

Planning Secretary's Environmental Assessment Requirements

Lucas Heights Bioenergy Facility



Application Number	SSD-79933225
Project Name	Lucas Heights Bioenergy Facility
Development	Construct and operate a bioenergy facility (power station) to convert gas from the Lucas Heights landfill into electricity
Location	Lot 101 DP 1009354 and Lot 102 DP 1009354, Little Forest Road, Lucas Heights
Applicant	LMS Energy Pty Ltd
Date of Issue	6 March 2025
General Requirements	The Environmental Impact Statement (EIS) for the development must: • comply with these assessment requirements • meet the form and content requirements in sections 190 and 192 of the Environmental Planning and Assessment Regulation 2021 (the Regulation) • have regard to the Department's <i>State Significant Development Guidelines (2021)</i>. In addition, the EIS must include: • a clear comprehensive description of the proposal for the site, including details of all activities and processes proposed to be carried out as part of the development • details of the relationship of the proposal with any existing agreements, consents and licences for the existing power station and details on whether these need to be amended, modified or surrendered • details of the transition from the existing facility to the proposed development, including any proposed decommissioning of the existing facility • consideration of issues detailed in the public authority advice (see Attachment 2) • a detailed assessment of the key issues specified below, including: – a description of the existing environment, using sufficient baseline data – an assessment of the potential impacts of all stages and activities that form part of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes – a description of the measures that would be implemented to avoid, minimise, mitigate and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage significant risks to the environment. The EIS must also be accompanied by: • an Estimated Development Cost (EDC) Report prepared in accordance with the relevant planning circular using the Standard Form of EDC Report • an estimate of the retained and new jobs that would be created during the construction and operational phases of the development, including details of the methodology to determine the figures provided • high quality files of maps and figures of the subject site and proposal • certification that the information provided is accurate at the date of preparation • a declaration from a Registered Environmental Assessment Practitioner that your EIS includes the information specified in the Department's <i>Registered Environmental Assessment Practitioner Guidelines</i>.
Key issues	The EIS must address the following specific matters: • Statutory and Strategic Context – including: – a detailed description of the history of the site, including the relationship between the proposed development and all agreements, development consents and approved plans previously and/or currently applicable to the site – demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, adopted precinct plans, draft district plan(s) and adopted management plans and justification for any inconsistencies. This includes, but is not limited to:

- State Environmental Planning Policy (Biodiversity and Conservation) 2021
 - State Environmental Planning Policy (Industry and Employment) 2021
 - State Environmental Planning Policy (Planning Systems) 2021
 - State Environmental Planning Policy (Resilience and Hazards) 2021
 - State Environmental Planning Policy (Transport and Infrastructure) 2021
 - Greater Sydney Region Plan: A Metropolis of Three Cities
- **Suitability of the Site** – including:
 - a detailed justification for the proposal and that the site can accommodate the proposed development having regard to its potential environmental impacts, permissibility, strategic context and existing site constraints
 - details of the suitability of the proposed development in relation to future recreational land uses identified for the adjacent land.
- a **Community and Stakeholder Engagement** – a community and stakeholder engagement strategy consistent with the Department's *Undertaking Engagement Guidelines for State Significant Projects* for all stages of the development, including (but not limited to):
 - details of how issues raised, and feedback provided during engagement activities have been considered and responded to in the development
 - details of the proposed approach to future community and stakeholder engagement based on the results of consultation.
- **Energy from Waste** – detail how the proposal would operate and comply with the EPA's *Energy from Waste Policy Statement 2021*, including if applicable, compliance with the *Eligible Waste Fuels Guidelines 2022*
- **Hazards and Risk** – including:
 - a preliminary risk screening completed in accordance with Chapter 3 of *State Environmental Planning Policy (Resilience and Hazards) 2021* and Applying SEPP 33 (DoP, 2011), that includes:
 - a clear indication of class, storage and handling quantities and location of all dangerous goods and hazardous materials associated with the development, including the dangerous goods transported within the landfill gas pipeline
 - a description of any design measures and controls to minimise fire risk and exposure to future adjacent recreational land uses
 - a Preliminary Hazard Analysis (PHA) prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011), should the preliminary risk screening indicate that the project is “potentially hazardous”
- **Fire and Incident Management** – including:
 - detailed information relating to the proposed structures addressing relevant levels of compliance with the National Construction Code (NCC).
- **Contamination** – a site contamination assessment in accordance with the Managing Land Contamination Planning Guidelines: SEPP 55 – Remediation of Land (DUAP, 1998), including:
 - characterisation of the nature and extent of any contamination on the site and surrounding area
 - a Detailed Site Investigation (DSI) and a Remedial Action Plan, if the Preliminary Site Investigation indicates contamination is present and a DSI is required.
- **Air Quality and Odour** – a quantitative assessment of the potential air quality, dust and odour impacts of the development (construction and operation) on surrounding landowners, businesses and sensitive receptors, in accordance with relevant Environment Protection Authority (EPA) guidelines, including:
 - a description of the receiving environment and relevant sensitive receptors, including consideration of future recreational land uses
 - quantification of pollutant emission sources from the project and cumulative emissions from nearby sources
 - description of emission controls and benchmarking against best practice emission controls
 - consideration of worst-case impacts and comparison with emission limits
 - demonstration of the proposal's ability to comply with the *Protection of the Environment Operations (Clean Air) Regulation 2022*
- **Noise and Vibration** – a quantitative noise and vibration impact assessment undertaken by a suitably qualified acoustic consultant in accordance with the relevant Environment Protection Authority guidelines and Australian Standards which includes:

- background noise levels, noise source inventory and worst-case emission scenarios
- modelling the impacts from operation for comparison with relevant criteria at sensitive receivers, including future recreational users on adjacent land
- a cumulative impact assessment
- proposed mitigation and management measures and details of residual noise and vibration impacts
- details of any proposed compliance monitoring programs.
- **Water Management** – including:
 - a site water balance detailing the water demand, supply and measures to minimise water use and water licensing requirements
 - a description of groundwater and surface water conditions and all works/activities that may intercept, extract, use, divert or receive surface water and/or groundwater (both temporary and permanent)
 - an assessment of potential surface and groundwater impacts (both quality and quantity), including potential impacts on watercourses, riparian areas, groundwater, and groundwater-dependent communities
 - details of the proposed stormwater/wastewater drainage design including the capacity of onsite detention system(s), onsite sewage management and measures to treat, reuse or dispose of water
 - details of any surface or groundwater mitigation, management and monitoring activities and methodologies.
- **Traffic and Transport** – a quantitative transport impact assessment prepared in accordance with the Transport for NSW Guide to Transport Impact Assessment (GTIA) and Austroads guidelines, that includes:
 - an estimate of trip generation, arrival/departure profiles and trip distribution
 - an assessment of cumulative traffic impact on road performance and safety at key intersections using an appropriate modelling framework
 - plans demonstrating how all vehicles generated during construction and operation can be accommodated on the site to avoid queuing in the street network
 - plans of any proposed internal road network, access points for the duration of operation, loading area, on-site parking, pedestrian and cyclist facilities
 - swept path diagrams for the largest vehicles manoeuvring through site access points
 - details of any required road upgrades for the development
 - a Draft Construction Traffic and Pedestrian Management Plan.
- **Soils** – an assessment of potential impacts on soil resources and riparian land on and near the site, including:
 - impacts on soil erosion, salinity and acid sulfate soils
 - details of earthworks, including cut and fill volumes
 - description of the proposed erosion and sediment controls during construction.
- **Waste** – including:
 - details of waste storage, handling and disposal during the development
 - details of the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste and Sustainable Materials Strategy 2041*.
- **Visual** - including:
 - an assessment of the potential visual impacts of the development on the amenity of the surrounding area, including future recreational areas on the adjacent land
 - detailed plans showing suitable landscaping which incorporates endemic species as well as how it maximise opportunities for green infrastructure, consistent with *Greener Places* (Government Architect NSW, 2020).
- **Infrastructure Requirements** – including:
 - an assessment of impacts of the development on existing utility infrastructure and service provider assets surrounding the site
 - identification of any existing infrastructure or easements on or off the site which may be impacted by construction or operation of the development and details of measures to be implemented to address any impacts.
- **Bush Fire** – a bush fire assessment report that addresses the aims and objectives of Planning for Bushfire Protection 2019, and includes:
 - details of proposed operational access for emergency services personnel
 - details of emergency and evacuation arrangements for occupants/visitors

	– a draft bush fire emergency management and evacuation plan that provides an outline of how the development will be managed / mitigated to address potential bush fire impacts • Non-Aboriginal Cultural Heritage – where there is potential for direct or indirect heritage impacts, provide a Statement of Heritage Impact and Archaeological Assessment (if potential impacts to archaeological resources are identified), prepared in accordance with the <i>Guidelines for preparing Statements of Heritage Impact</i> and guidelines <i>Archaeological Assessment</i> and <i>Assessing Significance for Historical Archaeological Sites and Relics</i> • Biodiversity – an assessment of the proposal's biodiversity impacts in accordance with the <i>Biodiversity Conservation Act 2016</i>, including the preparation of a Biodiversity Development Assessment Report (BDAR) where required under the Act, except where a waiver for preparation of a BDAR has been granted. • Social – including a social impact assessment in accordance with the Department's <i>Social Impact Assessment Guideline</i>. • Ecologically Sustainable Development – including: – identification of how ESD principles (as defined in section 193 of the EP&A Regulation) are incorporated in the design and ongoing operation of the development – demonstration of how the development will meet or exceed the relevant industry recognised building sustainability and environmental performance standards – demonstration of how the development minimises greenhouse gas emissions (reflecting the Government's goal of net zero emissions by 2050) and consumption of energy, water (including water sensitive urban design) and material resources – if Chapter 3 of State Environmental Planning Policy (Sustainable Buildings) 2022 applies: ○ demonstrate how the development has been designed to address the provisions set out in in Chapter 3.2(1) ○ provide a NABERS Embodied Emissions Material Form to disclose the amount of embodied emissions attributable to the development in accordance with section 35BA of the EP&A Regulation. • Planning Agreement/Development Contributions – including consideration of any applicable State and local development contributions, such as the Housing and Productivity Contribution and/or draft contributions plan(s), and/or details of any Planning Agreement required should a contributions plan not be in place.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: • Sutherland Shire Council • Department of Climate Change, Energy, the Environment and Water, specifically the: ○ Environment Protection Authority ○ Environment and Heritage Group ○ Water Group • Heritage NSW • Transport for NSW • Fire & Rescue NSW • NSW Rural Fire Service • Australian Nuclear Science and Technology Organisation • Department of Defence • Lucas Heights Resource Recovery Park Community Reference Group • surrounding local landowners, businesses and stakeholders • local and regional community, sport and environmental groups • any other public transport, utilities or community service providers.
SEARs Expiry	SEARs will expire two years after the date of issue (or the date they were last modified).
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.

ATTACHMENT 1

Technical and Policy Guidelines

The following guidelines may assist in the preparation of the environmental impact statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:

<https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines>

<http://www.australia.gov.au/publications>

<http://www.epa.nsw.gov.au/>

<http://www.environment.nsw.gov.au/>

<http://www.dpi.nsw.gov.au/>

Policies, Guidelines & Plans	
Aspect	Policy / Methodology
State Significant Development Guidelines	
	State Significant Assessment Guidelines (DPIE, 2021)
	Undertaking Engagement Guide – Guidance for State Significant Projects (DPIE, 2021)
	Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021)
	Planning Circular PS24-002: Changes to how development costs are calculated for planning purposes
	Standard Form of Estimated Development Cost (State significant projects) – March 2024
Energy from Waste	
	Energy from Waste Policy Statement, EPA 2021
	Eligible Waste Fuels Guidelines, EPA 2022
Air Quality	
Air Quality	Protection of the Environment Operations (Clean Air) Regulation 2022
	Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA, 2022)
	Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA, 2022)
Odour	Assessment and Management of Odour from Stationary Sources in NSW (DEC 2006)
Greenhouse Gas	AGO Factors and Methods Workbook (AGO, 2018)
	Guidelines for Energy Savings Action Plans (DEUS, 2005)
	National Greenhouse and Energy Reporting Scheme Measurement, Technical Guidelines for the estimation of emissions by facilities in Australia (Department of the Environment and Energy (DoEE), 2017)
	National Greenhouse Accounts Factors (DoEE, 2019)
Biodiversity	
	<i>Biodiversity Conservation Act 2016</i>
	Biodiversity Assessment Method (EES, 2021)
	Guidelines for Controlled Activities on Waterfront Land (NRAR, 2018)
	Developments adjacent to National Parks and Wildlife Service lands (DPIE, 2020)
Bush Fire	
	Planning for Bush Fire Protection (RFS, 2019)
Climate Change	
	EPA Climate Change Policy (EPA, 2023)
	Net Zero Plan Stage 1: 2020-2030 (DPIE, 2020)

Policies, Guidelines & Plans	
Aspect	Policy / Methodology
	NSW EPA Guide for Large Emitters – Draft for Consultation (EPA, 2024)
Fire Safety	
	Fire Safety Guidelines – Fire Safety in Waste Facilities (FRNSW, 2020)
	Fire Safety Guidelines – Access for fire brigade vehicles and firefighters
	Fire Safety Guidelines – Emergency services information package and tactical fire plans
Flooding	
	Flood Impact and Risk Assessment Flood Risk Management Guide (LU01) (DPE, 2022)
	Department of Planning and Environment Flood Risk Management Toolkit – https://www.environment.nsw.gov.au/topics/water/floodplains/floodplain-guidelines
Hazards and Risk	
	State Environmental Planning Policy (Resilience and Hazards) 2021
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DoP, 2011)
	Assessment Guideline: Multi-level Risk Assessment (Planning and Infrastructure, 2011)
Heritage	
	<i>Heritage Act 1977</i>
Non-Aboriginal Heritage	NSW Heritage Manual (HO and DUAP, 1996)
	The Burra Charter (ICOMOS Australia, 2013)
	Statements of Heritage Impact (HO and DUAP, 2002)
Aboriginal Heritage	Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)
	Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010)
Noise and Vibration	
	Approved methods for measurement and analysis of environmental noise in NSW (EPA, 2022)
	Acoustics – Description and measurement of environmental noise (AS1055:2018)
	Noise Policy for Industry (EPA, 2017)
	NSW Road Noise Policy (DECCW, 2011)
	Noise Criteria Guideline (RMS, 2015)
	Noise Mitigation Guideline (RMS, 2015)
	Interim Construction Noise Guideline (DECC, 2009)
	Assessing Vibration: A Technical Guide (DEC, 2006)
	Noise Guide for Local Government (EPA, 2013)
Social	
	Social Impact Assessment Guideline for State Significant Projects (DPIE, 2021)
Soils and Water	
	Managing Urban Stormwater: Soils & Construction (Landcom, 2004)
Erosion and Sediment	Soil and Landscape Issues in Environmental Impact Assessment (DLWC, 2000)
	Wind Erosion – 2 nd Edition (DIPNR, 2003)
Groundwater	Groundwater assessment toolbox for major projects in NSW - Overview document Technical guideline (DPE, 2022)

Policies, Guidelines & Plans

Aspect	Policy / Methodology
	Guidelines for Groundwater Documentation for SSD/SSI Projects Technical guideline (DPE, 2022)
	Minimum Groundwater Modelling Requirements for SSD/SSI Projects, Technical guideline (DPE, 2022)
	Cumulative Groundwater Impact Assessment Approaches Information paper (DPE, 2022)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC, 2000)
	NSW State Groundwater Policy Framework Document (DLWC, 1997)
	NSW Aquifer Interference Policy (NOW, 2012)
	Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources (NOW, 2011)
Stormwater	Storing and Handling Liquids: Environmental Protection (DECC, 2007)
	Managing Urban Stormwater: Strategic Framework. Draft (EPA, 1996)
	Managing Urban Stormwater: Council Handbook. Draft (EPA, 1997)
	Managing Urban Stormwater: Treatment Techniques (DEC, 2006)
	Managing Urban Stormwater: Source Control. Draft (EPA, 1998)
Wastewater	Managing Urban Stormwater: Harvesting and Reuse (DEC, 2006)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC, 1997)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC, 2000)
	National Water Quality Management Strategy – Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) (EPHC, NRMMC & AHMC, 2006)
Contamination	National Water Quality Management Strategy – Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2) (EPHC, NRMMC & AHMC, 2009)
	State Environmental Planning Policy (Resilience and Hazards) 2021
	Managing Land Contamination Planning Guidelines, SEPP 55 – Remediation of Land (DUAP & EPA, 1998)
	Consultants reporting on contaminated land: Contaminated Land Guidelines (EPA, 2020)
Traffic, Transport and Access	
	<i>Roads Act 1993</i>
	State Environmental Planning Policy (Transport and Infrastructure) 2021
	Guide to Transport Impact Assessment (TfNSW, 2024)
	Road Design Guide (RMS, 2015-2017)
	Guide to Traffic Management – Pt 12: Traffic Impacts of Development (Austroads, 2016)
	Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas (Austroads, 2014)
	Bicycle Parking Facilities: Guidelines for Design and Installation (AS 2890.3:2015)
	Integrated Public Transport Service Planning Guidelines: Sydney Metropolitan Area (TfNSW, 2013)
	Future Transport Strategy 2056 (TfNSW, 2018)
	Greater Sydney Services and Infrastructure Plan (TfNSW, 2018)
	NSW Freight & Ports Plan 2018-2023 (TfNSW, 2018)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (AS 2482)

Policies, Guidelines & Plans

Aspect	Policy / Methodology
Waste	NSW Waste and Sustainable Material Strategy 2041 (EPA, 2021) NSW Plastics Action Plan (EPA, 2021) NSW Energy from Waste Policy Statement (EPA, 2021) NSW Energy from Waste Infrastructure Plan (2021) The National Waste Policy: Less Waste More Resources 2018 Waste Classification Guidelines (EPA, 2014) Environmental guidelines: Composting and Related Organics Processing Facilities (DEC, 2004) Environmental guidelines: Use and Disposal of Biosolid Products (EPA, 1997) Composts, soil conditioners and mulches (Standards Australia, AS 4454) Standards for Managing Construction Waste in NSW (EPA, 2018)
Waterways	Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning (OEH, 2017) Guidelines for controlled activity approvals - https://water.dpie.nsw.gov.au/our-work/licensing-and-trade/controlled-activity-approvals/guidelines

ATTACHMENT 2
Government Authority Advice