading to enforceable undertaking, report to CCC or police; regulatory investigation; fines or sanctions imposed; legal action taken against LMS Energy.	Deliberate breach/non-compliance or gross negligence, systemic material compliance incident, disclosure of large volume of confidential information, or material error/omission in public documents leading to suspension of licence to operate or specific permits or approvals, litigation, disciplinary action, prosecution including CCC or police prosecutions.	Wilful malicious breach or non-compliance, criminal negligence or act, or severe unintended breach leading to: • Penalties including loss of licence to trade or operate • Regulatory action resulting in personal liability or prosecution of public officer • State Government intervention • Sustained litigation; class actions; significant court penalties • Parliamentary inquiry