

EPA ref: DOC21/785018

Mr Christopher Fraser
Environmental Assessment Officer
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Department of Planning, Industry and Environment
By email at: Christopher.Fraser@planning.nsw.gov.au

21 September 2021

Dear Mr Fraser

Kembla Grange Resource Recovery Facility - SSD 5300 MOD3 - EPA Comments

I refer to the modification application for the Kembla Grange Resource Recovery Facility being SSD-5300-Mod-3. The application is seeking to allow for 24/7 operation of the facility, which is located at 50 Wyllie Road, Kembla Grange (the Premises). It is also seeking to vary the types of waste permitted to be received at the Premises. Environment Protection Licence No.20601 (the Licence) is currently in force and covers activities at the Premises.

The Environment Protection Authority (EPA) has reviewed the application and supporting documentation and determined that it requires further information prior to being able to provide final comments. Details of the requirements are provided below.

Noise impacts

The EPA has reviewed the Noise Impact Assessment, ref: 2104404 compiled by RWDI Australia Pty Ltd and dated 20 August 2021 (the NIA). In summary, the EPA considers that more information is required to demonstrate that the potential impact from evening and night time operations will not adversely impact the community.

I note that the application seeks to change the operational hours at the Premises from 6am to 6pm Monday to Saturday and 8am to 4pm Sunday to operate 24 hours per day, 7 days per week. Section 1 of the NIA states that the modification "would enable more efficient use of the Kembla Grange facility to sort, pre-process, and accept material during the day, whilst transporting sorted material to the Eastern Creek facility in the evenings and nights." The NIA also states that whilst 24/7 operation is proposed, "no waste sorting and processing will occur between the hours of 6:00 pm and 7:00 am Monday through Saturday, and between 4.00 pm and 8.00 am on Sundays." (Section 2, page 2).

Please note that other resource recovery facilities that operate at night have been the subject of noise complaints, including from noise associated with trucks on the site. The EPA requires further information to provide assurance that the noise levels predicted in the NIA for the Premises are reasonable worst-case and that all feasible and reasonable mitigation is implemented to minimise any impact on sensitive receivers. Further comments on this are provided below.

Table 10 of the NIA defines the sound power levels and spectra of the equipment proposed to operate during the evening and night time period. The EPA requests the proponent clarify whether the levels are Z-weighted or A-weighted, as the heading above the octave levels states "Octave LZeq,15min Levels" and the heading of the column of the total sound power level is "dBA". Based on our experience, the EPA also considers that the sound power levels appear low for this type of activity (loading/unloading of waste material such as concrete, rocks and metal). The EPA requests that the proponent justify the sound power levels with further information, such as the load under which the equipment was operating during measurement, or alternatively run the predictions again with higher reasonable worst-case equipment sound power levels.

The Noise Policy for Industry (NPfI) specifies that one third octave levels are required to determine if there is a low frequency or tonal component to the predicted noise levels. The NIA states in section 5.4 that an assessment of the one third octave sound power levels has been conducted and the corrections for annoying characteristics in Fact Sheet C of the NPfI do not apply to the predicted noise levels. The spectra provided in Table 10 is in octaves, not one third octaves as required by the NPfI. The EPA requests that the proponent provide sound power levels in one third octaves and provide more evidence to support the claim that corrections to account for annoying characteristics do not apply at the receiver.

Currently the NIA is difficult to interpret because the predicted noise levels (Table 11) do not match what might be expected at the specified distances to the different receivers (Table 2). For example, Table 2 in the NIA illustrates that receiver R6 is much closer to the site than receiver R1, so it could be expected that the predicted noise level at R6 would be higher than at R1, yet the predicted noise level at R6 is 15 dB lower than at receiver R1. This is the case for each of the receivers and their corresponding predicted noise level. Without further information such as noise contour maps it is difficult to replicate / validate the predicted noise levels at each of the receivers and therefore difficult to have confidence in the predicted levels being representative of a reasonable worst-case scenario. The EPA requests that the proponent provide the predicted noise contour maps to illustrate how the Premises and surrounding topography have been modelled.

The maximum noise level assessment in section 5.6 of the NIA includes some activities likely to influence the maximum noise levels at night, but it does not include the dropping of skip bins onto hardstands, nor the bang of truck tailgates, reversing beepers or material being unloaded from trucks if appropriate during the evening and night time period. Furthermore, the NIA states "the typical LAFmax sound power level for such events is anticipated to range 110-117 dBA. Noise predictions presented in the maximum noise level event assessment conservatively assume the upper end of the nominated level range (i.e. 117 dBA)." Based on our experience, the EPA considers 117 dBA to be a low for some of the proposed activities, especially for material such as metal, rocks and concrete being loaded into an empty truck trailer. The EPA requests that the proponent justify with further details the use of 117 dBA in the maximum noise level assessment or run the predictions again with a higher reasonable worst-case LAFmax sound power level for the maximum noise level events.

Air quality

The EPA has reviewed the Air Quality Impact Assessment, ref:2104404 compiled by RWDI Australia Pty Ltd and dated 20 August 2021 (AQIA). I note that whilst the modification is not predicted to cause exceedances of air quality criteria, there are a number of issues that the EPA has identified.

The emission inventory provided in table 9-1 of the AQIA does not cover all activities that occur
at the Premises. For example, it does not include waste processing (crushing, screening etc)
during daytime hours. Further, the total emissions caused by wind appears incorrect.

• The contour plots for PM₁₀ and PM_{2.5} provided in Appendix C show relatively high impacts on neighbouring industrial premises.

The EPA makes the following recommendation regarding air quality at the Premises:

 Prior to approval, the proponent should commit to additional dust mitigation measures such as reducing emissions from haulage (noting that haulage makes up approximately 80% of total emissions).

Waste management

The application seeks to update the waste types permitted to be received at the Premises. The EPA has no objection to the updates, noting that all waste types fit the category of general solid waste (non-putrescible) and are in line with waste types already received at the Premises.

If you have any questions about this matter, please contact Greg Frost on (02) 4224 4113.

Yours sincerely



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