DOC20/594806

24 July 2020

Mr Karl Fetterplace
Senior Planner
Key Sites and Industry Assessments
Department of Planning, Industry and Environment
GPO Box 39
Sydney NSW 2001

Dear Mr Fetterplace

Glebe Island Concrete Batching Plant and Aggregate Handling Facility (SSD 8544)
EPA advice on Additional Information on the Response to Submissions

I am writing to you in reply to the invitation to the Environment Protection Authority (EPA) to provide advice on Additional Information on the Response to Submission (RtS) for the above project.

The EPA reviewed the document *Further Response to Submissions*, prepared by Ethos Urban, dated 11 June 2020, in addition to correspondence from the Port Authority of NSW to the DPIE, dated 19 June 2020. The EPA offers the following comments about noise and vibration in relation to each document:

Further Response to Submissions

In comments on the applicant's RtS (EPA letter to DPIE, dated 19 February 2020), the EPA recommended limits that were based on best practice vessel performance outlined in the project Environmental Impact Statement (EIS) and RtS. While Ports Authority of NSW have raised some reservation about the achievability of the vessel levels outlined in the EIS, the applicant (Hanson) has committed to achieving them via a purpose designed / contracted vessel and as such the limits recommended by the EPA for combined landside and vessel noise remain relevant and based on best practice.

Correspondence from Port Authority of NSW to DPIE (dated 19 June 2020)

It is noted that Port Authority of NSW raised concern that the EPA's noise limits (outlined in its advice on the RtS) are for combined landside and vessel operation and hence may not be totally appropriate when only landside activities are occurring – i.e. no vessel in port. The combined limits were recommended because the proposal required an Environment Protection Licence (EPL) for "shipping in bulk" under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act), due to the proposal having the capacity of 1 million tonnes of concrete aggregates per annum to be delivered by ship. However, it has since become apparent that other activities occurring at the premises, such as concrete batching, will also be regulated by the EPA under the EPL in accordance with Section 44(4) of the POEO Act.

The EPA has therefore amended the recommended tables of limits (refer **Attachments 1, 2 and 3**) to include limits relevant for landside activities only, that can be considered for inclusion in the

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planning consent. The limits are based on the best achievable levels in the EIS. The proposed limits satisfy the EPA derived 'project noise trigger levels' (PNTL) from the *Noise Policy for Industry* (EPA, 2017) (NPFI) with the exception of a 2 dB exceedance at Bowman Street Pyrmont. The limits include $LA_{eq,15minute}$ and $LA_{eq(period)}$ levels. While the inclusion of period based limits (i.e. day, evening and night) is not strictly in accordance with the NPfI, the EPA considers it appropriate as the applicant has calculated the $LA_{eq,15min}$ versus $LA_{eq(period)}$ differential, based on the length of time a full capacity production is likely to occur across a period. Therefore, a $LA_{eq,15min}$ limit only would not adequately capture the performance objectives for the facility as committed to in the EIS.

Port Authority of NSW also raised concern about the meteorological conditions assigned to the noise limits by the EPA advice on the RtS. The EIS had identified that noise enhancing meteorological conditions were not relevant for the project and hence predictions were undertaken using standard meteorological conditions. However, due to the proximity of the nearest receivers in Pyrmont and the direct propagation path for noise, the likelihood of increased noise levels from meteorological conditions is considered low. As such, the EPA had applied noise enhancing meteorological conditions to the limits to increase the range of meteorological conditions over which compliance monitoring could occur. Port Authority of NSW concurs with the approach proposed by the EPA for Pyrmont, however, has raised concern that noise levels are likely to be increased at Balmain and Glebe under temperature inversion conditions at night. Therefore, the EPA has amended the meteorological conditions in the recommended table of limits (**Attachment 3**) to account for the potential for noise enhancement at night under temperature inversion conditions in line with the requirements of the NPfI.

Attachment 1 provides the EPA's Derived PNTLs ($LA_{equ,15min}$ dB(A)); **Attachment 2** provides an Assessment of predicted noise levels against PNTLs established in Attachment 1; and **Attachment 3** provides a revised set of recommended consent conditions.

Should you require clarification of any of the issues please contact Anna Timbrell on 9274 6345 or email anna.timbrell@epa.nsw.gov.au.

Yours sincerely

ALEKSANDRA YOUNG
Unit Head, Regional Operations – Metro South
Environment Protection Authority

EPA Revised Advice – July 2020
Glebe Island Concrete Batching Plant – SSD 8544

ATTACHMENT 1

Noise Policy for Industry (EPA, 2017) – EPA Derived Project Noise Trigger Levels ($L_{Aeq,15min}$ dB(A))

The project intrusiveness levels have been derived from the rating background noise levels presented in the project's EIS plus 5 dB – *"Glebe Island Concrete Batching Plant Noise Impacts Assessment dated 15 March 2018 prepared by SLR Consulting Australia Pty Ltd (Report No. 610.1733-R01)"*. The project amenity noise levels have been derived by the EPA following the guidelines contained in the NPfI based on the 'urban industrial interface' receiver category for Balmain and Pyrmont and the 'urban' receiver category for Glebe.

Location	Project Intrusive Level[1]			Project Amenity Level[2]			PNTLs		
	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night
Balmain									
Donnelly Street	52	50	45	63	53	48	**52**	**50**	**45**
Batty Street	56	53	50	63	53	48	**56**	**53**	**48**
Pyrmont									
Refinery Drive	55	54	52	63	53	48	**55**	**53**	**48**
Bowman Street	55	54	52	63	53	48	**55**	**53**	**48**
Glebe									
Leichhardt Street	51	51	45	58	48	43	**51**	**48**	**43**

1. Project Intrusive Levels adopted from the EIS Noise Impact Assessment (NIA).
2. Project Amenity Levels derived by the EPA following requirements of the NPfI. Urban Industrial interface receiver category adopted for Balmain and Pyrmont and urban receiver category adopted for Glebe.

ATTACHMENT 2

EPA Assessment of predicted noise levels against PNTLs established in Attachment 1 (LAeq,15min dB(A)).

Location	Project Intrusive			Project Amenity			PNTLs / Predicted Levels		
	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night
Balmain									
Donnelly Street	52	50	45	63	53	48	**52**	**50**	**45**
EIS, NIA[1]							43	41	39
R2S Table 20A[2]							47	46	45
R2S Table 20B[3]							48	48	**47**
Batty Street	56	53	50	63	53	48	**56**	**53**	**48**
EIS, NIA[1]							46	45	42
R2S Table 20A[2]							48	47	46
R2S Table 20B[3]							50	49	**49**
Pyrmont									
Refinery Drive	55	54	52	63	53	48	**55**	**53**	**48**
EIS, NIA[1]							47-49	46-47	45-46
R2S Table 20A[2]							52-53	51-53	**51-52**
R2S Table 20B[3]							**57-58**	**57-58**	**57-57**
Bowman Street	55	54	52	63	53	48	**55**	**53**	**48**
EIS, NIA[1]							50-54	48-52	47-**50**
R2S Table 20A[2]							54-**56**	53-**54**	**52-53**
R2S Table 20B[3]							**58-59**	**57-58**	**57-58**
Glebe									
Leichhardt Street	51	51	45	58	48	43	**51**	**48**	**43**
EIS, NIA[1]							40-41	38-39	37-38
R2S Table 20A[2]							43	42	42
R2S Table 20B[3]							48	48	**48**

1. Predicted levels from EIS, NIA, Section 8.2, Table 18 for landside activities only (LAeq,15min dB)
2. Predicted levels from RtS, Response to EPA Noise Submission Table 20A - Predicted Berth (GIB1) Typical Activity [CSL Rhine] and Facility Intrusive Noise Levels
3. Predicted levels from RtS, Response to EPA Noise Submission Table 20B - Predicted Berth (GIB1) Maximum Activity [noisier ship and unloading practice] and Facility Intrusive Noise Levels.

ATTACHMENT 3

RECOMMENDED CONDITIONS

Noise Limit Conditions

L6.1a Noise generated at the premises while a ship servicing the facility is in berth at Glebe Island Berth 1 must not exceed the noise limits at the times and locations in the table below.

Location	Noise Limits in dB(A)			
	Day	Evening	Night	Night
	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	$L_{Aeq(15\ minute)}$	L_{AFmax}
Any residence in Donnelly Street Balmain	47	46	45	55
Any residence in Batty Street Balmain	48	47	46	57
Any residence in Refinery Drive Pyrmont	53	53	52	62
Any residence in Bowman Street Pyrmont	56	54	53	62
Any residence in Glebe Point Road Glebe	43	42	42	55

L6.1b Noise generated at the premises while no ship servicing the facility is in berth at Glebe Island Berth 1 must not exceed the noise limits at the times and locations in the table below.

Location	Noise Limits in dB(A)			
	Day	Evening	Night	Night
	$L_{Aeq(15\ minute)}$ / $L_{Aeq(day)}$	$L_{Aeq(15\ minute)}$ / $L_{Aeq(evening)}$	$L_{Aeq(15\ minute)}$ / $L_{Aeq(night)}$	L_{AFmax}
Any residence in Donnelly Street Balmain	43 / 40	41 / 36	39 / 35	55
Any residence in Batty Street Balmain	46 / 43	45 / 40	42 / 37	57
Any residence in Refinery Drive Pyrmont	49 / 46	47 / 42	46 / 41	62
Any residence in Bowman Street Pyrmont	54 / 51	52 / 47	50 / 45	62
Any residence in Glebe Point Road Glebe	41 / 38	39 / 35	38 / 35	55

Drafting Note: An EPL will define the premises

L6.2 For the purposes of condition L6.1:

(a) Day means the period from 7 am to 6pm Monday to Saturday and the period from 8 am to 6pm Sunday and public holidays.

(b) Evening means the period from 6 pm to 10 pm.

(c) Night means the period from 10 pm to 7 am Monday to Saturday and the period from 10 pm to 8 am Sunday and public holidays.

L6.3 Noise-enhancing meteorological conditions:

(a) The noise limits set out in condition L6.1a and L6.1b apply under the following meteorological conditions:

Assessment Period	Meteorological Conditions
Day	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level.
Evening	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level.
Night (Assessment locations in L6.1 in Pyrmont)	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level; or Stability category E and F with wind speeds up to and including 2m/s at 10m above ground level.
Night (Assessment locations in L6.1 in Balmain & Glebe)	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level

(b) For those meteorological conditions not referred to in condition L6.3(a), the noise limits that apply are the noise limits in condition L6.1 plus 5dB.

L6.4 For the purposes of condition L6.3:

(a) The meteorological conditions are to be determined from meteorological data obtained from the nearest Bureau of Meteorology weather station

(b) Stability category shall be determined using the following method from Fact Sheet D of the *Noise Policy for Industry* (NSW EPA, 2017:

i. Use of sigma-theta data (section D1.4).

L6.5 To assess compliance:

(a) with the $L_{Aeq(15\ minutes)}$ or the L_{Amax} noise limits in condition L6.1 and L6.3, the noise measurement equipment must be located:

i. approximately on the property boundary, where any residence is situated 30 metres or less from the property boundary closest to premises; or where applicable,

ii. in an area within 30 metres of a residence façade, but not closer than 3 metres where any residence on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable,

iii. in an area within 50 metres of the boundary of a National Park or Nature Reserve.

(b) with the $L_{Aeq(15\ minutes)}$ or the L_{Amax} noise limits in condition L6.1 and L6.3, the noise measurement equipment must be located:

i. at the reasonably most affected point at a location where there is no residence at the location; or,

ii. at the reasonably most affected point within an area at a location prescribed by condition L6.5 (a); or,

iii. where an internal noise limit is identified in L6.1, at or near the centre of a room that is not a garage, storage area, bathroom, laundry, hallway, toilet or pantry at the location, with the windows opened sufficiently to provide adequate ventilation except where mechanical ventilation is provided.

(c) with the $L_{Aeq(15\ minutes)}$ or the L_{Amax} noise limits in condition L6.1 and L6.3, the noise measurement equipment must be located:

i. between 1.2m to 1.5m above ground level.

L6.6 The noise limits in conditions L6.1 and L6.3 must not be exceeded at any point at the locations referred to in conditions L6.5 (a) or L6.5 (b), whether at the most reasonably affected point or elsewhere at the location.

L6.7 For the purpose of determining the noise generated from the premises, the modifying factor corrections in Table C1 in Fact Sheet C of the *Noise Policy for Industry* (NSW EPA, 2017) may be applied, if appropriate, to the noise measurements by the noise monitoring equipment.

L6.8 Noise measurements must not be undertaken where rain or wind speed at microphone level will affect the acquisition of valid measurements.

L6.9 Where it can be demonstrated that direct measurement of noise from the premises is impractical at location/'s nominated in L6.1, the EPA may accept alternative means of determining compliance. See Chapter 7 of the Noise Policy for Industry.

M8 Requirement to Monitor Noise

M8.1 Attended noise monitoring must be undertaken in accordance with Condition L6.5 and must be carried out:
(a) on the first occasion a vessel is berthed and unloading at the premises;
(b) on the first occasion a vessel that has not previously attended the premises is berthed and unloading;
(c) within one month of the commencement of full-scale batching plant operations while a ship is not in port; and
(d) in any other calendar quarter where monitoring has not been triggered by M8.1(a)(b) and (c).

Reporting Conditions

R4 Noise Monitoring Report

A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of monitoring required under condition M8. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include:
(a) an assessment of compliance with noise limits presented in Condition L6.1 and L6.3; and
(b) an outline of any management actions taken within the monitoring period to address any exceedances of the limits contained in Condition L6.1 and L6.3.

Additions to Definition of Terms of the licence

- NPfI - the document entitled "*Noise Policy for Industry*" published by the NSW Environment Protection Authority in October 2017.
- Noise – 'sound pressure levels' for the purposes of conditions L6.1 to L6.7.
- $L_{Aeq\ (15\ minute)}$ - the value of the A-weighted sound pressure level of a continuous steady sound that, over a 15 minute time interval, has the same mean square sound pressure level as a sound under consideration with a level that varies with time (AS1055.1-1997).
- L_{AFmax} – the maximum sound pressure level of an event measured with a sound level meter satisfying AS IEC 61672.1-2004 set to 'A' frequency weighting and fast time weighting.

Construction Noise

(a) Hours of Construction

L6.10 All construction work at the premises must be conducted between 7am and 6pm Monday to Friday and between 8am and 1pm Saturdays and at no time on Sundays and public holidays, unless inaudible at any residential premises.

L6.11 Exceptions to construction hours

The following activities may be carried out outside the recommended construction hours:
(a) construction that causes $L_{Aeq(15minute)}$ noise levels that are:

i. no more than 5dB above Rating Background Level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009); and
ii. no more than the Noise Management Levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses; or

(b) for the delivery of materials required by the police or other authorities for safety reasons; or

(c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or

as approved through the process outlined in "Variation of construction hours" of this approval.

Recommended conditions of consent
Noise Management and Traffic Management

Noise Management Plan

The proponent must prepare and implement a Noise Management Plan that covers all premises-based activities and transport operations. The plan must include but need not be limited to:

(a) all measures necessary to satisfy the noise limits in relevant EPL and/or this approval at all times,
(b) a system that allows for periodic assessment of Best Management Practice (BMP) and Best Available Technology Economically Achievable (BATEA) that has the potential to minimise noise levels from the premises,
(c) effective implementation of identified BMP and BATEA measures, where considered feasible and reasonable,
(d) measures to monitor noise performance and respond to complaints,
(e) measures for community consultation including site contact details,
(f) noise monitoring and reporting procedures.

Construction Noise Management Plan

The proponent must prepare and implement a detailed Construction Noise Management Plan (CNMP), prior to commencement of construction activities, that includes but is not necessarily limited to:

(a) identification of each work area, site compound and access route (both private and public)
(b) identification of the specific activities that will be carried out and associated noise sources at the premises and access routes,
(c) identification of all potentially affected sensitive receivers,
(d) the construction noise and vibration objectives identified in the Environmental Assessment,
(e) assessment of potential noise and vibration from the proposed construction methods (including noise from construction traffic) against the objectives identified in the Environmental Assessment,
(f) where the objectives are predicted to be exceeded, an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts,
(g) description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction, including the early erection of any operational noise control barriers,
(h) procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity,
(i) measures to monitor noise performance and respond to complaints.

Traffic Noise Management Plan

That a Traffic Noise Management Strategy (TNMS) be developed by the proponent, prior to commencement of construction and operation activities, to ensure that feasible and reasonable noise management strategies for vehicle movements associated with the facility are identified and applied, that include but are not necessarily limited to the following:

(a) driver training to ensure that noisy practices such as the use of compression engine brakes are not unnecessarily used near sensitive receivers,
(b) best noise practice in the selection and maintenance of vehicle fleets,
(c) movement scheduling where practicable to reduce impacts during sensitive times of the day,
(d) communication and management strategies for non-licensee / proponent owned and operated vehicles to ensure the provision of the TNMS are implemented,
(e) a system of audited management practices that identifies non conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assesses the implementation and improvement of the TNMS,
(f) specific procedures for drivers to minimise impacts at identified sensitive receivers,
(g) clauses in conditions of employment, or in contracts, of drivers that require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of the procedures.