

DOC22/160370-17

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EPA Advice on Submissions Report for proposed Jalco Manufacturing Facility, Horsley Park (SSD 21190804)

Dear Rebecka

Thank you for the request for advice from Public Authority Consultation (PAE-38014000), requesting the review by the NSW Environment Protection Authority (EPA) of the Submissions Report for the proposed Jalco Manufacturing Facility (SSD 21190804) at Warehouse 1, Lot 201, Horsley Logistic Park, 8 Johnstone Crescent, Horsley Park.

The EPA has reviewed response to submissions (RtS), including the following documents:

- Memo, Subject: Horsley Logistics Park Jalco SSDA Response to EPA Request for Additional Information, dated 25 February 2022, SLR Consulting Australia Pty Ltd, reference: 610.19360-M07-v1.0 Jalco EPA Response.docx (Noise RtS)
- Letter to Department of Planning and Environment, Subject: Response to Submissions: SSD-21190804 – Jalco Manufacturing Facility, dated 25 February 2022, Urbis, no reference (EIS RtS)
- SSD21190804 RTS, Appendix E, HORSLEY LOGISTICS PARK Lot 201 Warehouse 1, Air Quality Impact Assessment, SLR Ref No: 610.19360-R04-v3.0, dated 25 February 2022 (revised AQIA).

The EPA advises that the response has either not addressed all of the items raised in the EPA's submission on this project from 10 January 2022 (EPA Ref: DOC21/1027113-7) or the EPA requires further information to provide recommended conditions.

The EPA has the following additional comments and recommendations:

1. Matters to be addressed prior to determination

a. Air Quality

The EPA recommends that the proponent provides information on the expected control design and performance of air emission and pollution control equipment, and that additional assessment is undertaken to demonstrate compliance with EPA's impact assessment criterion. The EPA recommends the proponent provides:

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- 1. a description of all aspects of the air emission control system, including fugitive emission capture, treatment, and discharge systems (Item 1.i. in Attachment A).
- 2. plans, process flow diagrams and descriptions that clearly identify and explain all pollution control equipment and expected emission performance (Item 1.ii. in Attachment A).
- 3. manufacturers guarantee or similar, to confirm the expected emission performance of the scrubber systems (Item 1.iii. in Attachment A).
- 4. additional assessment to demonstrate the project complies with EPA's impact assessment criterion (Item 2. in Attachment A).
- 5. a sensitivity analysis that explores the contributions the uncontrolled building vents have on potential offsite impacts (Item 3. in Attachment A)

Further details are provided in Attachment A below.

b. Noise

The EPA notes the Noise RtS has provided clarifications and additions based on the information requested from the EPA (DOC21/1027113-7, 10 January 2022), including adding in consideration for scrubber systems that were not included in the initial Noise Impact Assessment (NIA).

Following these updates and clarifications, the EPA requires further information to be able to draft or recommend suitable conditions, if the Department of Planning approves the application.

The EPA recommends the proponent provides:

- The predicted noise level (L_{Aeq,15min} and L_{AFmax}) from <u>the Jalco premises only</u> at all assessed receivers, presented as both a table of results and noise contour maps for all assessed meteorological conditions, operating scenarios and time of day (day, evening and night).
- 2. An exhaustive list of operating hours for all activities and processes assessed in the application.

If you have any questions about this request, please contact Larissa Borysko on (02) 9995 6843 or via email at Larissa.borysko@epa.nsw.gov.au

Yours sincerely

Mann

25 March 2022

HAMISH CAMPBELL Unit Head – Regulatory Operations Metropolitan West NSW Environment Protection Authority

Attachment A. Comments on SSD21190804 RTS, Appendix E, HORSLEY LOGISTICS PARK Lot 201 - Warehouse 1, Air Quality Impact Assessment, SLR Ref No: 610.19360-R04-v3.0, (25 February 2022

1) Lack of detail and specificity for odour control equipment

In the EPA's previous advice (DOC21/1027113-7, 10 January 2022), it was recommended that the Proponent provide detailed descriptions of the design and expected emission performance of the proposed controls. The requested information was not provided. The revised Air Quality Impact Assessment (revised AQIA) states that the odour control equipment including the scrubbers and WWTP have not yet been designed. As such, the revised AQIA includes assumptions on potential odour impacts associated with the Project. Assumptions include odour emission rates and emission control performance.

Odour emission rates are assumed based on the Smithfield operations, which operates at a significantly smaller capacity than the proposed Horsley Park Plant. Emission rates were scaled to reflect the increase in operations. Furthermore, the revised AQIA has estimated an odour removal efficiency for the High Speed Fill Line (HSFL) and Low Speed Fill Line (LSFL) based on samples collected at inlet and outlet of the blending tank's scrubber – at the existing Smithfield plant. It has not been demonstrated that these control efficiencies are appropriate or achievable. As such, the emission performance of the proposed scrubbers adopted in the revised AQIA has not been robustly justified. Additionally, the revised AQIA states that the wet scrubbers are old technology scrubbers and not likely to control odours as effectively as modern scrubbers currently being considered for the project. However, as discussed above the proposed scrubbers have not been described.

The EPA recommends, prior to project approval, the proponent provide:

- i. a description of all aspects of the air emission control system, including fugitive emission capture, treatment and discharge systems
- ii. plans, process flow diagrams and descriptions that clearly identify and explain all pollution control equipment and expected emission performance
- iii. manufacturers guarantee or similar, to confirm the expected emission performance of the scrubber systems
 - 2) <u>Predicted impacts at neighbouring residential receptors above the EPA's</u> <u>assessment criterion</u>

The results of the revised AQIA indicate that the project could impact neighbouring industrial receptors. Odour contour plots show predicted odour impacts of 5 OU occurring at the adjacent industrial premises (C1). This is above the 2OU criteria adopted for the assessment. The revised AQIA speculates that the predicted impacts are influenced by sources located close to the Eastern boundary of the premises such as the WWTP. However, a source apportionment analysis has not been performed.

The revised AQIA has reported the predicted impacts at the neighbouring premises (C1) as the average across the entire commercial site. This is not considered appropriate as it ignores the high concentrations predicted to occur at the premises.

Section 9.2 of the revised AQIA identifies the WWTP as a significant source of odour for the facility, contributing approximately 28% to total odour emissions. Additional odour control options have been assessed which identifies that feasible control options are available should the operation of the WWTP lead to nuisance impacts at nearby sensitive receptor locations. The modelling found that enclosure of the WWTP could result in an approximately 50%-90% reduction of odour impacts at modelled residential receptors.

Whilst the revised AQIA identifies feasible options for future mitigation, on an as-needs basis, it is the expectation of the EPA that all reasonable and feasible emission controls be considered during the planning phases of the Project to ensure air emissions are prevented or minimised as far as reasonably practicable.

The revised AQIA claims that the emissions from the WWTP are likely significantly overestimated due to use of peak flow rates. The revised AQIA states that this leads to an overestimation of the odour emission rates, as filling of the balance storage tanks only occur intermittently. The EPA advises that odour impacts can occur over the space of seconds to minutes, as such it is not sufficient to claim that the assessment is conservative and therefore the project is unlikely to result in adverse odour impacts. It must be demonstrated, through a robust revised assessment, that the project is unlikely to result in adverse odour impacts.

The EPA recommends additional assessment be undertaken such that the project is demonstrated to comply with EPA's impact assessment criterion. This <u>could</u> include the following:

- Use a more refined level of assessment.
- Adopt additional mitigation measures and/ or controls such as a commitment to enclose the WWTP as assessed in the Response to Submissions, Revised Air Quality Impact Assessment (SLR, 2022)
- Redesign the activity/ location of emission sources away from receptors.

3) Worst case emission scenarios have not been considered

The EPA previously raised the issue that odour emissions from the buildings may not be worst case and recommended that the AQIA be revised to demonstrate that the modelled scenarios is representative of worst-case odour emissions. The EPA noted that an odour concentration of 220 OU was measured at the Smithfield premises, which was not considered in the modelling for the proposal.

The revised AQIA states that the samples with the highest concentrations were deemed to be unrepresentative of the project given some of the samples were collected in close proximity to the powder manufacturing area. The EPA understands that the higher odour concentrations were measured at the vents located in the liquids manufacturing building at the Smithfield premises. As such the revised AQIA has not provided substantial justification to discount the higher concentrations measured.

The EPA advises that odour sampling and modelling is not an exact science, and the variations in odour concentrations could be due to variations that occur in sampling methods rather than the powder manufacturing building. The data relied upon in the assessment is limited to a single sample and as such is unlikely to reflect the expected range of odour concentrations experienced at the facility. As such a sensitivity analysis should be undertaken to consider a range of emissions from the building vents to evaluate the potential risks of offsite impacts.

The EPA recommends the AQIA be revised to include a sensitivity analysis that explores the contributions the uncontrolled building vents have on potential offsite impacts. This should consider variations in discharge concentrations and the resulting predicted offsite contributions. Where the sensitivity analysis identifies risks to offsite impacts, additional mitigation measures should be nominated to address those risks. This may include the provision of better dispersion via increased building vent heights or additional controls.