

# Glebe Island White Bay Port Noise Policy

Response to Submissions Report

December 2020

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# Acronyms

Acronym/Term	Definition
AMSA	Australian Maritime Safety Authority
EPA	Environment Protection Authority of NSW
DPI&E	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
REF	Review of Environmental Factors
RtS	Response to Submissions
WBCT	White Bay Cruise Terminal

# 1 Introduction

## 1.1 Purpose

This report summarises and responds to submissions received by the Port Authority of NSW (Port Authority) following the release of its draft Glebe Island and White Bay Port Noise Policy (the Policy) and Vessel Noise Operating Protocol (the Protocol) for community and stakeholder consultation in mid-2020.

This Response to Submissions (RtS) Report outlines the Port Authority's further consideration of the specific issues raised in submissions, as well as a summary of the changes that will be made to the Policy and additional actions that will be undertaken as a result. Where changes are not proposed after examination of issues raised, this report also outlines why that is the case.

Port Authority thanks the 82 individuals and organisations that provided a submission.

## 1.2 Background

The common use vessel berths at Glebe Island and White Bay play an important role in providing commercial shipping berth capability for Sydney. Glebe Island is home to a number of terminal operators who receive bulk product by ship and supply the product to support Sydney's construction materials markets.

Port Authority recognises that noise and vibration from ships using the berths of Glebe Island and White Bay can be of concern to local residents living close to the working port. Port Authority is committed to working with residents, ship operators and tenants to manage noise and other impacts from ship operations.

The Policy aims to manage noise in a way that is acceptable to the community, port users, and other stakeholders while recognising and optimising Glebe Island and White Bay's ongoing, long-term status as a working port.

At time of writing this RtS, the Policy is understood to be the first of its kind in Australia, being specifically developed to address port noise.

## 1.3 Consultation process

The consultation process involved the following activities:

- Port Authority placed the draft Policy on public exhibition on its website from 15 June 2020 until 10 August 2020. During this time period there were 963 page views, and 470 unique page views<sup>1</sup>.
- A letterbox drop was carried out within the local area surrounding the port. A total of 2,200 flyers were distributed.
- An online advertisement was placed in the Inner West Courier about the consultation process occurring (due to no hard copies being produced at this time).
- Port Authority held two stakeholder information sessions which were conducted online on 22 and 23 July 2020. These were attended by a total of 14 individuals.
- Email and phone enquiry lines were open during the consultation period.

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<sup>1</sup> Unique page views provide a useful alternative to basic page views the factor of multiple views of the same page within a single session is eliminated. If a user views the same page more than once in a session, this will only count as a single unique page view.

## 1.4 Submissions

A total of 82 submissions were received from individuals and stakeholder groups including NSW Environment Protection Authority (EPA), Sydney City Council, and the Local Member of NSW Parliament.

Five submissions were received by other government departments, and forwarded to Port Authority. These have been included in the 82 total submissions.

A small number of submissions were classified as queries (six queries were received via email and one via phone) and direct responses were provided during the consultation period.

The majority of submissions provided some objections or concerns with the Policy. One submission specifically supported the Policy.

Each submission was reviewed and classified into key issues. These key issues are listed in Table 1. The number of times this issue was raised is provided in the table (as a percentage of total submissions received) with an indication of whether Port Authority proposes amendments or additional actions as a result of consideration of the issues raised. The issues are presented in descending order of frequency of this issue being raised.

**Table 1: Key Issues and percentage of submissions**

Issue No.	Key issues raised in submission (by theme)	% of total received	Indicative Response
1	<ul style="list-style-type: none"> <li>Concern/objection regarding noise from multi-user facility and/or Hanson developments at Glebe Island;</li> <li>previous development doesn't mean industrial nature of port should be able to continue;</li> <li>particularly concerned by port development due to close proximity to dense residential area.</li> </ul> <p><i>See detailed response in <b>Appendix A (Issue 1)</b></i></p>	71%	No change
2	<ul style="list-style-type: none"> <li>Operating hours/curfew</li> <li>scope of Policy not inclusive of arrival, departure of vessel and tug noise</li> <li>curfew requested on vessel arrival/departure due to noise from this period causing disturbance of sleep</li> <li>curfew needed on all port operations; need to reduce noise at night</li> </ul> <p><i>See detailed response in <b>Appendix A (Issue 2)</b></i></p>	62%	Additional action proposed
3(a)	<ul style="list-style-type: none"> <li>Independent review of Port Noise Policy including criteria;</li> <li>independent assessment of all port noise;</li> <li>model/cumulative assessment of all activities including the real noise impacts (including the cumulative impact of all projects and traffic associated with the port).</li> </ul> <p><i>See detailed response in <b>Appendix A (Issue 3)</b></i></p>	54%	Amendment and additional action proposed
3(b)	<p>Concern about cumulative noise impacts (e.g. all port, plus multi-user facility, Hanson, White Bay Cruise Terminal (WBCT)).</p> <p><i>See detailed response in <b>Appendix A (Issue 3)</b></i></p>	39%	No change – beyond scope

4	Other non-noise concerns including light / dust / air emissions / traffic / sediments and seagrass disturbance. <i>See detailed response in <b>Appendix A (Issue 4)</b></i>	51%	No change – beyond scope
5	Health concerns (from noise and/or non-noise issues, not all specified). <i>See detailed response in <b>Appendix A (Issue 5 and Issue 5(b))</b></i>	35%	Addressed by Policy (health); No change – beyond scope (non-health)
6	Need to justify noise limits: <ul style="list-style-type: none"> <li>• limits are too high;</li> <li>• difference between internal and external noise criteria;</li> <li>• vessel limits should not be higher than landside levels;</li> <li>• why different to WBCT;</li> <li>• why no evening trigger limit;</li> <li>• adopt more stringent standards</li> </ul> <i>See detailed response in <b>Appendix A (Issue 6)</b></i>	37%	Amendments proposed in Policy
7	Enforcement concerns: <ul style="list-style-type: none"> <li>• concern regarding loopholes in Vessel Noise Operating Protocol;</li> <li>• not prescriptive;</li> <li>• too many chances before a ban imposed;</li> <li>• ships should ensure compliance prior to being permitted to enter port;</li> <li>• reasonable and feasible should include encouraging newer ships which are quieter; clear and unambiguous procedures will be much more effective;</li> <li>• concern regarding implementation of the Vessel Noise Operating Protocol and changes in vessel ownership;</li> <li>• concern that Port Authority will not address ship noise adequately if exceedances occur; no timeframes for mitigation of noise.</li> </ul> <i>See detailed response in <b>Appendix A (Issue 7)</b></i>	23%	Amendment proposed in Protocol
8	Concern about noise from Transport for NSW projects and construction noise and that these are not included in Policy. <i>See detailed response in <b>Appendix A (Issue 8)</b></i>	22%	No change – beyond scope
9	Visual amenity concerns regarding port developments, with a preference for green space. <i>See detailed response in <b>Appendix A (Issue 9)</b></i>	18%	No change – beyond scope
10	Concern regarding historical complaints about vessels. <i>See detailed response in <b>Appendix A (Issue 10)</b></i>	17%	Noted – Policy will address in future
11	Shore power should be installed and used for ships. <i>See detailed response in <b>Appendix A (Issue 11)</b></i>	10%	Noted- subject of separate investigation

12	General concern regarding ship noise (not specifically identified). <i>See detailed response in <b>Appendix A (Issue 12)</b></i>	9%	Noted
13	Noise monitoring and reporting concerns; <ul style="list-style-type: none"> <li>• should be monitored at higher levels than just ground level;</li> <li>• make data visible when a vessel or landside operator has breached the limit; noise mapping annual periods;</li> <li>• should publish daily measurements (or similar);</li> <li>• regular reporting to community;</li> <li>• should be real time response including to complaints.</li> </ul> <i>See detailed response in <b>Appendix A (Issue 13)</b></i>	9%	Largely addressed by Policy. Noise monitoring to commence from January 2021
14	Concern regarding having to keep windows shut. <i>See detailed response in <b>Appendix A (Issue 14)</b></i>	7%	No change – see detailed response
15	Noise from ships cranes will be unacceptable. <i>See detailed response in <b>Appendix A (Issue 15)</b></i>	6%	Addressed in Policy
16	Review of Noise Triggers; <ul style="list-style-type: none"> <li>• why Policy has a gradual long-term reduction in noise as a goal;</li> <li>• why isn't immediate noise reduction a standard of the policy;</li> <li>• 3 years review of trigger levels is too long;</li> <li>• why can't these be reviewed annually?</li> </ul> <i>See detailed response in <b>Appendix A (Issue 16)</b></i>	5%	No change – see detailed response
17	Landside noise concerns (port operations) and existing and future landside tenants should also be included. <i>See detailed response in <b>Appendix A (Issue 17)</b></i>	5%	Addressed in Policy
18	Objection to multi-user facility approval pathway and lack of business case for project. <i>See detailed response in <b>Appendix A (Issue 18)</b></i>	4%	Noted – see detailed response
19	Cruise ship noise concerns; <ul style="list-style-type: none"> <li>• cruise ships should be included in the Policy;</li> <li>• will the WBCT Strategy be superseded by the Port Noise Policy?</li> </ul> <i>See detailed response in <b>Appendix A (Issue 19)</b></i>	4%	No change proposed – see detailed response
20	Port should be relocated to Port Botany or Port Kembla. <i>See detailed response in <b>Appendix A (Issue 20)</b></i>	2%	No change
21	Supports port use. <i>See response in <b>Appendix A (Issue 21)</b></i>	2%	Noted

22	Noise attenuation treatment should be provided like WBCT. <i>See detailed response in <b>Appendix A (Issue 22)</b></i>	2%	Noted
23	Seasonality of ship visits may be more concerning than less and assuming that the community are less annoyed because of the seasonality is a stretch. <i>See detailed response in <b>Appendix A (Issue 23)</b></i>	1%	See detailed response
24	Concern regarding boom gate operation at Buchanan St. <i>See detailed response in <b>Appendix A (Issue 24)</b></i>	1%	Addressed operationally
25	Concern regarding noise during the day for shift workers. <i>See detailed response in <b>Appendix A (Issue 25)</b></i>	1%	No change proposed – see detailed response
26	Supports the Policy. <i>See response in <b>Appendix A (Issue 26)</b></i>	1%	Noted
27	Policy should include ‘annoyance’ modifying factors in vessel and landside limits. <i>See detailed response in <b>Appendix A (Issue 27)</b></i>	2%	Clarification proposed
28	Policy needs ongoing consultation. <i>See detailed response in <b>Appendix A (Issue 28)</b></i>	1%	Amendment proposed in Policy

The submissions have been reviewed by Port Authority and the issues and comments made in the submissions have been addressed in detail in Section 2 of this report.



## 2 Response to submissions

Table A (Appendix A) provides a summary of the key issues raised in the submissions received, and responses from Port Authority to the key issues.

Table A also identifies where changes to the Policy will be made by Port Authority as a result of the submissions, or where further action to be undertaken by Port Authority has been identified.

A number of submissions raised concerns about technical aspects of the Policy or questioned the justifications or reasoning behind the Policy. Responses to these matters have been included in a technical paper which identifies the technical subject area and provides further information on that subject. This paper is included in Appendix B.

### 3 Conclusion

Port Authority is grateful for feedback on its draft Port Noise Policy to allow further examination of issues and improvements to the Policy to mitigate noise impacts on the Glebe Island and White Bay community.

After consideration of the submissions made during the consultation period, Port Authority will incorporate the following changes to the finalised Policy and Vessel Noise Operating Protocol:

- include **a cumulative noise assessment of all port activities** (to be included in Noise Maps in Appendix I of the Policy);
- contain **more detailed consideration of the noise limits adopted** in the Policy and how they have been derived (to be included in Sections 5-7 and Appendix F of the Policy);
- include **accelerated consequences for vessel operators for exceeding the trigger levels** for vessels during the evening period (refer to Vessel Noise Operating Protocol);
- **clarify process and consequences for any vessel after reaching ‘three strikes’** (3 corrective action notices) in the Vessel Noise Operating Protocol to make consequences more stringent after receiving a third corrective action regardless of level of exceedance.
- **clarify that in any future review of night time vessel noise triggers, the ultimate goal would be a minimum of 50dbA** (being the anticipated minimum noise level that could reasonably be achieved by vessels given current technology) and would not be below ambient noise levels in the area surrounding Glebe Island and White Bay at the time;
- **undertake Policy reviews on a five-yearly basis, and specifically include consultation** with the Glebe Island and White Bay Community Liaison Group.

Further, having considered the feedback received regarding specific community concerns about aspects of the Policy, the following actions in addition to the commitments in the Policy will be undertaken by Port Authority:

#### **Additional Action 1: Vessel arrival/departure noise investigation**

Port Authority commits to investigate a potential restriction or operational changes on vessels arriving and potentially departing during the night-time period based on review of actual noise levels during this period.

The time to complete this review will be dependent of the actual frequency of vessel arrivals into the port, particularly at Glebe Island berths. The review will include analysis of noise monitoring data from a reasonable set of vessel arrival periods at Glebe Island 1 and 2 and Glebe Island 7 and 8 (e.g. 10-20 individual vessels per berth) following the commencement of multi-user facility operations and other commercial vessels which use these berths. The investigation will explore changes to operations involved in berthing and departing which may reduce noise. This review will also consider the advantages of implementing a vessel curfew for departures against the benefits of permitting a vessel to depart a berth and thereby reduce the overall noise exposure of an individual vessel.

#### **Additional Action 2: Cumulative noise modelling**

Further modelling inclusive of cumulative landside noise from port activities will be undertaken during the implementation of the Policy, based on actual monitoring data of landside noise from the port.

## Appendix A - Key Issues and Port Authority Responses

Issue	Issue details and Response
<p><b>Issue 1</b></p> <p>Noise from developments at Glebe Island</p>	<ul style="list-style-type: none"> <li>• concern/objection regarding noise from multi-user facility and/or Hanson developments at Glebe Island;</li> <li>• previous development doesn't mean industrial nature of port should be able to continue;</li> <li>• particularly concerned by port development due to close proximity to dense residential area.</li> </ul> <p><b>Response</b></p> <p>Glebe Island and White Bay are the only remaining deep-water ports in Sydney Harbour for bringing bulk materials into the city. The Port Noise Policy has been prepared to address noise specifically from operations at Glebe Island and White Bay in noting that port operations will continue to be carried out in these locations.</p> <p>Port Authority recognises the community's concerns regarding noise from port operations. This is why significant effort has gone into preparation of the draft Port Noise Policy as a means of providing a framework to assess and manage noise from the port, whilst acknowledging that there will be noise generated from port activities.</p> <p>The Port Noise Policy provides a comprehensive framework of assessment and management of noise to enable port operations to be undertaken whilst minimising the impact on community.</p> <p>The approval for the multi-user facility included a commitment to develop and implement a ship noise guideline and protocol to manage ship noise. The Port Noise Policy provides a guideline to manage ship noise and specifically a Vessel Noise Operating Protocol that sets defined limits for a vessel noise whilst berthed in the port, and consequences for exceeding these limits be exceeded.</p> <p>The proposal to relocate Hanson's concrete batching plant from Blackwattle Bay to Glebe Island is subject to a separate planning process. However, the intent of the Policy to cover port noise as a precinct (as described in the Landside Noise Guideline, Appendix G of the Policy) and the planning assessment for Hanson's proposed batching plant has taken into consideration a protocol for management of ships.</p> <p>If approved, the Hanson development environmental assessment has indicated that the proposal is to operate in line with the Port Noise Policy, including compliance with the proposed Vessel Noise Operating Protocol.</p> <p>Further technical detail on this response is provided in Appendix <b>B</b>.</p>

<p><b>Issue 2</b></p> <p>Policy Scope – Arrivals and Departures</p> <p>Operating Hours/Curfew</p>	<ul style="list-style-type: none"> <li>• scope of Port Noise Policy not inclusive of arrival, departure of vessels and associated tug noise;</li> <li>• curfew needed on vessel arrival/departure due to noise from this period causing disturbance of sleep;</li> <li>• curfew needed on all port operations; need to reduce noise at night</li> </ul> <p><b>Response</b></p> <p><b>Scope of Policy and curfew on vessel arrivals and departures</b></p> <p>Glebe Island and White Bay as a working port currently operates continuously and has since the nineteenth century for water-based transport and industrial uses. It has been a multipurpose port, owned and controlled by the State Government since 1901.</p> <p>Submissions have identified vessel arrival and departure as a major source of noise and a significant concern for residents of Pyrmont. Port Authority is seeking to obtain further data in relation to the noise created from ships arriving/departing the berths. This data was not previously gathered due to monitoring activities focusing on periods of cargo operations and this issue was only recently being brought to the attention of Port Authority by the community as being a significant noise issue in the port. The Port Noise Policy does not seek to set noise levels for vessels arriving and departing berth. This is consistent with the level of control Port Authority as landowner can reasonably set in relation to vessel noise, including consequences for tenants and vessel operators. Additionally, it is important that noise levels for vessels arriving and departing berths do not detract from the critical safety role of tugs and vessel engines to safely and efficiently berth and depart.</p> <p>It is proposed to explore a potential restriction on vessels arriving and potentially departing during the night-time period, based on review of actual noise levels during this period which needs to be obtained (see <b>Action 1</b> below).</p> <p>Before these types of vessel curfews are progressed, it is necessary to obtain further data on the noise levels for the arrival and departure of ships at Glebe Island.</p> <p>Monitoring of the noise levels associated with vessel berthing and departing has commenced (eg for the salt ship “Daiwan Justice” to Glebe Island 1) noise levels were driven by the acceleration from the tug boats, which consisted of intermittent noise levels between 52 dBA and 59 dBA.</p> <p>Given the limited number of vessels scheduled before the commencement of the Port Noise Policy, it is proposed to commit to continuing monitoring and data gathering before considering any options around vessel arrival/departure curfews. Monitoring of this would commence with the monitoring of vessel noise already committed to under the Policy.</p> <p>Consideration would be given to the operational impacts of such a curfew, including potential impact on tenant operations, and changes required to tug and pilot scheduling.</p> <p>Should it considered required and a reasonable and feasible means of reducing community impacts, a curfew could form part of Port Authority’s shipping scheduling/Harbour Master directions, and may be progressed after the implementation of the Port Noise Policy.</p>
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This may be a curfew imposed on vessel's arrival at certain berths or, if more appropriate allowing vessels to leave any time after completion of cargo operations to limit the vessel's time (and hence noise emissions) at berth.

### **Curfew on port operations**

The current port at Glebe Island berths 1, 2, 7 and 8 and White Bay operates 24 hours a day, seven days per week as required. Shipping facilities around Australia and internationally operate on this basis as it increases efficiencies in supply chains and time at port. The existing operations at Glebe Island and White Bay operate on this basis and it is not proposed to change operating hours of port operations. However the implementation of the Port Noise Policy and Vessel Noise Operating Protocol will allow Port Authority to specifically address noise issues by setting limits and consequences should these be exceeded, particularly with the aim of addressing community noise concerns during night time hours.

Allowing operators to unload goods on a continual basis through the night provides the advantage of reducing the total number of days ships are in the port and therefore the total duration of the noise exposure on the community.

Restricting unloading operations increases the duration a vessel is required to be in port. Vessels, unlike aircraft, need to operate 24/7 to power critical systems including on-board accommodation whilst at berth, even whilst not unloading. So, vessels continue to emit noise within the port even if the facility is not operating. Overall noise exposure from a vessel visit may be reduced using 24 hour unloading, if unloading noise levels are appropriately limited, as 24 hour unloading can significantly reduce a vessel's time in port (often halved or more), thus reducing the total noise exposure.

The actual operational hours of the existing operators and the multi-user facility being developed at Glebe Island will depend on the operator's operational needs and port shipping movements. This does not necessarily mean that operations will take place during night time, however if they do, the operators will have to abide by noise limits and rules regarding night operations, as defined in their approvals and in the Port Noise Policy.

### **Additional Action 1:**

Port Authority commits to investigate a potential restriction or operational changes on vessels arriving and potentially departing during the night-time period based on review of actual noise levels during this period. The time to complete this review will be dependent of the actual frequency of vessel arrivals into the port, particularly at Glebe Island berths. The review will include analysis of noise monitoring data from a reasonable set of vessel arrival periods at Glebe Island 1 and 2 and Glebe Island 7 and 8 (eg 10-20 individual vessels per berth) following the commencement of multi-user facility operations and other commercial vessels which use these berths. The investigation will explore changes to operations involved in berthing and departing which may reduce noise. This review will also consider the advantages of implementing a vessel curfew for departures against the benefits of permitting a vessel to depart a berth and thereby reduce the overall noise exposure of an individual vessel.

### Issue 3

#### Independent review of Policy, & cumulative assessment

- independent review required of Port Noise Policy, including criteria;
- attempting to unduly influence the Environment Protection Authority (EPA);
- independent assessment required of all port noise;
- cumulative noise impacts (eg. all port impacts including existing White Bay Cruise Terminal (WBCT) noise, plus developments eg. multi-user facility, Hanson);
- model/cumulative assessment required of all activities including real noise impacts from all projects and traffic associated with the port

### Response

#### Independent review & influence over EPA

The EPA is the appropriate agency in NSW to advise on the application of its technical policies and guidelines, including the Noise Policy for Industry.

The development of the Port Noise Policy is an application of the EPA's Noise Policy for Industry and a committed action under an Environmental Improvement Program, required by one of Port Authority's Environmental Protection Licences (EPL).

The development of the Port Noise Policy was also required by Condition 5.1 of the approval for the multi-user facility which required the *implementation of a procedure to manage noise from uncharacteristically noisy vessels at the facility prior to operations commencing in consultation with the White Bay Glebe Island Community Liaison Group*. In addition, the Port Authority has responded to submissions made by the Department of Planning, Industry and Environment (DPIE) stating we are committed to developing a Port Noise Policy which will impose requirements to actively manage land-based noise and noise from vessels associated with the multi-user facility as well as other bulk ships berthing at Glebe Island and White Bay: <https://www.portauthoritynsw.com.au/media/4012/response-to-items-raised-by-department-of-planning-final.pdf>

The EPA sets the conditions, including in respect of noise, in its EPLs for port operators for shipping in bulk activities. The EPA is aware that the existing EPLs for shipping in bulk in Glebe Island and White Bay set by the EPA are inconsistent and have not effectively addressed vessel noise concerns. These inconsistencies have arisen as developments within the port have been approved with different requirements; and the noise environment has changed over time with the increased development around the port.

In its submission to the Port Noise Policy, the EPA noted that in a 2018 review, the EPA determined that the EPLs for shipping in bulk in Glebe Island and White Bay should be made more consistent and a precinct approach to managing noise investigated. The development of the Port Noise Policy is in line with this recommendation.

The EPA also commended Port Authority for taking a proactive approach and committing to the development of the Port Noise Policy and suggested that Port Authority commit to the development of the Port Noise Policy via one of its EPLs through an Environmental Improvement Program (which Port Authority has done).

The EPA noted that the draft Port Noise Policy can potentially mitigate and reduce over time noise impacts from both vessels and landside activities and in its submission has provided written support for the proposed approach to management of noise from commercial vessels as being “particularly innovative and practical”.

Port Authority has consulted with EPA to further develop the aspects of the Port Noise Policy with regard to landside activities, particularly the adoption of a noise management precinct approach for landside activities.

Following the implementation of the Port Noise Policy, Port Authority understands that EPA intend to review the EPLs for shipping in bulk in Glebe Island and White Bay in consideration of the Port Noise Policy.

### **Independent cumulative assessment of all port noise including traffic and all projects**

The Port Noise Policy has considered cumulative port noise through the preparation of Noise Maps for the whole port including both landside and vessel noise.

The draft Port Noise Policy did not have completed maps which included landside components, as further modelling of landside activities was required. These are being prepared and will be included in the final Port Noise Policy, Appendix I. These include all port-related landside activities at Glebe Island and White Bay, port-related traffic and vessels.

The maps have been prepared by an acoustic consultant on behalf of Port Authority.

The Port Noise Policy contains guidelines and sets fair and reasonable collective precinct-wide landside noise criteria for the port, with consequences if these are exceeded. The Noise Standard (Appendix H of the Port Noise Policy) documents the noise contribution allocated to individual port users to the whole-of-precinct noise criteria for landside activities. The Policy also recommends minimum planning controls (internal noise levels) for new developments that encroach on the port area.

The scope of the Port Noise Policy does not include construction activities which take place on the port including Transport for NSW projects, which are generally fixed term construction activities.

The cumulative impacts of developments at the port (such as the WestConnex and Western Harbour Tunnel projects) are assessed by each development as part of their individual planning assessment. Noise associated with construction activities carried out at Glebe Island and White Bay, including the use of barges, are not subject to this Policy where they are governed by an existing and comprehensive construction noise assessment and approval framework. This is to avoid duplication and inconsistency in noise management of construction activities in the port.

Port Authority will monitor landside noise of activities covered by the Port Noise Policy using the same noise loggers as for measuring ship noise, when there are no ships at berth. These noise monitors will generate data that will be included in regular noise monitoring reports that will be published on Port Authority’s website.

	<p>The maps in Appendix I of the Policy will be updated where necessary based on further data captured by the landside monitoring activities once the Policy commences (<b>Action 2</b>).</p> <div style="background-color: #003366; color: white; padding: 10px;"> <p><b>Amendments to Policy</b></p> <p>Final Policy will include complete cumulative noise assessment of all port activities in Appendix I.</p> <p><b>Additional Action 2:</b></p> <p>Further modelling inclusive of cumulative landside noise from port activities will be undertaken during the implementation of the Policy, based on actual monitoring data of landside noise from the port.</p> </div>
<p><b>Issue 4</b></p> <p>Other non-noise concerns</p>	<ul style="list-style-type: none"> <li>concerns including light / dust / air emissions / traffic / sediments and seagrass disturbance</li> </ul> <p><b>Response</b></p> <p>These submissions have been noted, however they are beyond the scope of the Port Noise Policy which focuses exclusively on noise impacts.</p> <p>These issues are generally addressed via:</p> <ul style="list-style-type: none"> <li>individual planning assessment processes and approvals for operations in the port;</li> <li>implementation of operational environmental and traffic management plans; and</li> <li>Port Authority's complaints handling process when complaints are received by Port Authority</li> </ul> <p>Specifically, in relation to shipping emissions and air quality impacts related to vessels, it is noted that the regulation of ship emissions in Australia is undertaken by Australian Maritime Safety Authority (AMSA) on a national level includes regulation of the minimum standards for fuel sulphur content for all ships (including cargo ships, bulk carriers and other vessels).</p> <p>Further information is provided here: <a href="https://www.amsa.gov.au/marine-environment/air-pollution">https://www.amsa.gov.au/marine-environment/air-pollution</a></p>
<p><b>Issue 5(a)</b></p> <p>Health concerns (from noise)</p>	<p><b>Response</b></p> <p>Effectively managing community noise exposure and noise levels from commercial ships is key to the successful operation of the port of Glebe Island and White Bay. To achieve this, Port Authority has developed a Port Noise Policy to manage noise proactively, consistently and fairly across port operations in Glebe Island and White Bay.</p>



	<p>The draft Port Noise Policy and draft Vessel Noise Operating Protocol aim to manage noise from commercial shipping in a way that is acceptable to the local community, while recognising and optimising Glebe Island and White Bay’s ongoing, long-term status as a working port.</p> <p>The Port Noise Policy and Vessel Noise Operating Protocol will assist with reducing noise from the landside operations and vessels using the port. The aim of the Policy is to address noise by ensuring the ship operators know about the Policy, Protocol, and consequences for non-compliance. The Policy will also work by identifying the noise from the ship quickly through extensive noise monitoring and having the escalating consequences to manage an individual ship that exceeds the trigger noise level in real time (either through mitigating the noise or changing operations).</p>
<p><b>Issue 5(b)</b> Health concerns (from non-noise issues)</p>	<p><b>Response</b></p> <p>Submissions relating to health impacts from non-noise issues are noted, however they are beyond the scope of the Port Noise Policy.</p>

## Issue 6

### Justify noise limits

- need to justify noise limits;
- proposed limits are too high;
- difference between internal and external noise criteria examples;
- should not be higher than landside levels;
- why Policy different to WBCT Noise Mitigation Strategy limits;
- why no evening trigger limit;
- need to adopt more stringent standards like Denmark

### Response

A summary of the justification of the trigger levels is provided below.

Further detail regarding this response is provided in Appendix B.

#### Approach used in determining limits

The Vessel Noise Guideline sets the trigger levels for vessels based on a level which is feasible and reasonable to achieve for the proposed berth by a vessel.

The Port Noise Policy sets the initial trigger level and provides for a reduction over time. The trigger level is only based on what is feasible and reasonable for the quietest 50% of vessels currently visiting the port to achieve and provides a starting point for future noise reduction.

Any new facility within the port requires development consent. Assessments, including the impacts on community, are required to be carried out during the Review of Environmental Factors (REF) or Environmental Impact Statement (EIS) process. For example, the [multi-user facility REF](#) process assumed the trigger level of 55 dBA for vessels and then considered if it is feasible and reasonable to apply noise mitigation to address the noise impact from vessels and the cumulative noise impact from the port. This is a continual process, with the need for mitigation to be reviewed based on cumulative impacts from the mapping in the absence of new projects, for example if ship numbers increased.

To date, Port Authority has applied noise mitigation treatments where vessel noise levels exceed 55dBA at night at WBCT and White Bay 4 at receivers that did not have existing treatment. A threshold of 55dBA at night before noise mitigation is applied is consistent with other forms of transportation noise at night such as road traffic. Australian Design Rules define the allowable (and achievable) noise levels from individual cars and trucks for the various classes. Whether the noise levels on specific roads near specific houses is reasonable and whether mitigation is required is instead covered in an REF or EIS.

The Port Noise Policy also provides new approaches, such as the noise maps and annual noise exposure maps (which show length of stay plus noise level effects), to guide the selection of feasible and reasonable noise mitigation and communicate impacts. These noise and exposure maps will be beneficial for any new development in the port or the development in the areas surrounding the port.

### **Landside and vessel limits**

The separation of vessel and landside noise sources will lead to reduced landside noise limits.

The EPA support the separation of vessel and landside noise sources.

While a ship is at berth, it shields the landside noise (acting as a barrier between the landside noise and the receivers across the water) and becomes the dominant source of noise. This means that separating the two noise sources rather than designating a single number for both land and vessel sources can lead to better outcomes for residents as the landside noise level can be set at a lower level to the vessel, and at levels which are more representative of actual landside noise emissions.

The landside levels would become the limits for the port when a vessel is not at berth.

Port Authority propose to monitor landside noise of port-related activities covered by the Policy using the same noise loggers as for ship noise and will measure landside noise contributions when there are no ships at berth.

A precinct wide basis has been taken for landside noise sources, providing an additional benefit to residents as noise should not exceed a particular level at the nearest sensitive receiver irrespective of the precise source of the noise or which tenant or combinations of tenants are emitting the noise.

This also has benefits to future port development which would be permitted provided that the collective noise level is not exceeded.

### **Noise limits for vessels**

Vessel trigger noise levels have been set at average levels of 55 decibels during the night and 60 decibels in the day. While the daytime noise limit for vessels is 60dBA, the target for 24/7 noise levels from the port is 55dBA or lower from an unloading vessel. The 60dBA limit provides short term allowance for a vessel that has reduced unloading rates at night following detection above 55dBA (which should be an infrequent occurrence). This allows the operators to operate at maximum unloading rates in the day, so as to reduce their length of stay. Any increased length of stay would increase the number of nights with noise exposure. Any such vessel would be required to develop and implement a management plan to reduce noise on subsequent visits and simply reducing night time unloading rates to reduce noise is not acceptable as a long term strategy as this increases the vessel's overall length of stay.

The triggers have been set for vessels based on noise levels that can reasonably be achieved while minimising impacts on the community. The 55dBA noise target for 24/7 operation and the night time noise limit for vessels are set at levels that would be achievable for 50% of vessels that currently use the port, with the aim to reduce this limit over time. This approach prevents the noisiest 50% of vessels from using the port unless they reduce their noise levels.

Historic limits set in EPLs, including those referred to in some submissions have been inconsistent and in some instances unachievable. The unachievable noise limits in some cases have been less than ambient noise levels without port operations and less than current EPA noise criteria. Unachievable noise limits have not resulted in vessel noise reduction or provided any incentive for noise reduction, as any reduction would still exceed the unachievable noise limit. Noise limits on some of the EPLs have been in place for many years. The

background noise levels are also likely to have increased over time, and development within the port has occurred. It is understood that the EPA recognises that the EPLs with noise limits within Glebe Island and White Bay require review.

In instances where noise limits have been set at unachievable levels, an approach in the past has been to prevent night time unloading to minimise noise. However, this has not been considered successful from a noise exposure perspective for a number of reasons, these are:

- Ongoing continuous night time noise impacts and significant night time sleep disturbance events when vessels restart additional generators, open cargo holds and prepare for daytime unloading. These were not regulated further as the required action of not unloading at night, had already been implemented.
- Vessel lengths of stay in port are often double or more with night time unloading restrictions. The increased length of stay has increased community exposure to night time noise from the operation of the vessel's auxiliary generators which are continually operated.

It should be noted that the draft Port Noise Policy night time noise limits of 55dBA are similar to existing levels of noise from Glebe Island. The aim of the Policy is to reduce these noise levels across the port over time with the currently anticipated aim of achieving noise levels at 50dBA (equating to the current ambient noise levels in the area).

Following review of submissions, Port Authority will amend the Port Noise Policy to make the ultimate goal of reaching night time noise levels equating to the then current ambient noise levels in the area.

#### **Evening limits**

In response to submissions raised, an evening limit for vessels will be included in the Vessel Noise Operating Protocol.

#### **Sleep disturbance events**

The EPA Noise Policy for Industry requires evaluation of the potential for sleep disturbance events, where the event noise levels are 15dBA or more above the background noise level at the time of the disturbance. Sleep disturbance events are defined as short, sudden events and in practice they typically each occur for less than a second. This does not mean that steady continuous noise doesn't cause sleep disturbance, however this is already considered in the setting of longer term average criteria over 15 minute, 1 hour and day or night time periods, being set at 55 dBA at night. Sleep disturbance events are measured using LA1, 1 minute and LAmax noise descriptors. LAmax is the most intuitive and is the maximum noise event we perceive. It is also the most stringent of the two descriptors and the LAmax noise level is always greater or equal to LA1,1minute.

Consideration was given to the existing noise environment and current EPA and other NSW infrastructure noise policy in setting the sleep disturbance criteria and the Port Noise Policy.

When vessels are near a residential area, they form the background noise level. Under the Port Noise Policy the range in vessel noise levels at night time will typically be between 50dBA and 55dBA while unloading and not above 55dBA. Using the most stringent LAmax noise descriptor and the lowest typical vessel noise level of 50dBA, we added 15dBA to 50dBA to obtain a sleep disturbance criteria of

65dBA L<sub>Amax</sub> which is an external noise level. For a residence with windows sufficiently open to meet fresh air requirements, under the Australian National Code of Construction (formerly the Building Code of Australia), internal noise levels are typically 10dBA less than external noise levels. On this basis an external level of 65dBA L<sub>Amax</sub> relates to an internal noise level of 55dBA L<sub>Amax</sub> as an upper limit.

The NSW EPA's Road Noise Policy provides a summary of current research on sleep disturbance and concludes that:

- Maximum internal noise levels below 50–55 dB(A) are unlikely to awaken people from sleep
- One or two noise events per night, with maximum internal noise levels of 65–70 dB(A), are not likely to affect health and wellbeing significantly.

For context, external L<sub>Amax</sub> noise levels at night, without vessels at Glebe Island and White Bay (based on noise logging undertaken at Abode and Reflections between May and June 2019) are typically in the range of 58dBA to 70dBA.

### **Amendments to Policy**

The Final Policy will include the following amendments:

- contain more detailed consideration of the noise limits adopted in the Policy and how they have been derived;
- accelerated consequences for vessel operators for exceeding the trigger levels for vessels during the evening period (refer to Vessel Noise Operating Protocol);
- in any future review of night time vessel noise triggers, the ultimate goal would be a minimum of 50dbA (being the anticipated minimum noise level that could reasonably be achieved by vessels given current technology) and would not be below ambient noise levels in the area surrounding Glebe Island and White Bay at the time.

## Issue 7

### Enforcement concerns

- concern re loopholes in Protocol;
- language used i.e. "MAY" not prescriptive;
- too many chances before a ban imposed;
- concern that Port Authority will not address ship noise adequately if exceedances occur;
- ships should ensure compliance prior to being permitted to enter port;
- reasonable and feasible should measures include encouraging newer ships which are quieter, or orientation of ships at berth;
- clear and unambiguous procedures will be much more effective;
- concern re implementation of Vessel Protocol and changes in vessel ownership;
- no timeframes for mitigation of noise.

### Response

The Port Noise Policy, and in particular the Vessel Noise Operating Protocol will be implemented by Port Authority using a range of contractual and operational means, including lease agreements between Port Authority and landside operators, and berth hire agreements between Port Authority and the ship/vessel operators, as well as monitoring and implementation of mitigation actions.

The concerns noted above are addressed under the following headings below.

#### **Loopholes or too many chances before “ban” imposed; not prescriptive enough; ambiguous procedures will not be effective; mitigation timeframes not specified**

Port Authority has considered the sequence of steps outlined in the Protocol that are required to investigate and take action against a ship which has been identified as exceeding the vessel trigger level. The timeframes for addressing and mitigating noise are dependent on how frequently a vessel visits the port. Hence the timeframes are a function of how many detections occur above the trigger (i.e. how many visits with exceedances have occurred).

It is acknowledged that ship noise is generally not regularly monitored in most ports and that the Protocol being adopted in Glebe Island and White Bay is one of the only policies of its type in the world. It is considered balanced to allow a ship the opportunity to address its noise level, particularly those that may be visiting the port for the first time, and may not have prior information regarding its noise level.

The sequence of consequences in the Protocol is cascading and depends on how far above the trigger level the noise has been measured and whether the exceedance occurs in the day or in the night. The sequence gives the vessel operator the chance to address noise issues before restrictions are imposed, including trying a range of changes to the vessel or its operations to achieve the required noise reductions.

The sequence that is followed for night time exceedances is:

- If noise is 1-2dB above trigger: the first detection will be notified to the operator. A second detection will require an attended noise measurement to confirm the noise level, and a management plan to be prepared by the ship operator to reduce the noise level to below the trigger level. The noise will continue to be monitored. Detections within this range are within the reasonable range of measurement error and will not result in further consequences.
- If the noise is between 3-5dB above the trigger level an attended measurement and management plan is required following the first detection above the trigger level, which will be monitored on the next visit. A second detection will require a corrective action to advise the ship to immediately address the noise exceedance, or further consequences will apply. A third detection will result in an operational restriction, which may include restricted unloading operations (or other proposed response) to reduce total noise. A fourth detection will result in the vessel being required to depart the berth between the hours of 8pm to 7am, at its cost.
- If the noise is greater than 5dB above the trigger, the corrective action is required from the first detection and operational restrictions required from the second detection; with night restrictions from the fourth detection. This timeframe (based on the number of successive visits) is considered fair as significant reduction of noise of this degree would presumably involve physical/engineering changes to the vessel which would need to be designed and implemented and be accommodated within its existing operations at other ports.

Port Authority will amend the Protocol to clarify process and consequences for any vessel after reaching 'three strikes' (3 corrective action notices) to make consequences more stringent after receiving a third corrective action regardless of level of exceedance. This will have the effect of allowing a noisy vessel only three chances to reduce its noise level.

Management Plans would be prepared by vessel operators as described above and would include any measures considered by an operator to be reasonable and feasible. The Plans would be reviewed by Port Authority. The Plans could include measures such as sourcing newer ships which are quieter, or changing the orientation of ships at berth if this still allows unloading of a ship and complies with any operation safety restrictions of the port.

For the evening and day time, a similar but less restrictive sequence applies, noting that day time exceedances are considered to cause less impact on the community than at night.

As the Policy sets the standard that is required to be met and explains the consequences of not meeting that standard this makes the Protocol clear and effective enabling a vessel operator to make changes to a vessel or its operations to reduce its noise output and sets a limit of how many detections (ie visits) are permitted before the next consequence is imposed.

#### **Ships should ensure compliance before entering port**

The Protocol is available to vessel operators and landside operators prior to arrival at the berth to allow operators to source vessels which will comply with requirements. Port Authority's monitoring system will detect each vessels' noise level at representative receivers upon arrival at the berth, which may be the first opportunity for operators to obtain a local and direct measurement of the vessel. Given that some contracts of hire of vessels extend for significant periods of time it would be prudent for an operator to ensure a vessel is compliant to avoid potential restrictions.

### **Change in vessel ownership**

A Ship Operator is defined in the Vessel Noise Operating Protocol. A Ship Operator: *means the person (natural or corporate) that owns or operates the ship or the cargo or on whose behalf the ship is being operated. If there are more than one, it refers to each of them severally and any two or more of them jointly.*

If there is a change in ownership of a vessel Port Authority will continue to manage a specific vessel's level of restriction in such situations. The requirements under the Protocol relate to a specific ship and to the Ship Operator. It is acknowledged that a Ship Operator (or owner) or vessel's name may change from time to time. The consequences under the Protocol for breaching the trigger noise levels is intended to apply to the ship, regardless of changes of ownership particularly in the circumstances described below where the registered ownership is transferred between companies within the same company structure. Additionally, all individual vessels have specific International Maritime Organisation (IMO) numbers and regardless of changes in name, can be identified. Should a vessel's ownership (or name) change, the current level of restriction on such a ship remains with it. In cases where a ship has reached 'Vessel Declined' status, the restriction will continue to rest the ship regardless of its owner.

Further, there are additional consequences for landside operators. Where a landside operator brings multiple ships into port, and has received a total of three Corrective Action Notices in a 12 month period (from any number of these ships), Night Restrictions apply for the next ship servicing the landside operator that exceeds these limits.

### **Amendments to Policy**

The Final Vessel Noise Operating Protocol will include the following amendment:

- clarify process and consequences for any vessel after reaching 'three strikes' (3 corrective action notices) in the Vessel Noise Operating Protocol to make consequences more stringent after receiving a third corrective action regardless of level of exceedance.



<p><b>Issue 8</b></p> <p>Noise from transport projects</p>	<ul style="list-style-type: none"> <li>• concern for noise from transport projects (WestConnex, Western Harbour Tunnel, Sydney Metro West etc) which are excluded from Policy;</li> <li>• construction noise not included in Policy</li> </ul> <p><b>Response</b></p> <p>Noise associated with construction activities carried out at Glebe Island and White Bay, including the use of barges, are not subject to this Policy where they are governed by an existing and comprehensive construction noise assessment and approval framework. This is to avoid duplication and the creation of inconsistency in noise management of construction activities in the port. There is an existing EPA guideline (NSW Interim Construction Noise Guideline) which informs assessment and management of construction noise.</p> <p>Port Authority doesn't regulate noise from these types of activities, this is undertaken by EPA and DPI&amp;E through regulatory means including planning approvals and environment protection licences. Large construction projects occurring at Glebe Island and White Bay are generally approved under conditions of consent and are generally licensed by the EPA. The Interim Construction Noise Guideline may be referenced by a condition of approval, or EPL.</p> <p>The cumulative impacts of developments at the port (such as Western Harbour Tunnel) are assessed by each development as part of their individual planning assessment, and taken into account in any approval that may be given. Conditions of approval which set requirements in relation to noise impacts are included for each project, usually including the preparation and implementation of Construction Environmental Management Plans to mitigate impacts of these activities.</p> <p>It should not be assumed that the actual landside noise levels experienced by local residents will be higher than the landside precinct noise limits set in the Port Noise Policy as these construction activities are occurring in specific parts of Glebe Island and White Bay which are located in areas geographically distinct from existing berths.</p>
<p><b>Issue 9</b></p> <p>Visual amenity</p>	<ul style="list-style-type: none"> <li>• visual amenity concerns re developments at port;</li> <li>• prefer green space</li> </ul> <p><b>Response</b></p> <p>These submissions have been noted, however they are beyond the scope of the Port Noise Policy.</p> <p>With respect to the visual impacts associated with the development of the multi user facility being undertaken by Port Authority, further information regarding visual amenity is available here: <a href="https://www.portauthoritynsw.com.au/projects-planning/projects/multi-user-facility-glebe-island/">https://www.portauthoritynsw.com.au/projects-planning/projects/multi-user-facility-glebe-island/</a>.</p>

<p><b>Issue 10</b></p> <p>Historical complaints</p>	<ul style="list-style-type: none"> <li>concern re historical complaints about vessels which have occurred in past, and how these have/have not been addressed (eg. Artania, Huanghai Advance)</li> </ul> <p><b>Response</b></p> <p>Port Authority responds to all complaints it receives by following its Complaints Response Procedure <a href="https://www.portauthoritynsw.com.au/community/community-complaints-procedure/">https://www.portauthoritynsw.com.au/community/community-complaints-procedure/</a></p> <p>In relation to specific examples, <b>Huanghai Advance</b> berthed at Glebe Island for approximately 3 days, departing on the evening of Thursday 21 May 2020. The vessel called to Sydney to collect the components of a tunnel boring machine (TBM), that was used to excavate new rail tunnels as part of the Sydney Metro City and Southwest public transport project. Due to the size of the componentry, passage by sea is the most effective method by which to transport this type of equipment offshore.</p> <p>No overnight work was undertaken. Complaints were raised about the noise from ship’s generators. This ship is not a regular visitor to Sydney.</p> <p>Port Authority informs all ships that noise and light should be kept to a minimum while at berth, noting that the auxiliary engines need to continue running while alongside because the crew onboard require a supply of power for the ship to allow liveable conditions (for example for lighting, air conditioning, refrigeration, equipment, communication systems etc). The cruise ship, <b>Artania</b>, at berth overnight at WBCT from 12-16 March 2020 (its stay was extended due to the ban on cruise ships under COVID-19), was issued with a breach notification for excessive engine/generator noise under Port Authority’s Noise Restriction Policy for cruise ships at White Bay. The ship’s agent has been informed that the ship must make physical or operational adjustments demonstrated to reduce noise before future bookings of this vessel will be accepted.</p> <p>From January 2021, all commercial ships visiting Glebe Island and White Bay will be subject to the requirements of the Port Noise Policy. Cruise ships will ordinarily be subject to the Noise Restriction Policy, unless in the unusual event that berths 4 or 5 are not being utilised. Where a cruise ship is berthed at any other berth within Glebe Island and White Bay they will be subject to the Port Noise Policy.</p>
<p><b>Issue 11</b></p> <p>Shore power</p>	<ul style="list-style-type: none"> <li>shore power should be installed and used for ships in the port</li> </ul> <p><b>Response</b></p> <p>For the bulk cargo vessels predominantly using Glebe Island and White Bay berths, which the Port Noise Policy primarily relates to, there are currently no known commercial vessels globally that can connect to shore power.</p> <p>It is also noted that shore power will not eliminate noise emission from a vessel. Shore power only eliminates the need for generators and not the on-board systems the generators are powering (for example, air conditioning and ventilation systems, and cargo unloading systems such as conveyors), which can also be significant noise sources. Shore power may therefore provide a minimal reduction in noise depending on the specific vessel.</p> <p>A separate investigation into shore power for WBCT is underway.</p>

<p><b>Issue 12</b></p> <p>General concern re ship noise</p>	<ul style="list-style-type: none"> <li>• general concerns re ship noise (concern not specified)</li> </ul> <p><b>Response</b></p> <p>The Port Noise Policy has been prepared specifically to address this concern, with the aim of providing a set of noise limits for the port, and specifically for vessels and consequences should those limits be exceeded, via the Vessel Noise Operating Protocol.</p>
<p><b>Issue 13</b></p> <p>Noise monitoring and reporting</p>	<ul style="list-style-type: none"> <li>• noise should be monitored at higher levels than just ground level;</li> <li>• make data visible to community when a vessel or landside operator has breached the limit and what the outcome was;</li> <li>• noise mapping covers annual periods over a calendar year with data averaged over a two year period - helpful for summarising the data, but this is not complete, should publish daily p25, p50, p90 and p99 measurements (or similar) from various receivers;</li> <li>• regular reporting to community;</li> <li>• real time response should be provided/reported;</li> <li>• should report regular complaints data</li> </ul> <p><b>Response</b></p> <p>Port Authority has committed to monitoring noise from the port as outlined in the Port Noise Policy, this will be undertaken using a noise monitoring system commencing from January 2021.</p> <p>The first task in establishing the monitoring system is to identify the most appropriate monitoring locations for measuring representative noise levels from each berth location. The identification of these locations will be undertaken by independent noise consultants on behalf of Port Authority. Specific monitoring locations (where they are not located on Port Authority land) will require agreement with the relevant land owners. These are very likely to be located at higher levels than ground level, as noise sources from ships are generally located at the exhaust of a vessel which is significantly higher than ground level. As an example, Port Authority has previously used monitoring locations in relation to WBCT with loggers mounted on light poles or on elevated land above the wharf.</p> <p>The noise monitoring result for each ship will be reported and published on Port Authority's website, including whether it exceeded the Vessel Noise Trigger Level. This is unable to be provided in real time, as following an initial detection by the noise loggers, an attended measurement will be required to be obtained by an acoustic consultant located on site near the vessel to obtain a verified reading of the noise level from the ship. This process has been adopted to appropriately identify the vessel and to ensure that the initial detection from the noise loggers originated from the ship.</p> <p>Exceedances &amp; dates would be published on Port Authority website as is the process for WBCT noise monitoring.</p> <p>Similarly landside noise levels will be monitoring and reported with results to be published. Exceedences of the precinct noise level will be identified.</p>

	<p>Vessel monitoring results will be based on LAeq over a 1 hour period as this provides enough data to establish a true indication of noise level, given the relatively constant noise emission from vessels once they are berthed.</p> <p>Breaches of landside noise levels by individual operators would be required to be addressed by each operator including in compliance with any applicable Environment Protection Licence requirements.</p> <p>In response to reporting of regular complaints data, this is provided to the local community members via the Glebe Island and White Bay Community Liaison Group meetings which are held quarterly and attended by 11 local community representatives. Details of the community liaison group can be found here: <a href="https://www.portauthoritynsw.com.au/community/glebe-island-white-bay-community-liaison-group/">https://www.portauthoritynsw.com.au/community/glebe-island-white-bay-community-liaison-group/</a></p>
<p><b>Issue 14</b></p> <p>Concern re need to windows shut</p>	<ul style="list-style-type: none"> <li>• concern re having to keep windows shut (to reduce noise)</li> </ul> <p><b>Response</b></p> <p>The Port Noise Policy notes that some properties in the vicinity of the port have had acoustic treatment incorporated in their design and construction. Additionally properties adjacent to WBCT and White Bay 4 have been offered noise treatment by Port Authority as part of the Noise Attenuation Program specifically to address cruise ship noise at the port. The benefits of acoustic treatment are increased with windows being shut as this provides further mitigation of noise although the decision as to whether to shut windows is an individual decision.</p>
<p><b>Issue 15</b></p> <p>Noise from ships cranes</p>	<ul style="list-style-type: none"> <li>• noise from ships cranes will be unacceptable</li> </ul> <p><b>Response</b></p> <p>The Port Noise Policy considers all noise impact from vessels including noise from ship's cranes. The noise limits imposed by the Vessel Noise Operating Protocol apply for any type of ship visiting the port.</p> <p>If this noise exceeds the vessel trigger then the consequences will apply.</p> <p>It is not proposed by Port Authority to use ships' cranes for the multi-user facility.</p>

<p><b>Issue 16</b></p> <p>Review of Noise Triggers</p>	<ul style="list-style-type: none"> <li>• why does the policy have a gradual long term reduction in noise as a goal?</li> <li>• isn't this another way of stating that the expected noise is unacceptable?</li> <li>• why isn't immediate noise reduction a standard of the policy?</li> <li>• waiting 3 years to update noise trigger levels is a very long time in the life of the community;</li> <li>• why can these not be reviewed annually?</li> </ul> <p><b>Response</b></p> <p>The goal of the Port Noise Policy is to achieve both a reasonable short term and balance the needs of the port to have a gradual long term reduction of vessel noise.</p> <p>The vessel trigger levels have been set to prevent 50% of the loudest ships to continue to visit the port. This means that the loudest ships will be required to reduce their noise levels to continue to visit the Glebe Island and White Bay.</p> <p>The Vessel Noise Operating Protocol provides the first means of requiring a vessel to achieve specific noise limits in the port. To Port Authority's knowledge this is the first type of protocol of this kind being implemented for vessels.</p> <p>Review of triggers after three years, rather than annually acknowledges that there needs to be a reliable set of vessel noise measurements from the various different vessels visiting the port over the period of time to undertake the statistical analysis. The period also allows discussion with landside operators and vessel operators on barriers to source vessels that could meet any reduced vessel noise trigger levels remembering that operators would be prevented from contracting with 50% of the current fleet visiting the port as well as the implementation of any noise mitigations.</p> <p>Noise mitigation for a vessel is recognised to be a significant undertaking and hasn't been required previously by regulators. The period allowed between review of the trigger level (every 3 years) allows vessel operators time to have data available regarding vessels using the port, and to implement mitigations where these are identified as being close to the vessel noise trigger levels. Mitigation will often require engineering or physical changes to a vessel which can generally only be undertaken when a vessel is scheduled for maintenance.</p>
<p><b>Issue 17</b></p> <p>Landside noise concerns</p>	<ul style="list-style-type: none"> <li>• concern for noise from landside port operations;</li> <li>• existing and future landside tenants should also be included</li> </ul> <p><b>Response</b></p> <p>All existing and future tenants of the port are required to comply with the requirements of the landside guidelines in the Port Noise Policy. Any port development within the port by an existing tenant or new port tenant would need to be assessed in accordance with the Policy in order to be considered acceptable to Port Authority.</p>

## Issue 18

### Multi-user facility approval

- objection to multi-user facility approval pathway;
- lack of business case for multi-user facility

### Response

Port Authority is the determining authority for the Multi-User Facility under Part 5 of the Environmental Planning and Assessment Act 1979 (the Act) pursuant to the provisions of Division 13 of the State Environmental Planning Policy (Infrastructure) 2007. This is an automatic and non-discretionary statutory provision and is consistent with the same approach that applies to other public authorities for comparable infrastructure projects.

Under the Act, Port Authority must fully examine and consider all matters affecting, or likely to affect, the environment as a result of the Project. This was done through a REF, which included:

- an assessment against the Environmental Planning and Assessment Regulation 2000
- a specialist Noise Impact Assessment
- a specialist Air Quality Impact Assessment, an Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth) protected matters review and
- an assessment of other matters including traffic and transport; soils, water and waste; safety and emergency response; heritage; visual amenity; ecology; socio-economic; cumulative impacts; and climate change and sustainability.

The REF was placed on public exhibition between 31 January and 12 March 2018 and over 300 submissions were received. Port Authority prepared a RtS report which included additional:

- noise impact assessment
- air quality impact assessment for projected ship emissions and
- consideration of the approvals process; the strategic need and justification for the Project; options and alternatives; traffic and transport; water and waste; navigation impacts; visual amenity; ecology; socio-economic; and cumulative impacts.

Based on the assessment, the conclusion was reached that the Project was not likely to significantly affect the environment.

A peer review was undertaken by DPI&E which found the assessment pathway for the Project to be appropriate.

Glebe Island is currently a commercial port facility, which operates up to 24/7 as required. The introduction of a Multi-User Facility does not seek to change this. The Multi-User Facility would introduce a medium-term port activity at Glebe Island which is consistent with the use of Glebe Island as a working port, the zoning of the land and relevant Government strategies.

NSW Government's strategic vision for Sydney Harbour recognises the importance of, and are supportive of, a working port and Glebe Island's strategic importance in supplying bulk materials to the Sydney market as one of the last remaining deep-water wharves west of the Sydney Harbour Bridge. This includes the Greater Sydney Region Plan 2018, the Eastern City District Plan 2018, the State Infrastructure Strategy 2018-2038 and the Freight and Ports Plan 2018-2023.

<p><b>Issue 19</b> Cruise ships</p>	<ul style="list-style-type: none"> <li>• cruise ships should be included in the Policy;</li> <li>• will the WBCT Strategy be superseded by the Port Noise Policy?</li> </ul> <p><b>Response</b></p> <p>The WBCT Noise Mitigation Strategy was established in direct response to the noise levels of cruise ships, which exceeded the Planning Approval conditions of the cruise facility. This Strategy was developed by Port Authority and is now a required action resulting from the Project Approval. The Strategy was accepted by DPI&amp;E and must continue to be implemented by Port Authority.</p> <p>The Port Noise Policy complements the WBCT Strategy in respect of noise monitoring and addressing ships which exceed specified limits.</p> <p>Cruise ships and WBCT facility noise is included in the noise maps presented in Appendix I of the Port Noise Policy, providing an overall representation of noise from the port as a precinct.</p>
<p><b>Issue 20</b> Location of Port</p>	<ul style="list-style-type: none"> <li>• port should be relocated to Port Botany / Port Kembla</li> </ul> <p><b>Response</b></p> <p>The Port Noise Policy has been prepared to address noise specially from operations at Glebe Island and White Bay in the acknowledgement that port operations will continue to be carried out in these locations. Glebe Island and White Bay is the only remaining port in Sydney Harbour for bulk handling of cargo. The Port Noise Policy does not consider the question of whether the port should be operating in this location, but on the premise that it will continue to do so, provides a comprehensive framework of assessment and management of noise to enable port operations to be undertaken whilst minimising the impact on community.</p> <p>Port Botany is a dedicated container and bulk liquid/gas port with no facilities, or land available, for the development of facilities for the receipt of construction material that is handled in bulk (not containers) utilising self-discharging ships. Similarly, receipt of bulk products in regional ports would necessitate long haul truck movements over already congested roads. A single ship can carry 1100-1500 truck loads of bulk material to within a few kilometres of their end use in some of the largest transport developments undertaken in Sydney.</p> <p>Similarly any relocation of port activities from central Sydney to Port Kembla would entail significant truck movements required to transport construction materials into the city where development will continue to occur.</p>
<p><b>Issue 21</b> Supports port use</p>	<p><b>Response</b></p> <p>Noted.</p>

<p><b>Issue 22</b></p> <p>Noise attenuation</p>	<ul style="list-style-type: none"> <li>• treatment should be provided for residences like the program for WBCT</li> </ul> <p><b>Response</b></p> <p>The Port Noise Policy outlines that acoustic treatment is a mitigation strategy that may be considered to provide mitigation to residences affected by noise.</p> <p>There are a number of residences surrounding the port which have already been treated to allow for noise as outlined in Appendix H of the Policy. It is noted in Appendix H that many newer developments surrounding the port have been required to have acoustic treatment included in their construction as required by their development approval.</p> <p>Port Authority, as part of its Noise Mitigation Strategy for WBCT, has committed to at-receiver treatments for eligible properties to address exceedances of the noise criteria outlined in the planning approval for the terminal.</p>
<p><b>Issue 23</b></p> <p>Seasonality</p>	<ul style="list-style-type: none"> <li>• under section 6.4.1 - Seasonality of ship visits may be more concerning than less;</li> <li>• assuming that the community are less annoyed because of the seasonality is a stretch</li> </ul> <p><b>Response</b></p> <p>The Port Noise Policy applies to all vessels and all landside port operations regardless of the season. The ‘seasonality’ of port operations does affect how much noise is generated from the port between different periods. For example cruise ships have a distinct ‘season’ where more ships visit the port during October to March.</p> <p>Other types of ships such as bulk ships generally are not seasonal and regularly visit throughout the year.</p> <p>As all vessels, including cruise ships, have been modelled for production of the noise maps provided in Appendix I of the Policy, to appropriately communicate the overall noise exposure on the community different seasons have been highlighted in the noise maps to identify that noise levels fluctuate between seasons, as a results of ship visits at different times of the year.</p>
<p><b>Issue 24</b></p> <p>Boom gate</p>	<ul style="list-style-type: none"> <li>• concern re boom gate operation at Buchanan St (White Bay)</li> </ul> <p><b>Response</b></p> <p>The boom gate and security process at Roberts St provides appropriate access control to the port as required. There are restrictions on the use of Roberts St entrance such as:</p> <ul style="list-style-type: none"> <li>• Cruise passenger vehicles must use the Port Access Road, not Roberts St, to minimise the amount of noise from this area.</li> <li>• Vehicles such as garbage trucks accessing WBCT are not permitted to enter prior to 7am in accordance with the Operational Environmental Management Plan.</li> </ul> <p>In response to this submission Port Authority investigated noise from the boom gate at Roberts St, and found its operation to be normal for this type of operation. Port users and security team have been reminded of community surrounding the entry point and the need to keep noise to a minimum.</p>



<p><b>Issue 25</b> Day time limits</p>	<ul style="list-style-type: none"> <li>concern re noise during the day for shift workers</li> </ul> <p><b>Response</b></p> <p>This submission is noted, and it is acknowledge that day time impacts may occur for residents who are at home during the day for any reason. However, the Policy also considers the general approach adopted by EPA (for example in the Noise Policy for Industry) which indicates that stricter noise limits should apply during the night when more impacts have the potential to occur due to lower background noise.</p>
<p><b>Issue 26</b> Supports the policy</p>	<p><b>Response</b></p> <p>Noted.</p>
<p><b>Issue 27</b> 'Annoyance' factors</p>	<ul style="list-style-type: none"> <li>include annoyance modifying factors in limits</li> </ul> <p><b>Response</b></p> <p>Some submissions misread the section dealing with modifying factors such as tonality, intermittency and low frequency. The Port Noise Policy imposes a penalty of up to 5dBA for each of these factors and where there is more than one factor the total value of penalties is capped at 10dBA. This approach is the same as the existing approach for such factors as outlined in the EPA's Noise Policy for Industry. The comparison to other types of transportation noises was that other forms do not measure or impose penalties for modifying factors.</p> <p>Port Authority appreciates that these modifying factors, such as low frequency, can cause annoyance and disturbance to the community and are a component of noise from ship engines. Mitigation measures may reduce the overall noise of a vessel (dBA levels), though increase these modifying factors by making the low frequency component more noticeable.</p> <p>To further limit the impact of low frequency noise, further review of the Port Noise Policy in future may include a more sophisticated Vessel Noise Operating Protocol to introduce particular noise levels for low frequency noise (introducing additional factors than dBA). This development is dependent on the review of further data to be collected in relation to low frequency noise from vessels and will require specific technology for the noise monitoring equipment and database, which have yet to be implemented.</p> <div data-bbox="465 1136 2067 1316" style="background-color: #003366; color: white; padding: 10px;"> <p><b>Amendments to Policy</b></p> <p>The wording regarding annoying characteristics in the Port Noise Policy will be reviewed and made clearer if required. Further information is provided in Appendix B.</p> </div>

**Issue 28**

## Consultation

- policy needs ongoing consultation

**Response**

It is proposed that the policy will be reviewed in conjunction with stakeholders on a five-yearly basis. The policy previously stated:

*Port Authority will review this policy every five years, in conjunction with EPA and Department of Planning, Industry and Environment and stakeholders to ensure that the policy still meets the legislative framework and properly addresses the challenges of the port of Glebe Island and White Bay.*

**Amendments to Policy**

The Final Policy will include the following amendment in Section 4.2:

- undertake Policy reviews on a five-yearly basis, and specifically include consultation with the Glebe Island and White Bay Community Liaison Group.

# Appendix B – Technical Responses

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