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Ricardo Prieto-Curiel  
Senior Town Planner  
Port Authority of New South Wales  
Level 4, 20 Windmill Street  
WALSH BAY NSW 2000

Dear Mr Prieto-Curiel

### **PROPOSED MULTI-USER FACILITY ON GLEBE ISLAND – COMMENTS ON REF**

Thank you for providing the Environment Protection Authority (EPA) with the opportunity to comment on the Review of Environmental Factors (REF) for the proposed Glebe Island Multi-User Facility (MUF), and for meeting with the EPA's representatives on 23 April 2018.

The EPA's detailed comments are attached. In summary, the EPA's main concern relates to the need for an effective and transparent process for managing noise from uncharacteristically noisy ships to be in place prior to the MUF commencing operations. The EPA also has concerns about aspects of the assessment of ship noise during ship unloading activities.

The EPA would be pleased to meet with you to discuss our comments. Should you require clarification regarding the contents of this letter or to arrange a meeting, please contact Mike Sharpin, Unit Head Metropolitan Infrastructure on 9995 6953 or [mike.sharpin@epa.nsw.gov.au](mailto:mike.sharpin@epa.nsw.gov.au).

Yours sincerely

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

**JACINTA HANEMANN**  
**Regional Manager Operations - Metropolitan Infrastructure**  
**Environment Protection Authority**

Attachment A

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## ATTACHMENT A

### – THE ENVIRONMENT PROTECTION AUTHORITY'S COMMENTS –

#### MULTI-USER FACILITY ON GLEBE ISLAND

##### 1. Construction phase

The EPA notes that the REF prepared for the Port Authority of NSW (PANSW) states that construction and construction-related activities will be undertaken in an environmentally responsible manner with emphasis on:

- compliance with recommended standard construction hours;
- feasible and reasonable noise and vibration minimisation and mitigation;
- effective dust control and management;
- erosion and sediment control; and
- waste handling and management.

##### 1.1 Dust control and management

The EPA considers dust control and management to be an important air quality issue during site preparation and subsequent construction.

The EPA notes the REF states that the residual effect of dust caused by construction works after mitigation would not be significant on surrounding sensitive receptors. A review of the air quality impact assessment supports this conclusion as the EPA notes;

- the assessment was a semi-quantitative risk assessment of potential dust impacts, carried out in accordance with the methodology described in *Guidance on the assessment of dust from demolition and construction* (IAQM 2014), and
- mitigation measures are described in the REF, and shall be implemented as part of a Construction Environmental Management Plan (CEMP).

##### 1.2 Noise and vibration

The EPA emphasises the importance of properly managing noise and vibration impacts during site preparation, construction and construction-related activities, especially in regard to high noise impact activities, such as grinding, jack hammering, rock breaking and hammering, rock drilling and saw cutting.

The EPA notes that the REF states that noise impacts during construction can be adequately managed. A review of the noise assessment supports this conclusion as the EPA notes;

- the assessment was guided by the Interim Construction Noise Guidelines (DECC 2009) (ICNG),
- mitigation measures are described in the REF, and shall be implemented under a specific noise management plan as part of any CEMP, and
- construction would be generally undertaken during standard construction hours.

##### 1.3 Surface and ground water quality

The EPA notes that during construction, there is a minor potential for adverse impacts to surface and ground water quality. Following a review of the REF, it is considered that the likelihood of adverse impacts occurring is low as the EPA notes;

- all known risks are discussed,
- mitigation measures are described in the REF, and shall be implemented as part of any CEMP.

## 2. Operational phase (on-shore facility)

### 2.1 Dust control and management

The EPA notes that the REF predicts that the proposed material handling activities are not expected to cause a significant dust impact on nearby receptors, following a qualitative assessment of potential dust impacts on surrounding sensitive receptors. The EPA's review of the air quality impact assessment supports this conclusion, as the EPA notes;

- mitigation measures are described in the REF, and shall be implemented as part of any Operational Environmental Management Plan (OEMP), and
- impacts on air quality caused by unfavourable wind conditions from the west and east in the morning and afternoon respectively, should be minor after mitigation is implemented.

### 2.2 Noise and vibration

The EPA notes that operational noise from on-shore activities will comply with the noise management levels set out in the Noise Policy for Industry (EPA 2017) (NPfI). The EPA's review of the noise assessment supports this conclusion, and it appears that the shore based activity / facility noise will be less than noise from ships and ships unloading as predicted in a 2013 REF approved by PANSW.

The operational noise assessment recommends adopting a noise management precinct as described in the NPfI to all future developments at PANSW land at White Bay / Glebe Island. The assessment also considers noise from the relocation of the Hanson concrete batching plant to the Glebe Island, which is subject to a separate planning approval.

The EPA **recommends** that that further information is provided in the response to submissions report for this REF on:

- a) the modelling assumption assumes that lining the hopper bin will provide a reduction of 6dB. It would be beneficial to ensure this is (i) viable, and (ii) a reasonable assumption (i.e. supported by evidence), and
- b) why PANSW considers that a correction for tonality or modifying factors is not considered appropriate – the EPA notes that the use of the facility is likely to be intermittent / irregular,

### 2.3 Water quality

The EPA notes that during operation, there is a potential risk for water quality to be impacted. The EPA notes that mitigation measures are described in the REF, which are intended to be implemented as part of any operational environmental management plan (OEMP).

## 3. Operational phase (vessel operations)

### 3.1 Vessel noise impacts

The EPA recognises that Glebe Island is a long-standing working port but anticipates changes in vessel movements associated with the proposed development may have significant operational noise impacts on nearby sensitive receivers. The EPA notes that the project mitigation and management measures provided in Table 46 do not include any operational noise management plans, monitoring or similar relating to ship noise.

The EPA recognises that the 2018 REF relies largely the 2013 REF for consideration of the environmental effects of shipping vessels associated with the Glebe Island 1 and 2 berths. The 2013 REF noted that salt shipments have been unloaded at G11 since 2008 and no noise complaints had been received. The 2013 REF noted that as the unloading of gypsum vessels at these berths is a new activity, and that:

- noise level monitoring of the first shipment should be undertaken to verify the assumptions of the 2013 REF; and
- should excessive noise levels and/or noise complaints be noted, further mitigation measures will be considered and implemented where feasible.

The EPA is aware of approximately 120 noise pollution complaints associated with bulk shipping at Glebe Island 1 and 2 since the 2013 REF was issued. The substantial majority of these complaints include vessel noise, with only a small minority relate exclusively to shore-based noise. The EPA varied the relevant environment protection licence (EPL) in 2014 to restrict the hours of operation at Glebe Island (EPL 20330) to address community concerns about noise impacts.

The EPA **recommends** that that further information is provided in the response to submissions report for this REF on:

- a) the scale of vessel movements, in particular the anticipated frequency of visits and average length of stay (similar to Table 1 in the 2013 REF). This is important so that the community can understand the frequency and duration of impacts,
- b) the worst case and typical case operational noise scenarios, to take into account different methods for ship unloading operations, for example swivelling screw conveyors versus crane and bucket, which was not considered in the 2013 REF operational noise assessment. Depending on the outcomes of this assessment, restrictions to the vessel unloading methodology may be appropriate to minimise noise emissions, for example to preclude crane and bucket,
- c) a procedure for effectively managing noise impacts on sensitive receivers (eg residents at Pymont) from uncharacteristically noisy ships, particularly at night times. This procedure should be made publicly available and be in place prior to MUF operations,
- d) a review of the ship noise predictions in Table 26 to assess whether they are representative, including a review of all relevant ship noise monitoring data. A preliminary analysis of noise monitoring reports available to the EPA indicate that the ship noise levels for Pymont for typical operations (100% unloading speed) is likely to be reasonably representative, however this should be confirmed using all available data,
- e) ensure that all users of the proposed facility include a ship noise management plan (or similar) in their OEMP, as these vessels will be chartered by MUF lessees,
- f) how PANSW will require lessees to include community notification, community liaison and complaint response in their OEMPs, consistent with standard EPL requirements (this is particularly relevant for activities that do not hold an EPL),
- g) the source and justification of the night time RBL for Pymont ( $L_{Aeq, 15 \text{ min}}$  of 47 db(A)) as being representative of the RBL at the closest noise sensitive receivers to the MUF (ie 2 Bowman Street),
- h) an explanation of why the  $L_{Aeq, 15 \text{ min}}$  night time sleep disturbance assessment in Table 30 only includes predicted noise levels associated with shore-based activities and do not include the cumulative impact of ship and shore based activities (as described in Table 29),
- i) An explanation of the source/derivation of the predicted  $L_{AFmax}$  noise levels and whether these noise levels are from shore-based activities or the cumulative noise levels from ship and shore based activities. A preliminary analysis of noise monitoring reports available to the EPA indicate that the  $L_{A, 1 \text{ min}}$  ship noise levels for Pymont range from 58 to 71 db(A), averaging 66 dB(A). This is higher than the  $L_{AFmax}$  noise levels noted in Table 30, and
- j) why the noise modelling of ship unloading operations in the noise impact assessment (Appendix B) effectively models the ship as a noise barrier, rather than a noise source. This means that the noise contour maps in this appendix (figures D1, D2, E1 and E2) effectively underestimates the noise impacts from ship unloading activities on sensitive receivers.

As it is difficult to establish RBLs, ship noise sources, and land-use activities due the variability in port operation over the years; it would be beneficial for PANSW to prepare a consolidated report containing data acquired on their behalf by consultants, to identify trends and patterns in noise emissions. This would be useful for the PANSW, the community and the EPA in the medium to long-term to provide a common understanding and for manage noise impacts going forward.

### 3.2 Vessel air impacts

The EPA recognises that the 2018 REF has relied upon the 2013 REF for consideration of the environmental effects of shipping vessels associated with Glebe Island 1 and 2 berths. The EPA is aware of at least four air pollution complaints associated with bulk shipping at these berths since the 2013 REF was prepared.

The EPA acknowledges that 1 January 2020 has been set as the global implementation date under MARPOL for a significant reduction in the sulphur content of the fuel oil used by ships, from 3.5% to 0.5%. However, the facility is anticipated to be operational by the first quarter of 2019.

The EPA **recommends** that that the response to submissions report for this REF includes a commitment by the PANSW to an interim requirement for ships berthing at the MUF to use low sulfur until 1 January 2020, unless the ship operator can demonstrate that this is not technically feasible for a particular ship. This could be implemented through appropriate lease conditions and be similar to the Australian Maritime Safety Authority requirements relating to cruise ships.

### 3.3 Environment protection licences

Section 3.4 of the REF notes that an environment protection licence (EPL) may be required for some activities at the MUF, to carry out the scheduled activity of shipping as specified under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act). This may result in some users of the facility being regulated under the POEO Act by the EPA and the Inner West Council being the appropriate regulatory authority for other activities at the MUF carried out by lessees that do not require an EPL. The PANSW should consult with Inner West Council in relation to this proposal.

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