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Via: *Major Projects Planning Portal*

**EPA's Recommended Secretary's Environmental Assessment Requirements for Bookham
Wind Farm (SSD-79885459)**

Dear Ms Watson,

I am writing in response to your request for the Environment Protection Authority's (EPA's) Secretary's Environmental Assessment Requirements (SEARs/EARs) for the Bookham Wind Farm (SSD-79885459) (Proposal).

The EPA has reviewed the Bookham Wind Farm Scoping Report (Version 3) prepared by Ecological Australia Pty Limited dated 6 February 2025.

The EPA understands the Proposal consists of:

- Up to 99 wind turbines with a generation capacity of up to approximately 594 megawatts (MW).
- A battery energy storage system with a capacity of up to 250MW.
- Permanent ancillary infrastructure and temporary facilities.

The EPA has considered the details of the Proposal and provides the recommended SEARs as **Attachment A**. In carrying out the assessment, the proponent should refer to the relevant guidelines listed, as well as any relevant industry codes of practice and best practice management guidelines.

The Proponent should be made aware that any commitments made in the environmental assessment may be formalised as approval conditions and may also be placed as formal licence conditions. Consistent with Part 9.4 of the POEO Act the EPA may require the provision of a financial assurance and/or assurances. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of the licence.

If you have any questions about this request, please contact Bree Turkington via email at brianna.turkington@epa.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Stricker', written in a cursive style.

ANDREAS STRICKER
A/Unit Head
Operations

ATTACHMENT A

EPA's Recommended Secretary's Environmental Assessment Requirements Bookham Wind Farm (SSD-79885459)

1. Environmental impacts of the project

- 1.1. The description should include the following for both the construction and operation of the project:
 - a. Details of the premises covered by the project including any relationship with any existing Environment Protection Licences
 - b. the layout of all the physical elements of the project within the project area, including all buildings, structures, works, haulage activities, pollution controls, stockpile and material handling areas, sealed and unsealed areas, landscaping and open space.
 - c. all mitigation measures that will be built into the physical layout and design of the project (such as noise walls)
 - d. any ancillary infrastructure for which approval is being sought (such as upgrades to utilities or surrounding roads)
 - e. identify those components of the physical layout and design that may change during the detailed design of the project, and set clear limits within which this change may occur without requiring amendments to the DA or modifications to the development consent if the project is approved
 - f. plans showing the layout and design in plan-view and cross section.
- 1.2. Identify any likely interactions between the development and any existing/approved developments and land uses in the area.
- 1.3. Identify all sensitive receivers likely to be affected by the development using clear maps/plans, including key landform areas, such as conservation areas and waterways.
- 1.4. Identify all potential environmental emissions, assess the likely environmental impacts, and describe the proposed mitigation measures to minimise environmental pollution to achieve compliance with relevant environmental legislation, policies, and guidelines.
- 1.5. The EIS must accurately summarise the key findings of the detailed technical studies in the appendices of the EIS and use suitable cross-referencing to reduce repetition between the two parts of the EIS.

2. EPA Licensing and Approval Requirements

- 2.1. Identify all approvals and licences required under environment protection legislation including details of all scheduled activities under schedule 1 of the *Protection of the Environment Operations Act 1997*.
- 2.2. Outline how the proposal and its environmental protection measures would be implemented and managed so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (e.g. outline of an environmental management plan).

3. Construction Works

- 3.1. The EIS must include detail of the construction works including:

- a. any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site).
- b. Identify, characterise and classify the following in accordance with the EPA's *Waste Classification Guidelines (2014)*:
 - i. all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste;
 - ii. all waste that is to be removed to an offsite location, including proposed quantities. Include the commitment to ensure this waste is taken to a facility that can lawfully receive it.

Note: The EPA's *Waste Classification Guidelines (2014)* are available at: <https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste>

- c. construction timetable and staging; hours of construction; proposed construction methods.
 - d. environment protection measures, including noise mitigation measures - in accordance with the Interim Construction Noise Guideline (DECC, 2009), dust control measures and erosion, and sediment control measures- in accordance with Managing urban stormwater: Soils and construction, vol. 1 (Landcom 2004).
- 3.2. Include a site diagram showing the site layout and location of environmental controls.
- 3.3. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline* (DECC, 2009). These are available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/construction-noise>

4. Air issues

- 4.1. The EIS must demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the POEO Act and the *Protection of the Environment Operations (Clean Air) Regulation 2022*. This consideration should include section 129 of the POEO Act concerning control of "offensive odour".
- 4.2. The EIS must include an air quality impact assessment (AQIA). The AQIA must be carried out in accordance with the document, *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2022). These are available at: <https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/approved-methods-for-the-modelling-and-assessment-of-air-pollutants>
- 4.3. The EIS must detail emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, *POEO (Clean Air) Regulation* (2022) and criteria within *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2022).

5. Noise and Vibration

The EIS must assess the following noise and vibration aspects of the proposed development:

- 5.1. Operational and construction activities on the premises that maybe considered vibration intensive should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006). These are available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration>

- 5.2. If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in *Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC, 1990). These are available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/construction-noise>
- 5.3. Operational noise from noise intensive activities to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Noise Policy for Industry* (EPA, 2017). Available at: [https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-\(2017\)](https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017))
- 5.4. If applicable, noise on public roads from increased road traffic generated by land use developments other than road projects should be assessed using the guidelines contained in the *NSW Road Noise Policy* (EPA, 2011) and associated application notes. Available at: <https://www.epa.nsw.gov.au/your-environment/noise/transport-noise>.
- 5.5. If applicable, noise on rail lines from increased rail traffic generated by land-use developments other than rail projects should be assessed using the guidelines contained in the *Rail Infrastructure Noise Guideline* (EPA, 2013) and associated application notes. Available at: <https://www.epa.nsw.gov.au/your-environment/noise/transport-noise>.

6. Waste, chemicals and hazardous materials and radiation

The EIS must assess the following waste, chemical and hazardous materials related aspects of the proposed development:

- 6.1. Assess and describe all aspects of waste generation, management and disposal associated with the proposed development.
- 6.2. Demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations.
- 6.3. Outline contingency plans for any event that may result in environmental harm, such as excessive stockpiling of material, or dirty water volumes exceeding the storage capacity available on-site.
- 6.4. Demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with all relevant Australian Standards, and/or NSW EPA's *Storing and Handling of Liquids: Environment Protection-Participants Manual* (DECC, 2007).
- 6.5. Demonstrate compliance with Part 9.3E of the POEO Act for the use of any industrial chemicals, including details of activities involving Schedule 6 or Schedule 7 chemicals listed on the IChEMS register. Additionally, demonstrate a system for periodic review to ensure that any new IChEMS Register requirements are incorporated.
- 6.6. Assess and describe any potential risks relating to all known and potential contaminants of concern (CoC) including per- and polyfluoroalkyl substances (PFAS) that may be associated with the proposed development and if applicable, how they will be mitigated. Consideration should be given to potential health and environment related impacts caused by the CoC. The assessment should consider various sources, receptors and exposure pathways including but not limited to ingestion (drinking water and food consumption), inhalation, and dermal contact.

- 6.7. Identify the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*. Available at: <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/warr-strategy>.

7. Water

The EIS surface water quality assessment must:

- 7.1. Demonstrate that all practical measures to prevent, control, abate or mitigate water pollution have been implemented, including a description of options that were explored (such as reuse to avoid a discharge or treatment).
- 7.2. Provide details of the proposal that are essential for predicting and assessing potential impacts to receiving waters. This could include (but is not limited to):
 - a. Site layout, including details of the existing and proposed water management system.
 - b. Drainage map for the entire site identifying sub-catchments, flow paths, drainage infrastructure, design sizing of structures, water storages, discharge points, and any potential flow paths to receiving waters.
 - c. How stormwater will be managed in all phases of the project. Information should include, where appropriate, measures to avoid or minimise erosion, leachate generation, and sediment mobilisation at the site.
 - d. Any in-water activities (such as piling or dredging).
- 7.3. Include water balance(s) for ground and surface water, including any intake and discharge locations, volumes, frequency and duration.
- 7.4. Identify and estimate the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point, including residual discharges after mitigation measures are implemented. This should be undertaken for construction and operational phases.
- 7.5. Include a water pollution impact assessment undertaken consistent with the guidance available at <https://www.epa.nsw.gov.au/your-environment/water/managing-water-pollution-in-nsw/environment-protection-licensing/water-pollution-discharge-assessments>. The level of assessment should be commensurate with the risk to the environment and human health.
- 7.6. Describe any surface water quality monitoring programs, including proposed monitoring locations, frequency and indicators of surface water quality. Analytical limits of reporting should have regard to any identified guideline values. Water quality monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (2004) available at: <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/water/22p3488-approved-methods-for-water-in-nsw.pdf>.
- 7.7. The EIS must describe how stormwater will be managed in all phases of the project, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EIS should consider the guidelines *Managing urban stormwater: soils and construction*, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008).

8. Groundwater

- 8.1. Provide details of the project that are essential for predicting and assessing impacts to groundwater with a description of the existing environment, including:
 - a. Geological, topographical, and hydrogeological resource descriptions, maps, and cross-sections.
 - b. Assessment of groundwater quality, users of groundwater, existing bores including depths and construction, assessment of local land use.
 - c. A hydrogeological interpretation of water-bearing geological units, depth to water table, groundwater gradient, Conceptual hydrogeological model, assessment of groundwater dependent ecosystems.
 - d. Site map and cross-sections showing and characterising any proposed excavations and spoil emplacement (relative to water table) with topography.
 - e. Proposed groundwater monitoring program.

9. Soils

- 9.1. The EIS should include an assessment of the potential impacts on soil and land resources should be undertaken, being guided by the *Soil and Landscape Issues in Environmental Impact Assessment* (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:
 - a. Soil erosion and sediment transport- in accordance with *Managing urban stormwater: Soils and construction, vol. 1* (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C Unsealed Roads; D Main Roles) (DECC2008).
 - b. Mass movement (landslides) – in accordance with *Landslide risk management guidelines* presented in *the Australian Geomechanics Society* (2007).
 - c. Urban and regional salinity – guidance given in the *Local Government Salinity Initiative* booklets which includes *Site Investigation for Urban Salinity* (DLWC, 2002).
- 9.2. A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. Where required, add any specific assessment requirements relevant to the project.

10. Contamination

- 10.1. Identify the likelihood of contamination at the site and surrounding land (on different media such as soils, groundwater, ground gas, surface water and sediments, where applicable) by considering the context of past, current, and proposed land uses. The EIS must document how the assessment of contaminated land has been undertaken with regard to the relevant guidelines for contaminated land made or approved by the NSW EPA.
- 10.2. All reports on contamination must be prepared by a suitably qualified contaminated land consultant⁽¹⁾ who is also certified⁽²⁾.

(1) A suitably qualified and experienced contaminated land consultant is a contaminated land consultant who meets the competencies outlined in the Guideline on the Competencies and

Acceptance of Environmental Auditors and Related Professionals (Schedule B9) as provided in the ASC National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended in 2013)."

(2) A certified consultant is a consultant certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme;

Note: If an auditor is being engaged for the project, the requirement for a certified consultant to prepare the contaminated land reports is still recommended as it will help ensure all assessment work is done as efficiently as possible, but it is optional. However, it must still be required for all reports to be prepared by a suitably qualified contaminated land consultant.

- 10.3. Where contamination is considered likely based on past or current land uses or other factors (such as offsite contamination migrating onto the site), undertake detailed site investigation/s to determine the nature and extent of the contamination.
- 10.4. Where contamination exists, assess if remediation of the land is required, having regard to current and future land uses; and the ecological and human health risks posed by the contamination to both onsite and offsite receptors.
- 10.5. Where a detailed site investigation is prepared and/or remediation is considered necessary, a NSW EPA accredited Site Auditor must be engaged to undertake an audit. The EIS must include copies of any Interim Audit Advice provided by the auditor and a Site Audit Statement and Site Audit Reports issued by the auditor which certifies the site can be made suitable for the proposed use
- 10.6. The following references should be included as relevant guidelines that must be followed when assessing contaminated land:
 - a. *Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land (DUAP and EPA, 1998)* - <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/clm/managing-contaminated-land-guidelines-remediation.pdf?la=en&hash=6AAE054645C2A0264515ABF7121AEF7F47E5FC85>
 - b. *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015)*
 - c. *Contaminated land sampling design guidelines - Part 1 and 2 (EPA, 2022)*
 - d. *Consultants reporting on contaminated land: contaminated land guidelines (EPA, 2020)*
 - e. *Guidelines for the NSW Site Auditor scheme 3rd edition (EPA, 2017)*
 - f. Any other relevant guidelines made or approved by the EPA under s105 of the *Contaminated Land Management Act 1997* - <https://www.epa.nsw.gov.au/your-environment/contaminated-land/statutory-guidelines>

11. Climate Change

- 11.1. Provide estimate of greenhouse gas (GHG) emissions for the project by carrying out a Greenhouse Gas Assessment consistent with the most recent version of the EPA's Greenhouse Gas Assessment Guide for Large Emitters (GHG guide) that is available on the EPA's website. The GHG estimate is to confirm if the project is likely to result in 25,000 tonnes or more of scope 1 and 2 emissions (CO₂-e), in any financial year during the operational life of the project. Input data and assumptions used to estimate GHG should be accompanied by supporting evidence.

Note:

Where the proponent believes that certain requirements from the GHG guide are not applicable, the proponent may indicate that in the EIS but must provide sufficient justification.