



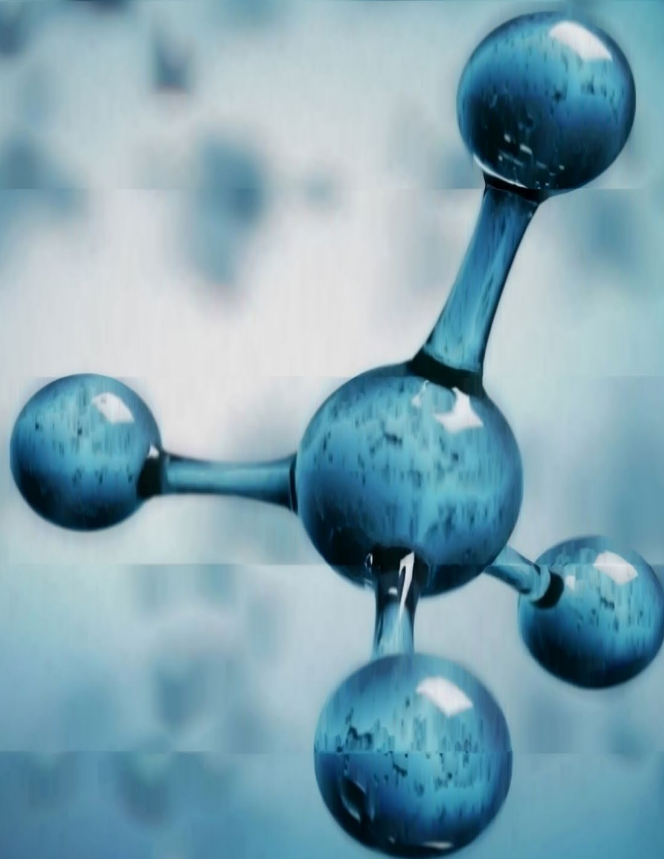
Lucas Heights Bioenergy Facility



Response to submissions

LMS Energy Pty Ltd

4 February 2026

→ **The Power of Commitment**



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1. Introduction

1.1 Overview

LMS Energy Pty Ltd (LMS) proposes to upgrade the landfill biogas management infrastructure at the Lucas Heights Resource Recovery Park (LHRRP), by upgrading the existing power station (the project) to produce renewable energy from landfill gas generated at the LHRRP.

The new bioenergy facility would be a like for like replacement of the existing power station biogas generators within the existing power station site, with improvements that comply with modern standards and regulations and forecasted biogas generation capacity requirements. The project ensures appropriate capacity to manage forecast peak recoverable biogas and renewable energy generation would effectively continue through the remaining landfilling and post closure periods at the LHRRP.

1.2 Background

The LHRRP is operated by Cleanaway Pty Ltd (Cleanaway) in accordance with State significant development (SSD) consent (No. SSD 6835). SSD 6835 allowed for an increase in landfill capacity, relocation and expansion of the garden organics (GO) facility and construction and operation of a new advanced resource recovery technology (ARRT) facility. The approval also allowed for continued operation and maintenance of the landfill biogas infrastructure within the LHRRP boundary including the progressive installation of landfill biogas extraction wells and header pipes to transfer landfill biogas to a power station and flare.

Through the production of distributed baseload renewable electricity, the utilisation of landfill biogas for energy generation provides numerous environmental and community benefits, including carbon abatement and air quality improvement through destruction of methane and other volatile organic compounds. The proposed bioenergy facility would be capable of generating up to 190,000 MWh annually, which is equivalent to powering approximately 30,000 homes in the region and abating over one million tonnes of carbon dioxide emissions.

The existing power station was commissioned in 1998 and is nearing the end of its design life.

1.3 Purpose of this report

This Response to Submissions has been prepared by GHD Pty Ltd (GHD) on behalf of LMS Pty Ltd (LMS) to support the application for approval of the project. The purpose of this document is to respond to submissions received for the project, as well as clarify the extent of potential impacts and benefits related to the project. This report also clarifies the measures that would be implemented to avoid, manage, mitigate and offset issues raised in submissions.

The Department of Planning Housing and Industry (DPHI) received 1 community submission which was located in Sydney, NSW. DPHI also received 9 submissions from government authorities, service providers and local Council who were invited to comment on the project. DPHI has provided copies of these submissions to LMS. In accordance with section 59(2) of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) of the EP&A Regulation, the Secretary requires the proponent to provide responses to the issues raised in the submissions.

This report has been prepared in accordance with the DPHI guideline '*State significant development guidelines – preparing a submissions report*' (DPHI, 2024).

2. Analysis of submissions

2.1 Overview

DPHI received a total of 10 submissions during the exhibition of the EIS. Table 2.1 groups the submissions received by submitter and whether they are in support, for comment or objection.

Table 2.1 Summary of submissions received

Source	Support	Comment	Objection	Total
Government agencies	1	7	-	8
Organisations	-	1	-	1
Community and individuals	1	-	-	1
Total	2	8	-	10

The designation of submissions as being in support, comment or objection shown in Table 2.1 is based on the designation made by DPHI on the Major Projects Website.

2.2 Submitters

The submissions received consist of:

- **Government agencies:**
 - Department of Planning, Housing and Infrastructure (DPHI).
 - NSW Environment Protection Authority (EPA)
 - NSW Fire and Rescue Service
 - DCCEEW – Heritage NSW
 - Conservation Programs, Heritage and Regulation (CPHR) under NSW DCCEEW
 - Transport for NSW (TfNSW)
 - NSW Rural Fire Service
 - Sutherland Shire Council
- **Submissions from organisations:**
 - 1 submission – Ausgrid
- **Submissions from community members and individual residents:**
 - 1 submission

2.3 Categorisation of issues

In accordance with the guideline *State significant development guidelines – preparing a submissions report* (DPHI, 2024), GHD has grouped issues raised in submissions into one of five broad categories:

- Project (e.g. the site, the physical layout and design, uses and activities, timing).
- Procedural matters (e.g. level or quality of engagement, compliance with the Secretary’s Environmental Assessment Requirements (SEARs), identification of relevant statutory requirements).
- Economic, environmental and social impacts of the project (e.g. amenity, air, biodiversity, heritage).
- Justification and evaluation of the project (e.g. consistency of project with Government plans, policies or guidelines, support for the project).
- Issues that are beyond the scope of the project (e.g. broader policy issues) or not relevant to the project.

Table 2.2 sets out the subcategories of issues raised by the submissions received and to which of DPHI's five broad categories. A number of submissions made comment on multiple issues so the number of issues raised does not correlate directly with the number of submissions.

Table 2.3 shows that the main issues raised were in relation to specific environmental aspects of the project based on the agency responding. All these issues have been considered in detailed responses in Section 4.

Table 2.2 *Issues categorisation*

Primary Category	Issue Sub-category	No. of times issue raised in submissions
Project	Operational procedures during bushfire events	1
	APZ and emergency firefighting water	2
	Gas composition	1
Procedural matters	Environment protection licence requirements	1
	Electricity grid connection procedures	1
Economic, environmental and social impacts	Traffic or road design	1
	Fire safety	3
	Heritage, Aboriginal community	1
	Biodiversity	1
Justification and evaluation of the project as a whole	General support	2
Issues beyond the scope of the project	Leachate management	1
	Landfill closure obligations	1

2.4 Summary of issues raised

2.4.1 Agency and organisation submissions

Submissions were reviewed from government agencies and Ausgrid and no overarching themes were identified. Agency and organisation comments were generally limited to matters within their functional or environmental areas of responsibility. Given the low volume and focused nature of the submissions, no recurring subcategories or broader themes could be established. A summary of the submissions received is provided in Table 2.3.

Table 2.3 *Summary of issues raised in agency submissions*

ID	Agency / Organisation	Sentiment	Category(s)	Issue / comment
1	DPHI	Comment	The Project Economic, environmental and social impacts Issues beyond the scope of the project	Air quality during non-routine operations Operational procedures during bushfire events Leachate management Gas composition Consideration of impacts upon future recreational areas Landfill closure obligations
2	NSW EPA	Comment	Procedural matters	Environment Protection Licence requirements
3	NSW Fire and Rescue	Comment	Economic, environmental and social impacts	Fire hazards and safety
4	Heritage NSW	Comment	Economic, environmental and social impacts	Confirmation of no further comments on heritage matters.
5	CPHR	Comment	Economic, environmental and social impacts	Confirmation of no further comments on either flooding or biodiversity matters

ID	Agency / Organisation	Sentiment	Category(s)	Issue / comment
6	TfNSW	Comment	Economic, environmental and social impacts	Confirmation of no further comments on transport related matters
7	NSW Rural Fire Service	Comment	Economic, environmental and social impacts	Fire hazards and safety.
8	Sutherland Shire Council	Support	General (Sutherland Shire Council)	In support of the project
9	Ausgrid	Comment	Procedural matters	Connection and compatibility with existing electricity infrastructure

2.4.2 Community submissions

One submission was received from an individual community member based in Chatswood, Sydney and was in support of the project. No other submissions were received from individuals or community members.

3. Actions taken since EIS exhibition

3.1 Changes to the project

The project will remain consistent with the project described in the EIS and development application. Minor refinements have been undertaken to further strengthen bushfire risk management and ensure alignment with the Integrated Protection Area (IPA) requirements within the site.

Since exhibition of the EIS, the Asset Protection Zone (APZ) has been reviewed and updated to ensure it aligns with the defined IPA and current bushfire protection objectives. The revised APZ has been designed to reduce radiant heat exposure to below 12.5 kW/m² during a bushfire event, consistent with relevant bushfire planning guidelines. The APZ will be maintained by LMS for the full operational life of the project to ensure its ongoing effectiveness in managing bushfire risk.

The project is also proposing to make use of the existing 120,000 litre water tank available located within 15 metres of the project site to support emergency response requirements for the project.

The Bushfire Assessment and accompanying Bushfire Emergency Management and Evaluation Plan (BEMEP) has been updated to incorporate additional emergency access arrangements, increased water supply capacity and enhanced on-site fire protection measures, further strengthening the project's bushfire preparedness and response capability.

3.2 Stakeholder consultation during exhibition

LMS Energy has maintained contact with key stakeholders in the period leading up, during and following the exhibition period including the correspondence outlined in Table 3.1.

Table 3.1 Post exhibition consultation and engagement

When	Who engaged/consulted	Overview and outcome
31 October 2025	Sutherland Shire Council	Email notification that the EIS had been submitted to DPHI for review prior to formal lodgement on portal
11 November 2025	Cleanaway	Confirmation email to Cleanaway management team notifying the EIS was on public exhibition
13 November 2025	Lucas Heights Community Consultative Committee	Notification the EIS was on public exhibition and available for viewing on the Major Projects Portal
11 December	NSW Environment Protection Authority	Email correspondence regarding EPL licence requirements and the transition in operations between the existing power station operations and the proposed bioenergy facility

4. Response to submissions

All agency, organisation and community submissions have been summarised in Table 4.1. The submissions have been categorised in accordance with Table 2.2 and detailed responses provided to clarify comments where required.

Table 4.1 Agency submissions and responses

ID	Primary category	Secondary category	Summary of issue / Comment	Response
1 DPHI	Economic, environmental and social impacts	Air quality	<p><i>The Air Quality Impact Assessment demonstrates compliance with relevant criteria under normal operating conditions, based on assumptions regarding effective landfill gas (LFG) capture and treatment. However, the EIS does not adequately assess how air quality and odour may vary under changing landfill conditions or non-routine operating scenarios.</i></p> <p><i>Further information is required to clarify the following: details of how air quality and odour may be affected by changes in LFG capture efficiency during non-routine operating conditions, including commissioning, maintenance activities, operational disruptions and prolonged flaring.</i></p>	<p>The project involves replacing an existing facility with the same combustion technology and thereby will not substantially alter the existing air emissions to the surrounding environment. As such in the absence of this project, the same emissions would occur, noting that this project upgrades the older equipment to new, and thereby likely to improve the current outcome.</p> <p>The like for like replacement internal combustion engines are a CAT 3500 series unit specifically designed for landfill gas with more than 40 years of development by Caterpillar. These are the most widely deployed landfill gas generators worldwide, operating on landfill gas across a broad quality range (estimate more than 3,000 have been installed globally and more than 100,000,000 operating hours). Likewise, LMS has been managing these units in Australia for more than 20 years accumulating millions of operating hours of experience.</p> <p>Variation in capture efficiencies will not materially impact the engine operation, as the extraction system is managed (outside of this approval) to ensure a consistent delivery of landfill gas. Landfill gas is generated by a biologic process that generates gas within a relatively consistent fuel composition (50-60% methane by volume). The managed extraction of this gas targets a nominal performance band of 45-55% methane in the delivered gas. Outside of this the CAT 3500 series landfill gas generator can operate on a much wider band of 30-100% methane.</p> <p>The generator emissions will be required to comply to EPA licence conditions which provide discharge limits of the key pollutants. These conditions remain, regardless of changes to landfill conditions or non-routine operating scenarios. These upper limits were used in emission modelling provided in the AQA and should not be exceeding under any operating scenario.</p> <p>The AQA assessed a worst-case emission scenario where six of the 20 engines had emissions increased by 50% (equating to a 15% exceedance of licence limits for the full facility). Given the requirement to remain within licence limits, this is a highly conservative assumption. Under this worst-case scenario the facility would not exceed air quality criteria at any identified receptor.</p>

ID	Primary category	Secondary category	Summary of issue / Comment	Response
				<p>At times when the BEF is unable to operate, or the BEF is operating below capacity (non-routine scenarios) the management of collected landfill gas will continue through the adjacent flaring contingency (separately approved under SSD 6835 Mod 3). The flaring facility is designed to have an equivalent processing capacity to the bioenergy facility to provide contingency for landfill gas destruction in the event that engines are required to be taken offline for maintenance or commissioning works. An AQA was prepared as part of the Modification Report for SSD 6835 Mod 3 to demonstrate compliance when this contingency is required.</p>
	Economic, environmental and social impacts	Bushfire	<p><i>The EIS identifies that the site is located on bushfire-prone land and includes a bushfire assessment for the proposal. However, consideration of potential bushfire risk and landfill gas capture, flaring and bioenergy facility operations is not clear. Further information is required to clarify the following:</i></p> <ul style="list-style-type: none"> – <i>details on how the bioenergy facility will operate safely during bushfire events, including management of landfill gas extraction and flaring infrastructure</i> – <i>emergency access arrangements, on-site fire safety infrastructure, water supply capacity and evacuation measures relevant to the bioenergy facility, including references to site layout where required</i> <p><i>how emergency response arrangements for the bioenergy facility will align with and be coordinated through broad Lucas Heights Resource Recovery Park (LHRRP) emergency management processes.</i></p>	<p>The proposed facility will be managed through a central supervisory control and data acquisition (SCADA) system that monitors all operations, and triggers alarms for abnormal conditions. It has real time monitoring sensors that can monitor gas infrastructure conditions to trigger alerts and prevent actions. During bushfire events, these remote monitoring and control capabilities will enable safe shutdowns of non-critical systems or isolation of gas lines and flaring infrastructures.</p> <p>An asset Protection Zone (APZ) is proposed around the facilities to reduce heat levels below 12.5kW/m² during bushfire event. LMS will maintain the APZ for the lifetime of the project.</p> <p>LMS has prepared a Bushfire Emergency Management and Evacuation Plan (BEMEP) for the bioenergy facility and the flaring infrastructure. LMS will follow all mitigation measures outlined in the Plan and will coordinate with NSW RFS who will be familiarised with the facility layout and emergency access points, emergency access arrangements, on site fire safety infrastructure, water supply capacity and evacuation measures.</p> <p>LMS will follow all emergency arrangement and evacuation measures outlined in the BEMEP.</p>
	Economic, environmental and social impacts Issues beyond the scope of the project	Leachate management	<p><i>The EIS describes existing landfill leachate (at the LHRRP) and condensate management (at the existing power station facility), however further clarification is required to demonstrate how leachate will be managed to avoid potential ingress into LFG wells, pipework and condensate systems and to prevent adverse impacts on LFG quality and system performance at the bioenergy facility.</i></p>	<p>Condensate (water born for the saturated landfill biogas) and any other leachate collected by the extraction system and delivered at the facility is removed at the condensate knockout vessel and pumped back to the landfills leachate management system for separate treatment and disposal (it is not returned to the gas extraction system). These systems are typical of landfill bioenergy systems with 100's of similar systems in operation in Australia (1,000's globally).</p>

ID	Primary category	Secondary category	Summary of issue / Comment	Response
	Economic, environmental and social impacts	Waste composition	<i>Further information is required to explain how changes in waste moisture content and leachate generation over time may influence landfill gas quality and composition, and how these changes will be monitored and managed to ensure the ongoing performance and operations at the bioenergy facility.</i>	<p>Management of leachate and condensate within the landfill biogas extraction system (wells, pipe work and infield management systems) is managed in accordance with landfill operations and do not form part of the current application. These are all managed in accordance with normal industry practises and separately subject to the landfill's regulatory requirements.</p> <p>The generation of landfill gas is a biologic process that generates biogas in a relatively consistent composition (50% methane). This comes from a simplified chemical reaction that can be approximated as: $C_6H_{10}O_5 + H_2O \rightarrow 3CH_4 + 3CO_2$ (i.e. methane and CO₂ are nominally produced in equal proportions generating a raw biogas of these constituents in equal proportions). As this describes, water is necessary and it is generally accepted that increasing moisture increases the rate of gas generation, but due to the basic equation described above it does not materially impact gas quality and composition.</p> <p>Some minor compositional changes can occur through other, biologic and non-biologic process within the waste generally resulting in gas compositions ranges between 40 and 60% methane. This is monitored and managed in the gas extraction system which is outside of this approval.</p> <p>The bioenergy facility monitors the raw gas feed at the power station and manages the variations in gas composition by altering air fuel mixtures to ensure efficient combustion (noting the internal combustion engines are designed to operate well outside this range). The adjacent flaring facility is also designed to accommodate changes in gas composition.</p>
	Economic, environmental and social impacts	Noise	<p><i>The Noise Impact Assessment identifies potential exceedances of applicable noise criteria at locations adjacent to areas identified for future recreational use within the LHRRP. The EIS does not adequately justify the absence of mitigation measures to address these exceedances.</i></p> <p><i>Further information is required to clarify how noise impacts on future recreational users will be addressed.</i></p>	<p>The LHRRP is planned to undergo a significant transformation following the completion of landfill operations, which are currently forecast to conclude between 2037 and the early 2040s. In accordance with SSD 6835, the site is proposed to be progressively rehabilitated and repurposed into a large scale community recreational parkland known as the future parkland at the conclusion of landfilling operations.</p> <p>The future parkland is intended to provide long term community benefit, while ensuring the safe and environmentally responsible closure of the former landfill facility.</p> <p>The project represents a like-for-like replacement of the existing bioenergy facility with modern generators within a dedicated infrastructure area to the east of the future recreational parkland. The project is required to ensure ongoing gas management throughout the landfill post closure period and is required to</p>

ID	Primary category	Secondary category	Summary of issue / Comment	Response
				<p>enable the safe transformation of the landfill to passive recreation in accordance with the master plan</p> <p>In the absence of this project, the existing power station would likely generate higher noise emissions, as the existing generators are ageing and are located marginally closer to the future recreational area.</p> <p>The design process for the new facility has included all reasonable and feasible mitigation to minimise exposure to potential future receivers including the following design measures to control noise at the source which were included in the noise assessment for the project:</p> <ul style="list-style-type: none"> – Custom designed insulated acoustic enclosure for the generators – Intake attenuators – Discharge attenuators – Silencers on generator exhausts – Selection of low-noise radiator fans. <p>Receiver ID R08 (future recreational area) within the LHRRP was the only sensitive receiver which predicted an exceedance (5 dB) of the project noise trigger levels (Table 7.1 under the NIA). Notwithstanding this, the predicted noise level of $L_{Aeq(15min)}$ 53 dBA remains compliant with the <u>recommended amenity noise level</u> for passive recreational areas, and at this location the industrial noise environment would be dominated by a single source associated with the project, rather than multiple cumulative industrial contributors. This outcome is consistent with the NSW Noise Policy for Industry, Fact Sheet F, noting that all feasible and reasonable noise mitigation measures have been considered and incorporated into the project design.</p> <p>The predicted noise levels in the NIA represented the worst-case scenario of peak capacity operations. This was a conservative model given that the future recreational area will occur in the years after the landfilling is completed and gas generation at this point will likely be in decline. Therefore, the facility may not be operating at the peak design capacity that was modelled (i.e. reduced noise emissions) once the future recreational area is being used by the public.</p>


ID	Primary category	Secondary category	Summary of issue / Comment	Response
				<p>Key points regarding the future recreational area (R08):</p> <ul style="list-style-type: none"> – the location of receiver R08 within the future parklands is based on concept level design (GHD 2015). The location would be confirmed during future master planning and detailed design of the recreational areas. – Sutherland Shire Council will manage the future parkland and have been extensively consulted with respect to the facility and were satisfied with the predicted amenity outcomes. – The design and development of the future recreational area must adhere to the development guidance outlined in the NSW EPA Environmental Guidelines: Solid Waste Landfills (Second edition 2016). These guidelines specify that gas emission levels must meet established criteria and that the development should not compromise the integrity and operation of environmental controls, including the gas collection system. Consequently, it is essential to integrate the post closure landfill design with the ongoing operation of the gas extraction system within the site. Continuing gas capture and utilisation for energy generation are critical components of the landfill's after care strategy. The receiver point of R08 in the noise modelling represented the nearest walking track within the future recreational area (approximately 190 metres north-west of the project). Given the location is a walking track, the receiver would not be stationary and exposure would likely be temporary. Identified high use future recreational areas (North Lawn and South Lawn) are located further from the project. – Additional noise attenuation measures such as acoustic barriers are impractical for mitigating noise impacts at R08, due to the height of the dominant noise sources at R08 (5.1 metres high discharge attenuator and 5.6 metres high radiator fans). – Distance attenuation buffering from the project should be considered as part of the final master plan. Areas where noise levels are likely to be higher (i.e. closer to the project) can be used as a vegetated buffer and open space buffer zones, which would also improve visual amenity outcomes for the recreational area, noting that the existing concept masterplan shows woodland planting over localised mounds between R08 and the project site.

ID	Primary category	Secondary category	Summary of issue / Comment	Response
	Issues beyond the scope of the project	Post-closure obligations	<p><i>The Department notes that the EIS does not adequately address how the ongoing operation of the bioenergy facility will interact with Cleanaway's obligations to complete landfill closure at the LHRRP in accordance with the EPA Solid Waste Landfill Guidelines (2016). In particular, further clarity is required regarding how closure certification and finalisation of closure obligations will be achieved while landfill gas infrastructure continues to be operated by a third-party operator. Further information is required to address the following:</i></p> <ul style="list-style-type: none"> – <i>clarification on how landfill closure obligations will be achieved by Cleanaway while landfill gas infrastructure continues to be operated by LMS.</i> – <i>details of responsibilities, access arrangements and long-term liabilities between Cleanaway and LMS will be managed to enable completion of landfill closure obligations in accordance with regulatory requirements.</i> 	<p>The closure obligations, consistent with all EPL obligations for the LHRRP, remain the responsibility of Cleanaway. However, Cleanaway retains the flexibility to determine how these obligations are discharged.</p> <p>It is common practice within the industry to engage specialised third-party providers to deliver management services that support principal licensees in fulfilling these responsibilities.</p> <p>Given the closure is scheduled for over a decade from now and that a formal closure plan is not required until 12 months prior to that date, it is premature to provide detailed information at this stage. This includes specifics on responsibility allocation, access arrangement and long-term liabilities Post closure obligations for ongoing landfill gas management are outlined in the LHRRP post-closure Operational Environmental Management Plan (SITA 2015) that was prepared as part of the SSD 6835 EIS.</p>
	Project Economic, environmental and social impacts	Recreational amenity	<p><i>The Department notes that while the EIS acknowledges future rehabilitation and the final landform of the LHRRP, including its intended use as future public parklands, the EIS does not sufficiently demonstrate how the proposed bioenergy facility will integrate with future land uses over the long term. Further information is required to address the following:</i></p> <ul style="list-style-type: none"> – <i>how visual amenity will be maintained from key future parkland viewpoints over the operational life of the bioenergy facility</i> – <i>clarification as to whether amenity mitigation measures (including noise, air quality and visual mitigation) will be reviewed and updated over time to reflect changing land uses and increased sensitivity as the LHRRP transitions from an operational landfill to rehabilitated public parklands.</i> 	<p>The proposed post-closure landform includes approximately 149 hectares of open space intended for passive recreational use. The vision for the site includes:</p> <ul style="list-style-type: none"> – broad areas of open grassland and tree plantings – integrated walking and cycling paths – vehicular access routes and parking areas – gradual recontouring of landfill areas to support recreation and ecological restoration. <p>The future parkland is intended to deliver long term community benefits, while ensuring the safe and environmentally responsible closure of the former landfill facility. The final design , including access points, recreational infrastructure and landscaping treatments, will be determined in consultation with key stakeholders, including Sutherland Shire Council, EPA and ANSTO, closer to the closure date.</p> <p>The bioenergy facility represents critical environmental management infrastructure, a compact footprint situated within a dedicated infrastructure zone to the east of the open space areas as shown on the draft masterplan included in Figure 7.2 of the EIS.</p> <p>Ongoing gas management will be maintained following the landfills closure. The bioenergy facility has been designed to</p>

ID	Primary category	Secondary category	Summary of issue / Comment	Response
				<p>integrate with the existing gas collection and transmission infrastructure. The facility will replace the existing power station generators, which will be decommissioned as part of the project, no be new visual elements are introduced to the landscape. This approach aligns with the infrastructure designation in the existing masterplan.</p> <p>Future users of the parklands are likely to have partial views of the bioenergy facility from the southern portion of the parklands. However, visibility in this area will be limited by the final landform slopes of 10 to 19 per cent. Existing trees to the west of the site may also partially obstruct views. Additionally, further planting on the southern batter, considered as part of the final masterplan for the parkland could further reduce visibility. Any additional plantings would be subject to an approved final landscape plan and parkland design.</p> <p>The primary pedestrian and cycle paths are proposed to be located within the flatter regions (5-10 per cent slope). These are likely to higher foot and bicycle traffic. These flatter areas are about 10 to 19 metres higher than the elevation at the project site and are unlikely to be overshadowed by the bioenergy facility or interrupt scenic views from the elevated sections of the parklands.</p> <p>Based on the approved landscape plan for the future parklands (GHD 2015), views from the South Lawn will be primarily obstructed by screening vegetation along the southern boundary of the proposed parklands. Views from The Peak and adjoining walkways would be partially obstructed by vegetated mounds and additional screening vegetation. Views from the North Lawn will be obstructed by the final landform. Accordingly, residual visual impacts at key future parkland viewpoints are anticipated to be low and acceptable.</p> <p>LMS will operate the facility under an Operational Environmental Management Plan (OEMP) which will be reviewed periodically. Between reviews, a register of issues will be maintained to document any issue raised by internal and external workers associated with the facility. This register will facilitate the integration of relevant issues into the OEMP during subsequent reviews. The review process aims to ensure the management system complies with applicable standards, policies and objectives. If deficiencies are identified, the OEMP will be amended accordingly to promote continuous improvement to amenity outcomes proximate to the facility.</p>

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2 EPA	Procedural matters	Licencing	The EPA currently regulates the existing power station under Environment Protection Licence (EPL 6345), which covers electricity generation works with a scale of 0–250 gigawatt hours annual generating capacity. Given the proposed changes, this licence will require a variation to reflect the revised premises boundary, updated point source monitoring locations, and other potential changes associated with the upgraded facility.	<p>The proponent acknowledges that the existing Environment Protection Licence (EPL 6345) will require variation to reflect the updated operations at the site.</p> <p>The existing EPL has been transferred to Lucas Heights Bioenergy Pty Ltd when they took over the operation of the existing power station in January 2026.</p> <p>The existing power station operations and construction of the new Bioenergy facility will be regulated under EPL 6345 prior to the commissioning of the new facility.</p> <p>LMS acknowledge the EPL premises applies to the full project application area presented in the EIS and will need to be amended prior to commissioning to include new emission points reflective of the new Bioenergy Facility layout.</p> <p>LMS will engage with the EPA closer to decommissioning of the existing facility and will submit an EPL variation in line with EIS recommendations.</p>
3 NSW Fire and Rescue Service (FRNSW)	Economic, environmental and social impacts	Fire hazards	<p>FRNSW note that bioenergy facility presents unique fire-fighting challenges and are likely to require additional fire safety provisions. FRNSW recommend preparation of the following:</p> <ul style="list-style-type: none"> – A Fire Safety Study (FSS) prepared in accordance with HIPAP No. 2 and FRNSW guidelines – FRNSW review and satisfaction of the FSS prior to any further fire engineering submissions – Requirement for an Emergency Plan (EP) prior to occupation/commissioning (HIPAP No. 1) – Requirement for an Emergency Services Information Package (ESIP) prior to occupation/commissioning, consistent with FRNSW guidance. 	<p>The proponent acknowledges FRNSW's request for preparation of a Fire Safety Study (FSS), Emergency Plan (EP) and Emergency Services Information Package (ESIP). A Fire Safety Study is specified as a key mitigation measure identified in the Preliminary Hazard Analysis (PHA) prepared for the EIS. Consistent with this, the proponent will prepare an FSS in accordance with HIPAP No. 2 and relevant FRNSW guidelines and will submit the FSS to FRNSW for review and comment at the appropriate stage.</p> <p>The proponent also confirms that an Emergency Plan (HIPAP No. 1) and an Emergency Services Information Package will be prepared prior to commissioning, consistent with FRNSW's requirements. These measures are fully integrated into the hazard and risk mitigation commitments outlined in the EIS.</p>
4 Heritage NSW	Economic, environmental and social impacts	Heritage	<p>Heritage NSW previously advised that no SEARs for Aboriginal cultural heritage were required, based on the proposal's location, depth of fill and consistency with earlier assessments under SSD-6835.</p> <p>Although the project footprint has since been moved approximately 90 metres east within Lot 102 DP 1009354, the proposal remains consistent with the original scoping report. Accordingly, Heritage NSW confirms that its original advice remains applicable and no additional Aboriginal cultural heritage requirements are necessary.</p>	<p>The proponent acknowledges the submission from Heritage NSW and notes that its confirmation that no additional Aboriginal cultural heritage assessment requirements apply and the project remains consistent with the original SEARs and previous advice.</p>

ID	Primary category	Secondary category	Summary of issue / Comment	Response
5 CPHR	Economic, environmental and social impacts	Biodiversity and flooding	The project is a like-for-like replacement and is located at the top of the catchment, and CPHR has no further comments regarding flooding. In relation to biodiversity, a BDAR Waiver has been granted for SSD-79933225, and CPHR has no further comments.	The proponent acknowledges CPHR's review of the Environmental Impact Statement and notes their advice that the site is not flood prone and that a BDAR Waiver has been granted for SSD-79933225.
6 TfNSW	Economic, environmental and social impacts	Traffic and transport	Transport for NSW has reviewed the submitted information and has no requirements as the proposed development is unlikely to have a significant impact on the state classified road network.	The proponent acknowledges Transport for NSW's review and notes that no further requirements are necessary, given that the proposed development is unlikely to have a significant impact on the State road network.
7 NSW RFS	Economic, environmental and social impacts	Fire hazard and safety	<p>NSW Rural Fire Service reviewed the EIS and advised that the project is acceptable subject to the implementation of the following bushfire protection measures:</p> <ul style="list-style-type: none"> – Inner Protection Areas (IPAs) and APZ maintenance in accordance with PBP 2011 – Vegetation and fuel load management – Low-flammability landscaping near buildings – Building Standards – BAL-29 construction for new and upgraded buildings – Ember protection upgrades to existing buildings – Non-combustible generator construction – Compliant emergency vehicle access (all-weather, widths, grades, turning areas) – 20,000-litre static firefighting water supply – Bushfire-resilient utilities – Bush Fire Emergency Management and Evacuation Plan and submission to NSW RFS for review prior to occupation. 	<p>The proponent has taken into consideration relevant bushfire protection measures as advised by NSW RFS for the project. The Bushfire Assessment Report has been updated to account for these relevant protection measures including compliance table with Appendix 4 of Planning for Bushfire Protection as shown in Table 6.1 of the updated Planning for Bushfire Protection 2019.</p> <p>Of relevance to the assessment is that the required APZ to the north has been confirmed by RFS as 29 metres rather than 56 metres as outlined in the RFS submission. The APZ extends marginally beyond the bioenergy facility boundary, so an agreement with Cleanaway (operators of the landfill and partner for the bioenergy facility) will be entered into for the ongoing maintenance of the APZ along the northern boundary of the site.</p> <p>The project is also proposing to make use of the existing 120,000 litre water tank located approximately 15 metres from the project site boundary. The existing concrete firewater tank is operational and is serviced by a dedicated pumping shed. The tank is supplied via a water main located near the adjacent (now decommissioned) water tower.</p> <p>Access arrangements have been confirmed with Cleanaway with provisions in place for use of the tank during fire or emergency events in accordance with existing emergency response procedures.</p> <p>The availability of this on-site firewater supply provides a secured and reliable source of water for firefighting purposes consistent with the intent of Planning for Bush Fire Protection 2019.</p> <p>If the existing firewater supply is not considered adequate, there is space available within the bioenergy facility site for incorporation of an additional 20,000 litre static firefighting water supply tank if determined to be required.</p>

ID	Primary category	Secondary category	Summary of issue / Comment	Response
				
8 Sutherland Shire Council	Project	Support	<p>Sutherland Shire Council has been closely involved in the development of the EIS and has no further comments.</p> <p>The Council supports the Lucas Heights Bioenergy Facility, noting its environmental and community benefits, and is working with the proponent to ensure the facility is aesthetically integrated with future parklands following landfill closure.</p>	<p>The proponent acknowledges Sutherland Shire Council's support for the Lucas Heights Bioenergy Facility and thanks the Council for their collaboration during the preparation of the EIS.</p> <p>The proponent notes Council's agreement that the facility will provide environmental and community benefits and their ongoing engagement regarding the aesthetic integration of the facility with the future parklands.</p>
9 Organisation Ausgrid	Procedure	Electricity connections	<p>The submission from Ausgrid primarily relates to safety and compatibility with existing electricity infrastructure. Key considerations include:</p> <ul style="list-style-type: none"> – Risks associated with electrocution, fire, EMFs, noise, and visual impacts – Need to manage interactions with existing underground cables, including careful excavation, locating services, and observing minimum separation requirements – Requirement for the proponent to consult with Ausgrid regarding new connections, load requirements, and any changes to ground levels near cables – Reference to relevant safety guidance: SafeWork Australia's Excavation Code of Practice and Ausgrid's Network Standard NS156. 	<p>An Ausgrid detailed connection enquiry process was completed in Q4 2024, and work has continued on the formal enquiry in early 2025. An Ausgrid Design Information package was issued to LMS late September 2025 and an R0 modelling package and connection application submitted in early November 2025. The connection application due diligence process has commenced, with AEMO currently undertaking their due diligence review.</p> <p>Work on contestable design has commenced and is on track for completion in early Q3 of 2026. Protection design has commenced and the LMS team are working with Ausgrid to finalise the protection settings agreement. Design is on track to enable construction of non-contestable and contestable works in Q3 of 2026, with commissioning and testing following in late Q3. All proposed construction activities, including excavation, driveways, and ground anchors, will be planned and conducted in accordance with Ausgrid guidance, relevant safety standards, and any written approvals.</p>

ID	Primary category	Secondary category	Summary of issue / Comment	Response
				The depth and location of underground services will be confirmed via Before You Dig Australia (BYDA) prior to works, and measures will be implemented to ensure no interference or risk to Ausgrid infrastructure.
10 Individual Community member	Project	Support	The individual states that they support the project.	The proponent acknowledges the community members support for the project.

5. References

Department of Environment and Science. (2020). *Noise Measurement Manual* (ESR/2016/2195, Version 4.01). Queensland Government, Department of Environment and Science.

Environment Protection Authority. (2016). *Environmental Guidelines: Solid Waste Landfills* (2nd ed.)

GHD Pty Ltd. (2015). *Lucas Heights Resource Recovery Park Project Landform, settlement, staging and capacity assessment*, Prepared for SITA Australia

NSW DPHI. (2024). State significant development guidelines – preparing a submissions report Appendix C to the state significant development guidelines, NSW Government.

SITA Australia. (2015). *Operational Environmental Management Plan, Lucas Heights Resource Recovery Park* (Draft Version 12, September 2015). Prepared for SITA Australia, Lucas Heights Resource Recovery Park, New Illawarra Road, Lucas Heights, NSW.



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