

Planning Secretary's Environmental Assessment Requirements

Kurri Kurri Data Centre



Application Number	SSD-128819490
Project Name	Kurri Kurri Data Centre
Development	Fit-out and operation of a data centre with a total power consumption of up to 540 megawatts (MW), comprising one data centre building with plant areas/screening, ancillary office space, electrical substations and STATCOM equipment, lithium-ion batteries, back-up generators and additional bulk earthworks, hardstand areas, supporting infrastructure and landscaping
Location	Hart Road, Loxford (Lot 4 DP 1314331), in the Cessnock local government area
Applicant	ADW Johnson Pty Limited
Date of Issue	14 July 2026
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 most recent version of the Department's <i>State Significant Development Guidelines</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 • 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: • high quality files of maps and figures of the subject site and proposal • 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 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 • details on any staging of the construction and/or operation of the development • 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>.
Additional Data Centre Considerations	<u>Total Power Consumption:</u> The EIS must provide an estimate of the development's total power consumption, inclusive of both the Information Technology (IT) load and load from all supporting infrastructure. <u>Plant and Equipment Systems:</u> The EIS must include a detailed description of the development's plant and equipment systems, including any on-site renewable energy systems, back-up power system/s and the cooling system. This must be supported by: • detailed justification for the chosen technologies, including evaluation of any alternative, commercially available technologies

	• a detailed description of how the proposed power system/s will minimise emissions, avoid unnecessary over-provisioning and/or reduce network constraints through demand management • a detailed overview of the testing procedures and usage arrangements for the back-up power system/s, including for any planned or unplanned maintenance procedures • demonstration of a commitment to continual improvement with respect to the proposed plant and equipment systems' air emissions, noise emissions and electricity/water usage • details of operating scenarios for air and noise modelling, with particular focus upon the operation of the proposed back-up power system/s and cooling system during: ○ 'worst-case' (e.g. an unplanned power outage) ○ testing of critical systems (including the back-up power system/s) ○ general system maintenance and/or planned power outages (if necessary). • details of manufacturer specifications for plant and equipment, including associated noise source inventories and emissions profiles for all modelled scenarios. <u>Renewable Energy:</u> • The EIS must include a commitment to ensure the development's operational electricity demand is matched with NSW-based renewable generation at all times.
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 development consents, complying development certificates, and approved plans previously and/or currently applicable to the site – justification for the proposal, with regard to the suitability of the site and the proposal's potential environmental impacts – 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 (Planning Systems) 2021 ○ State Environmental Planning Policy (Resilience and Hazards) 2021 ○ State Environmental Planning Policy (Sustainable Buildings) 2022 ○ State Environmental Planning Policy (Transport and Infrastructure) 2021 ○ existing Environment Protection Licences (EPLs) on and in the vicinity of the site, including EPL 1548, EPL 21770 and EPL 21627 ○ Planning Proposal PP-2021-477 ○ State Voluntary Planning Agreement SVPA2023-16 ○ Cessnock Local Environmental Plan 2011 ○ Hunter Regional Plan 2041 ○ Greater Newcastle Metropolitan Plan 2036 ○ Hunter Strategic Regional Integrated Transport Plan. • Community and Stakeholder Engagement – a community and stakeholder engagement strategy consistent with the Department's <i>Undertaking Engagement Guidelines for State Significant Projects</i> for all stages of the development, which includes: – details of how issues raised, and feedback provided during engagement activities have been considered and responded to as part of the final proposal – details of the proposed approach to future community and stakeholder engagement based on the results of consultation. • Air Quality – an air quality impact assessment prepared in accordance with relevant EPA guidelines, which includes: – an assessment of any potential air quality impacts during construction and fit-out – modelling of emissions and air pollutants during operation, which: ○ considers all existing sensitive receivers and proposed new residential area/s ○ is supported by emissions contour maps ○ provides a cumulative assessment that considers all proposed and approved developments in proximity to the site (including the Hunter Power Project) – a description of the best practice air quality impact mitigation, management and monitoring measures that would be implemented. • Noise – a noise impact assessment prepared in accordance with relevant EPA guidelines, which includes:

- detailed modelling of potential noise impacts during construction, fit-out and operation, which:
 - considers all existing sensitive receivers and proposed new residential area/s
 - is supported by noise contour maps and a detailed sleep disturbance assessment
 - provides a cumulative assessment that considers all proposed and approved developments in proximity to the site (including the Hunter Power Project)
- consideration of annoying characteristics of noise (including, but not limited to, low frequency noise) and prevailing meteorological conditions in the study area
- a description of all best practice 'feasible and reasonable' mitigation, management and monitoring measures that would be implemented.
- **Greenhouse Gas Emissions** – including:
 - preparation of a Greenhouse Gas Assessment in accordance with the *NSW Guide for Large Emitters* (EPA, 2025)
 - identification of all proposed emission reduction measures (e.g. energy efficiency measures, on-site renewable systems, etc).
- **Ecologically Sustainable Development** – including:
 - identification of how ESD principles (as defined in section 193 of the EP&A Regulation) are incorporated into the design, fit-out 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, including a maximum Power Usage Effectiveness (PUE) of 1.3, a best practice Water Usage Effectiveness (WUE) value and a minimum NABERS rating of five stars
 - demonstration of how the development minimises consumption of energy, water (including water sensitive urban design) and material resources.
- **Hazards and Risk** – including:
 - details regarding the location and number of all back-up power units, back-up fuel storage tanks and lithium-ion or other battery chemistries (with details of peak discharge rate in MW) to be installed to service the development
 - an assessment completed in accordance with 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 proposal
 - demonstration that the proposal would be capable of complying with all relevant standards and guidance documents including, but not limited to:
 - *Loss Prevention Data Sheet 5-32 – Data centers and related facilities* (FM Global Property)
 - *Position Statement Summary – Lithium-ion batteries and diesel generators in data centres* (FRNSW)
 - *The storage and handling of flammable and combustible liquids* (AS 1940:2017).
- **Infrastructure Requirements** – an infrastructure delivery, management and servicing plan, prepared in consultation with relevant service providers, which:
 - assesses the impacts of the development on existing utility infrastructure and service provider assets surrounding the site
 - identifies any infrastructure required on-site and off-site to facilitate the development, including the substation/s and switch yard/s
 - provides an infrastructure delivery and staging plan, which includes a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.
- **Built Form and Urban Design** – a design report which:
 - provides an assessment of all potential design options (including the preferred scheme) against the relevant considerations in *Better Placed* (GANSW, 2017) and *Greener Places* (GANSW, 2020)
 - demonstrates how the final building design (including the ancillary plant areas/screening) will deliver a high-quality development, with regard to façade and screen design, materiality and colours
 - includes site-wide landscape plans which incorporate locally native species
 - assesses how the proposal would comply with relevant accessibility requirements.
- **Visual** – including:
 - photomontages and perspectives of the development layout and design, particularly from publicly accessible vantage points
 - an assessment of any potential visual impacts of the development on the amenity of the surrounding area.

- **Traffic and Transport** – a transport and accessibility impact assessment, which has been prepared in accordance with relevant Transport for NSW and Austroads guidelines, and includes:
 - details of all traffic types (including any over-size and/or over-mass (OSOM) movements), volumes and frequency generated during construction and operation
 - an assessment of the predicted impacts of this traffic on the safety and capacity of the surrounding road network, including consideration of cumulative traffic impacts
 - details and plans of all on-site access roads, loading docks, parking areas and active transport infrastructure, in accordance with all relevant standards
 - details of any road upgrades, infrastructure works, or new access points required to service the development (if necessary).
- **Soil and Water Management** – a soil and water management plan, which includes:
 - details of the additional earthworks proposed, including cut and fill volumes
 - a description of the proposed erosion and sediment controls during construction
 - a detailed site water balance, including a description of the proposal's water demands (daily, peak and annual volumes) and associated servicing requirements (including any water licensing requirements)
 - details of the proposed stormwater/wastewater management system, including the capacity of the final on-site detention system, on-site sewage management and measures to treat, reuse or dispose of water
 - characterisation of all discharges from the development, against all relevant criteria
 - an assessment of potential impacts on surface and groundwater resources, including groundwater-dependent communities
 - details of all proposed mitigation, management and monitoring measures.
- **Aboriginal Cultural Heritage** – including:
 - a new Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared in accordance with the relevant Heritage NSW guidelines
OR
 - where a previous ACHAR has been prepared, a project update letter for the development, which:
 - includes:
 - a summary of the current project (and any potential impacts), supported by relevant figures/mapping
 - a summary of all previous heritage assessments and/or engagements applicable to the site
 - the results of an updated search of the Aboriginal heritage information management system (AHIMS)
 - updated recommendations around the management of Aboriginal cultural heritage at the site
 - is supported by updated consultation with Registered Aboriginal Parties, undertaken in accordance with the requirements of Heritage NSW (with the consultation process documented within the final project update letter).
- **Non-Aboriginal Cultural Heritage** – including an assessment of any potential impacts to nearby, non-Aboriginal heritage assets.
- **Contamination** – including:
 - a summary of all previous remediation activities (as described in the scoping report)
 - consideration of the proposal's impact upon any residual contamination or remediated areas at the site, with regard to the relevant aspects of the *Managing Land Contamination Planning Guidelines: SEPP 55 – Remediation of Land* (DUAP, 1998).
- **Biodiversity** – including:
 - an updated Biodiversity Development Assessment Report (BDAR) for the site
OR
 - where the development would not impact upon biodiversity values, a waiver for the preparation of a BDAR
OR
 - where an order conferring biodiversity certification has been made, a summary of the order and its relationship to the site.
- **Bush Fire** – a bush fire assessment report, prepared in accordance with *Planning for Bush Fire Protection* (RFS, 2019).
- **Flooding** – a flood impact risk assessment, prepared in accordance with the *Flood risk management guideline LU01 – Flood impact and risk assessment* (DPE, 2023).

	• Social – including a social impact assessment in accordance with the Department’s <i>Social Impact Assessment Guideline</i> (DPHI, 2026). • Waste – a waste management report, which includes details of: – the waste quantities and streams which would be generated across the life of the development (including e-waste) – the measures which would be implemented to ensure that all waste is stored and disposed of in accordance with all relevant EPA waste strategies and guidelines. • Planning Agreement/Development Contributions – including: – consideration of any applicable State and local development contributions, such as the Housing and Productivity Contribution, and/or details of any proposed Planning Agreement – a Cost Summary Report, in the format specified by the Cessnock City Wide s.7.12 Infrastructure Contributions Plan.
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: • Cessnock City Council • Development Coordination Authority, in relation to bush fire, water, biodiversity and heritage matters • Department of Climate Change, Energy, the Environment and Water, specifically the: ○ Energy, Climate Change and Sustainability Group ○ Environment Protection Authority • Transport for NSW • Fire & Rescue NSW • Hunter Water • Ausgrid • surrounding local landowners, businesses and stakeholders • local and regional community and environmental groups • Traditional Owners, including the Mindaribba Local Aboriginal Land Council • 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 Development Guidelines (DPHI, 2026)
	Undertaking Engagement Guidelines – Guidance for State Significant Projects (DPHI, 2026)
	Cumulative Impact Assessment Guidelines for State Significant Projects (DPHI, 2026)
	Planning Circular PS25-004: Changes to how development costs are calculated for planning purposes
	Standard Form of Estimated Development Cost (State significant projects) – October 2024
	Social Impact Assessment Guideline for State Significant Projects (DPHI, 2026)
Data Centres	
	National AI Plan (AG DISR, 2025)
	Expectations of data centres and AI infrastructure developers (AG DISR, 2026)
	NSW Data Centre Consultation Paper (INSW, 2026)
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)
	AGO Factors and Methods Workbook (AGO, 2018)
	Guidelines for Energy Savings Action Plans (DEUS, 2005)
Greenhouse Gas	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)
	NSW Guide for Large Emitters (EPA, 2025)
	Emissions Reporting and Climate Change Mitigation and Adaptation Plans: Guidance for environment protection licensees (EPA, 2026)
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)

Policies, Guidelines & Plans	
Aspect	Policy / Methodology
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)
Design Quality	Greener Places (Government Architect NSW, 2020) Better Placed (Government Architect NSW, 2017) NSW SDRP: Guidelines for Project Teams (GANSW Advisory Note, V3 2522/2020)
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 Loss Prevention Data Sheet 5-32 – Data centers and related facilities (FM Global Property, 2026) Position Statement Summary – Lithium-ion batteries and diesel generators in data centres (FRNSW, 2026)
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 Shelter in place guideline for flash flooding (DPHI, 2024)
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) Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries, for use in industrial applications (AS IEC 62619:2023) The storage and handling of Class 9 (miscellaneous) dangerous goods and articles (AS 4681:2000) The storage and handling of flammable and combustible liquids (AS 1940:2017)
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)
Human Health Risk	Health Impact Assessment Guidelines (enHealth, 2017)

Policies, Guidelines & Plans

Aspect	Policy / Methodology
	Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012)
	Australian Exposure Factor Guidance: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012)
	The Health Effects of Environmental Noise (enHealth, 2018)
	Guidance on the Use of Rainwater Tanks (enHealth, 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)
Soils and Water	
Erosion and Sediment	Managing Urban Stormwater: Soils & Construction (Landcom, 2004)
	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)
	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, NRMCC & AHMC, 2006)

Policies, Guidelines & Plans	
Aspect	Policy / Methodology
Contamination	National Water Quality Management Strategy – Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2) (EPHC, NRMCC & 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)
	Guide to Traffic Management – Pt 12: Traffic Impacts of Development (Austroads, 2016)
	Guide to Road Design (Austroads, 2026)
	Supplement to Austroads Guide to Road Design (TfNSW, 2023)
	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)
	Connecting NSW Strategy (TfNSW, 2026)
	Transport Technology Strategy (TfNSW, 2024)
	Strategic Regional Integrated Transport Plans (TfNSW, various)
Upper Canal and Warragamba Pipeline Corridors	
	Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines (WaterNSW, 2018)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (AS 2482)
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)
Waterways	Standards for Managing Construction Waste in NSW (EPA, 2018)
	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