



DOC21/1117696-4

Department of Planning, Industry and Environment
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Email: Jeffrey.Peng@planning.nsw.gov.au

Attention: Jeffrey Peng – Senior Environmental Assessment Officer, Energy Resource Assessment

Dear Jeffrey

Luddenham Advanced Resource Recovery Centre – SSD-10446 – 275 Adams Road, Luddenham

Thank you for the request for advice from Public Authority Consultation (**PAE-33630713**), requesting the review by the NSW Environment Protection Authority (**EPA**) of the Submissions Report for the proposed Luddenham Resource Recovery Facility (**SSD-10446**) at 275 Adams Road, Luddenham (**the Premises**).

The EPA has reviewed the following documents:

- *'Luddenham Advanced Resource Recovery Centre – Responses to Request for Information'*, EMM, December 2021 (**the Submissions Report**)
- *'Luddenham Advanced Resource Recovery Centre – Addendum Noise and Vibration Impact Assessment'*, EMM, 14 December 2021 (**the Addendum NVIA**)
- *'Re: Response to EPA's submission on the Luddenham Advanced Resource Recovery Centre Submissions Report (SSD-10446'*, EMM, 19 October 2021 (**the Response Letter**)
- *'Luddenham Advanced Resource Recovery Centre – Surface Water Assessment'*, EMM, July 2020

The proposal has been amended following agency submissions. Coombes Property Group & KLF Holdings (**the Proponent**) have stated that they will restrict evening and night-time operations until Western Sydney Airport (**WSA**) operations are properly underway in order to mitigate predicted noise impacts at several residential receivers.

EPA Advice

The EPA does not support approval being given at this stage for evening and night-time operations unless a moratorium on evening and night-time operations can be added as a condition of approval. Please see **Attachment 1** for details.

If DPIE approves the application, the EPA has provided recommended conditions in **Attachment 2**.

Environment Protection Licence

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If approved by the Department Planning, Industry and Environment (**DPIE**), the proposal will require an environment protection licence (**EPL**) under section 48 of the *Protection of the Environment Operations Act 1997* (**POEO Act**). The Submissions Report indicates that 600,000 tonnes (t) of construction and demolition waste will be received and processed annually, 540,000t of which is estimated to be despatched as recycled product. The proposal will therefore require an EPL for 'Resource recovery' and 'Waste storage' under clause 34 and 42 of Schedule 1 of the POEO Act respectively.

If you have any questions about this request, please contact Kieran Henry on 02 8837 6000 or via email at kieran.henry@epa.nsw.gov.au.

Yours sincerely



28/01/2022

BERNIE TURNER
A/Unit Head
Regulatory Operations Metro West



Attachment 1 – Matters to be addressed prior to determination

a. Evening and night-time operations

Significant residual noise impacts, as defined in Chapter 4 of the Noise Policy for Industry (NPI), are predicted at two receivers during the day (R3 and R6). Impacts above the Project Noise Trigger Levels (PNTLs) are predicted at six receivers during the evening and night, including at three receivers (R2, R3 and R6) which are more than 5 dB above the PNTLs. Impacts above the maximum noise trigger levels were predicted at R3 and R6 indicating the potential for sleep disturbance.

The Proponent has proposed to restrict evening and night-time operations until operations at Western Sydney Airport are properly underway. Unless this moratorium on evening and night-time operations can be added as a condition of approval, the EPA does not consider this to be a suitable mitigation measure for the following reasons:

- There is no certainty of the time frame when evening and night operations would start.
- The measure to restrict hours of operation is currently voluntary and the EPA nor DIPE have any regulatory oversight or control of it.
- There is no definition of what would constitute that airport operations are “properly underway” (e.g. noise levels, flight numbers, on ground activity etc.)
- The level of expected impact when airport operations are “properly underway” is not defined and therefore cannot be managed.
- There is no certainty that when the airport starts operating it will have the applicant’s desired effect on background noise levels for example, increases to the PNTLs.

The EPA does not support approval being given at this stage for evening and night-time operations. The EPA recommends that if approval is given, it is only given for daytime operations.

The Proponent can apply to modify a planning approval to change the operating hours, if and when they can demonstrate that ambient noise conditions have changed sufficiently and that lower impacts may be expected.



Attachment 2 – Matters to be addressed with conditions

Noise Impacts

a. At-property treatments for significant residual noise impacts

The EPA considers that receivers R3 and R6 will experience significant residual noise impacts as defined in Chapter 4 of the Noise Policy for Industry, given the magnitude of the predicted noise levels above the PNTLs during daytime operations.

Chapter 4 of the NPfI provides guidance on the management of residual impacts. Where all source and path noise mitigation measures have been exhausted as appears to be the case for this development, at-property treatment can be considered for the two significantly affected receivers (R3 and R6) if operations are approved for day-time operations only. Examples of at-property treatments (at the applicant's expense) for significant residual impacts can include:

- Provision of mechanical ventilation and/or air-conditioning
- Upgrade of façade elements including glazing, seals, doors and roof insulation
- Localised screening/barriers
- Commercial and/or negotiated agreements with affected parties

The EPA recommends that, if the application is approved for day-time operations only, DPIE considers making at-property treatments available to the affected receivers (R3 and R6) through consent conditions.

b. Monitoring requirements

The EPA recommends that sufficiently robust monitoring and compliance requirements are included as a condition of approval, which could include:

- Commissioning noise monitoring and reporting – to confirm noise levels predicted are representative or to trigger additional mitigation measures.
- Quarterly noise monitoring for a sufficient time period to capture an appropriate amount of data to characterise noise emissions from the premises.
- Specific reporting requirements to ensure the appropriate level and quality of data are captured.

Water Management

The EPA provided comments and recommended conditions related to water management for the proposal to the Department of Planning, Industry and Environment (**DPIE**) on 25 August 2020 (**the August 2020 Advice**). The EPA makes the following comments and reiterates previous recommended conditions:

b. Leachate management

Leachate from within the warehouse will drain to the Leachate Tank (130KL). Contaminated water within the Leachate Tank will be directed to the Water Treatment Plant, and then stored within the Reuse Water Tank (100KL) prior to reuse onsite. The maximum treatment

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rate of the Water Treatment Plant is 6L/sec. The EIS has not demonstrated that there is enough holding capacity in the leachate and water reuse tanks. There are no contingency measures if the treatment plant is offline, operating at a reduced efficiency or unable to treat water to the appropriate quality for the nominated end-uses.

The EPA recommends that as a condition of approval the Proponent:

- ***develops a Leachate Management Plan that includes contingency measures if the treatment plant is offline or unable to treat water to the appropriate quality for the nominated end-uses***

c. Water treatment plant discharges

The Proponent states in 'Luddenham Advanced Resource Recovery Centre – Submissions Report', EMM, May 2021 (**the May 2021 Submissions Report**) that only rainwater collected onsite and potable water will be used for landscape irrigation at the Premises. The preparation of an Irrigation Management Plan as recommended by the EPA in the August 2020 Advice is therefore no longer recommended as the Proponent does not intend to irrigate using treated wastewater.

Air Quality

The EPA requested additional information from the Proponent related to predicted air quality impacts in the August 2020 Advice. Upon reviewing the May 2021 Submissions Report, the EPA notes that Proponent has adequately addressed the additional information requested. The EPA provides the following comments and recommended conditions:

a. Mitigation of PM_{2.5} and PM₁₀

The EPA had previously advised that the exhibited Air Quality Impact Assessment (the AQIA) had not considered further mitigation measures that could be implemented to reduce emissions particular noting that diesel emissions represent the most significant (and uncontrolled) PM_{2.5} emission source at the premises. Diesel emissions from onsite equipment accounted for ~51% of PM_{2.5} emissions assessed in the AQIA.

The May 2021 Submissions Report advises that the proponent has committed to use non-road diesel plant and equipment that achieves US EPA Tier 4 particulate matter emission standards. The revised AQIA provides quantitative assessment of potential impacts accounting for this commitment, coupled with revisions to the size and number of vehicle movements through proposed operating periods. This has resulted in a reduction in estimated and modelled total PM_{2.5} emissions from approximately 587 kg/yr to 314 kg/yr (i.e. a 46 % reduction).

The EPA recommends that DPIE add a condition of approval consistent with the commitments made to use non-road diesel equipment that achieve particulate matter emission performance consistent with US EPA Tier 4 emission standard. See recommended condition below.

b. Predicted exceedance of total suspended particles (TSP)

The EPA had requested that 'Luddenham Advanced Resource Recovery Centre – Air Quality Impact Assessment', EMM, July 2020 (**the AQIA**) be revised to include further analysis, discussion and assessment of the predicted TSP exceedance at receptor R3.

The May 2021 Submissions Report includes a revised AQIA which provides quantitative assessment of potential impacts accounting for revised emission estimates for non-road diesel equipment, coupled with revisions to the size and number of vehicle movements through proposed operating periods. The revised AQIA does not predict an exceedance of the annual average impact assessment criteria at assessed receptors.

c. Additional recommended conditions of approval

1. The Premises must be maintained in a condition which prevents or minimises the emission of dust from the premises.
2. Activities occurring in or on the premises must be carried out in a manner that will prevent or minimise the generation, or emission of dust from the premises.
3. All waste material received at the premises must be stored, handled, and/or processed within the enclosed warehouse.
4. All crushers and screens associated with material handling and processing operations must be fitted with water sprays to prevent or minimise air emissions
5. All non-road diesel plant and equipment utilised at the premises must achieve a particulate matter emission performance of 0.02 g/kWh or less.
6. The proponent must prepare and implement an Air Quality Management Plan (AQMP) for the premises. For all significant emissions sources at the premises the AQMP must include, but is not limited to:
 - a. Key performance indicator(s)
 - b. Monitoring method(s)
 - c. Location, frequency and duration of monitoring
 - d. Record keeping
 - e. Response mechanism; and
 - f. Compliance reporting