



DOC20/132968

19 February 2020

Mr Karl Fetterplace  
Senior Planning Officer  
Department of Planning, Industry and Environment  
GPO Box 39,  
Sydney NSW 2001

Dear Mr Fetterplace

**Glebe Island Concrete Batching Plant and Aggregate Storage Facility (SSD 8544)  
EPA comment on Response to Submissions**

I am writing to you in reply to the invitation to the Environment Protection Authority (EPA) to provide comment on the Response to Submissions (RtS) for the *Glebe Island Concrete Batching Plant and Aggregate Storage Facility* project.

The EPA has reviewed relevant RtS documents provided by the Department of Planning, Industry and Environment (DPIE). The EPA has no further comment regarding air quality or water quality following our previous submission on the Environment Impact Statement (EIS).

However, the EPA provides additional advice and recommendations for noise and vibration impacts in **Attachment A**, particularly with regard to adopting the established provisions in the *Noise Policy for Industry* (EPA, 2017) to determine Project Noise Trigger Levels (PNTLs).

The EPA's main concern is that the PNTLs will be exceeded by up to 10 dB at night when there is a noisy ship or unloading practices. Exceedances of the PNTLs indicate a potential noise impact on the community. The EPA recommends that noise mitigation measures are required by the consent to minimise these impacts.

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

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Aleksandra'.

**ALEKSANDRA YOUNG**  
**Unit Head, Metropolitan Infrastructure**  
**Environment Protection Authority**

## **ATTACHMENT A**

### **EPA ADVICE ON NOISE AND VIBRATION**

#### **OPERATIONAL PHASE**

In its submission on the Environmental Impact Statement (EIS), the EPA sought further information regarding how the proposed noise management precinct will function in accordance with Section 2.8 of the *Noise Policy for Industry* (NPfI) (EPA, 2017) regarding noise management precincts.

The applicant's RtS provided details of the proposed port noise precinct approach and ship noise management process currently being developed for Glebe Island / White Bay. The documentation provides notional noise allocation for individual uses within the proposed precinct (shore side activities) based on the approach.

While the EPA accepts that the Port Authority of NSW is progressing initiatives towards development of a precinct approach for Glebe Island / White Bay, including a mechanism to address ship noise, this approach has not been finalised or endorsed by DPIE and should not inform the current SSD.

In the absence of a finalised and endorsed strategy to regulate cumulative port noise it is recommended that the assessment adopt the provisions in the NPfI (as required by the SEARs) that include cumulative noise assessment provisions – i.e. the project amenity noise levels.

The Project Noise Trigger Level (PNTL) is the noise level that, if exceeded, would indicate a potential noise impact to the community. As the EPA did not fully concur with the approach adopted in the EIS to derive PNTLs, the EPA has derived PNTLs in accordance with section 2.1 of the NPfI based on the following:

- Rating background levels (RBLs) presented in the EIS Noise Impact Assessment (NIA); and
- Urban Industrial Interface residential receiver amenity category for Balmain and Pyrmont and the Urban Amenity category for Glebe (Table 2.2 of the NPfI).

The derived PNTLs are provided in the following **Table 1**:

**Table 1: Noise Policy for Industry – EPA's Derived PNTLs (LAeq,15min dB(A))**

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

1. Project Intrusive Levels adopted from EIS NIA.

2. Project Amenity Levels derived by the EPA following requirements of NPfI (Table 2.2). Urban Industrial interface receiver category adopted for Balmain and Pyrmont and Urban receiver category adopted for Glebe.

An assessment against the derived PNTLs is provided in **Table 2**:

**Table 2: EPA's Assessment of predicted noise levels against PNTLs established in Table 1 (LAeq,15min dB(A))**

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

1. Predicted levels from EIS, NIA Section 8.2, Table 18 [shoreside facility only]

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.

Table 2 above presents predicted batching facility and berthing noise levels assessed to sensitive receivers in Balmain, Pymont and Glebe. The predicted noise levels consider batching facility levels only (identified as "EIS, NIA") and combined batching facility and berthing activities (identified as

“RtS Table 20A and RtS Table 20B”). The EPA understands that the essential difference between RtS Table 20A and RtS Table 20B is the noise performance of the berthed vessel. For the purposes of the EPA’s submission, we hereafter refer to ship noise considered in Table 20A as a good noise performing vessel and ship noise considered in Table 20B as a poorer noise performing vessel.

Analysis of the predicted noise levels against the PNTLs in Table 2, when considering the recommendations in Section 4 of the NPfl, would describe noise emissions associated with a good noise performing vessel as “marginal to moderate” whereas impacts associated with a poorer noise performing vessel as potentially significant.

Given that the assessment has identified that selection of good noise performing vessels can result in reduced impacts to sensitive receivers, the EPA has recommended noise limits based on that scenario. This is designed to ensure that ship selection and unloading operations are consistent with identified best practice. This approach would not be inconsistent with the intent of the Port Noise Policy currently being developed by the Port Authority of NSW.

The recommended noise limits include  $L_{Amax}$  limits derived from the NPfl. This follows the RtS identifying additional mitigation measures to reduce  $L_{Amax}$  noise levels to below the NPfl trigger thresholds in response to EPA’s request for a detailed assessment of the maximum noise level events.

While the applicant’s assessment has determined that noise enhancing meteorological conditions are not significant, they have been adopted in the recommended limit conditions. The basis for this is that meteorology is not likely to significantly influence noise propagation in this scenario, especially to receivers in Pyrmont. The adoption of noise enhancing conditions in the limits will broaden the opportunities for compliance assessment without imposing an unreasonably stringent requirement on the proponent.

The EPA notes that the applicant has supplied additional information in the RtS to support its claim that correction factors will not be necessary, based largely on plant selection and design. However, recommended limits will include requirements for correction factors to be applied if monitoring indicates the presence of annoying noise characteristics, noting that this is a risk for the proponent that should be addressed through the design and construction phase.

## **CONSTRUCTION PHASE**

Additional information in the RtS has demonstrated that noise levels from the construction of the facility can be managed to within the Construction Noise Management Levels (CNML) derived from the *Interim Construction Noise Guidelines* (ICNG) (EPA, 2009). The EPA emphasises that cumulative impacts associated with concurrent construction of the proposed Glebe Island Concrete Batching Plant, the proposed Multi User Facility and WestConnex M4-M5 Rozelle site will need to be effectively managed.

As such the EPA has recommended conditions that require construction to be confined to within standard hours as well as the requirement for the development of a Construction Noise and Vibration Management Plan (CNVMP).

## **RECOMMENDED CONDITIONS OF CONSENT**

### **Noise Limit Conditions**

- L6.1** Noise generated at the premises 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 <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>AFmax</sub>
Any residence in Donnelly Street Balmain	52	50	45	55
Any residence in Batty Street Balmain	56	53	48	57
Any residence in Refinery Drive Pyrmont	55	53	52	62
Any residence in Bowman Street Pyrmont	56	54	53	62
Any residence in Leichhardt Street or Glebe Point Road Glebe	51	48	43	55

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

- Day means the period from 7 am to 6 pm Monday to Saturday and the period from 8 am to 6pm Sunday and public holidays.
- Evening means the period from 6 pm to 10 pm.
- 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

- The noise limits set out in condition **L6.1** 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	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.

- 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 5 dB.

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

- The meteorological conditions are to be determined from meteorological data obtained from the nearest Bureau of Meteorology weather station.
- Stability category shall be determined using the following method from Fact Sheet D of the *Noise Policy for Industry* (NSW EPA, 2017):
  - Use of sigma-theta data (section D1.4).

**L6.5** To assess compliance:

- a) with the  $L_{Aeq(15 \text{ minutes})}$  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  $L_{Aeq(15 \text{ minutes})}$  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  $L_{Aeq(15 \text{ minutes})}$  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.

## **Noise Limit Conditions**

### **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) In any other calendar quarter where monitoring has not been triggered by **M8.1(a)** and (b); and,
  - d) during each day, evening and night period as defined in the *Noise Policy for Industry* for a minimum of:

- 1.5 hours during the day;
- 30 minutes during the evening; and
- 1 hour during the night.

## **Reporting Conditions**

### **Noise Monitoring Report**

- R4.1** 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 exceedences of the limits contained in Condition **L6.1** and **L6.3**.

## **Additions to Definition of Terms**

- Noise Policy for Industry - 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**.
- $L_{Aeq}(15\text{ minute})$  - 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**

### **Hours of Construction**

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

### **Exceptions to construction hours**

- L6.11** The following activities may be carried out outside the recommended construction hours:
- a) construction that causes  $L_{Aeq}(15\text{ minute})$  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
  - d) as approved through the process outlined in “Variation of construction hours” of this approval.

## **Noise Management and Traffic Management**

### **Noise Management Plan**

- P1.1** 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**

- P1.2** 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**

- P1.3** 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.