

Port Authority of NSW

White Bay Cruise Terminal Noise Mitigation Strategy Response to Submissions Report

September 2017

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VERSION HISTORY

Reference	Date	Prepared	Comment
FINAL v1.0	April 2017	Port Authority	Version submitted to DP&E for review.
FINAL v2.0	September 2017	Port Authority	Version updated to include DP&E feedback.

1 Introduction

Port Authority of New South Wales (Port Authority), formerly Sydney Ports Corporation (Sydney Ports), has approval to operate the White Bay Cruise Terminal (WBCT) located within the White Bay port precinct on the Balmain Peninsula, in accordance with Project Approval (MP 10_0069) dated 2 February 2011 (as modified). Subsequent to approval, WBCT was constructed comprising a new purpose built cruise passenger terminal at White Bay 5 (WB5) with a secondary temporary berth at White Bay 4 (WB4). Operations at the WBCT commenced on 15 April 2013.

On cruise ship days, WBCT is used for passengers embarking and disembarking cruise ships berthed at WB5 (and / or WB4) and associated activities (there were a total of 120 vessel visits in the financial year end June 2016, including 16 overnight visits).

Alternatively, on non-cruise ship days (except during unforeseen circumstances such as if a ship is forced to berth due to extreme weather or mechanical failure) the WBCT facility is available for a variety of functions and events.

While WBCT operations are consolidated under Project Approval (MP 10_0069), the approved activities can be considered separately, namely:

- Cruise Operations; and
- Function and Event Operations.

In accordance with Project Approval (MP 10_0069) condition D15, the WBCT operations are managed under an environmental management framework and in accordance with two Operational Environmental Management Plans (OEMPs), namely:

- WBCT OEMP Cruise Operations dated March 2013; and
- WBCT OEMP Function and Event Operations dated May 2013.

Both OEMPs include Operational Noise Management Plans (ONMPs), associated noise monitoring programs, noise mitigation and management measures, and complaint response procedures.

2 Overview of the Noise Mitigation Strategy

A Noise Mitigation Strategy was developed by Port Authority in November 2016 to address the ongoing issue of noise from cruise ships at WBCT.

The strategy includes a suite of initiatives that have been designed to minimise the impact of cruise ships on the local community. The Noise Mitigation Strategy Report prepared by SLR Consulting Australia Pty Ltd (and released for public consultation) outlined the rationale for the selection of the preferred elements of the strategy.

The strategy comprises a set of initiatives to be undertaken by Port Authority at WBCT. The three elements of the strategy include:

1. Noise Attenuation Program: noise attenuation comprising of physical treatments to homes to a defined area of residences where noise modelling indicates that average noise levels reach or exceed 55 decibels at night ('attenuation eligibility threshold').

The Noise Attenuation Program is designed to provide physical treatments to homes to reduce the levels of noise experienced in areas affected by cruise ships. The program includes the following noise reduction treatments.

- Upgrading windows and external doors
 - Enclosing or sealing gaps, vents and openings, where practical
 - Installing new windows or external doors
 - Installation of ventilation systems to allow for the circulation of fresh air when windows are closed.
2. Noise Restriction Policy: a new policy restricting on-deck music and public announcements not related to safety and restrictions for ships which cause further exceedances of the attenuation eligibility threshold.
 3. Noise logging: continuous real-time logging to monitor noise levels and guide ongoing noise management.

An updated Operational Noise Management Plan (ONMP) was also prepared and released for consultation to supplement the Noise Mitigation Strategy Report.

3 Overview of Community Consultation

Community consultation was an integral part of the development of the strategy. The consultation program included the following components:

- Letters and a factsheet about the strategy were distributed to local community on 22 November 2016
- Ads were placed in the Inner West Courier on 22 and 29 November 2016
- Website information and consultation documentation (Noise Mitigation Strategy Report, ONMP, complaints process, feedback form, factsheet) were available online from 22 November 2016
- Drop in briefing sessions were held on 29, 30 November and 1 December 2016
- Community representatives on the inter-agency working group for WBCT were informed via email on the proposed strategy on 23 November 2016
- Community members of the White Bay/Glebe Island Community Liaison Group were informed via email on the proposed strategy on 23 November 2016
- Briefing session with agencies (Environment Protection Authority, Department of Planning and Environment, Sydney Local Health District Public Health Unit) was held on 22 November 2016
- Briefing session with Administrator of Inner West Council was held on 28 November 2016
- Cruise lines (including Carnival, Australian Cruise Association, Cruise Lines International Australasia (CLIA) & Royal Caribbean Cruise Lines) were briefed on 21 November 2016
- Second letter was distributed to local community (wider area) on 11 January 2017 reminding them of the closing date
- Meeting held with Inner West Council representatives to respond to their submission on 17 March 2017

The community consultation period was open from 22 November 2016 to 31 January 2017.

This report forms an important part of the community consultation process as it documents the issues raised during the consultation period, provides a response to each of the issues and describes what, if any, changes to the proposed Noise Mitigation Strategy are required.

3.1 Summary of Submissions

Port Authority received 55 formal submissions in response to the public exhibition of the Noise Mitigation Strategy. Submissions were received from a mix of individual residents, resident groups, Local Council, Government authorities and industry organisations. It should be noted that multiple submissions were received from some individuals and were counted as one submission to avoid double counting. Some submissions were also considered as queries and requests for further information and as such were not considered as formal submissions. The content of the submissions are contained in Appendix A (specific submissions) and Appendix B (individual submissions).

Figure 1 shows the issues raised by number of mentions of this issue, and indicates which of those issues were noted most frequently. Most submissions noted more than one issue. Issues which were only mentioned in one submission are not included in the graph.

The key issues raised in the submissions, and Port Authority's response to each issue, are summarised in Table 1.

Figure 1 - Graph of No. of Submissions by Issue

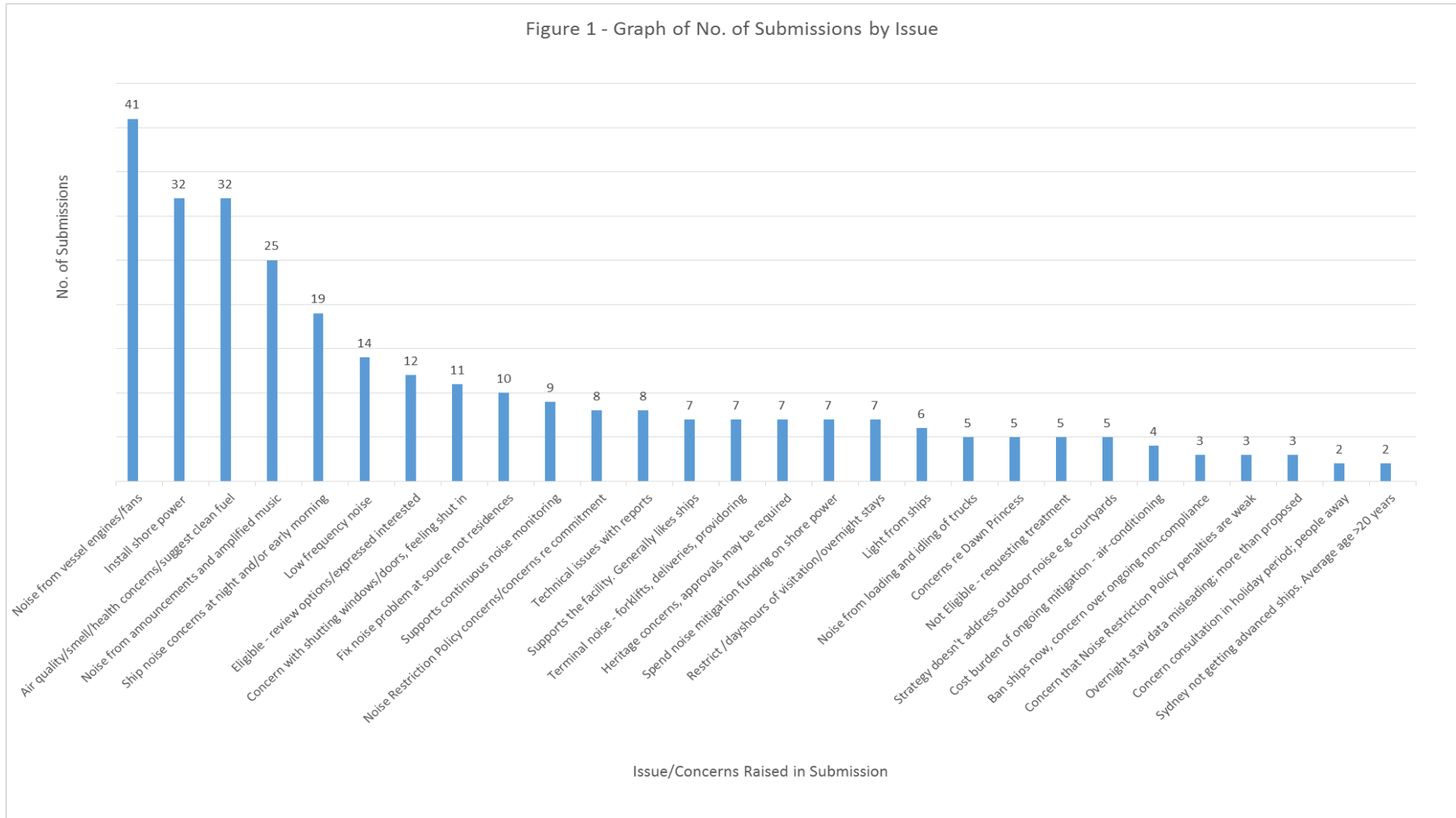


Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
41	Concerned about noise from vessel engines/fans	3,4,6,7,8,11,13,14,16,17,18,20,22,23,24,25,26,27,28,29,31,32,33,35,36,37,39,40,42,43,44,45,46,47,48,49,50,51,52,53,54	<p>Vessel engine/fan noise is one of the key noise sources which is addressed through the implementation of the Noise Mitigation Strategy.</p> <p>As part of the Noise Mitigation Strategy, Port Authority has developed a Noise Attenuation Program, which provides noise treatment to eligible residences to mitigate noise impacts to residents, including engine/fan noise.</p> <p>Additionally, vessel noise (including engine/fan noise) is to be monitored by Port Authority and vessels which have noise levels which are found to exceed the Noise Restriction Policy limit will be given an initial warning to make improvements; a second non-compliance will result in overnight relocation of the ship from WBCT; and a third non-compliance will result in future bookings not being allowed at WBCT.</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
32	Preferred solution is to install shore power at WBCT	6,8,11,12,13,18, 22,23,24,26,27,28, 29,30,32,34,35,36, 37,38,40,42,43,44, 45,46,47,48,51,52, 53,54	<p>The shore power feasibility, costing and emissions benefit study was released by Government in July 2017. Based on investigations and potential air emissions benefits, the report does not recommend the installation of shore power at White Bay Cruise Terminal as a cost effective solution.</p> <p>The report further recommended that Port Authority of NSW continues working collaboratively with relevant stakeholders to implement the Noise Mitigation Strategy for White Bay Cruise Terminal in 2017.</p> <p>In developing the Noise Mitigation Strategy, Port Authority investigated and considered the potential noise mitigation benefits of shore power, and while shore power was estimated to provide up to a 10dBA noise benefit, it would be at a significant cost.</p> <p>It is noted that only 25% of current cruise ships visiting WBCT are capable of connecting to shore power, and Port Authority have no evidence to believe that this percentage will increase in the future.</p>

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No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
32	<p>Concern over air quality, impacts of emissions on health</p> <p>Some submissions suggest use of clean fuel, encourage cleaner ships</p>	5,6,7,8,9,13,14,22,23,24,25,26,27,28,32,34,35,36,37,39,40,42,43,44,45,46,47,48,50,51,52,53	<p>Port Authority acknowledges the concerns of residents around air quality and emissions from vessels. However it is noted that the Noise Mitigation Strategy has been developed in response to Condition of D1 of the WBCT Project Approval which relates to compliance with noise criteria, and hence air emissions are outside the scope of the strategy.</p>
25	Concerned about noise from announcements and external amplified music	3,6,9,8,11,13,14,17,18,20,21,22,23,26,27,31,34,35,38,39,40,42,43,49,53	<p>Noise from vessel public address (PA) announcements and external amplified music on vessels are some of the key noise sources to be addressed through the implementation of the Noise Mitigation Strategy.</p> <p>As part of the Noise Mitigation Strategy, Port Authority has developed a Noise Restriction Policy, which is a new policy designed to impose penalties for ships which are found to have been non-compliant with the requirement not to make on-deck PA announcements (except where they are safety-related) or play amplified music on-deck.</p> <p>Non-compliant ships will be given an initial warning to make improvements; a second non-compliance will result in overnight</p>

Table 1 – Responses to Submissions

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			<p>relocation of the ship from WBCT; and a third non-compliance will result in future bookings not being allowed at WBCT.</p> <p>With regard to the suggestion in some submissions that vessel PA safety announcements should be internal only, or externally only during an active safety situation, Port Authority understands residents' concerns, however these safety announcements are required by the Australian Maritime Safety Authority under an internationally agreed convention, and must be undertaken (in areas of the ship including external decks) prior to a vessel's departure from the berth.</p>
19	Specific concern over noise from ships at night and/or very early in morning	3,6,8,13,14,16,17, 18,25,36,39,40,42, 43,46,48,49,52,53	<p>The Noise Mitigation Strategy was developed with specific consideration of the impacts of vessel noise at night.</p> <p>The Noise Attenuation Program is designed to provide mitigation of noise impacts for residents at all hours of the day and night.</p> <p>The most stringent criteria for eligibility for the Noise Attenuation Program are based on addressing the impacts of noise at night.</p> <p>The Noise Restriction Policy includes penalties for non-compliance that result in a ship being relocated from WBCT at night (between 22:00-07:00); or for a further non-compliance banned from WBCT in the future.</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
14	Low frequency noise/vibration concerns	3,4,8,29,32,36,27,40,43,45,48,49,52,53	<p>Low frequency noise, which can cause vibration, is caused by certain vessels due to the operation of their engines and fans. Low frequency noise is one of the key noise sources to be addressed through the implementation of the Noise Mitigation Strategy.</p> <p>The Noise Mitigation Strategy Report (Section 3.3.2) identifies which of the vessels have been identified with low frequency noise emissions. The eligibility threshold used in the Noise Attenuation Program assumes that all vessels have a low frequency noise component (Noise Mitigation Strategy Report Section 4.4.6).</p> <p>The Noise Attenuation Program is designed to provide treatment to eligible residences to mitigate noise impacts to residents, including low frequency noise impacts, where possible.</p>
12	Eligible for treatment and requesting further investigation of options	1,4,5,9,10,13,14,16,26,33,47,54	<p>In addition to all owners of properties identified as eligible for the Noise Attenuation Program, consultation is to be undertaken directly with the relevant owners who have made submissions, with Port Authority committed to perform individual assessment of all properties which experience noise impacts from WBCT, should this be requested.</p>

Table 1 – Responses to Submissions			
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11	Concern with shutting windows/doors, feeling shut in	5,27,28,40,42,44,48,51,52,53,55	The Noise Attenuation Program includes the provision of mechanical ventilation to provide adequate flow of external fresh air into the room, when the windows are closed.
10	Fix noise problem at the source not at residences	7,28,29,32,40,42,48,50,51,52	Identification of noise sources of noise on-board vessels, trials of operational changes to reduce these sources, and proposed engineering solutions to reduce noise were investigated and are described in Section 5.2.1 of the Noise Mitigation Strategy Report.
9	Supports continuous noise monitoring, publicly available, with reports of breaches of Noise Restriction Policy, some submissions suggest monitoring should be independent of Port Authority	8,27,30,36,37,42,45,48,53	<p>Port Authority proposes to use an independent acoustic consultant to install and collect data from noise monitoring devices situated at two locations in Grafton St, Balmain.</p> <p>The data would be available in real time to Port Authority to monitor compliance with the noise limit defined in the Noise Restriction Policy.</p> <p>Monitoring results for each vessel would be summarised and made publicly available on a monthly basis on the Port Authority website.</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
8	Noise Restriction Policy concerns, e.g. regarding Port Authority's commitment to implement Policy, Strike 3 implications	6,7,27,39,40,42,48,50	Port Authority is committed to enforcement of the Noise Restriction Policy.
8	Specific technical issues with Noise Report/ Data/Criteria, hard to comprehend	4,22,29,36,37,40,48,52	<p>These submissions raise several technical acoustical issues.</p> <p>It is acknowledged that the report is of a highly technical nature, hence a factsheet was also prepared to summarise the report and drop in centre days were held to discuss the findings with the community.</p> <p>Responses to specific issues especially those raised by submissions 4, 29, 36, and 37 are included in a separate report prepared by acoustic consultant SLR and are included in Appendix C.</p> <p>Responses to further specific technical issues/recommendations including those raised in Submissions 22, 40, 48 and 52 are provided within this Table.</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
7	Supports the facility; Generally likes ships	9,15,19,33,38,41, 51	Acknowledged.
7	Terminal operational noise - forklifts, deliveries, providoring	6,9,18,23,40,42,43	Port Authority has raised the concerns from residents regarding landside terminal noise including noise from forklifts, truck movements and idling, providoring, horns and warning beepers, and has requested all landside operators to review landside noise generated noise from their operations, investigate mitigation options and advise what measures can be implemented.
7	Approvals may be required to install mitigation measures on heritage properties	1,7,14,32,40,48,52	<p>Port Authority is aware of the heritage nature of the local area. Section 6.1.2 of the Noise Mitigation Strategy Report includes relevant heritage information relating to the implantation of the Noise Attenuation Program.</p> <p>Prior to any work occurring, appropriate environmental assessments (e.g. Review of Environmental Factors) together with any associated specialist studies, including heritage impact statements as appropriate, and consultation with Local Council, and where required, approval from NSW Heritage, subject to the extent of any heritage impact, would be undertaken.</p> <p>As discussed in the Noise Mitigation Strategy Report Section 5.4.1, the proposed Noise Attenuation Program would involve a</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
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customised package of noise reduction treatments to dwellings. In some dwellings the preferred noise reduction package may require the use of a secondary system, such as secondary windows (or in some cases doors) fitted interior to the dwelling. The use of secondary systems preserves the dwelling façade and the appearance and function of existing windows or doors.

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
7	Spend the noise mitigation funding on shore power facilities	5,12,38,42,48,52,54	<p>The shore power feasibility, costing and emissions benefit study was released by Government in July 2017. Based on investigations and potential air emissions benefits, the report does not recommend the installation of shore power at White Bay Cruise Terminal as a cost effective solution.</p> <p>The report further recommended that Port Authority of NSW continues working collaboratively with relevant stakeholders to implement the Noise Mitigation Strategy for White Bay Cruise Terminal in 2017.</p> <p>In developing the Noise Mitigation Strategy, Port Authority investigated and considered the potential noise mitigation benefits of shore power, and while shore power was estimated to provide up to a 10dBA noise benefit, it would be at a significant cost.</p> <p>It is noted that only 25% of current cruise ships visiting WBCT are capable of connecting to shore power, and Port Authority have no evidence to believe that this percentage will increase in the future.</p>

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7	Restrict days/hours of visitation/overnight stays and/or ban overnight stays until shore power introduced or noise addressed	30,36,40,42,51,52,53	<p>The Noise Mitigation Strategy identifies the approach to provide noise attenuation to eligible residences, and implement a policy to restrict external PA announcements and music on-deck. The Noise Restriction Policy includes berth restrictions to those vessels which are non-compliant.</p> <p>In developing the Noise Mitigation Strategy, Port Authority considered the noise mitigation benefits of shore power, and while shore power was estimated to provide up to a 10dBA noise benefit, it would be at a significant cost.</p>
6	Concern regarding light spill from ships	9,20,33,40,48,52	Port Authority acknowledges the concerns of residents around light spill from vessels. However it is noted that the Noise Mitigation Strategy has been developed in response to Condition of D1 of the WBCT Project Approval which relates to compliance with noise criteria, and hence lighting emissions are outside the scope of the strategy.
5	Noise from loading and idling of trucks	9,23,27,40,43	Port Authority has raised the concerns from residents regarding truck noise, and has requested all landside operators review truck noise from their operations, investigate mitigation options and advise what measures can be implemented.

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No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
5	Concern regarding noise from the Dawn Princess	2,16,47,48,52	<p>Based on noise measurements taken on behalf of Port Authority and EPA, the Dawn Princess was identified as a significantly noisy vessel. EPA required that actions were taken by the cruise line (Carnival) to reduce noise emissions, and it was identified by Carnival that the noise attenuation baffles had been removed following material failure, due to risk of failed units causing significant damage to the vessel, and not re-instated. These baffles were re-instated by Carnival in November 2016, and the Dawn Princess noise emissions have been significantly reduced.</p> <p>EPA advised the Dawn Princess noise levels measured on the 20 November 2016 visit to WBCT were 55.4dB (LAeq 15 minute), which is significantly reduced from the measurement of 66dB reported by SLR in the Noise Mitigation Strategy Report.</p> <p>The Noise Mitigation Strategy Report has been updated to include this result.</p>
5	Not eligible for noise attenuation under the proposed Noise Mitigation Strategy but requesting consideration for treatment	4,8,18,49,53	<p>The details of the relevant properties have been noted. Consultation is to be undertaken directly with the relevant owners, and further investigations may be undertaken to assess these properties once the Noise Attenuation Program commences, subject to the endorsement of DP&E.</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
			<p>Port Authority advises that the Noise Attenuation Program includes the ability for any residence (not currently identified as eligible) to be considered on a case by case basis, and subject to source noise investigation and approved field noise monitoring, as required.</p>
5	The strategy does not address outdoor noise e.g. courtyards	37,40,48,52,55	<p>Reducing noise to an external façade (e.g. a courtyard) is generally preferred under a Noise Mitigation Strategy. This is achieved by directly reducing the source of the noise, or introducing a barrier between the noise source and the receiver, where reasonable or feasible. The Noise Mitigation Strategy identified that directly reducing the source of ship noise was not reasonable or feasible, and the installation of a noise barrier would introduce significant visual impact and was therefore considered unlikely to be reasonably acceptable to the community.</p> <p>The proposed Noise Attenuation Program aims to generally achieve the recommended internal noise levels for habitable rooms (refer Noise Mitigation Strategy Section 4.6). Also as discussed in Noise Mitigation Strategy Report, guidelines with respect to the use of external residential recreational areas are relatively higher by comparison with the internal noise levels. Additionally, the WBCT Noise Restriction Policy aims to reduce</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
			<p>noise impacts in external residential recreational areas by controlling and managing noise levels from external public address systems on vessels. Furthermore, the policy prevents significantly noisy ships from berthing at WBCT, benefiting both internal and external dwelling areas.</p> <p>Should courtyards in specific residences eligible for treatment readily lend themselves to being treated for noise and thereby reduce internal noise levels also, this may be considered by Port Authority at the time of rolling out the Noise Attenuation Program.</p>
4	Cost of ongoing mitigation such as air-conditioning is considered a burden	27,40,48,52	It is not proposed to include air-conditioning systems as part of the Noise Attenuation Program. However the Program includes the provision of mechanical ventilation to provide adequate flow of external fresh air into the room, when the windows are closed.
3	Ban cruise ships now which exceed approved noise criteria from WBCT; concern over ongoing non-compliance	6,40,42	<p>The Noise Mitigation Strategy Report summarises the results of noise monitoring (Section 3.3.1), which demonstrate that cruise ships can generate operational noise levels in excess of the noise criteria specified in condition D1 of the WBCT Project Approval.</p> <p>As a result, in accordance condition D1, which states “<i>where these criteria cannot be met, the Proponent shall take appropriate measures to limit any impacts and shall submit a report to the</i></p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
			<p><i>Director General upon the implementation of those measures. These measures may include operational changes, further on-site mitigation to infrastructure or off-site mitigation measures”</i> Port Authority prepared a Noise Mitigation Strategy and OEMP for community consultation and for submission to DP&E.</p> <p>The strategy and the updated OEMP aim to ensure that the environmental management framework adequately addresses any identified issues (i.e. noise impacts) and appropriate mitigation identified.</p> <p>Key elements of the proposed strategy include ongoing noise monitoring and a Noise Restriction Policy.</p> <p>Vessels which have noise levels which are found to exceed the Noise Restriction Policy limit will be given an initial warning to make improvements; a second non-compliance will result in overnight relocation of the ship from WBCT; and a third non-compliance will result in future bookings not being allowed at WBCT.</p> <p>The strategy will be submitted to DP&E for review, and following endorsement from DP&E, noise monitoring and implementation of the Noise Restriction Policy would be implemented by Port Authority.</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
3	Concern that Noise Restriction Policy penalties are weak	7,39,42	It is considered by Port Authority that the proposed penalties including potential relocation from WBCT at the cruise lines cost (Strike 2), or a potential for a ban from WBCT (Strike 3) is a significant implication for Cruise Lines, with substantial financial and operational implications.
3	Overnight stays given as a proportion of total visits is misleading; it is more than originally proposed in the WBCT Environmental Assessment	42,48,52	<p>The WBCT Environmental Assessment stated the number of overnight stays was estimated to be around 10% of visits.</p> <p>There were a total of 120 cruise vessel visits in the financial year ending June 2016 including 16 overnight stays.</p> <p>For the financial year ending June 2017, there have been 21 overnights stays to date (to end March 2017) and a further 2 stays are scheduled. The total number of scheduled visits for the financial year ending June 2017 is 121.</p> <p>It is noted that the published cruise schedule is updated regularly and not all scheduled visits shown actually occur, as bookings are made a number of years in advance.</p> <p>It is also acknowledged that for certain operational reasons (e.g. mechanical failure) vessels may have to make unscheduled overnight stays.</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
2	Concerned that the consultation was undertaken over the holiday period when people were away	11,37	It is acknowledged that the consultation was undertaken in the holiday period. Rather than delay the process of implementing the Noise Mitigation Strategy, an extended consultation period of 9 weeks was allowed for the community to provide comment.
2	Sydney not getting technically advanced ships. Average age >20 years. Ships should have technically advanced solutions installed to protect the environment by reducing air and noise pollution	48,52	Port Authority are continuing communications with cruise lines regarding the future deployment of ships to WBCT.
1	Seeking compensation for self-funded noise treatment	46	Port Authority is unable to offer compensation for attenuation already installed at the owner's expense as it was undertaken prior to the commencement of the Noise Attenuation Program.

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No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
1	Disagrees with strategy. Would like to see a code of conduct	43	<p>The cruise industry has been consulted on the Noise Mitigation Strategy and is aware of the proposed actions including the Noise Restriction Policy.</p> <p>It is considered by Port Authority that the Noise Restriction Policy outlines the acceptable behaviour by cruise ships when at WBCT. It could be considered to be in effect a 'code of conduct', with penalties to be imposed for non-compliance.</p>
1	Some mitigation measures at residences may not be feasible	7	<p>The design of the noise treatments to homes would be on an individual basis. As discussed in the Noise Mitigation Strategy Section 5.4.1, the proposed Noise Attenuation Program would involve a customised package of noise reduction treatments to dwellings. In some dwellings the preferred noise reduction package may require the use of a secondary system, such as secondary windows (or in some cases doors) fitted interior to the dwelling. The use of secondary systems preserves the dwelling façade and the appearance and function of existing windows or doors.</p>
1	Lack of certainty in berthing times. Notify	52	<p>The Port Authority website provides a continuous service to monitor the movement of participating vessels within the area of Sydney Harbour. Accurate arrival times are provided on this</p>

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	community if berthing schedules change		<p>page: https://www.portauthoritynsw.com.au/sydney-harbour/daily-vessel-movements/</p> <p>The cruise schedule provides a list of the scheduled arrivals of cruise vessels 3 years in advance. This is based on information from vessel agents and is subject to change. This information includes the projected arrivals and departures at Sydney's two dedicated passenger terminals, the Overseas Passenger Terminal (OPT) at Circular Quay and WBCT. The cruise schedule also includes other Sydney locations when appropriate: https://www.portauthoritynsw.com.au/cruise/cruise-schedule/</p> <p>As a result of community feedback, Port Authority is introducing an email notification system which includes details of changes to shipping movements. This email notification is sent to any member of the community who chooses to register to receive notifications for changes to the published schedule. Community can register for the notifications at: https://www.portauthoritynsw.com.au/community/community-notifications/</p>

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1	Future investment / development (e.g. White Bay power station) in area at risk	52	Port Authority considers that the measures included in the Noise Mitigation Strategy provide appropriate mitigation to the community from noise impacts at WBCT.
1	Further explanation for preferred solution requires more detailed reasoning to be explained.	55	It is considered that the explanation contained in the Noise Mitigation Strategy Report (Section 5) including analysis of each option investigated including the benefits, and potential implementation implications was sufficient to justify the preferred solution. The process used in evaluating the options applied the EPA's Industrial Noise Policy Section 1.4.5 Applying Noise Mitigation Strategies. Further information regarding estimated costs for each option investigated has been included the Noise Mitigation Strategy Report.
Additional comments	a. Ships horns sounding.	n/a	a. Concerns regarding sounding of vessel horns cannot be addressed in the Noise Mitigation Strategy. Vessels within Sydney Harbour are to comply with international regulation International Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS). The technical requirements of sound signalling devices is also regulated under this convention.

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
	<p>b. How were shore power costs estimates derived?</p> <p>c. Who can community contact re vessel PA issues?</p> <p>d. Complaints process is weak.</p> <p>e. Implementing strategy would be waste of taxpayers' money. People should pay themselves.</p> <p>f. Use of amenity criteria 49dB for Restriction Policy limit and 45dB for eligibility criteria.</p> <p>g. Fee based structure for quieter ships.</p> <p>h. Further investigate noise wall.</p>		<p>b. Shore power cost estimates were derived for the purpose of the study required by Cabinet. Details are available in the report which is available at: https://www.portauthoritynsw.com.au/shorepower</p> <p>c. The contact at Port Authority complaints related to WBCT is available at: https://www.portauthoritynsw.com.au/community/community-complaints-procedure/</p> <p>d. Comments re the current complaints handling process are noted. Ongoing feedback on the complaints process should be directed to the complaints line.</p> <p>e. The strategy was required by DP&E to be prepared and implemented as a result of non-compliance with Project Approval condition D1.</p> <p>f. The Noise Mitigation Strategy Report provides the basis for the selection of the criteria for eligibility for the Noise Attenuation Program.</p> <p>g. This suggestion is noted, however it is not proposed to be implemented by Port Authority at this stage.</p> <p>h. As outlined in the Noise Mitigation Strategy Report the noise barrier is not to be considered further.</p>

Table 1 – Responses to Submissions

No. of mentions	Issue/Concerns raised in Submission	Relevant Submission No.	Port Authority Response
	<ul style="list-style-type: none"> i. Terminal is in the wrong location. j. Multiple berthing (2 ships at once) concerns. k. Concern over Carnival's policies and Port Policies. l. Polluters should pay for cost of shore power. m. Suggests 2 ship free days per month n. Cruise companies should pay to install shore power o. Port Authority should encourage quieter ships via pricing incentives 		<ul style="list-style-type: none"> i. Decision to locate the Cruise Terminal at White Bay is not within the scope of the Noise Mitigation Strategy. j. It is considered that multiple berthing does not occur many times per year (8 times in financial year ending June 2016, including 1 double overnight berthing). k. Port Authority acknowledges that past operational policies warranted review. The Noise Mitigation Strategy including Noise Attenuation Program and Restriction Policy is Port Authority's preferred solution. l. Shore power is not recommended. See report available at: https://www.portauthoritynsw.com.au/shorepower m. Vessel visit data from financial year ending June 2016 indicates that there are currently at least 2 non-ship days in every month. n. This suggestion is noted, however it is not proposed to be implemented by Port Authority at this stage. o. The Noise Restriction Policy aims to prevent noisier ships from using WBCT. The pricing suggestion is noted, however it is not proposed to be implemented by Port Authority at this stage.

4 Proposed Changes to Noise Mitigation Strategy

The following amendments have been made to the actions recommended in the Noise Mitigation Strategy, based on the submissions, and have been included in the updated version of the strategy and recommended to be included in an updated ONMP.

4.1 Proposed Changes to the Noise Mitigation Strategy

The following additional measures have been incorporated into the Noise Mitigation Strategy:

- An email notification system has been introduced by Port Authority of any changes to shipping movements to be sent to registered community members who wish to receive it. The website for registering is <https://www.portauthoritynsw.com.au/community/community-notifications/>.
- Ongoing communication by Port Authority with cruise lines regarding the future deployment of ships to WBCT and noise impacts on the community.
- Noise treatments for courtyards and external areas (in addition to the internal areas) at eligible properties would be considered on a case by case basis where possible.
- The requirement that an eligible property be within 100m of the WBCT boundary is not considered necessary for the purposes of implementing the Noise Attenuation Program. The assessment of eligibility is to be based on noise modelling and assessment. This criterion has been removed from the assessment of eligibility. The SLR Noise Mitigation Strategy Report has been amended to remove references to the 100m criteria.

4.2 Proposed Changes to the Operational Noise Management Plan

The Draft Noise Restriction Policy released for community consultation was considered from the implementation and operational perspective. A change has been made to remove the inclusion of the loss of priority penalty from the second non-compliance. This decision was made following review of community feedback. As the cruise bookings are made 3 years in advance, the penalty would not have come into effect for at least 3 years after the offence. It was considered that the community may view it as an ineffective penalty (as noted in several submissions).

The following sentence has been deleted from the draft Policy: “A second non-compliance will have the consequence that any booking slot clashes for applications made for the vessel during the next booking application window will be assessed with a lower booking priority than would otherwise apply to the application.”

It is considered that the remaining penalty imposing “future overnight stays will be required to be relocated (at the vessel’s cost) to an alternative mooring between the hours of 2200 and 0700” is appropriate due to the reduced noise impact on the community as a result of relocating an overnight vessel.

Clarification has also been made to the statement of purpose in the first paragraph of the Policy.

The amended version of the Policy is included in the updated Operational Noise Management Plan (ONMP).

In addition, the following changes as described in Section 4.1 are also included in the updated ONMP:

- Email notification system for changes to shipping movements;
- Ongoing communication with cruise lines regarding deployment of ships and noise impacts.

5 Next Steps

Following Port Authority's consideration of the submissions received and issues raised during consultation as outlined in this Report, endorsement will be sought from the Department of Planning and Environment to implement the Noise Mitigation Strategy, as outlined in the updated ONMP. Subject to this endorsement it is expected that the rollout of the Noise Mitigation Strategy would commence in 2017. The Noise Attenuation Program is expected to take approximately 2 years to complete.

Appendices

Appendix A

Copy of Specific Submissions

- Copy of Inner West Council Submission
- Copy of Cruise Lines International Association Australasia / Australian Cruise Association Submission
- Copy of NSW Health Submission
- Copy of Curtis Rd Resident Submission

Copy of Inner West Council Submission



INNER WEST COUNCIL

Contact: Kursty Delmas
Phone: 9367 9068
Email: kursty.delmas@innerwest.nsw.gov.au

Council Ref: DWS2203279

30 January 2017

Phillip Vander Reest – Project Manager, Noise Attenuation Program
Port Authority of New South Wales
PO Box 25
MILLERS POINT NSW 2000

noisestrategy@portauthoritynsw.com.au

Dear Mr Vander Reest,

Re: Submission in response to public exhibition of the White Bay Cruise Terminal Noise Impact Mitigation Strategy and Operational Noise Management Plan

I am writing in response to the public exhibition of the White Bay Cruise Terminal Noise Impact Mitigation Strategy and Operational Noise Management Plan.

As you are aware, Council has been active in raising community concerns associated with cruise ships berthed at the White Bay Cruise Terminal to the State Regulators and Members of Parliament. In particular, Council has made submissions in relation to a range of community issues including health concerns, odour, air quality, noise and vibrations.

It is acknowledged that the Noise Mitigation Strategy and Operational Management Plan seek to provide a positive step forward in the management of noise pollution and vibration impacts from cruise ships berthed at White Bay Cruise Terminal.

In response to the public exhibition of the draft Strategy and Plan; with the limited time provided, Council has sought independent expert advice from an acoustic consultant in relation to:

- The strength, accuracy and validity of the Strategy and Plan,
- The level of enforceability of the Strategy and Plan,
- Any complications for enforcement that could be foreseen from the wording in the Strategy and Plan,
- Any improvement of the Strategy and Plan in terms of environmental health impacts and mitigation works, and
- Any other general comments and/or concerns.

Customer Service Centres

Ashfield | P (02) 9716 1800 | E info@ashfield.nsw.gov.au | 260 Liverpool Road, Ashfield NSW 2131

Leichhardt | P (02) 9367 9222 | E leichhardt@lmc.nsw.gov.au | 7-15 Wetherill Street, Leichhardt NSW 2040

Petersham | P (02) 9335 2222 | E council@marrickville.nsw.gov.au | 2-14 Fisher Street, Petersham NSW 2049

As a result, Rodney Stevens (Principal/Manager, Rodney Stevens Acoustics) has provided a review of the draft Strategy and Plan. The key points of his review are detailed as follows:

- Deck announcements and music were clearly audible from some cruise ships when in port;
- Noise monitoring has identified that there is likely going to be breaches of the Project Approval noise limits during the evening and night time periods;
- Implementation of real time noise monitoring would result in transparency of noise levels emanating from noise sources;
- Shore to ship power would result in considerable noise reductions of up to 10dBA;
- Installation of a permanent noise barrier/wall would reduce noise levels however could have significant visual impact;
- Dwelling noise attenuation to a defined area of residences should be based on the Amenity Criteria and would reduce noise levels within those homes, however continue to cause disturbances to those residences not currently identified in the defined area; and
- Noise in external residential recreation areas will remain as an adverse impact to residents.

To provide greater detail and clarity for your consideration on the key points listed above, a copy of Rodney Stevens' advice is attached to this letter (Appendix A).

In addition to this, Council held a public meeting on 24 January 2017 at Balmain Town Hall to present the findings of Rodney Stevens' peer review and to inform residents on how to make a submission on the draft Noise Impact Mitigation Strategy and Operational Noise Management Plan. I have also provided a copy of the main topics discussed at this meeting (Appendix B).

It is the opinion of both Inner West Council and affected residents that implementation of real time noise monitoring and the installation of ship to shore power be the two (2) main priorities for Ports of New South Wales in terms of short and long term noise mitigation.

One of the key benefits of real time noise monitoring is the ability for cruise ship operators to effectively use the received feedback as a mitigation tool. This means that the operator can view or be notified of the noise levels that are being recorded a certain distance away in real time and adjust the activity accordingly. Secondly, receiving live feedback on noise emissions can aid the quick identification of potential mechanical faults.

Real time noise monitoring will also strengthen transparency associated with regulatory action, in that, the community and stakeholders would know when a noise breach is occurring and take action accordingly. This would assist in the successful and accurate implementation of the three (3) warning letters procedure.

Shore to ship power is the best long term noise solution for White Bay Cruise Terminal in that, it allows cruise ships to turn off their diesel engines whilst in port and connect to the local power grid. Not only does this result in a significant reduction in noise levels by 25% but it also assists in reducing the health impacts associated with toxic airborne pollutants such as particulate matter and sulphur dioxide.

Shore to ship power is the only mitigation option that provides a holistic solution for both noise and air pollution at White Bay Cruise Terminal. Council strongly recommends that ship to shore power be investigated in great depth with a further feasibility study to be undertaken and made available to the public.

Thank you for the opportunity to provide comment on the draft Noise Mitigation Strategy and Noise Management Plan. If you or your office requires any further information, please do not hesitate to contact Mrs Kursty Delmas, Team Leader Environmental Health, on 9367 9068.

Regards,



Elizabeth Richardson
Group Manager Development Assessment and Regulatory Services



Peer Review
The Port Authority of NSW
Operational Noise Management Plan
SLR Consulting Noise Management Plan

Balmain NSW

REPORT R160697R1
Revision 0

"The Port Authority of NSW (Port Authority) shall design, construct, operate and maintain the White Bay Cruise Terminal (WBCT) using all reasonable and feasible precautions and measures to achieve the objective that noise contributions from activities on Cruise Ship Days associated with the project do not contribute to an exceedance of the specified noise criteria".

Prepared for:

Inner West Council

9 January 2017



The Port Authority of NSW
Operational Noise Management Plan
Balmain NSW

PREPARED BY:

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DOCUMENT CONTROL

Reference	Status	Date	Prepared	Checked	Authorised
R160697R1	Revision 0	9/01/2017	Rodney Stevens	Desmond Raymond	Rodney Stevens



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1 BACKGROUND

1.1 Planning Proposal

Rodney Stevens Acoustics has been requested by Inner West Council to provide a 'Peer Review' of the Operational Noise Management Plan (ONMP) and associated SLR Consulting NIS and to determine if the ONMP is adequate for the residences adjacent to the White Bay Cruise Terminal (WBCT).

The Port Authority of NSW (Port Authority) manages the White Bay Cruise Terminal (WBCT) within the White Bay Port Precinct on the Balmain Peninsula. The development was approved in February 2011.

On days when a cruise ship is present, the WBCT is used for the processing of passengers embarking and disembarking a cruise ship berthed at White Bay Wharf 5 (WB5) and associated activities. The approval also provides for a cruise terminal to be located at White Bay Wharf 4 (WB4).

The purpose of the Port Authority Operational Noise Management Plan (ONMP) is to outline the method of compliance with statutory requirements for the management of noise, and realising the specific noise limits set out in the Project Approval.

The ONMP is intended to detail methods available to mitigate noise during the use of the WBCT, including the behavioral noise controls (regarding music and non-safety announcements) and restrictions related to cruise ship noise.

The WBCT was assessed and approved under the Environmental Planning and Assessment Act 1979. As part of that assessment and approval the facility was assessed in accordance with the Industrial Noise Policy. The Project Approval gives force to the outcomes of the noise impact assessment which was carried out as part of the environmental impact assessment, and the Port Authority is required to comply with the various conditions set out in the Project Approval.

The White Bay Cruise Terminal (WBCT) Noise Restriction Policy is a commitment by the Port Authority of New South Wales that all passenger vessels utilising the White Bay Cruise Terminal (WBCT) are required to ensure that noise does not exceed a level which the Port Authority of NSW considers inappropriately impacting on the neighbours of the White Bay Cruise Terminal at Balmain.

1.2 Legislation and Nominated Noise Criteria

The White Bay Cruise Terminal Operations noise criteria nominated in the approval are derived from noise assessment outcomes presented in the White Bay Cruise Terminal Noise Impact Assessment prepared in support of the White Bay Cruise Terminal development application. The DP&E's Director General Requirements (DGRs) included the requirement that the noise assessment take into account the Industrial Noise Policy.

It should be noted that, the INP is specifically aimed at assessing noise from (24/7) continuous industrial noise sources scheduled under the POEO Act, and discussed in Section 3.1.2 the WBCT operations are not scheduled activities under the POEO Act. Hence, the INP does not specifically address situations, such as the WBCT passenger shipping operations, where there is a potential for infrequent elevated noise levels from a small number of cruise vessels for a limited number of nights in the year.

The internal criteria is based on the Australian Standard ASNZ 2107:2000. The recommended intrusive ($L_{Aeq(15\text{minute})}$) WBCT VNAP Eligibility Noise Criteria are given as night-time 55 dBA, evening 60 dBA and daytime 70 dBA.



1.3 Nature of Noise Concerns

The primary concern for noise intruding into the nearby residential areas are from the operation of cruise ships at the White Bay Cruise Terminal. Noise sources include:

- Noise from ship horns
- Noise from chimes, whistles, sirens and alarms
- Noise from ship engines, generators, ventilation systems and air conditioning
- Noise from PA announcements
- Noise from entertainment, music
- Noise from emergency drills
- Noise from maintenance activities
- Noise from overnight stays of ships
- Noise from multiple berths of cruise ships
- Noise from very early morning arrival of ships
- Noise from various ancillary services associated with the terminal garbage and sewerage services traffic and transport services.
- Vibrations in the surrounding area caused by cruise ships

1.4 Operational Noise Management Plan (ONMP) and Policy

The commencement of the WBCT operations resulted in appreciable noise complaints from the local community (primarily located in Balmain to the north of the terminal). These concerns have been generally supported by noise monitoring results, which demonstrate cruise ships can generate operational noise levels in excess of the noise criteria specified in condition D1.

As a result, in accordance Project Approval (MP 10_0069) condition D1, which states "where these criteria cannot be met, the Proponent shall take appropriate measures to limit any impacts and shall submit a report to the Director General upon the implementation of those measures. These measures may include operational changes, further on-site mitigation to infrastructure or off-site mitigation measures" Port Authority prepared an initial report outlining potential noise mitigation and management measures for investigation as presented in the Noise Impact Mitigation Strategy (NIMS) Cruise Operations dated September 2014. Following the progress of these investigations, Port Authority prepared a follow-up NIMS Cruise Operations Interim Findings Report dated April 2015.

A Final NIMS Cruise Operations Report (SLR, November 2016) reviewed the outcome of these investigations and recommended additional actions in accordance with the requirements of the Project Approval.

This updated Cruise Operations ONMP has been amended to ensure that the environmental management framework adequately addresses any identified issues (i.e. noise impacts) and appropriate mitigation identified in the SLR Final NIMS Cruise Operations Report.

2 DISCUSSION

2.1 Unattended Noise Monitoring

In order to characterise the existing acoustical environment of the area unattended noise monitoring was conducted between 27th December 2016 and 3rd January 2017 at the logging location shown in Figure 2-1. The purpose of the logger was to determine the accuracy of the SLR Consulting levels and the validity of the current background noise criteria proposed by SLR Consulting and The Port Authority. A copy of the logging results is in the appendix of this review.



Figure 2-1 Logging Location



The logger provides the baseline background noise environs. Logger location was selected with consideration to other noise sources which may influence readings, security issues for noise monitoring equipment and gaining permission for access from residents and landowners.

Instrumentation for the survey comprised of a RION NL-42 environmental noise logger (serial number 133013) fitted with microphone windshields. Calibration of the logger was checked prior to and following measurements. Drift in calibration did not exceed ± 0.5 dB(A). All equipment carried appropriate and current NATA (or manufacturer) calibration certificates. Measured data has been filtered to remove data measured during adverse weather conditions upon consultation with historical weather reports provided by the Bureau of Meteorology (BOM).

The logger determines L_{A1} , L_{A10} , L_{A90} and L_{Aeq} levels of the ambient noise. L_{A1} , L_{A10} , L_{A90} are the levels exceeded for 1%, 10% and 90% of the sample time respectively (see Glossary for definitions in Appendix A). Detailed results at the monitoring location are presented in graphical format in Appendix B. The graphs show measured values of L_{A1} , L_{A10} , L_{A90} and L_{Aeq} for each 15-minute monitoring period.

The monitoring identified a number of Operational Noise Management Plan - Mitigation measures that are currently not being complied.

"A notification to the 'Staff Captain' or 'Deputy Captain' of all cruise ships berthing at the WBCT, reminding them of the proximity of the Terminal to residential areas and outlining certain expectations of the ships whilst they are berthed, including no deck announcements or music from open decks is permitted while in port, with the exception of safety announcements. All music and non-safety related announcements must be kept to internal ship areas until well clear of the berth.



The Pacific Pearl and the Crystal Symphony had clearly audible loud speaker announcements at docking 6.20am.

The following cruise ships were on schedule:

- 27/12/16: Pacific Pearl (6:20 to 14:20)
- 28/12/16: Pacific Eden (8:00 to 16:00)
- 29/12/16: No Ships
- 20/12/16: Pacific Pearl (6:50 to 16:00) and The World at Terminal #4: (18:00 to present)
- 31/12/16 (6:15) to 2/1/17 (18:30) – Crystal Symphony (Speaker announcement at docking – 6:20)

2.2 Data Processing

2.2.1 Noise Emission (Industrial Noise Policy)

In order to establish the construction noise criteria, the data obtained from the noise logger has been processed in accordance with the procedures contained in the NSW Environmental Protection Authority's (EPA) *Industrial Noise Policy* (INP, 2000) to establish representative noise levels that can be expected in the residential vicinity of the site. The monitored baseline noise levels are detailed in Table 2-1.

Table 2-1 Measured Baseline Noise Levels Corresponding to Defined INP Periods

Location	Measurement Descriptor	Measured Noise Level – dB(A) re 20 µPa		
		Daytime 7 am - 6 pm	Evening 6 pm – 10 pm	Night-time 10 pm – 7 am
Logger at rear of site	L _{Aeq}	56	57	54
	RBL (Background)	47	43	42

Notes: All values expressed as dB(A) and rounded to nearest 1 dB(A);
 L_{Aeq} Equivalent continuous (energy average) A-weighted sound pressure level. It is defined as the steady sound level that contains the same amount of acoustic energy as the corresponding time-varying sound.
 L_{A90} Noise level present for 90% of time (background level). The average minimum background sound level (in the absence of the source under consideration).

2.3 Operational Noise Criteria

Responsibility for the control of noise emissions in New South Wales is vested in Local Government and the EPA.

The EPA oversees the Commercial Noise Policy (INP) January 2000 which provides a framework and process for deriving noise criteria. The INP criteria for Commercial noise sources have two (2) components:

- Controlling the intrusive noise impacts for residents and other sensitive receivers in the short term; and
- Maintaining noise level amenity for particular land uses for residents and sensitive receivers in other land uses.

Intrusiveness Criterion

For assessing intrusiveness, the background noise generally needs to be measured. The intrusiveness criterion essentially means that the equivalent continuous noise level (L_{Aeq}) of the source should not be more than 5 dB(A) above the measured Rated Background Level (RBL), over any 15 minute period.



Amenity Criterion

The amenity criterion is based on land use and associated activities (and their sensitivity to noise emission). The cumulative effect of noise from industrial sources needs to be considered in assessing the impact. The criteria relate only to other industrial-type noise sources and do not include road, rail or community noise. The existing noise level from industry is measured. If it approaches the criterion value, then noise levels from new industrial-type noise sources, (including air-conditioning mechanical plant) need to be designed so that the cumulative effect does not produce total noise levels that would significantly exceed the criterion.

Area Classification

The INP characterises the “Urban” is an area often has the following characteristics:

- Is dominated by ‘urban him’ or industrial source noise
- Has through traffic with characteristically heavy and continuous traffic flows during peak periods
- Is near commercial districts or industrial districts
- Has any combination of the above

This area may be located in either a **rural, rural-residential or residential zone**, as defined on an LEP or other planning instrument, and also includes mixed land use zones such as mixed commercial and residential uses.

Project Specific Noise Levels

Having defined the area type, the processed results of the attended noise monitoring have been used to determine project specific noise criteria. The intrusive and amenity criteria for nearby residential premises are presented in Table 2-2. These criteria are nominated for the purpose of assessing potential noise impacts from the proposed development.

In this case, the ambient noise environment is not controlled by industrial noise sources and therefore the amenity criteria become equal to the Recommended Amenity Criteria for Residences in an Urban Area (ie ANL or Acceptable Noise Level). For each assessment period, the lower (ie the more stringent) of the amenity or intrusive criteria are adopted. These are shown in bold text in Table 2-2.

Table 2-2 Operational Noise Criteria

Receiver	Time of Day	ANL ¹ L _{Aeq} (15min)	Measured		Criteria for New Sources	
			RBL ² L _{A90} (15min)	L _{Aeq} Noise Level)	Intrusive L _{Aeq} (15min)	Amenity ³ L _{Aeq} (15min)
Residential	Day	60	47	56	52	58
	Evening	50	43	57	48	47
	Night	45	42	54	47	44

- Note 1: ANL = “Acceptable Noise Level” for residences in Urban Areas.
 Note 2: RBL = “Rating Background Level”.
 Note 3: Assuming existing noise levels are unlikely to decrease in the future
 Note 4: Current measured RBL meets the ANL requirement



In summary, the project specific noise level for the assessment of (continuous $L_{Aeq(15\text{minute})}$) operational noise emissions between 7:00 am and 6:00 pm, based upon the procedures documented within the NSW INP, is **52 dBA** at the residential receivers and evening between 6:00 pm and 10:00 pm is **47 dBA**. For any plant operating at night-time, between 10:00 pm and 7:00 am, the project specific noise limit is **44 dBA**.

2.4 Port Authority Control Measures

A notification is given to the 'Staff Captain' or 'Deputy Captain' of all cruise ships berthing at the WBCT, with requirements related to this OEMP and reminding them of the proximity of the Terminal to residential areas and outlining certain expectations of the ships whilst berthed.

These requirements include:

- No on-deck announcements or music from open decks is permitted while in port, with the exception of safety announcements.
- All music and non-safety related announcements must be kept to internal ship areas until well clear of the berth.
- Ensure ship generators/engines are maintained and operated efficiently to help reduce noise and air emissions while in port.
- Ships are to run on minimum generator/engine power required whilst at berth and minimise light spill from ship lighting after sunset.

Previous noise monitoring has identified that there is likely to be ongoing exceedance of the Project Approval noise limits particularly at night time, as a result of cruise related activities. The investigations undertaken for the NIMS have determined the cause and extent of the exceedances, and the appropriate feasible and reasonable mitigation measures have been identified.

The Noise Impact Mitigation Strategy Cruise Operations for the White Bay Cruise Terminal outlined a number of potential mitigation measures in accordance with the requirements of Condition of Approval. The Strategy noted that despite reductions in noise resulting from mitigation measures implemented to date, it is anticipated that exceedances of noise criteria will continue to occur, particularly in circumstances where ships are at berth during the evening (6pm to 10pm) and night time (10pm to 7am) periods.

Since September 2014, investigation of more complex and technically difficult options into further on-site and off-site measures has been occurring. The focus has been on noise barriers, shore power as a noise mitigation option, architectural façade treatments of dwellings, at-source noise control measures and an investigation into 'vibration' as a source of some community complaints.

On-ship Noise Control

The Port Authority has stated that some improvement to existing on-ship noise controls are technically feasible, such mitigation measures are not reasonably achievable as each individual vessel would be require significant vessel mechanical redesign, retrofitting and/or repurposing.

Shore Based Power

It is concluded that shore based power, as an alternative to on-ship power, would result in a noise reduction of up to 10 dBA, but only where a cruise vessel can accept shore based power. According to the Port Authority the installation of shore power is to be in the order of tens of millions of dollars, and with low current utilisation of 25% by cruise vessels makes this potential noise mitigation essentially ineffective and unreasonably cost prohibitive.



Potential Site Boundary Noise Wall (Barrier)

The installation of an approximate 8 metre high noise wall along the northern perimeter of the WBCT site boundary (i.e. similar to the acoustic barriers used to mitigate road and rail noise) may be technically feasible - subject to detailed constructability assessments (i.e. geotechnical, wind loading, safety and associated structural and civil engineering assessments).

It is concluded, however, the installation of a permanent noise barrier would introduce significant visual impact and is therefore, considered unlikely to be reasonably acceptable to the nearest residential land users if only to address elevated WBCT operating noise levels which occur with such infrequency.

Dwelling Noise Attenuation:- The recommended noise reduction treatments to properties should comprise as an absolute minimum:

The program is designed to provide physical treatments to homes that will reduce the levels of noise experienced in areas affected by cruise ships. The program will include the following noise reduction treatments:

- Upgrading windows or external doors
- Enclosing or sealing gaps, vents and openings, where practical
- Installing new windows or external doors
- Installation of ventilation systems to allow for the circulation of fresh air when windows are closed.

The Port Authority has requested continuous noise monitor to supplement the current noise data. Results of the monitoring will be available in near real time and Port Authority will provide a weekly summary of results on the Port Authority website. The locations of the continuous noise monitoring devices are opposite 32 Grafton Street and opposite 12 Grafton Street. To achieve the objective that noise contributions from activities on Cruise Ship Days associated with the WBCT do not contribute to an exceedance of the noise criteria specified as being an LAeq15 min - Day 56 dBA, LAeq15 min - Evening 54 dBA and LAeq15 min - night 49 dBA.

A first warning letter will be issued if noise reasonably considered by Port Authority to have originated from a passenger vessel is non-compliant with noise restrictions for the first time.

A second warning letter will be issued if noise reasonably considered by Port Authority to have originated from a passenger vessel is non-compliant with noise restrictions for the second time. If this non-compliance occurs at night, the vessel will also be notified that future overnight stays will be required to be relocated (at the vessel's cost) to an alternative mooring between the hours of 2200 and 0700 (subject to availability).

A third warning letter will be issued if noise reasonably considered by Port Authority to have originated from a passenger vessel is non-compliant with noise restrictions for the third time. A third letter will be issued to the vessel master and copied to the relevant cruise line/cruise company, advising of the third breach of the noise restrictions set in this policy. A third non-compliance by a vessel will have the consequence that the vessel will not be permitted to utilise the White Bay Cruise Terminal facility in future visits/years.



2.5 Operational Noise Management Plan - Mitigation Measures

Noise monitoring and reporting will be undertaken in accordance with the program and procedures of Sections 6 and 7 of the ONMP.

Ground service equipment (e.g. baggage cages) are moved and prepared the evening before rather than in the early morning hours before the arrival of a cruise ship in the case of consecutive cruise ship days.

PANSW's Cruise Terminal Operations Coordinators (CTOC) delivers a notification to the 'Staff Captain' or 'Deputy Captain' of all cruise ships berthing at the WBCT, reminding them of the proximity of the Terminal to residential areas and outlining certain expectations of the ships whilst they are berthed, including:

- No all deck announcements or music from open decks is permitted while in port, with the exception of safety announcements. All music and non-safety related announcements must be kept to internal ship areas until well clear of the berth.
- Ensure ship generators/engines are maintained and operating efficiently to help reduce noise and air emissions while in port.
- Ships are to run on minimum generator/engine power required whilst at berth.
- Minimise light spill from ship lighting after sunset.

Any 'live' complaints received about deck announcements / music are communicated directly to the ship via the port agent.

The Port Authority will enforce the policy by limiting or excluding the use of the White Bay Cruise Terminal facility by non-compliant vessels, which is complementary to the current Harbour Master's Directions in relation to the use of the White Bay Cruise Terminal. This policy expressly prohibits external non-safety announcements and or music on-deck whilst at berth.

The Port Authority has been committed to a program of providing noise attenuation to residences in the vicinity of WBCT, based on an expected maximum ship noise level (including noise from WBCT cruise ship engines, generators and ventilation).

The Port Authority will provide attenuation to a defined area of residences where noise modelling indicates that current noise levels reach or exceed 55dBA at night ('attenuation eligibility threshold'). Cruise ship noise which causes further disturbance to residences, other than those currently identified, are considered to exceed the attenuation eligibility threshold and therefore will be considered non-compliant.

The noise restrictions set out in this policy apply to any noise originating from a passenger vessel, and are defined as no external non-safety announcements; no music played on-deck; and any non-compliant noise including, but not limited to engine, generator or ventilation noise.

3 DISCUSSION

There are a number of defining points that need to be addressed prior to the RSA recommendation of Noise Mitigation Measures

The White Bay Cruise Terminal (WBCT) is a permanent location and White Bay Wharf 4 (WB4) and White Bay Wharf 5 (WB5) will remain as a Cruise Ship docking venue for the foreseeable future. The recommendation from residents that evening and night time restrictions should be imposed on 'all cruise ships' is not expected to be supported/enforced and therefore, appropriate acoustic measures/treatments must be instigated immediately to ensure residential criteria is achieved.



Regardless of the Noise Management Plan to be implemented, noise will always be a source of annoyance to the residential areas surrounding the terminal and noise levels from cruise ships will, on occasions, exceed the noise control limits. Low frequency noise and vibration was evident in noise measurements and acoustic treatment to houses in the Balmain area may make this low frequency noise and vibration more evident.

Even though internal residential noise levels may be controlled, noise in 'external' residential recreation areas and low frequency noise and vibration will remain an annoyance.

- Rodney Stevens Acoustics (RSA) requires as a 'First Step' to be implemented immediately, the establishment of a continuous noise monitoring system in at least two (2) locations, operated by Inner West Council or an 'independent acoustic body' must take place and be in operation by February 2017. The locations of the continuous noise monitoring devices are opposite 32 Grafton Street and opposite 12 Grafton Street. The results will be available in near real time and Port Authority and Innerwest Council will provide a weekly summary of results on their websites. The exceedance levels are an $L_{Aeq\ 15\ min-Day}$ 56 dB, $L_{Aeq\ 15\ min-Evening}$ 54 dB and $L_{Aeq\ 15\ min-night}$ 49 dB. The data will provide a record of noise from all sources and an estimated contribution from port activities.
- To achieve the objective that noise contributions from activities on Cruise Ship Days associated with the WBCT do not contribute to an exceedance of the noise criteria is specified as being an $L_{Aeq\ 15\ min-Day}$ 56 dB, $L_{Aeq\ 15\ min-Evening}$ 54 dB and $L_{Aeq\ 15\ min-night}$ 49 dB.
- The First, second and third warning letters (as outlined above) must be issued immediately by Port Authority if noise is non-compliant with noise restrictions. If the second non-compliance occurs at night, the vessel will also be notified that future overnight stays will be required to be relocated (at the vessel's cost) to an alternative mooring between the hours of 2200 and 0700 (subject to availability). A third non-compliance by a vessel will have the consequence that the vessel will not be permitted to utilise the White Bay Cruise Terminal facility in any future visits.
- Shore power is technically feasible and will achieve a 25% reduction in noise, therefore, this should be instigated and be fully operational by the end of 2017.
- Non-compliant vessels on overnight stays will be required to be relocated (at the vessel's cost) to an alternative mooring between the hours of 2200 and 0700 (subject to availability).
- The acoustic treatment for affected houses in the Balmain area should be based on the Amenity Criteria "Urban" being night-time 45 dBA, evening 50 dBA and daytime 60 dBA. The internal residential criteria should be based on the Australian Standard ASNZ 2107:2000. The recommended noise reduction treatments to achieve AS 2107 internal requirements within properties should comprise as an absolute minimum, enclosing external building penetrations (vents, openings and eaves) where practical to do so; upgrading seals to existing external windows and doors; installing ducted air conditioning; new or 'heritage' upgraded external windows and doors.
- An 8 metre high Glass/Perspex wall along the northern perimeter rock wall adjacent to Grafton Street would give a noticeable reduction of ground level 'external recreation' noise in Grafton Street and beyond. Architectural/structural drawings/visual prospective drawing should be provided by the end of February 2017 to all Grafton Street residents to make an informed decision of the visual impact.
- A noise fee based structure should be developed and applied to shipping using the facility as an incentive for port users to investigate and implement noise reduction works on their ships.

Approved:-

Rodney Stevens – MAAS
Principal/Manager



Appendix A – Acoustical Terminology

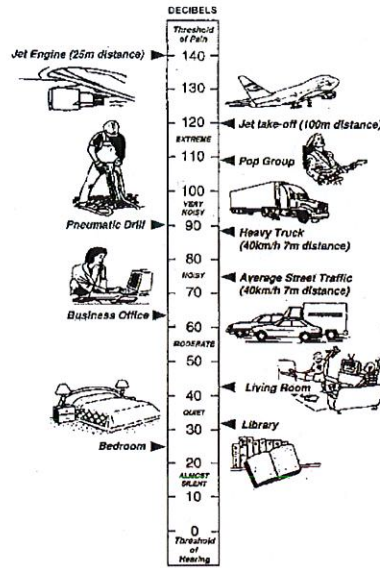
A-weighted sound pressure	The human ear is not equally sensitive to sound at different frequencies. People are more sensitive to sound in the range of 1 to 4 kHz (1000 – 4000 vibrations per second) and less sensitive to lower and higher frequency sound. During noise measurement an electronic ' <i>A-weighting</i> ' frequency filter is applied to the measured sound level <i>dB(A)</i> to account for these sensitivities. Other frequency weightings (B, C and D) are less commonly used. Sound measured without a filter is denoted as linear weighted <i>dB(linear)</i> .
Ambient noise	The total noise in a given situation, inclusive of all noise source contributions in the near and far field.
Community annoyance	Includes noise annoyance due to: <ul style="list-style-type: none">• character of the noise (e.g. sound pressure level, tonality, impulsiveness, low-frequency content)• character of the environment (e.g. very quiet suburban, suburban, urban, near industry)• miscellaneous circumstances (e.g. noise avoidance possibilities, cognitive noise, unpleasant associations)• human activity being interrupted (e.g. sleep, communicating, reading, working, listening to radio/TV, recreation).
Compliance	The process of checking that source noise levels meet with the noise limits in a statutory context.
Cumulative noise level	The total level of noise from all sources.
Extraneous noise	Noise resulting from activities that are not typical to the area. Atypical activities may include construction, and traffic generated by holiday periods and by special events such as concerts or sporting events. Normal daily traffic is not considered to be extraneous.
Feasible and reasonable measures	Feasibility relates to engineering considerations and what is practical to build; reasonableness relates to the application of judgement in arriving at a decision, taking into account the following factors: <ul style="list-style-type: none">• Noise mitigation benefits (amount of noise reduction provided, number of people protected).• Cost of mitigation (cost of mitigation versus benefit provided).• Community views (aesthetic impacts and community wishes).



- Noise levels for affected land uses (existing and future levels, and changes in noise levels).

Impulsiveness	Impulsive noise is noise with a high peak of short duration or a sequence of these peaks. Impulsive noise is also considered annoying.
Low frequency	Noise containing major components in the low-frequency range (20 to 250 Hz) of the frequency spectrum.
Noise criteria	The general set of non-mandatory noise levels for protecting against intrusive noise (for example, background noise plus 5 dB) and loss of amenity (e.g. noise levels for various land use).
Noise level (goal)	A noise level that should be adopted for planning purposes as the highest acceptable noise level for the specific area, land use and time of day.
Noise limits	Enforceable noise levels that appear in conditions on consents and licences. The noise limits are based on achievable noise levels, which the proponent has predicted can be met during the environmental assessment. Exceedance of the noise limits can result in the requirement for either the development of noise management plans or legal action.
Performance-based goals	Goals specified in terms of the outcomes/performance to be achieved, but not in terms of the means of achieving them.
Rating Background Level (RBL)	The rating background level is the overall single figure background level representing each day, evening and night time period. The rating background level is the 10 th percentile min L _{A90} noise level measured over all day, evening and night time monitoring periods.
Receptor	The noise-sensitive land use at which noise from a development can be heard.
Sleep disturbance	Awakenings and disturbance of sleep stages.
Sound and decibels (dB)	Sound (or noise) is caused by minute changes in atmospheric pressure that are detected by the human ear. The ratio between the quietest noise audible and that which should cause permanent hearing damage is a million times the change in sound pressure. To simplify this range the sound pressures are logarithmically converted to decibels from a reference level of 2 x 10 ⁻⁵ Pa.

The picture below indicates typical noise levels from common noise sources.



dB is the abbreviation for decibel – a unit of sound measurement. It is equivalent to 10 times the logarithm (to base 10) of the ratio of a given sound pressure to a reference pressure.

Sound power level (SWL)

The sound power level of a noise source is the sound energy emitted by the source. Notated as SWL, sound power levels are typically presented in $dB(A)$.

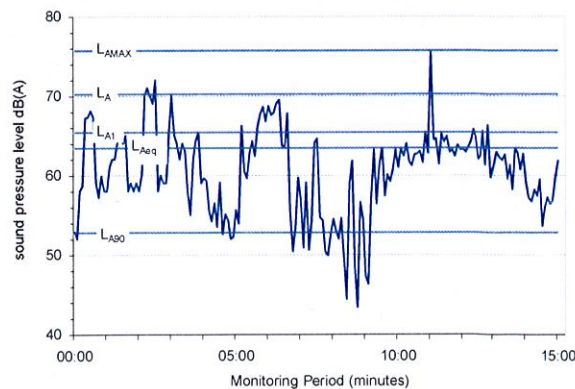
Sound pressure level (SPL)

The level of noise, usually expressed as SPL in $dB(A)$, as measured by a standard sound level meter with a pressure microphone. The sound pressure level in $dB(A)$ gives a close indication of the subjective loudness of the noise.

Statistical noise levels

Noise levels varying over time (e.g. community noise, traffic noise, construction noise) are described in terms of the statistical exceedance level.

A hypothetical example of A weighted noise levels over a 15 minute measurement period is indicated in the following figure:





Key descriptors:

L_{Amax} Maximum recorded noise level.

L_{A1} The noise level exceeded for 1% of the 15 minute interval.

L_{A10} Noise level present for 10% of the 15 minute interval. Commonly referred to the average maximum noise level.

L_{Aeq} Equivalent continuous (energy average) A-weighted sound pressure level. It is defined as the steady sound level that contains the same amount of acoustic energy as the corresponding time-varying sound.

L_{A90} Noise level exceeded for 90% of time (background level). The average minimum background sound level (in the absence of the source under consideration).

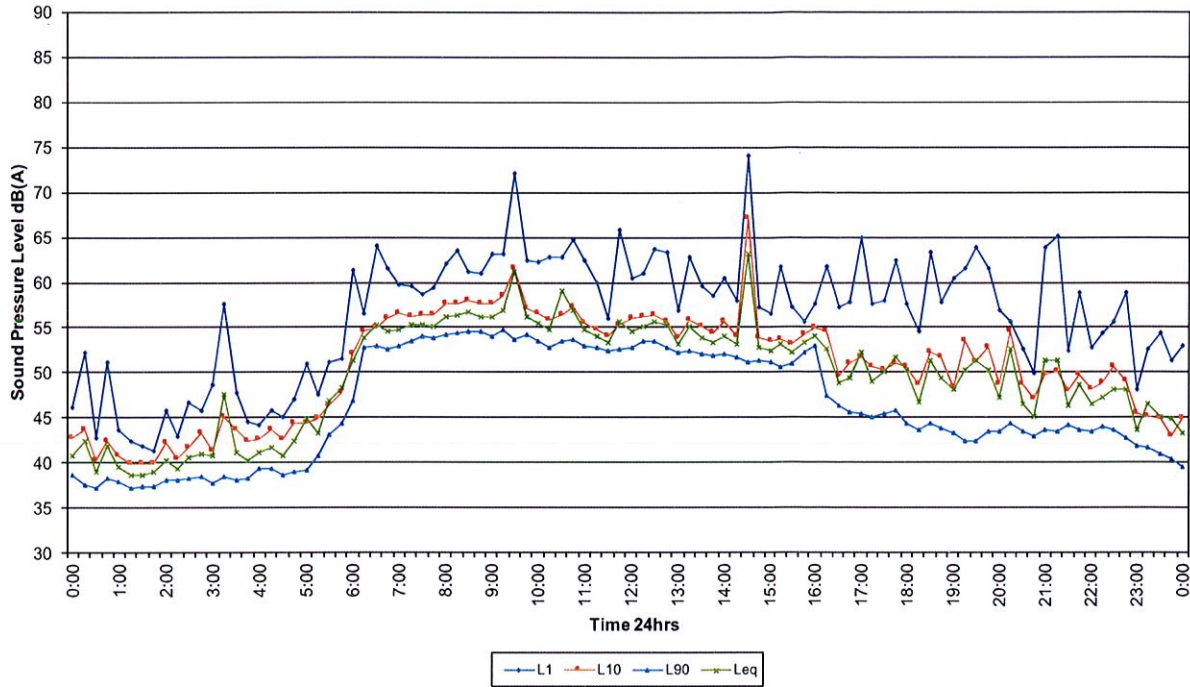
Threshold The lowest sound pressure level that produces a detectable response (in an instrument/person).

Tonality Tonal noise contains one or more prominent tones (and characterised by a distinct frequency components) and is considered more annoying. A 2 to 5 dBA penalty is typically applied to noise sources with tonal characteristics.

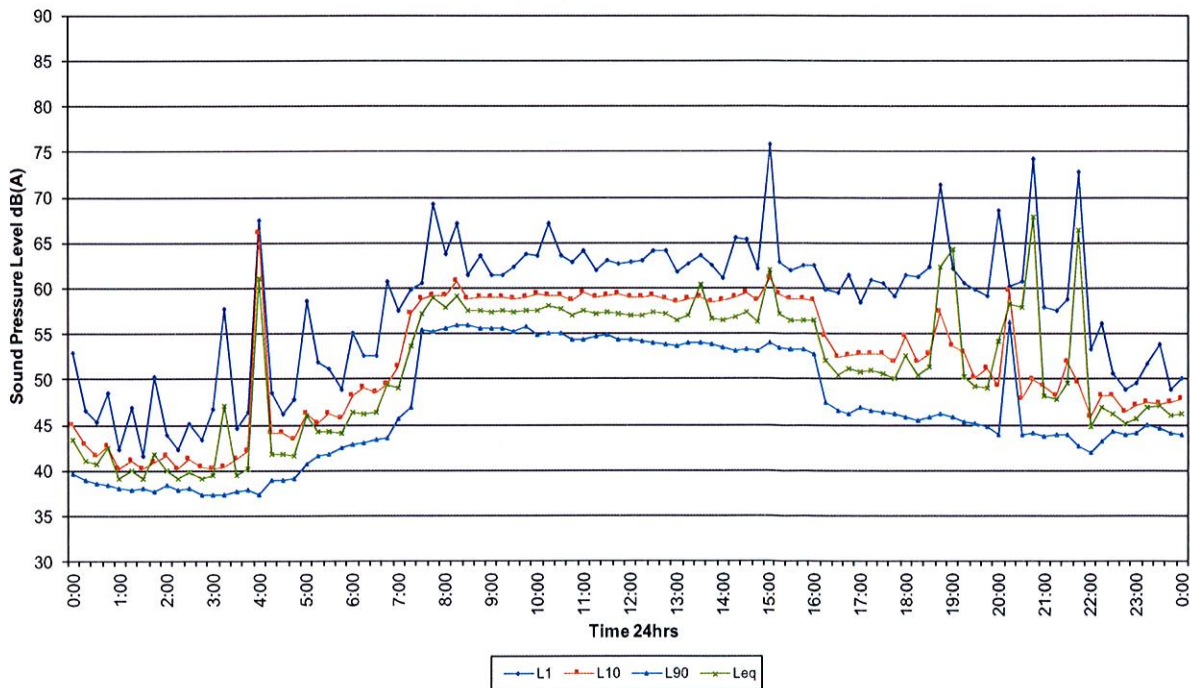


Appendix B – Baseline Noise Survey Graphs

White Bay Terminal
12B Grafton St, Balmain
Tuesday 27/12/16

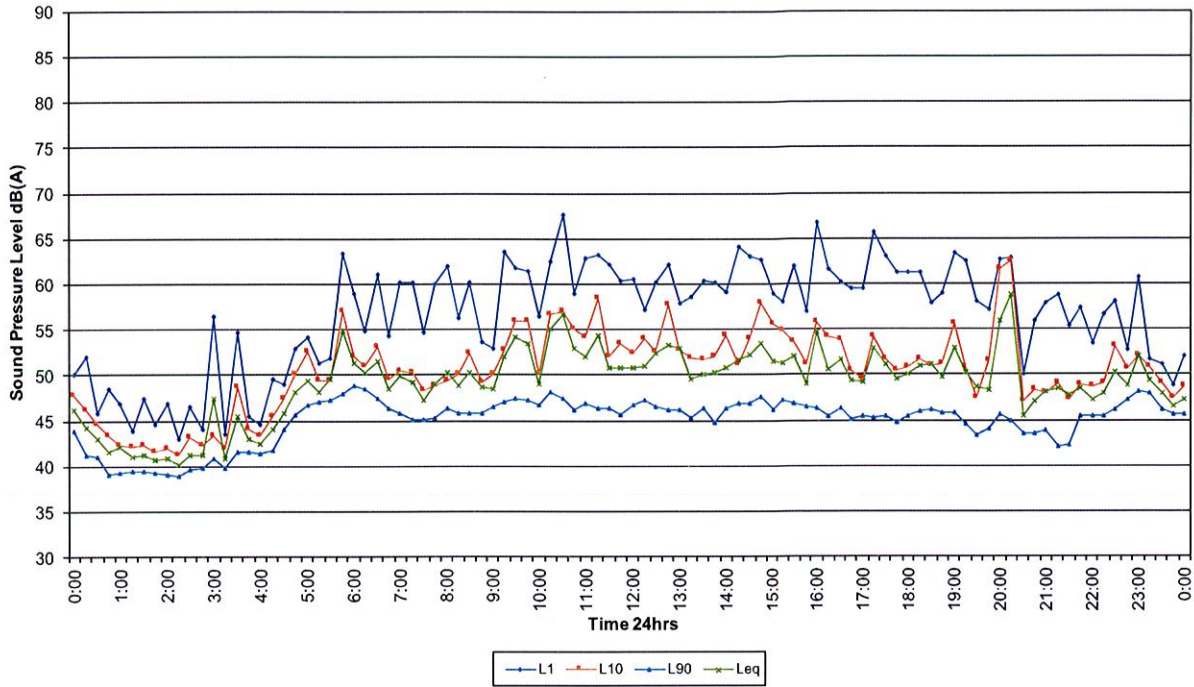


White Bay Terminal
12B Grafton St, Balmain
Wednesday 28/12/16

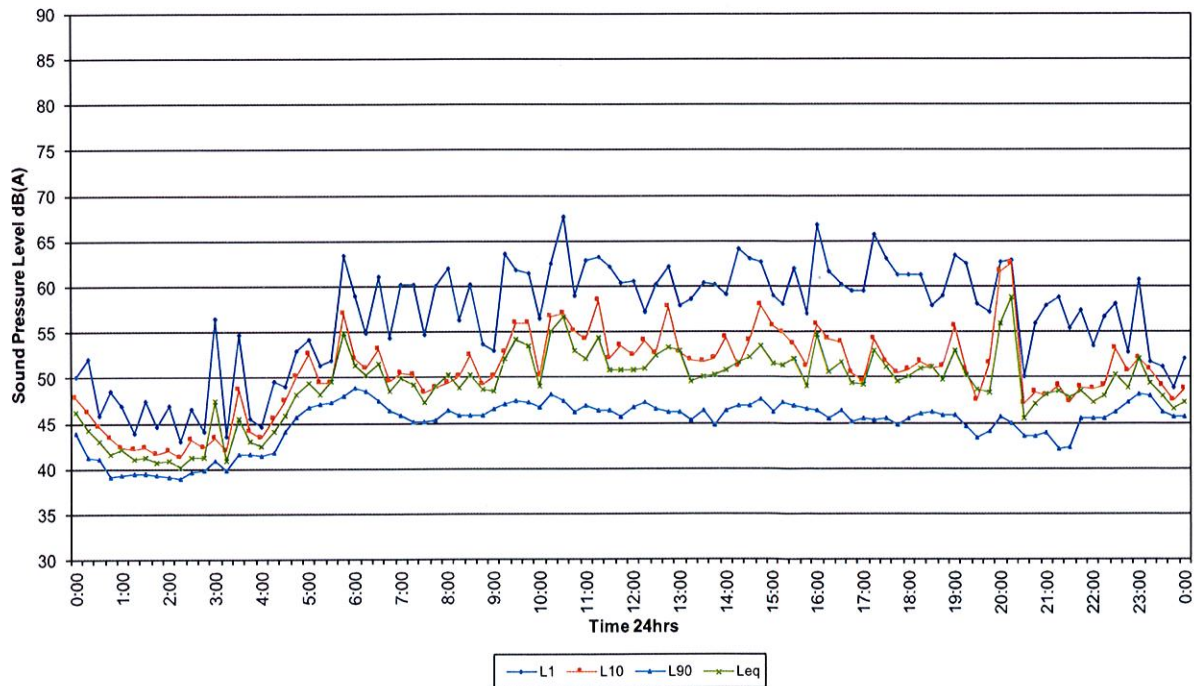




White Bay Terminal
12B Grafton St, Balmain
Thursday 29/12/16

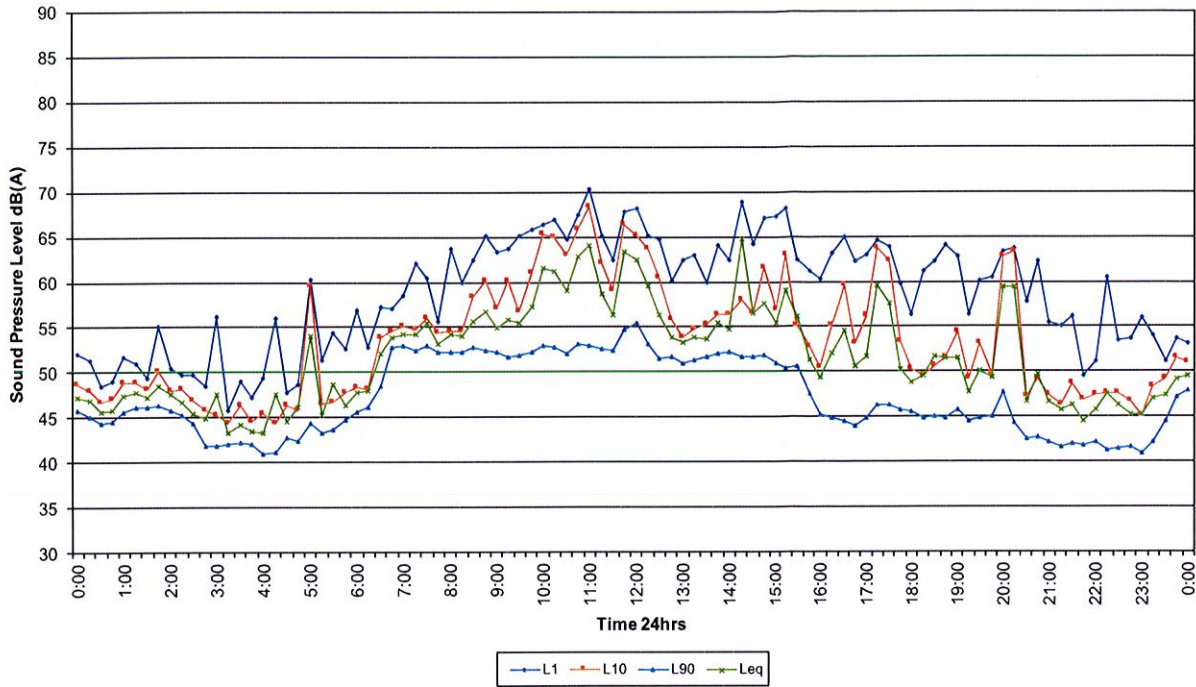


White Bay Terminal
12B Grafton St, Balmain
Thursday 29/12/16

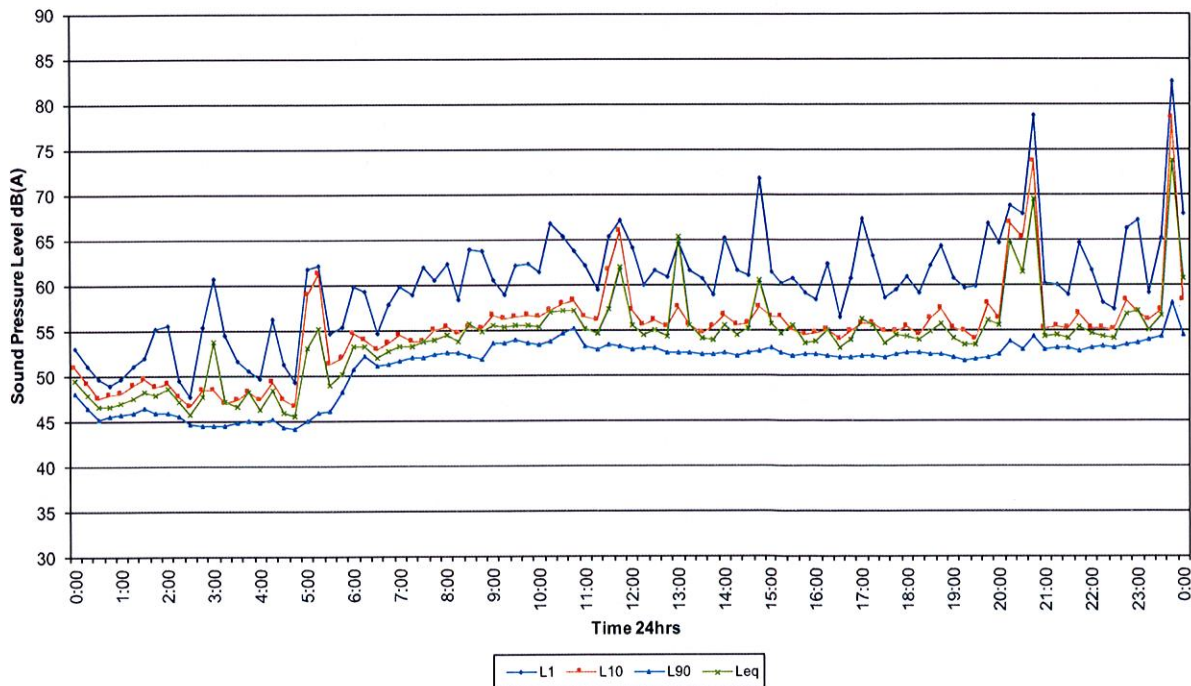




White Bay Terminal
12B Grafton St, Balmain
Friday 30/12/16

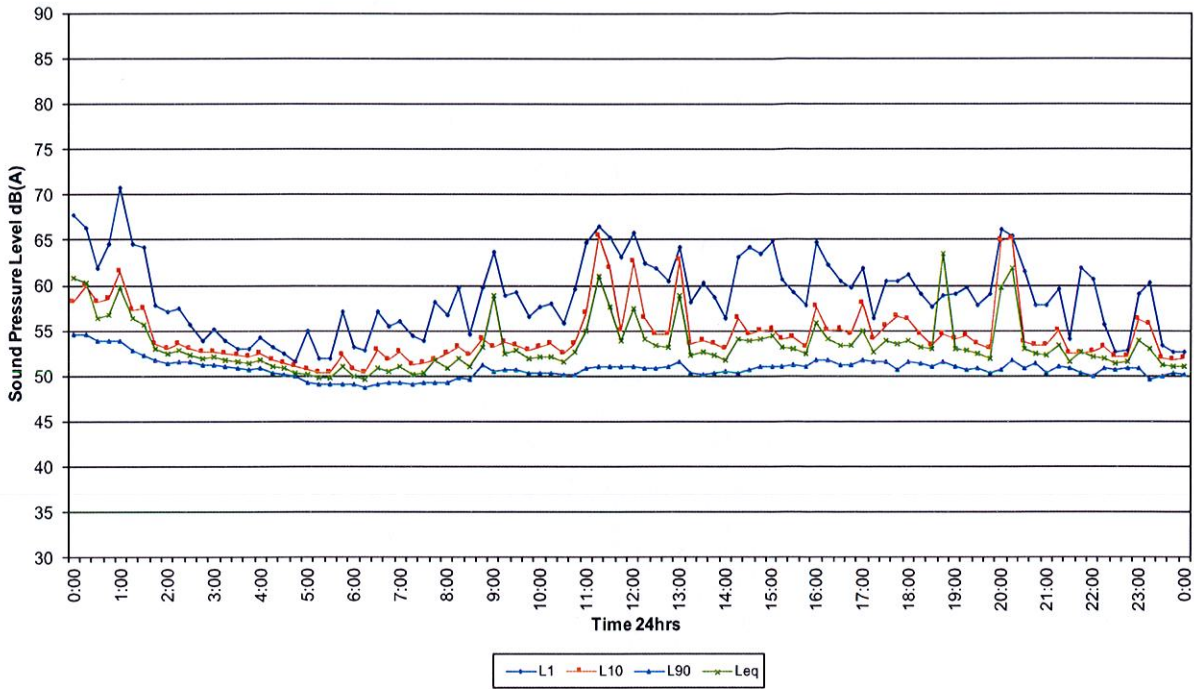


White Bay Terminal
12B Grafton St, Balmain
Saturday 31/12/16

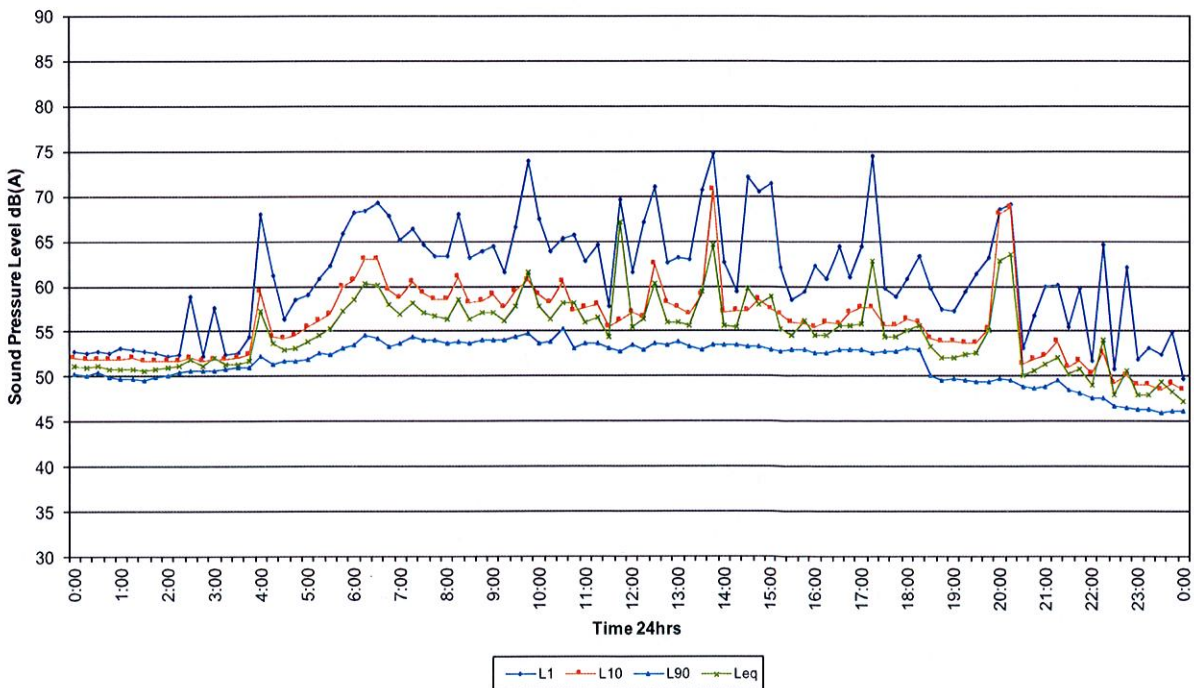




White Bay Terminal
12B Grafton St, Balmain
Sunday 1/1/17

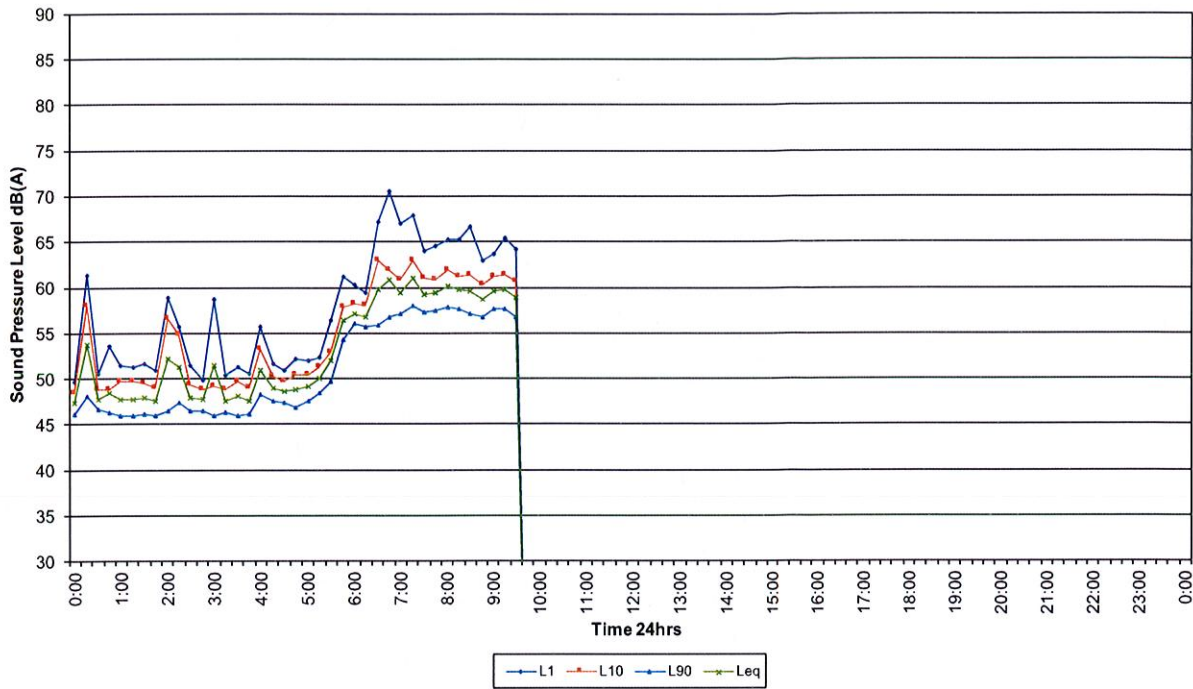


White Bay Terminal
12B Grafton St, Balmain
Monday 2/1/17





White Bay Terminal
12B Grafton St, Balmain
Tuesday 3/1/17





Appendix C – Feasibility Table

Mitigation Alternative	Technically Feasible	Noise Reduction	Reasonably Achievable	Recommendation
Source Noise Mitigation				
Engineering Noise Control	YES - such as installation of fan attenuators and or acoustic louvres to major on-ship mechanical noise sources	Vessel dependent, but potentially appreciable and could be designed to achieve at least 5 dBA per noise source	NO - while some improvement to existing on-ship noise controls are technically feasible, such mitigation measures are not reasonably achievable as each individual vessel would be require significant vessel mechanical redesign, retrofitting and or repurposing.	MONITOR - Port Authority to maintain discussion with cruise vessel operators and monitor the progress of improved design and acoustical performance of cruise vessels
Operational Management	Yes - such as minimising the use of major on-ship mechanical noise sources	Vessel dependent, but marginal up to 1 dBA	YES Relatively low cost measure but only marginal noise benefit	MONITOR - while only a marginal noise benefit, could be incorporated into cruise vessel operator awareness programme
Shore Based Power	Yes - but only useful for cruise vessels that can accept shore based power	Vessel dependent, but potentially significant and up to 10 dBA	YES With current utilisation (25%) makes it essentially effective and cost effective	IMPLEMENT
Propagation Path Control				
Noise Wall	Yes - but subject to detailed constructability assessment	Dwelling location dependent, but potentially significant and up to 9 dBA from an 11.5 m barrier	YES The installation of a permanent glass/Perspex noise barrier would introduce a ground level noise reduction.	DISCUSS subject to consultation with community



Receiver Noise Control				
Dwelling Noise Attenuation	Yes - but subject to individual property assessment	Dwelling construction dependent, but potentially significant with Type 1 treatment design 8 dBA to 10 dBA; and Type 2 treatment design 12 dBA to 16 dBA	YES - the WBCT Vessel Noise Attenuation Program (VNAP) is a targeted and cost effective noise mitigation measure, which can be delivered in a timely manner. Include ducted Air Conditioning to all living areas within affected residences.	IMPLEMENT - subject to consultation with community

Appendix B:

White Bay Noise Mitigation Strategy

Inner West Council Public Meeting Tuesday 24 January 2017

Notes from attendees

Suggestion of class action for loss of amenity.

'Show of hands' – ship to shore power and real time noise monitoring both popular solutions

Noise Wall

It would cut off the breeze.

Sydney Ports have terrorised and intimidated residents with a noise wall for years.

Wouldn't add to our property values

We've been putting up with it for 4 years and this is the best they can come up with.

Ship to Shore Power

It seems pretty clear that the best amelioration is ship to shore power.

We've all been behind ship to shore power for a long time

The amount of money that the port authority is looking to spend on their proposed solution is not inconsiderable. That money would go a long way towards putting the shore power solution in place.

All the research that we've done shows that shore power solutions around the world cost between 2 million and 12 million.

Ships can be modified if they don't have shore power.

50% of the ships that contribute to the noise are home ported here. They start and finish their journeys here.

Bays Precinct – shore power is solution to maximise the value of that land, and easy solution to be paid for as part of that development work.

Someone needs to get a feasibility study on shore power and we need access to those reports.

There are five electrical sub stations on the wharf and KVA cables.

If we see our priority as shore power there is a report before the cabinet, supposed to be before the premier. We have never seen it, Council has never been asked to comment on it. The priority is to make sure that before a decision is made, Council and residents are asked to consult on it. That needs an immediate high level intervention from Council to the premier. Premier is supposed to make a decision. Consultation in the cabinet is finished – it's sitting on the Premier's desk.

Appendix B:

In Hamburg, my understanding is that they have a mixed approach to this. They don't say it's all shore to ship power. They look at the toxins, the particulate matter and they focus in on the ships that are home ported – in their case the Baltic ferries. We have to concentrate on that too – the ones that are using it most regularly are likely to be rejects from other routes.

50% of the ships are home ported and they are probably the ones that are the noisiest. We are going to get more rejects from other ports if we don't make a stand for ship to shore power.

Shore power is a cable hook up. These ships generate their own power because it's cheaper for them to generate as they do at sea than it is to buy power. There's a big substation – used to run container wharf, cranes, Balmain harbour etc. That cabling still has to be down there. These modern ships have very efficient engines.

Noise Restrictions

Every other facility in the area has noise restrictions. At the moment, there are no restrictions on the ships, particularly at night when they impact on residents.

Here we are four years down the track and everything ports said they will do hasn't happened. I don't believe that three strikes will happen.

We need independent noise monitoring. Sydney University Public Health has been helpful. Any monitoring needs to be carried out independently from State Government. Council could play a major role in making sure there are monitoring devices independent from State Government.

Noise, when there's no wind, is omnidirectional. The sound monitoring gear is a very valid thing. Port Wharfage control used to implement ordinance. Limit on decibels. There should be a noise monitor down below, not just on top of the hill. The cliff face there forms a natural amphitheatre.

Horns on the ships are covered by range of laws. The audio level of the sound from public announcements – something can be done about that – possibly through the port authority.

Most of the announcements aren't safety incidents, they are going through procedures and text drills. They should be genuine safety situations only. They can run drills when they're out from berth.

None of the good neighbour commitments made by Sydney Ports and Carnival Cruises when the Terminal opened has ever happened – there's been noise, music, announcements.

Consultant failed to identify times as a noise control measure – time of day for noise – it's straightforward.

60% increase in number of ships from 2016-2017. Under planning assessment guidelines that increase should have resulted in new environmental assessment taking place.

Solid waste truck is exceptional in its noise, sustained for at least an hour. Big deal for people who operate in their homes – generally goes over 70 decibels

Lights overnight – some people are affected more than others

**Copy of Cruise Lines International Association
Australasia / Australian Cruise Association
Submission**



31 January 2017

Port Authority of New South Wales

By email: noisestrategy@portauthoritynsw.com.au

Dear Sir/Madam

White Bay Cruise Terminal Noise Mitigation Strategy

Cruise Lines International Association (CLIA) Australasia and Australian Cruise Association (ACA) welcome the Noise Mitigation Strategy (Strategy) developed by the Port Authority of New South Wales (PANSW) for the White Bay cruise terminal.

The cruise terminal was built at White Bay in 2013 following the decision of the NSW government to relocate from the city surrounds of Darling Harbour. Since that time, cruise operations at White Bay have employed noise mitigation measures such as no public address announcements (except for safety-related broadcasts) or entertainment on open deck. Prior to the government's decision, the White Bay and adjacent Glebe Island Terminals operated as freight and car terminals. In the case of White Bay, Sydney's busiest roll-on-roll-off bulk and heavy machinery terminal was situated on the site, operating 24/7 and generating considerable industrial noise through truck, crane and other heavy machinery movement.

For context, out of the 336 cruise ship visits planned for Sydney in 2016-17, White Bay will be used for approximately 140 visits. Only 15 of these visits will involve overnight stays at White Bay, with the vast majority of ships departing the berth by late afternoon/early evening. CLIA and ACA anticipate that even if there are more visits to White Bay in future years, this pattern of a very low proportion of overnight stays will continue.

Notwithstanding the long continuous use of the White Bay site as a shipping terminal, the cruise industry is committed to working with PANSW to ensure its Strategy delivers outcomes that meet the needs of the community as well as the industry, allowing White Bay to continue its legacy of over 100 years of port operations. We are also pleased to advise that the operational noise issue referred to in the Strategy concerning the *Dawn Princess* was resolved.

We wish to reinforce the Strategy's findings regarding the impracticality of shore-based power as a noise abatement option. Shore-based power has not been widely adopted internationally and the majority of the ships that call at White Bay do not have the ability to use shore-based power. The substantial conversion costs involved to fit such machinery would potentially lead cruise lines to omit Sydney, impacting their considerable contribution to the local visitor economy.



CLIA and ACA also note the continued availability of a second cruise terminal has been key to New South Wales' ability to enjoy the lion's share of the industry's economic contribution in Australia.

According to the "Contribution of Cruise Tourism to the Australian Economy in 2015-16" report commissioned by CLIA Australasia and released in November 2016, the overall economic contribution of cruising in NSW rose by 20% in real terms to \$2.89 billion in 2015-16. The report confirmed that NSW is the dominant cruise state, accounting for 63 per cent of the industry's economic contribution in Australia.

Both CLIA and ACA emphasise the importance of appropriate cruise infrastructure and a positive operating environment to ensuring this contribution can continue and grow.

CLIA Australasia is the regional office of Cruise Lines International Association, the world's largest cruise association dedicated to the promotion and growth of the cruise industry. CLIA is comprised of more than 60 of the world's major cruise lines and serves as a non-governmental consultative organisation to the International Maritime Organisation, an agency of the United Nations.

Australian Cruise Association (formerly Cruise Down Under) is the co-operative and marketing brand for Australian and the Pacific region. ACA is made up of 81 members and represents regional ports, national and state tourism agencies, shipping agents, inbound tour operators and companies dedicated to making the ACA region a major world class base and destination for cruise vessels. CLIA and ACA look forward to continued dialogue with PANSW on the Strategy.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Joel Katz', written in a cursive style.

Joel Katz
Managing Director
CLIA Australasia

A handwritten signature in black ink, appearing to read 'Jill Abel', written in a cursive style.

Jill Abel
Chief Executive Officer
Australian Cruise Association

Copy of NSW Health Submission



SF11/521
BR17/64

Mr. Grant Gilfillan
Chief Executive Officer and Director
Port Authority of NSW
PO Box 25
Millers Point NSW 2000

Dear Mr Gilfillan

Thank you for the opportunity to comment on the draft *White Bay Cruise Terminal – Cruise Operations: Final Noise Impact Mitigation Strategy* ('the strategy'), which addresses the problem of intrusive noise from the White Bay Cruise Terminal (WBCT) on some local residents.

The major noise impact reduction strategy proposed in this document is noise reduction treatment to the impacted dwellings, funded by the Port Authority of NSW. SLHD does not disagree with the selection of dwelling treatment as the predominant strategy (rather than decreasing the noise generated by the ships), but believes that the information provided does not outline the reasoning behind this decision clearly enough.

For example, on Page 22, in the paragraph following Table 8, the report reads "...., *such mitigation measures are not reasonably achievable as each individual vessel would be require (sic) significant vessel mechanical redesign, retrofitting and or repurposing. Port Authority has explored the possibility of such significant redesign with select cruise vessel operators, however securing such a significant commitment within the foreseeable future cannot be determined with reasonable certainty of both timing and outcome.*"

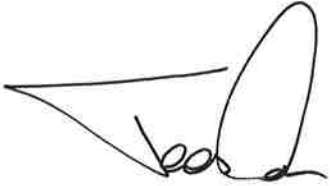
SLHD recommends that the argument behind this decision be more clearly detailed in the strategy. For example, some of the costs involved could be listed, or a firmer statement be made about the potential consequences of requiring ship companies to undertake such work (e.g. that rather than undertake such controls, the cruise companies would probably no longer stop at Sydney).

Providing transparent reasoning is important as residents have expressed frustration that they will be impacted by the proposed solution to the noise problem while the cruise ships will not be required to reduce the noise they generate.

Residents have indicated that the noise treatment to their homes will itself have negative impacts on their amenity and time. For example, the strategy outlines that at some dwellings, appropriate noise reduction following treatment will only be achieved when all external windows and doors remain shut (with alternative passive ventilation installed). Furthermore, this highlights that outdoor areas of these properties will still be impacted by unacceptable levels of noise.

Thank you for considering these comments on the strategy. Should you require any further information, please contact Dr Kleete Simpson, Medical Epidemiologist, Sydney Local Health District Public Health Unit, on telephone (02) 9515 9434.

Yours sincerely

A handwritten signature in black ink, appearing to read 'T. Anderson', with a large, stylized loop at the end.

Dr Teresa Anderson
Chief Executive

Date: 21.2.17

Copy of Curtis Rd Resident Submission

Comments on the draft White Bay Noise Mitigation Strategy prepared by SLR

30 January 2017

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Summary

The Draft White Bay noise mitigation study prepared by SLR is a rudimentary attempt at over-riding the seriousness of the offensive noise pollution caused by cruise ships berthed at White Bay. As an experienced acoustic engineer with over 40 years of experience, I find the document is lacking in critical review of noise emissions from cruise ships. It is grossly unfair to expect severely impacted residents to make an informed decision as to whether the proposed acoustic treatment of residential buildings is reasonable. The failure of the document to provide a true record of existing background noise levels coupled with the failure to include a wide range of fully costed noise reduction options places residents in an unenviable position. The document suggests that residents have only one choice and that is to accept the proponent's offer. This is both untrue and unreasonable. The document should be rejected with one exception.

The Mitigation Strategy does offer one element relating to response to noise complaints. Instead of Ports NSW waiting almost four years since the cruise ships commenced berthing at White Bay, the proposed response to noise complaints should have been implemented from day one. This would have provided the public with some confidence that Ports NSW took the offensive noise being generated by cruise ships seriously. Instead, the lack of effective action has led to residents having no confidence in Ports NSW taking offensive noise emissions from cruise ships seriously.

The Author

The author was previously employed by the former State Pollution Control Commission and Environment Protection Authority for over 27 years. This included 10 years working as a noise control engineer and was involved with the development of the Environmental Noise Manual (ENM). Parts of the ENM evolved to become the Industrial Noise Policy (INP). He is a professional engineer and has qualifications in engineering and public policy. His primary roles encompassed environmental assessment, approval, licensing, review and regulation of many industrial facilities. These included the Botany shipping facilities, Botany industrial area, Third Runway at Sydney Airport, Parramatta High Speed Ferry and the rail network.

1. Has SLR provided a critical review of White Bay cruise ship noise emissions?

The consultant's report is questioned for its failure to present a review of the noise planning conditions and the basis of those planning conditions. In my view, this exposes the report to a lack of objectivity. There are three fundamental flaws in the planning approval none of which was recognised nor identified by SLR. The first flaw is the classification of the Balmain residential area in Grafton Street (and each of the other residential areas surrounding White Bay) as being within the urban/industrial interface classification according to the Industrial Noise Policy (INP). This failure requires further explanation which I have detailed later in this submission.

The second flaw is the SLR report failed to identify the error in the Planning approval (which was based on an error in the Wilkinson Murray report.) This error is the assignment of a noise criteria of 60dB(A) to the residential area for the Dockside Apartments. SLR cruise ship noise compliance reports included noise measurements at the Dockside apartments yet the disparity between the planning consent noise limit and the measured background noise without a cruise ship being present

was never questioned. It is my view, an experienced acoustician would have questioned why the higher noise level was assigned for this area and then reviewed the documents used as a basis.

The third flaw is the planning consent provides no limits on the numbers and times of day cruise ships can berth at the White Bay facility. The EIS documents provided indicative number of cruise ships that might use the facility up to a maximum of 170 per year. The consent conditions were therefore based upon a maximum of 170 cruise ships per year. It was a serious omission of the consent that the consent conditions failed to specify any limit to the number and durations of cruise ship usage of the two berths. No doubt Ports NSW will claim that they are entitled to permit an unlimited number of cruise ships to use White Bay permitting two ships to be berthed at the White Bay facility 365 days per year on an overnight basis. The failure to specify limits on the number of cruise ships, and times of day is an unprecedented omission in a planning approval.

Experience with planning consent condition enforcement since the facility was established has shown that NSW Planning has failed to enforce noise limits contained in the consent. When this is combined with the exceedingly generous noise limits specified in the planning consent, the draft Noise Mitigation Strategy should be rightly viewed as lacking in a serious attempt to address the offensive noise generated by cruise ships using White Bay. The failure of the SLR report to identify the true extent of potential noise exposure that Balmain residents can be expected to be exposed to, that is the difference between the true background noise and cruise ship noise, highlights my claim questioning the value of the SLR report.

On the basis of the above flaws in the planning consent, the SLR report does not provide an adequate basis for residents to make an informed assessment of the noise management strategy proposed by Ports NSW.

2. The urban/industrial interface noise criteria

The White Bay facility does not fall within the “urban/industrial interface” definition under the NSW Industrial Noise Policy (INP). There are several reasons why this claim is the case.

- In the absence of a cruise ship or ships at WB4 and 5, the background noise is dominated by road traffic noise associated with the Anzac Bridge and the associated road network. The SLR acoustic compliance reports make reference to this fact on numerous occasions during attended noise surveys.
- In the absence of cruise ships at either or both WB4 and 5, measured background noise levels obtained during either the day or night closely resemble typical noise levels in residential areas where there is distant significant road traffic.
- Both SLR and Wilkinson Murray failed to identify any locations around the White Bay cruise ship facility where industrial noise levels, in the absence of cruise ships, reduce by 5dB(A) due to noise from shipping activities.

The INP requires the above elements to be satisfied for the urban/industrial interface concessional noise criteria to be used. In the case of White Bay, noise from shipping activities without cruise ships in berth at either WB4 or WB5 is rarely dominant at an L90 noise level. The L90 noise is dominated by traffic noise using the nearby road network associated with Anzac Bridge. This is the case for each of the residential areas nominated in the Wilkinson Murray report. This is the reason that Wilkinson

Murray was unable to identify any point where shipping noise at the L90 level reduced by a further 5dB(A). Consequently, the urban/industrial interface concessional noise level should not have been used. Instead, the INP noise assessment should have correctly applied noise criteria for sites in urban areas with cruise ships being effectively a “new” industry as shipping noise is not dominant in the ambient environment. The claim that shipping noise was dominant in the past fails to accept that circumstances have changed. It could equally be argued that Anzac Bridge was not present in the past and traffic noise levels were once much less.

Using the above analysis, the SLR report is based on a false premise and the permitted noise levels should be based upon a proper application of the INP. The credibility of the SLR report is undermined by its failure to critically review the appropriateness of the current noise limits.

3. Previous SLR acoustic compliance reports on ship noise emissions failed to identify tonal and low frequency noise associated with certain cruise ships

SLR has provided numerous ship acoustic compliance reports in the past. Each of these reports failed to identify whether the emitted noise had tonal, low frequency or intermittent components or other elements which would cause the measured noise to be subject to a weighting for those annoying components as specified in the INP. The compliance assessment reports submitted by SLR and published on Ports web site failed to satisfy the planning consent condition which required those reports to include weightings for annoying components as required under the INP. The objectivity of SLR is questioned by the failure to include any assessment of annoying components in these previous reports. The community needs to be provided with complete information to make an informed assessment of the recommendations contained in the SLR report.

Based upon my noise measurements of certain cruise ships, there are annoying components when assessed under the INP and it is significant that SLR has now incorporated annoying components in the SLR noise reduction report. This inclusion coincides with release of a draft review of the INP by the EPA. The draft revision provides a reduced weighting of some annoying components and the inclusion of annoying components raises a question of SLR’s objectivity.

4. Seasonal Nature of Cruise Ship Activities

The seasonal nature of cruise ship activities means that residents are subjected to the highest noise levels during the hottest part of the year when it is recognised that houses reliant upon natural ventilation, rely upon windows being left open. It is a further feature of cruise ships that the peak season has ships berthed on consecutive days and relief from the high levels of noise is not provided from day to day. The SLR report failed to identify the seasonal elements of cruise ship noise and highlight the impact that the nature of these seasonal movements occurring when the need for residents to have open windows is greatest. The summer season incidence of cruise ship berthing exacerbates the noise impact inflicted upon neighbouring residents.

5. Growth in cruise ship berthing activities

Section 3 of the SLR report includes the number of cruise ship berths in 2016 and projected number in 2017. It is a serious omission that the SLR report fails to identify that berthing activities are projected to increase from 120 in 2016 to 201 in 2017. This number of ships far exceeds that assessed in the EIS. In acoustical terms this is an increase of approximately 60% and is a major cause of increasing annoyance not identified in the SLR report. For many industrial premises, this level of growth would trigger a new development application.

One can rightly ask the question: Why does the SLR report not mention this level of growth as being significant? Growth in cruise ship berthing activities together with growth in overnight berthing of cruise ships is a serious issue and gives rise to the question of whether a new development application should be lodged irrespective of the current consent which failed to identify any limits on number and timing of berthing events in any year.

6. Berthing activities outside daytime hours

Under the INP, daytime hours are defined as 7am to 6pm. The SLR report does not discuss the frequency of berthing arrivals to 7am when the night noise limit applies nor departures after 6pm when a lower noise limit applies for the evening period. The failure of SLR to include a detailed consideration of the times of ship movements reflects an omission of a fundamental noise reduction option: limit the times of shipping activities. Sydney Airport has operated for many years with a night-time curfew in operation. Rail maintenance yards operate 24 hours however there are self-imposed restrictions on activities that take place at night. Entertainment venues are subject to restrictions on the use of amplified music. It is an accepted practice that time restrictions apply to the generation of offensive noise. The SLR report fails to make any attempt to justify why cruise ships should not be subject to time restrictions just like other activities which generate offensive noise.

7. Multiple noise sources associated with cruise ship berthing activities

The draft Noise Mitigation strategy fails to identify the multiplicity of noise sources associated with cruise ships. The SLR report focuses almost entirely on ship engine and ventilation noise. The report must include an assessment of each of the noise generating activities and identify reasonable and feasible noise reduction measures for each of those activities. An example of a particularly annoying noise is the use of public address systems. Currently available technology enables sophisticated switching off of loudspeakers at times or as programmed. If Ports NSW claims that cruise ships using White Bay have modern equipment, then the control of PA systems provides an opportunity for that modern equipment to be demonstrated.

Another example is the use of noise generating safety equipment. Railway maintenance yards deploy safety management systems to ensure the safety of employees. Safety management systems include the selective use of fit for purpose equipment and systems. Movement of trains without whistles being sounded now takes place.

8. Noise Exceedance list in Appendix A is misleading

The content of the noise exceedances listed in Appendix A is seriously misleading for two reasons. The first is that attended noise monitoring has only taken place on a very limited number of occasions. There is no continuous noise monitoring system in place capable of assessing any breach of planning consent conditions. The second reason is that on the few occasions when noise measurements were made, these measurements were made by SLR without an assessment being completed of modifying factors as specified in the INP for all residential areas around the cruise ship berths. For these reasons the table is very misleading. The public has been misinformed on the true extent of noise breaches of the planning consent due to the failure to explain how the list was formed. An objective assessment of noise compliance should have been provided. The limited information in this Appendix grossly understates the degree and extent of offensive noise generated by cruise ships using White Bay.

9. Error analysis of noise measurements

The failure of the SLR report to identify the existence of errors in the measurement of noise is of serious concern. Presumably, the instruments used for the noise measurements were Class 1 sound level meters. The earlier noise compliance reports submitted by SLR did not include any low frequency noise measurement being performed. The allowed error for a Class 1 meter at 20Hz is +/- 2.5 dB. Given that ship noise has significant low frequency components, the allowable error for a Class 1 instrument means that claimed noise levels are subject to errors which can be significant. Hence the absolute nature of results claimed by SLR is deficient as the results provided do not include any reference to the margin of error present in noise levels and additionally, the varying nature of noise emitted by the same source over time and atmospheric conditions that is also relevant. An error analysis is required for cruise ships in relation to claims relating to whether a given noise has low frequency or tonal components. It is necessary for an objective review of the SLR claims to be made and to include an assessment of measurement errors.

10. Draft INP versus current INP

The SLR report is based upon the claim that the "draft INP" is to be considered to be a "final" document. The failure of the SLR report to clearly differentiate between conclusions based on the current INP again highlights the questionable objectivity of the SLR report. This is because the draft INP provides a reduced weighting for low frequency and tonal components. Basing the recommendations in the SLR report on the "draft INP" will cause the residents to be exposed to increased noise levels in the long term if these recommendations were to be accepted.

11. SLR report claims the INP does not apply

It is of serious concern that the SLR report attempts to claim that the INP does not apply to this project because it relates to shipping noise. However, SLR fails to identify any internationally recognised standard which might be used to assess noise emissions arising from shipping activities. If SLR is unable to identify any such standard, then it must accept the INP as being the relevant document to assess noise emissions in New South Wales. The urban/industrial interface concession provided in the INP does not apply to cruise shipping at White Bay yet SLR asserts that the

concession should be applied. My analysis of SLR's position is that it is inconsistent. This position is not satisfactory as it does not provide the community with a meaning basis for assessing the noise reductions proposed by SLR.

12. Relevancy of comparing ship berth noise with road traffic and rail pass-by noise

The SLR report claims that both the rail traffic noise and road traffic noise guidelines have some relevance to noise cruise ships at berth. This assertion fails to identify that the fundamental difference between both rail and road traffic which give rise to pass-by noise while cruise ship noise at berth is from a stationary source. The SLR report failed to note that railway maintenance yards in NSW are assessed under the INP. Rail maintenance yards are much more of a stationary source and are more similar to ships at berth. Cruise ships at berth generate a totally different sound to pass-by noise emitted by rail and road traffic. In the case of rail traffic, it is dominated by discrete events associated with rail pass-by. While road traffic may be continuous, its frequency content is very different to that created by a cruise ship at berth. In fact, noise from a cruise ship at berth is typically dominated by noise from a very large diesel engine mounted in a steel structure. A cruise ship at berth is much more similar to a peaking diesel powered electricity generating plant. Such a plant would fall within the schedule under the POEO Act and the INP would be the relevant noise assessment guideline. Claims made by SLR that cruise ships are "special" should not be taken seriously as the arguments are spurious. It remains my view that the INP should be strictly applied and cruise ships considered as a type of peaking electricity generating plant.

The basis of the SLR report claiming that WBCT VNAP should be based upon road and rail traffic noise guidelines is fundamentally flawed. There are no international standards quoted in the SLR report which claim that noise from ships while berthed should be assessed on the same basis as pass-by transport noise from roadways or railways. Hence the basis provided in the SLR report for acoustic treatment of dwellings is misinformed and misleading.

The SLR proposal for residences only to be treated if noise levels are greater than 70dB (daytime), 60dB (evening) and 55dB (night) highlights using the "model" cruise ship with a sound power of 111dB means that many residents who are subjected to noise just 1dB or even 0.5dB less than the specified levels will fall outside the eligibility zone. This is totally unfair. A resident will not be able to detect just a 0.5dB change in noise level. As a generator of offensive noise, Ports NSW must adopt a conservative approach to any offer of acoustic treatment. This means the above "limits" must be reduced by at least 10dB. Given that the proponent has failed to propose any time restrictions on cruise ship arrivals, departures or overnight stays, acoustic treatment needs to be offered to all residents with external noise levels at or above 45dB(A). This will ensure that future increases in usage of the port by ships with substantial low frequency and/or tonal noise are provided for.

Similarly the 100m distance from the boundary of the site is also arbitrary. Any distance must take secondary importance to that of noise level and the character of the noise as assessed using the modifying factors specified in the INP.

13. Community engagement

My review of action initiated by Ports NSW to engage the community in its attempt to address noise associated with cruise ships using White Bay is that this exercise has not been taken seriously. Despite identified breaches of planning consent conditions, Ports NSW has failed to take meaningful steps to deliver effective noise reduction at source. The SLR noise reduction strategy is based largely upon providing acoustic treatment of houses. Community engagement must be demonstrated before it is reasonable for Ports NSW to impose its “solution” on residents. Community engagement demands that the residents be heard and be provided with balanced comprehensive information.

Since cruise ships started using White Bay, response to residents’ noise complaints show that there has been little change to noise from individual ships. In fact, the increase in number of ships using the facility shows that Ports NSW has not actioned one of the most effective means for reduction ship noise, that is, introduced a noise management scheme for noisier vessels. The failure of Ports NSW to demonstrate achieved noise reductions has not helped convince residents that Ports NSW is attempting to seriously reduce noise from cruise ships. Perhaps the primary concern of Ports NSW is that any reduction in cruise ships would impact its revenue stream unfavourably.

Ports NSW has previously committed to installing a continuous noise monitoring system in Grafton Street. The failure to install such a system and provide open access to online noise levels could be interpreted to reflect Ports NSW concern that such a system would show just how quiet this residential area is when cruise ships are not present. The failure to correctly apply the INP to noise limits imposed on the facility and the true background noise levels will be exposed by a continuous noise monitoring system. A 24 hour noise monitoring network would have shown that background noise levels in Grafton Street are much less than 50dB(A). The inaction of Ports NSW highlights my concern with the draft Strategy as being a token exercise and an attempt to mislead the affected residents with misinformation.

14. Credibility of claims of achieving 12-16dB(A) reduction in shipping noise by treatment of dwellings

The basis of this claim is questionable in the context of low frequency diesel engine noise. Closing off ventilation openings to reduce noise levels by 8-10dB(A) is also questionable when considering the predominant low frequencies arising from diesel engines on cruise ships. My concern is that these “claimed” noise reductions relate to broadband noise caused by air turbulence noise. The application of the proposed “acoustic treatments” will simply cause the inside of these dwellings to be dominated by low frequency noise with a higher propensity for that noise to fall within the “tonal” or “low frequency” definition. This situation would exacerbate the acoustic environment inside these houses with windows sealed and no ventilation. Shifting the acceptability of acoustic treatment on residents fails to place the responsibility for the cruise ship facility on the operator. At this point of time, Ports NSW has failed to demonstrate that it accepts responsibility for the noise problem and it has the responsibility to find a solution.

I have conducted noise measurements of some of the cruise ships and identified one ship which emitted a tonal noise that generated a standing wave in Grafton Street. At the highest noise level, the C weighted noise level was 82.0dB(C) against a measured 53.0dB(A) sound pressure level. The 1/3 octave band level was 74dB in the 31.5Hz band. The claim by SLR that the proposed acoustic

treatment would reduce noise at this frequency by 12-16dB(A) is questionable. This is also doubtful as the low frequency noise from cruise ships causes structural vibration within the buildings and is likely to trigger building resonances. The proposed acoustic treatments would not substantially change this type of building induced low frequency noise. Once a residence was “treated” Ports NSW would claim that no further action was required under the strategy. Consequently, the residents would remain subjected to annoying noise and have no further redress. This situation is not acceptable. The risk of achieving acceptable noise levels in the residential areas must remain with Ports NSW and not be shifted to the residents. For this reason the proposed noise mitigation outlined by SLR is unacceptable.

15. Treatment of source noise under the INP

The SLR report fails to provide detailed analysis of noise source treatments. The provision of ship to shore power was identified and considered only superficially. The SLR report suggests that few ships have ship to shore capability. However if White Bay had a shore power facility and a usage charge incentive was imposed for excessive noise, demand would grow. The analysis of ship to shore power provided in the SLR report is lacking in serious analysis. It would be a very poor decision if acoustic treatment of dwellings was accepted without comprehensive assessment of treatment at source achieved by ship to shore power. The only information provided is that shore power could cost “tens of millions.”

The shore power cost must be compared with a true cost of proper treatment of all the residences where shipping noise exceeds the noise criteria specified with proper use of the INP. The false limit used in the SLR report (70/65/45dB) greatly understates the numbers of residences requiring treatment. If all the residences were treated and the low frequency noise factor addressed (if it could be), the shore power cost is probably very similar to the building treatment costs. The acoustic treatment of houses causes the houses to become prisons as all the windows need to be sealed shut. Residents would be far more acceptable with source noise reduction instead of their homes being sealed shut. The SLR report again presents misleading information as it does not define the true extent of costs of its proposed treatment and does not detail the actual projected cost of source treatments.

A further option that was not explored in the SLR report, is for noise limits and times of use to be placed on cruise ships seeking to berth at White Bay. This measure constitutes best management practice and is identified as being appropriate for noisy activities like that associated with the berthing of cruise ships. This would provide a new market for quieter cruise ships. The current noisy ships using White Bay could be redeployed to other destinations. Imposing time limits for ship arrivals and departures would also ensure that ships adhered to schedules which caused less annoyance to residents. At present, cruise ships have no restrictions on when they arrive or depart the facility. A lack of restrictions means that residents have no protection against offensive noise at any time of day. This is unhelpful and should have been identified in the SLR report.

16. Economic instruments

Economic instruments can be used to provide an effective means for achieving noise reduction using a market mechanism. Whether this instrument is applied through an environment protection licence

issued by the EPA or whether the instrument was to be applied by Ports NSW is open for discussion. The opportunity exists for a financial incentive system to be applied in terms to address the following aspects of cruise ship noise:

- Noise level
- Berthing at WB4 and WB5
- Ship arrival time before 7am
- Ship departure time after 6pm or after 10pm
- Overnight berthing of cruise ships

The imposition of a financial instrument would provide an effective signal for cruise ship operators to vary their current practices. Experience over the last 4 years suggests that without a financial market system, variation to time schedules will not take place on a voluntary basis.

17. Valuation of noise impact on households

The SLR report proposes that a very limited number of houses surrounding the White Bay facility be subject to acoustic treatment. I am very concerned about the claimed effectiveness of the proposed treatments and the satisfaction of residents who “agree” to such treatments being provided. If, after acoustic treatment has been provided, a resident finds cruise ship noise to be unacceptable what happens then?

It has been a past practice with overnight noisy events for the developer to provide residents with motel accommodation for the duration of the activity. Offering residents around White Bay overnight motel accommodation provides a charging model for the overnight berthing of noisy cruise ships. Under this arrangement, cruise operators would be charged a fee based upon their noise level and the number of residents who would be eligible for motel accommodation.

Using the provision of motel accommodation as a cost model, noisy cruise ships would be charged a fee in the vicinity of say \$50,000 per night (200 residents x \$250/motel).

Similarly, early noisy ship arrivals and late noisy ship departures, would be charge a fee a fee of \$5000/incident as an “annoyance” charge imposed upon the residents. Daytime berthing for noisy ships would have a charge of say \$5000. Noise charges would reflect noise levels generated.

The fee system would achieve effective noise control. The costs of the scheme could be avoided if ship operators schedule the times of ship movements and select quieter ships to use the facility.

Using the above fee structure, the dismissing of ship to shore power requires closer examination. A reduction of 10dB in ship noise levels would enable many ships to move to a lower fee structure.

The introduction of a ship noise fee structure would also provide a means to challenge future growth in ship berthing activities except for ships which satisfy the revised noise limits.

18. Proposed alternative Noise Reduction Program

The SLR report provides little assistance with addressing offensive noise emitted by the White Bay cruise ship facility. As set out in the INP, a noise reduction program should have been implemented

from the first day operations commenced as the existing facility causes offensive noise on a regular basis.

My suggested noise reduction program includes the following:

- Impose absolute noise limits for ships using the facility and a timetable for introduction of more stringent limits. Supplement these limits with a berthing noise fee which encourages lower noise cruise ships. The provision of ship to shore power is an integral element of this noise reduction measure.
- Impose limits on arrival and departure times and include a berthing fee for early arrivals or late departures.
- Impose a berthing fee structure for overnight stays.
- Establish at least two sites with independent 24 hour noise monitoring with full resident access to data online. Sites to include recording of elevated noise events including source direction.

19. Proposed New Noise Limits

I have reassessed the data contained in the Wilkinson Murray report and using the INP, I have applied corrections as specified for an urban area. This provides the following corrected noise levels which must be applied if residents are to achieve the amenity and intrusiveness limits specified by the INP. These noise limits must be the basis used to determine the required level of acoustic treatment of dwellings for an ever increasing utilisation of the berthing facility.

Site	Day	Evening	Night
Grafton St, Balmain	50	42	42
Donnelly St, Balmain	52	42	42
Dockside Apartments	53	42	38
Refinery Dr Pyrmont	55	45	40
Oxley St, Glebe	57	43	43
Camerons Cove, Balmain	50	42	42

Notes: The proposed new day noise limits are all $L_{A,eq(15\text{ min})}$ while the evening and night noise limits are all $L_{A,eq,period}$. Cruise ships arriving before the 7am or staying beyond 6pm would be subject to the appropriate $L_{A,eq(15\text{ min})}$ which I have not included in the above table to avoid confusion.

The above table should be used as the basis for the assessment of noise from White Bay cruise ships as there has been a more than doubling of ship movements since the facility commenced operations. The above limits provide for an increase in ship movements – in contrast with the planning consent which was based upon a much smaller number of cruise ships.

20. Updating the Operational Noise Management Plan (ONMP)

The changes proposed in the draft ONMP for White Bay cruise shipping is inadequate and lacking in enforceable requirements. The draft document has no requirement for operator attended

monitoring to include monitoring of noise for modifying factors as specified in the INP. This highlights the on-going failure of Ports NSW to accept that low frequency and tonal noise is emitted by some of the cruise ships using White Bay.

The ONMP should also include the noise limit objectives I have specified in the preceding section. This would provide some assurance to the community that Ports NSW accepts the noise limits placed in the planning consent were incorrectly set and that community acceptance of White Bay cruise ship noise should not be expected until those noise levels have been met.

The ONMP must also include a timetable for the installation of ship to shore power capability together with a revision of the current port usage charge schedule which includes noise weightings, times for ship arrivals and departures, and ship noise limits. Unless these elements are incorporated into the ONMP, the document will fail to deliver any noticeable changes to current ship noise.

The ONMP must also be revised to address the plethora of other nuisance noise issues created by cruise ships. This includes the use of PA systems, sewage removal and safety systems. The draft document is ineffective in its approach to addressing these nuisance noises as experience shows there has been no change since port activities commenced. The use of the phrase “noise which the Port Authority of NSW considers inappropriately impacts on its neighbours” is too vague to be enforceable. Actions taken by Ports NSW since the facility became operational indicate that Ports NSW does not consider the current noise levels cause an inappropriate noise impact. The establishment of an independently operated continuous noise monitoring system will be of great assistance in confirming that the other noises are not being regulated and also amount to offensive noise due to the character, duration and time of day that these take place.

21. Conclusion

The draft Noise Mitigation Strategy fails to provide an accurate and objective assessment of the level of offensive noise being caused by cruise ships using the White Bay facility. The proposed offer of “acoustic” treatment for a very small number of dwellings is totally unacceptable. The credibility and objectivity of the proposed strategy is undermined by my critical review of what has been offered. It would be a waste of public money for the proposed treatments to be completed as the offensive noise generated by cruise ships would remain an on-going problem.

Appendix B

Content of Individual Submissions

Appendix B

Table B1 - Content of Individual Submissions

No.	Date received	Submission details
1	29/11/2016	Our property is eligible for treatment and we would like to explore the available options. Our house is heritage listed and we would be concerned how it would effect our property.
2	29/11/2016	The boat/ship that is the noisiest by far is the "Dawn Princess"
3	1/12/2016	We have a significant problem with engine noise from cruise ships resonating with our windows and causing vibrations. This can be very distressing at night. This is in addition to disturbance from sirens/announcements.
4A	6/12/2016	I currently own [redacted] and I note [redacted] is down as a single story when in fact there is 2 bedrooms and bathroom on the first floor. Although ground floor noise from cruise ships is acceptable, the upstairs rooms get elevated noise levels as compared to downstairs. In addition we get considerable vibration of windows and doors when certain vessels are in port at both levels. I would like the upstairs level at [redacted] reassessed under the guidelines for treatment as it has not been assessed
4B	6/12/2016	I currently own [redacted] and I note [redacted] is down as a single story when in fact there is 2 bedrooms and bathroom on the first floor. Although ground floor noise from cruise ships is acceptable, the upstairs rooms get elevated noise levels as compared to downstairs. In addition we get considerable vibration of windows and doors when certain vessels are in port at both levels. I would like the upstairs level at [redacted] reassessed under the guidelines for treatment as it has not been assessed
5	6/12/2016	Hi, sadly we were unable to attend the community consultation but would like to add our voice to the suggestion of a noise attenuation program as an affected house. As nice as this all sounds it doesn't take away the fact that the pollution spewing from these stacks all day and sometimes into the night when birthed overnight is a bigger problem and greater concern. The \$5.3 million should be spent on onshore power rather than providing double glassing. I am not sure what how we are supposed to survive with windows/doors shut - double glazing or not. Happy for you to come round and tell us what you are going to do but suggest program is nothing more than trying to shut the community up. If you were serious, an onshore power would be the first thing to be attended to
Included as 6	6/12/2016	"Ships can't meet decibel requirements for o'night stays. Can you ban now – not just wait?"
6	31/01/2017	We live directly opposite the White Bay Cruise Ship Terminal and our lives have been negatively affected by the noise, vibrations, light spill, and heavy pollution. We are woken early (before 7am) when ships arrive with loud engine noises, excessive diesel fumes and honking noises from forklifts unloading the ships. We can no longer open our windows on a hot summers day without getting a lung full of diesel stench. The number of days where a ship is in port has increased so we are rarely able to open windows for fresh air. I am reluctant to open the windows at night when I know a ship will wake me at dawn with its air and noise pollution.

No.	Date received	Submission details
		<p>Overnight stays by vessels mean no sleep for my family. My children's bedrooms upstairs are exposed to excessive light spill, loud speaker announcements (in addition to safety drills) and engine noise. I can no longer enjoy time in my garden or organise any friends to visit when ships are in port due to engine stench and loud speaker announcements. I am stressed by planning my personal calendar around the cruise schedule to ensure I don't invite friends or family to visit on a day when a ship is at WBCT so I don't expose them to the pollution and noise.</p> <p>I know that the Port Authority could implement on shore power to the ships that would eliminate the engine noise, but the cost to them appears to outweigh the cost to our health and wellbeing. We are deemed valueless.</p> <p>The planning approval allowed the Port Authority to make operational changes to mitigate the impact on residents but they chose to do nothing. They could have turned away noisy, polluting ships they know breach the noise and pollution restrictions but do nothing. They could have delayed noisy ships arriving before 7:30am so residents were not woken early particularly on weekends. They could stop overnight stays when they know the ship cannot comply with the noise level restrictions but, as there is no penalty, they do nothing.</p> <p>While a noise mitigation strategy is welcome, it should and could have been implemented at any time since the cruise terminal became operational in 2013.</p> <p>I thought the ships were only allowed to sound their main horns as a warning, however WBCT ships sound several extremely loud horn blasts as they leave port more as a signal to their guests that is party time. There are often no other vessels in the immediate vicinity so it is not a safety warning. The Port Authority seems to have no power to enforce any odd the planning regulations, External speakers are used on ships regularly to make routine announcements to passengers, unrelated to safety. The Port Authority appears to rely on resident complaints before they approach the ship personnel to stop the noise.</p> <p>The design of the terminal is faulty if it requires all forklifts to constantly beep their horns throughout the unloading process for supposed safety reasons. Some ships crews are much louder than others for no apparent reason. These appear to be manual noises that could be fixed relatively easily but no one seems willing to address them.</p> <p>I would welcome the opportunity to be properly consulted and appropriate mitigation strategies that could be applied to make my family's lives safer from noise, air and light pollution would be welcomed.</p>
7	7/12/2016	<p>On Thursday evening I attended the community consultation session held at Clontarf Cottage in Balmain. I live at [redacted] which falls within your Noise Attenuation Program boundaries.</p> <p>I took the opportunity to have a conversation with your representatives on Thursday evening and left with many questions and issues around the various aspects of your strategy. Firstly if we look at the attenuation program, I can only imagine that many of the homes targeted for this treatment are heritage homes - some listed and perhaps some not.</p> <p>Nonetheless I can't imagine going to Council (that would be our currently undemocratic unelected Council - another State Government initiative) and necessarily gaining their approval for this treatment to our windows and doors. Your representative on the evening talked about how easy it is with sliding doors etc. The houses in this area are mostly 100 or more years old without a sliding door to be seen. I was left bewildered about the appropriateness of this strategy and indeed how likely it was to be able to be implemented due to the issues mentioned.</p> <p>If we then look more broadly at your Noise Mitigation Strategy it just doesn't have any teeth as far as I can see. Your Noise Restriction Policy will be a new policy which I understand may come into being possibly in the second half of 2017 though we won't really know that unless and until it happens so at this stage it has no influence. Also, even if we assume it does come into play, I was told by your representatives that it will not have any impact on ships already booked to berth at White Bay but will only apply to future bookings. So that would mean that at the very best this is a medium term response but with a bunch of ifs, buts and maybes along the way. If it did go according to plan however that would mean that perhaps in a few years from now if a ship had its noise logged and it was non-compliant on three occasions you could take action to ban that ship. Seems a long time to wait for not much action.</p> <p>Again, even if we accept that the above is the process and it does come into effect at some point down the track, the noise logging and noise level those ships will be held to was set at 55 decibels. Why 55 and not 50, or even 45? A cynical person would consider this a level selected to favour some cruise operators.</p> <p>So they are my issues specifically with the elements of your Noise Mitigation Strategy. I do however</p>

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		<p>have broader concerns and believe the strategy will be ineffective even if it is introduced. Above that though I believe your approach is inappropriate. The analogy I raised was that if my daughter plays her music too loud in her bedroom I don't find ear plugs to wear while I cook dinner - I make her turn the music down. You are effectively taking the opposite approach and would have the rest of my family wear ear plugs if my daughter's inconsiderate and noise-polluting behaviour bothers us. I would consider that oppressing the rights of the rest of my family in favour of her freedom to make too much noise. If we apply the same logic to the noise pollution of cruise ships then your plan is oppressing the rights of residents in favour of cruise operators which I believe to be wrong.</p> <p>If the problem is the noise then stop the noise at its source - simple as that.</p> <p>So to wrap up on your Noise Mitigation Strategy I reject each aspect as it is ineffective, unlikely to be implemented and punishes the victim. While I thought it important to address your Strategy as that is the way you've framed your conversation with residents, I would also like to say that I do not believe it is in the interests of residents to engage with you on this Strategy. The issue as I see it regarding the White Bay Cruise Terminal is a massive environmental issue. It is not a noise issue but rather an all encompassing noise, air and energy issue - a significant environmental issue for not just the houses in your noise mitigation strategy plan but for the larger surrounding area. My concern would be that going along with your Strategy may acknowledge that noise is THE issue when clearly it is not and I would further be concerned that residents' position in the larger debate is weakened by this.</p> <p>We should not be carving this up into more manageable chunks to make life potentially easier for the Port Authority and the cruise operators to 'manage' residents. It is an absolute disgrace and hugely shameful that a city like Sydney, host of the 2000 Olympics - progressive, multicultural and with such extraordinary natural beauty has one of the newest cruise ship terminals in the world and yet has nothing that even approaches best practice in terms of its environmental policies. This for me is the real issue. It is not a Grafton Street issue or a Balmain issue or even a Sydney issue. It is an environmental issue and a complete disgrace that our city allows this to occur.</p> <p>So my feedback is that I am not at all happy to engage in your narrow and restrictive conversation about noise because I do not acknowledge it as an individual issue - its perhaps the smallest concern in a much larger issue.</p> <p>Thank you for your time in considering my submission.</p>
8	13/12/2016	<p>Property is just outside the eligible area and she would like to be considered for treatment. Windows and front door face port. Park opposite and street and continues and comes up street. Low humming of engines, particularly in early morning. Announcements are also a concern as she works from home. Air quality concerns, reported a dry throat, just settling dirt/dust. Was advised of process re report to DP&E then everyone would be contacted again.</p> <p>Subsequently sent written submission requesting shore power and noise monitoring.</p>
Included as 9	7/12/2016	<p>Rang to say he disagrees with other peoples opinions. Some were saying the old shed was worse - but that is simply not the case. He recalls the old steam ships and constant overnight noise, this is so much better. Can't understand why some object to the horn - its obviously needed. Understands some of the party noise is not good, but overall not an issue. Loves the ships - can't understand some of the other peoples' opinions. Air quality - can see this somewhat - should be best practice. Will put a submission in. Further submission follows: 9/01/2017: I hope that the Cruise ships are allowed to sound their horn when leaving Port? Some do and some don't. We like it when they do and while on the subject this years NYE I did not hear a ship sound their horn after the midnight fireworks. is this some sort of 'directive'?</p> <p>This was a first. I hope it is the last.</p> <p>Noise level is more evident today. Whenever the ships berth BOW first as is the case with 'The Regent' at the moment. Mostly ships berth STERN first (our preferred option) and therefore less intrusive</p> <p>Updated submission: 31/01/2017:</p> <p>In presenting our submission we would firstly like to point out that we like having the Cruise Ships at the WBCT and we enjoy having the ship movements within White Bay. We have lived here since 1983.</p> <p>The term 'working harbour' is widely used without clarifying exactly what that means and unlike the inability in the survey I undertook over the phone, I would like to point out that it is very unhelpful if this is not done. Unloading Containers is a working harbour as is barge positioning but the two have decidedly different propositions and impacts.</p>

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		<p>Our area of concern at the WBCT is 'Best Practice' issues primarily concerning Pollutants and Noise.</p> <p>Pollutants: The issue of fuel could be solved simply by Legislating World's Best Practice Policies and eventually installing 'shore to ship power'.</p> <p>Noise: An element of noise is to be expected. I think it is fair to say that depending time of day and on the location of one's house there is a varying level of acceptance of this and it needs to be looked at on an individual basis. In our case we are located at the Eastern end of the terminal, adjacent to the boom gate, where certain service vehicles enter and exit. That's not to say we are not affected by other noise further away from this point. We are, but depending on the time of day or night we are affected differently depending on the type of 'service vehicle' entering or exiting. For example at 3am if someone arrives and is having a conversation with another party we can hear it very clearly because it is so quiet at that time of morning. Getting back to sleep is not always possible. (This is an example of what used to happen when the WBCT first opened...) Times have changed thanks to the cooperation of Brendan Elliott and his supervisor Bob le Grande. They were very helpful and understanding. It is the level of 'intrusiveness' of certain work related noises and sounds that make it difficult to pin point and cherry pick what's ok and what's not. For instance, we accept that there are Arrival and Safety Announcements to be made and having attended several meetings I don't need to go further with this as you are well aware of it, except to say that we hope that a ship can still sound it's horn at the appropriate time when departing. We love that and other shipping sounds such as a Ferry reversing 'three toots'. We don't find these 'noises' intrusive at all. 'Ding Dong' bell on some ships prior to announcements is a bit tiresome but thankfully not all ships use that device before making announcements.</p> <p>Overnight Stays: Lighting from the ships staying overnight affects some of our bedrooms. In our house at [redacted] we already installed external louvres which has had the desired impact in relation to the ships lighting. In house [redacted]the lights directly affect the end bedroom, which has mostly glass features, and the middle bedroom. My wife L and I, are open to discussions and want to take part in Noise Attenuation of our properties. Window sound mitigation and lighting are our most pressing concerns and we hope that at the conclusion of the survey we will be able to have these issues quickly resolved. We look forward to working on ways to better deal with the noise and pollutant fuel currently used by ships when in Port.</p> <p>Here are three examples of how we were 'noise affected' over the past week.</p> <ul style="list-style-type: none"> • 10 Dec 2140 hrs Forklift Delivery by tilt truck. Chains dragged across the metal tray. • 11 Dec 2035 hrs More of the above and gas bottles. • 12 Dec 1235 hrs Street Cleaning Truck going up and down the roadway beside the Terminal and Cliff face wall. <p>Perhaps some of the overriding problems could be eliminated or made 'palatable' by delaying arrivals from 0600 to 0800 and moving out the departure times by two hours as well. Worth considering? We hope this helps and look forward to hearing from you.</p> <p>ADDITIONAL: Port Authority Noise Register by Date. I have taken note of these time purely for the benefit of the Monitoring authority to, in some cases, exactly pinpoint the time to assist in you locating quickly some of the noises emanating from WBCT. I have not rung to complain on any issue listed here. Note the times I have listed are just some of the times I happened to be at home and there may have been many more that I could not record simply because I was not there. I hope it helps.</p> <p>27 Dec 16 21-2200 hrs Delivery of Forklifts / Gas Bottles. 6 Jan 17 2030 hrs as above 10 Jan 17 0545 hrs Service vehicle East end. 17 Jan 17 Pacific Eden very noisy all day. Funnels and generators. Morning worse due South wind</p>

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		<p>direction.</p> <p>19 Jan 17 Lots of Fork lift movements and 'tooting'. Crystal Symphony overnight stay. Lights from the ship penetrating the rear and middle bedrooms.</p> <p>21 Jan 17 2240 hrs More vehicle delivery and chains dragging over metal truck tray.</p> <p>25 Jan 17 Pacific Eden (berthed Bow First) constant noise and pollution from the chimney stacks.</p> <p>26 Jan 17 Pacific Dawn. Lots of air pollution from the chimney stacks.</p> <p>27 Jan 17 Pacific Perl berthed and lots of smoke stack discharge.</p> <p>28 Jan 17 Pacific Eden maintenances noises. ?</p> <p>29 Jan 17 Dawn Princess. Lots of noise all morning. 1215; 1224.1310,1313. Some of the Announcements 1508 and 1510. 1520.</p> <p>30 Jan 17 Pacific Perl. Assess noise at 0859 hrs. 1911, 1936 hrs.</p>
9	15/12/2016	<p>Provided feedback on terminal related noises. Likes the noise from ships. Interested in attenuation for their properties.</p>
10	30/12/2016	<p>I am writing to confirm our eligibility for noise proofing our home due to the noise pollution from the White Bay Passenger Terminal.</p> <p>We will require new or replacement windows and French doors that face directly towards the passenger terminal and a ventilation system to allow for the circulation of fresh air in our master bedroom as well as office rooms as we need to have all doors and windows closed due to the noise when conducting any form of our business.</p> <p>Based on the letters I have received from council and the information sessions I understand that our property is eligible and will be included for the above works i.e. I do not need to compete any forms etc</p>
11	12/01/2017	<p>To whom it may concern,</p> <p>I live in [redacted] and are directly impacted by noise at the White Bay Terminal.</p> <p>I will endeavour to respond to the community response program but I am someone cynical to the outcome in light of the fact that it is being conducted over a couple of weeks when most residents are away on holidays. I happen to be at home for a couple of days before planning to go away/camping with my kids. This surely does not pass the 'sniff test' in terms of probity for genuine community consultation processes and is extremely disappointing</p> <p>Submission: Outside the disappointment of the timing of and the limited timeframe of the consultation period, the current noise mitigation strategy does not work. If not all but most of the ships docking at the WBT breach the following: 1. Make non-essential announcements and make announcements outside the relevant time periods; 2. Play music from time it time on deck; and 3. Generate non-compliant noise which is coming from the engine or the generator. I am not sure. This only way this can be dealt with is a proper landed energy source that ships can plug in. I simply don't have the opportunity to read al relevant documentation as I am trying to spend time with my family over the break however I wish to highlight that the current noise mitigation program is inadequate - both from a resident perspective and also if you are a passenger visiting from our of town. Surely a city like Sydney can do so much better.</p>
12	13/01/2017	<p>The Officer in Charge, Sydney Ports Report No 610.13361.00200-R01</p> <p>I am concerned/intrigued as to how easily the possible provision of shore power is dismissed in this report.</p> <p>The argument seems to be that:</p> <ol style="list-style-type: none"> 1) only 25% of cruise ships can currently accept shore power. 2) it might cost "tens of millions of dollars" to install the necessary shore plant. <p>Neither of these arguments is compelling.</p> <ol style="list-style-type: none"> 1) I understand that cruise ships will shortly have to use "clean" fuel, and if they cannot currently do so, are obliged to convert their machinery. There is no reason why a similar obligation to accept shore power cannot be implemented. 2) I would be interested to know how the estimate of "tens of millions of dollars" to provide shore power was derived. <p>Having been involved with the provision of the shore power system on Garden Island I find this</p>

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		<p>estimate somewhat 'fruity'. I understand from recent publicity that some \$5m has been set aside for noise mitigation. I believe this would go a long way to providing a shore power installation, and would have the additional benefit of eliminating pollution problem of exhaust from ships generators. It may take some courage to compel cruise ships to modify their vessels to accept shore power, but I believe it is by far the better solution. I will be very interested in your response</p>
13	14/01/2017	<p>We already have installed double glazed windows on southern side of the house facing the WBCT which has minimised most noise issues for us. We do experience some night time/early morning noise issues in our north facing master bedroom when vessels stay overnight or arrive very early. It is to be noted that we have experienced variable noise issues (some vessels are much quieter than others) from cruise vessels with noise problems coming from what appears to be plant room/engine room ventilation fans which it is likely have to be run continuously to maintain on board power generation. The provision of shore power may well reduce or eliminate most of the noise issues (as well as smell) for us. Music and PA announcements are rarely a problem, however when they are we need to be able to contact a person by phone in the Port Authority who is able to speak directly to the vessel's crew and alert them to the problem.</p>
14	14/01/2017	<p>Dear Sir - Thankyou for sending the information on White Bay. My husband & myself are now retired & live at [redacted], only three doors up from the cruise ship terminal. Our tiny heritage-listed cottage was built in 1855. Obviously, its very old doors & thinly glassed windows both at the front & the rear of the house, were never designed to keep out external noises emanating from massive cruise ships, thus we have often been upset by ships moored there both day and night. Over summer, we used to be able to close & lock our front shutters, & leave open the glass French doors behind them, thus allowing cool night air to come in. Now its too noisy so shutters & doors all remain shut up these days. On top of that, the rear enclosed courtyard acts as a kind of soundshell, thus noise from ship engines & PA systems are magnified there, so it's no longer a nice place to relax in during balmy summer evenings. In terms of other noises emanating from cruise ships, I once heard details of an argument amongst crew members emanating from a ship's bridge after a PA system was unwittingly left on! On another occasion, when we were sleeping in the front bedroom, I was awoken in the early hours of the morning by the stench of toxic engine fumes emanating from a cruise ship that absolutely filled our room! I really do wonder just how these cruise ships may badly undermine our health, & for how much longer we can stand it. It should never have been allowed! If you can help us in any way, we would be very grateful. Left as is, the current situation is becoming untenable.</p>
15	14/01/2017	<p>We live at [redacted], so are very close to the White Bay Cruise terminal, overlooking it in fact. Other than for the emergency procedure testing where the sirens go off, we barely notice the ships. We don't find them noisy coming in the morning, we hardly notice noise of the boats of the people coming on and off via bus, coach or ferry, Personally for our family we have no concerns with the boats or the noise they make, no action at all is required as far we are concerned and no further waste of tax payers money required</p>
16	15/01/2017	<p>We are a family of four living in [redacted]. Balmain directly above the White Bay Cruise Terminal. We have a 7 year old and in particularly a 3 year old who are affected by the noise that the ships produce. Our 3 year old sleeps during the day and is regularly woken by noisy engines running or emergency drills conducted by the cruise companys. We don't have thick windows so there is a constant hum that can be heard from a majority of the ships but in particularly the "Princess Cruise" ships. Their engines are a lot louder than any other. This is a problem that needs to be rectified and we are more than happy to have our say in regards to the matter.</p>
17	15/01/2017	<p>Although we are just outside the highlighted area, we are frequently aware of public address messages being broadcast to ship passengers. If we can clearly hear these messages, it means that they are far too loud and an unnecessary intrusion. This is very annoying. It must be unbearable for householders adjacent to the terminal. Some ships no longer make these loud announcements - the problem is with some offenders only. We are also aware of engine noise - a roaring noise - sometimes at night coming from the port.</p>

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18	15/01/2017	<p>Thank you for your recent flyer in the letter box, this is the first communication I have received on the subject.</p> <p>Yes, we receive significant noise nuisance from the cruise ships at the terminal, especially as our bedroom is in direct view of the moored ships. We would appreciate any assistance you can give to reduce the noise nuisance. We receive 3 types of noise nuisance, the worst nuisance first;</p> <ol style="list-style-type: none"> 1. Ship PA system announcements. These announcements are loud and wake me up when asleep. Listening to the announcements they mostly are routine safety related, going through procedures & testing warning alarms. Note that the announcements do not seem to relate to any active safety situation, they are all about going through routine check procedures. It is very important to me that these routine procedural announcements not be broadcast on the ships external PA system, ie. should be internal PA only, unless there is an active safety situation. <p>Your proposed guidelines are very inadequate here. They should allow external announcements/warning alarms only when there is an "active safety situation" whilst at port, not when going through safety check procedures which should be internal PA only.</p> <ol style="list-style-type: none"> 2. Ship engine exhaust stack noise. This noise is quite audible from our bedroom and is intrusive noise. Needs to be much quieter. Desperate need for land based electric power to the ships. 3. Equipment reversing beeps. This noise is quite audible from our bedroom and is intrusive noise. Welcome your proposals to install much quieter equipment. <p>As our house is close to the ships and our bedroom is in line of sight, I feel we should be given special consideration of any extra measures you can provide. Not good to be regularly woken up whilst asleep.</p> <p>looking forward to your favourable response,</p>
19	15/01/2017	<p>I am providing feedback regarding the noise mitigation strategy being proposed in Balmain due to the White Bay Cruise Ship Terminal. I suggest that the noise attenuation methods proposed are paid for by the residents themselves. White Bay has docked cruise ships for many years and these residents moved here knowing this to be the case. Sydney is a major tourist destination and the terminal is a valuable commodity. I too live very close to the terminal. The ships that dock are majestic and the noise is minimal. Balmain residents generally have higher than average incomes, professional jobs, have tertiary education, and are predominantly made up of 2 income families. They are hardly struggling. They have harbour view properties, and are privileged in many ways. I find it embarrassing that they expect to be compensated for living in million dollar foreshore properties.</p>
20	16/01/2017	<p>I live very close to the berth. The noise from the boats is deafening at times, particularly when running engines and having lights on at night. Loudspeaker announcements are also particularly loud. When does the new noise strategy become the law?</p>
21	16/01/2017	<p>The cruise ship outside tannoy system needs to be kept to minimum levels when moving around Sydney harbour and especially at all times when docked.</p> <p>It's so loud that I can hear it in Rozelle and it is an annoyance.</p>
22	17/01/2017	<p>Thank you for the opportunity to provide feedback on the noise impact mitigation strategy for WBCT.</p> <ol style="list-style-type: none"> 1. The report is very detailed and technical. It is not constructed in a way that makes it clear what the main findings and final recommendations are: this could have been remedied by providing an abstract or summary. The separate fact sheet does this in part. 2. Figure 5, Noise Complaint Summary by Calendar Year 2013 – 2016, shows a decline in complaints over time. One obvious explanation for this is that people become tired of complaining when their complaints produce no outcome. Figures 1 and 2 show that the number of cruise ship visits will increase in 2017. It is reasonable to conclude that noise and air pollution impacts will be worse. 3. The report says that providing shore based power to cruise ships could reduce noise levels by 10dBA, which would be a great outcome, but concludes that this is not a cost effective solution in part because only 25% of cruise ships can accept shore based power. In reaching this conclusion, the report is not considering the potential impact on air pollution as well as noise pollution achieved through providing shore based power. Furthermore, it is open to the report to recommend that the Port Authority take action to encourage more ships to use shore based power. This could be achieved by pricing incentives in the port fees charged to cruise ships. 4. Quieter ships are better for the passengers as well as for local residents. Ships that create less noise and air pollution are better for everyone wherever they go. The report plays down the effectiveness of working with cruise ship owners to encourage or even require higher standards of

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		<p>noise and air pollution abatement, but I think this is poor judgment. Sydney Harbour is a world premier cruise location. The Port Authority is in a reasonably strong position to require high standards from cruise ships using its facilities.</p> <p>I hope that these comments are useful. There are many good things about cruise ships visiting Sydney Harbour, but it remains important to reduce their negative impacts.</p>
23	17/01/2017	<p>While noise generated by loading/unloading procedures, passenger announcements etc are items that should receive attention in the noise mitigation strategy, 'the elephant in the room' is the noise generated by the ships engines / on-board dynamos.</p> <p>These must operate for the full period of time while the ship is docked to supply its electrical needs. It would hence make the installation of 'shore to ship' power the single most important strategy in noise abatement.</p> <p>An added bonus would be the almost complete cessation of air pollution resulting from the burning of sulphur containing diesel fuel.</p> <p>This is standard practice in North American ports (Juneau, Alaska, {since 2001}, (Seattle. Vancouver, Los Angeles, San Diego, San Francisco etc, etc etc)</p> <p>Princess Line has outfitted 14 of its North American ships with custom built electrical connection cabinets.</p> <p>Obviously what is standard practice in North America should be mandatory in Australia, both being first world countries.</p> <p>Shore to ship power for docked vessels in Sydney harbour is a non-brainer since it solves simultaneously the problems of noise and pollution.</p>
24	18/01/2017	<p>Thank you for the opportunity to comment. -[redacted]. Your noise strategy fails to address the issue of engine noise - which can be satisfied with shore power cables. Obviously there is a pollution issue also with bunker fuel being used in such close proximity to residential homes. We have two young boys and the issue is of extreme concern to us. Therefore we request that the noise strategy also address the issue of cruise ship noise generation from engines - which is satisfied by shore power.</p>
25	19/01/2017	<p>I have been living at Balmain East since 2010. I am an asthmatic and my asthma is very well controlled and rarely flares up. It is triggered by pollution.</p> <p>Since the White Bay terminal has re opened I have noticed that my breathing is a bit laboured and I have an asthma cough, at certain times. I have seen my family GP about this and he also believes it's related to the now very frequent ships that sail literally past my bedroom balcony and windows.</p> <p>Otherwise, on the same days, and time periods, my asthma is perfectly fine eg when I'm at work or at other people's homes. I also have been getting itchy eyes and a runny nose, all of which I believe are also set off by the pollution from the boats. Even when they are docked at White Bay the ship's engines are still running and I have stood many times and watched all the pollution spouting out of the top and shook my head.</p> <p>In addition to this, there is an excessive amount of noise pollution coming from these ships. I was woken up this morning a bit after 6am by a loud, constant thrumming sound. As I lifted my head off my pillow, sure enough, there was another ship going past our bedroom. This is a regular occurrence and happens frequently. It has come to the point that if I think we're going through a time where there are lots of ships coming past, I close up all the bedroom windows and balcony doors so we don't hear the noise and hopefully not as much pollution comes into the house. I have two little children (2 and 3 yrs old) and I am very concerned about the pollution they are being exposed to. Given we have been having incredibly hot weather lately, being locked up in the house due to the ships is unreasonable. Yesterday was quite warm and the night humid, so I left our bedroom windows and balcony open, forgetting there might be a ship early this morning.</p> <p>I do believe in there being working ports around the harbour. I think they need to be managed in accordance with the needs of the local community, the tourism industry and people's recreation. Surely an appropriate solution can be found to this issue?</p> <p>Workmen are not allowed to start working before 7am as it's considered to be too disruptive, so perhaps similar restrictions can be put into place for the ships. Another option is the cruise ships using cleaner fuel (eg not bunker fuel), which would cost them more money (which I'm sure they'd pass onto their guests), but is much better for the environment and the local community's health. Another consideration could be a requirement to turn off their engines once the ships have docked at White Bay so as to help reduce the noise and environmental pollution.</p>

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26	21/01/2017	<p>As a person living in a defined affected area I have previously commented on some of the noises and the smells emanating from some of the ships that have moored at White Bay. It is also worth mentioning that some of my guests have occasionally commented on the smell of fumes at my house. DIESEL SMELLS.</p> <p>I think it fair to say that some ships create a problem and others not so much, but obviously the wind direction and strength must have a bearing on which ships I notice the most. The smell of the diesel exhaust is sometimes quite objectionable, so bad that the house has to be closed up. But, when the windows are left open at night for fresh air, and a 'smelly' ship subsequently arrives early AM, the smells are bad, even before I have the chance to get the windows closed and the odour lingers for some time then; I should not have to close my windows for ships' smells particularly if installing shore power means the engines would not have to be left running to provide electricity.</p> <p>NOISE.</p> <p>Although noise levels from the shipping have reduced they still are noticeable. As confirmed by your own surveys of the immediate area which have identified my home where noise is significant. I note that I understand that safety announcements are a necessity and that they are unavoidable and need to be of sufficient volume to serve their purpose.</p> <p>SUMMARY.</p> <p>I have made submissions before re the shipping mooring at White Bay, but sparingly and then when some ship has made itself obvious by either noise diesel odours. I repeat those observations but in the overall/general sense. I still have some problems with both those issues.</p> <p>I hope that you are able to provide some relief but, I have to say, control of the ship's polluting outputs seem much more preferable than treating the symptoms than modifications to local homes.</p>
27	23/01/2017	<p>Thank you for the opportunity to make a submission with respect to the White Bay Cruise Terminal Noise Mitigation Strategy.</p> <p>We reside at [redacted] and have been impacted by noise from the Cruise Terminal since its opening. Specifically:</p> <ol style="list-style-type: none"> 1. Noise from truck engines left running (including refrigeration trucks) whilst waiting to load their cargo onto cruise liners. This noise is often worst early in the morning and interrupts our sleep 2. Excessive announcements being broadcast from the cruise liners. It has been our understanding that only safety announcements were to be broadcast, however on many occasions a lot of additional broadcasts have been made 3. Ongoing engine noise from the cruise liners <p>Whilst we have been advised that we may be eligible for noise abatement work to our household we believe this is not an optimal solution as it will reduce amenity if we are to leave the house closed up whilst cruise liners are berthed. This will also lead to potentially higher energy costs as we would need to use air-conditioning to cool rather than other natural cooling from open windows, doors and skylights.</p> <p>Our submission is that the cruise terminal be fitted with shore power with the requirement that all trucks are required to switch off engines with the ability to plug into shore power if required whilst waiting to offload any refrigerated cargo.</p> <p>Whilst we recognise that it may take time and funding to provide the shore power, in the interim we submit that all non-refrigeration vehicles be required to turn off engines whilst waiting to unload cargo. We also submit that monitoring processes be put in place to ensure announcements are limited to safety announcements only, use of correct fuels whilst berthed and truck engines switched off. Monitoring details are to be made available to the public on a website including details of ships that have berthed, monitoring that has been carried out and details of breaches.</p> <p>We also submit that a 3 strikes process be put in place that results in any cruise liner or trucking firm breaching the requirements be banned from berthing for a period of at least 2 years if they breach these requirements 3 times over a period of 2 years.</p> <p>We believe that for what we understand is a manageable cost that the implementation of shore power and appropriate monitoring will enable the cruise terminal and local community to co-exist. It is our understanding that shore power is now world's best practice and this is the goal the Port Authority should be aspiring to.</p> <p>We look forward to the Port Authority taking our submission into consideration and await your feedback.</p>

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28	23/01/2017	<p>The noise mitigation strategy is important for residents in the immediate vicinity of the terminal, but the noise from the terminal impacts only a small number of Balmain and Sydney residents.</p> <p>The mitigation strategy is a short-sighted "Band Aid" solution, which essentially does little to deal with the source of the problem and instead prefers to "imprison" local residents within their homes.</p> <p>Sydney is a city with a wonderful climate, where many live for the outdoor lifestyle, whether that be at home with windows and doors wide open, or away from home enjoying the city's amazing surrounds.</p> <p>Why should locals be forced to shut themselves inside on the numerous days each year that a ship is berthed?</p> <p>Instead look at fixing the root of the problem - the noise itself.</p> <p>One method which benefits not just those within the immediate vicinity, but also those both close by that are not impacted by the noise, as well as Sydney-siders more generally, would be to install shore-to-ship power and make it mandatory to use. This would both reduce engine noise, as ships would not need to keep their engines running at berth, as well as assist with the far more serious problem of the air pollution caused by the cruise ships.</p> <p>It is established science that the huge volumes of exhaust produced by the cruise ships contains large amounts of carcinogenic compounds, that contribute heavily to air pollution and have a widespread detrimental impact on health.</p> <p>Setting aside the fact that a cruise ship terminal should never have been built so close to homes in the first place, if the terminal is to remain then every possible step should be taken to minimise the impact of the terminal on Sydney residents, whether that impact be because of noise or pollution.</p> <p>When you have children taking ill at local schools on days ships are in, due to the diesel exhaust spewing into their classrooms and playgrounds, enough is enough.</p> <p>You can install double glazing and air conditioning units across Balmain, but this still doesn't deal with the core issue. Shore-to-ship power is an essential next step and must be installed without further delay.</p>												
29	24/01/2017	<p>Re submission noise at tourist terminal wharves 5/6 White Bay.</p> <p>No acoustic study has been done. The only control measure is that the noise level at one site be less than 70db. This is inadequate. What is required is an acoustic study which determines that the INP noise standards are observed and to recognise that loud noise is a health risk. This involves the acoustician:</p> <ol style="list-style-type: none"> Estimate noise maps indicated areas of high exposure. Ensure the following INP noise standards are met. <table border="1" data-bbox="464 1272 986 1397"> <thead> <tr> <th></th> <th>Acceptable dB</th> <th>Recommended maximum dB</th> </tr> </thead> <tbody> <tr> <td>Day</td> <td>55</td> <td>60</td> </tr> <tr> <td>Evening</td> <td>45</td> <td>50</td> </tr> <tr> <td>Night</td> <td>40</td> <td>50</td> </tr> </tbody> </table> <ol style="list-style-type: none"> Determine whether there are modifying factor corrections. <ol style="list-style-type: none"> Low frequency noise from ship engines. Other modifying factors. <ul style="list-style-type: none"> Impulsive noise. Duration noise. Consider mitigation. <ul style="list-style-type: none"> Doubly glazing. Requires air conditioning. Is ineffective with low frequency noise. <p>Source.</p> <ul style="list-style-type: none"> Control ship operations. On shore power generation. This is mandated by the damage done to the amenity of the residents of East Balmain by the presence of the terminal. <p>It is surprising that the behaviour of the Sydney Port is so lacking with the experience they have had when the container ships were in port at White Bay.</p>		Acceptable dB	Recommended maximum dB	Day	55	60	Evening	45	50	Night	40	50
	Acceptable dB	Recommended maximum dB												
Day	55	60												
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Night	40	50												
30	24/01/2017	<p>Shore-to-ship power is the main priority in noise mitigation from cruise ships.</p> <p>Shore-to-ship power is vital for Sydney harbour which is a major world cruise ship destination.</p> <p>The majority of ports around the world have shore-to-ship power including some ports in third world countries.</p> <p>Restrictions on cruise ships need to be enforced as cruise ships are not complying at present.</p>												

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		There needs to be better management by cruise ship companies in regard to public announcements. Real time independent noise monitoring is required.
31	26/01/2017	<p>My major comments concerning noise from White Bay cruise terminal relate to the volume of the announcements from the cruise ships.</p> <p>I have complained to the Port Authority in the past by telephone and received no help other than be told that all announcements can be as loud as necessary so that everyone on board can hear them. I was told to call the National Maritime Safety Board (or similar) in Canberra, to find what is the legal limit (decibel) for these announcements and never received a satisfactory reply other than be told that there was no limit!!!! and was directed back to the Port Authority or the Local council to complain. (basically, I received no help at all). So I now complain in writing to you.</p> <p>All I need to say is that all announcements concerning boarding , safety and departure on these boats is usually very audible in my house at [redacted]. This means that every time a ship departs , we get every message loud and clear and it is annoying. Surely these announcements can be monitored for loudness and reduced as required, or preferably, these announcements can be made by gathering all passengers indoors for the important safety announcements rather than noise abuse the local community) . The community was here before the Cruise company rented the space!</p> <p>In addition, on some occasions we do hear some ship noise (generators, air conditioning? – it's all noise) and of course we have horns sounding at departure. I do recall one ship had blaring music at departure but that was some time ago.</p>
32	29/01/2017	<p>I attended Clontarf Cottage on Thursday 1st December 2016.</p> <p>I met with a noise consultant, who had recently been employed by the Ports Authority, to discuss a noise attenuation program.</p> <p>We established that my heritage listed home of 45 years, was eligible for noise attenuation. Quite frankly I feel insulted.</p> <p>The pollution from cruise ships was addressed in the OEMP report for WBCT.</p> <p>The Parliamentary Inquiry into WBCT pollution 2014 made recommendations.</p> <p>SHORE POWER SHOULD BE INSTALLED FOR ALL CRUISE SHIPS SHIPS AT BERTH.</p> <p>LOW SULPHUR FUEL SHOULD BE USED BY ALL SHIPS ON ARRIVAL AND DEPARTURE.</p> <p>The amount of MONEY AND TIME WASTED in trying to justify why this should be done is extraordinary.</p> <p>MONITORING has proved that ongoing NOISE POLLUTION from visiting ships is at UNACCEPTABLE LEVELS in the adjoining residential areas.</p> <p>Nothing has addressed the problem of VIBRATIONS.</p> <p>We constantly see, smell and report foul EMISSIONS from the funnels.</p> <p>It has been established that our HEALTH is at risk.</p> <p>Why are the residents of our city are being asked to accommodate such a stressful situation?</p> <p>We are told the cruise business is booming! Sydney will always be a popular destination.</p> <p>Noisy ships, generating so much power, should be required to COMPLY with our ONSHORE REGULATIONS. FIX THE PROBLEM AT THE SOURCE.</p>
33	30/01/2017	<p>Our family have been away from our home in [redacted] from mid December till late last week. In the mail was correspondence from the Port Authority re community meetings and feedback. I have not attended any meetings or given any feedback because of my absence.</p> <p>I have however, since called Phillip.</p> <p>It is my intention here to let you know we would like to be involved in the noise attenuation program.</p> <p>Our house is [redacted]. We are smack bang in the middle of the ships berthing at White Bay. Having said this neither my wife nor I are anti the ships, nor have we been a party to any protest nonsense.</p> <p>Our amenity however has been affected as you may appreciate and it would be good to get together and find a solution.</p> <p>Our bedroom for example is upstairs adjoining the verandah overlooking White Bay. Prior to the ships berthing we would have the verandah windows and door open at night enjoying the cool ocean breeze throughout the upstairs bedrooms. Not so now !</p> <p>Being the biggest terrace in the street and possibly the highest, the light at night is also an issue we might discuss. This is particularly an issue when the ships are in for a few nights.</p>

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		We look forward to hearing back from you and working with you to come up with a solution that works for us both.
34	30/01/2017	<p>I live [redacted] from the White Bay Cruise Terminal, although I do hear announcements from the cruise ships I am much more distressed by the fumes emitting from the ships and I think supplying power is much more urgent than any noise barrier.</p> <p>The fumes from the cruise ships that dock right at the end of my street seem to have increased recently. I can see the smokey fumes coming out of the cruise ships whenever they are in, some much worse than others.</p> <p>This seems to be affecting plants in my garden, several trees dying. You can see the leaves on my neighbours' magnolia tree getting smaller and smaller and the staining on the roof of the house next door, which is closer again to the ships, are getting darker.</p> <p>It is not noise mitigation we need but it is a power supply for the cruise ships to plug into and stop the constant fumes coming out.</p> <p>Several neighbours with children have moved out of the area already to avoid these fumes. Our neighbour next door has been suffering from lung disease which is much worse since the ships have been belching out fumes.</p> <p>We need something to be done about it urgently.</p>
35	30/01/2017	<p>Nowhere in the Noise Mitigation Strategy is Shore to Ship Power mentioned and without that, the strategy is going to fail. Residents will continue to suffer noise from ship engines and the associated air pollution.</p> <p>We live just outside the area which is included in the noise attenuation program but we are very aware of the "noisy" ships when they are at White Bay. We hear a constant hum of the engines all day despite the fact that we cannot see the ships. These noisy ships, some of which have been identified in your reports, are also the ships which spread unpleasant diesel odour which is very distressing for people suffering from breathing/allergy conditions and keep us indoors. Recent examples of the excessive noise and diesel pollution were the "Pacific Dawn" on 26th Jan 2017 and the "Sea Voyager" on 12th Jan. We welcome the strategy to curb announcements and music when at the terminal with warnings and loss of privileges to repeat offenders but would suggest that continuous, loud blasts of the horn when leaving/arriving should also be curbed. The noise made by "Sea Voyager" on 12th Jan and a ship on 30th Jan, was excessive. We urge the Port Authority to work with local, State and Federal Governments to ensure that the condition for local residents is improved. We are being forced to put up with conditions that would not be allowed in many European and American cities which have greater constraints on noise and the use of the safe fuels, filters and old vessels.</p> <p>INSTALL SHORE TO SHIP POWER TO MITIGATE NOISE AND AIR POLLUTION</p>
36	30/01/2017	Refer to submission in Appendix A (Curtis Rd Resident Submission)
Included as 37.	21/12/2016	<p>Extension of time request: Attn: Brad Milner - Acting Executive General Manager, Commercial, Technical & Legal Mr Milner,</p> <p>I refer to the recent public consultation process associated with the White Bay Noise Mitigation Strategy and out meeting at Council on 28 November 2016. It is noted that the Community will have until 5pm, Tuesday 31 January 2017 to provide written comment on the proposal.</p> <p>In this regard, Council formally requests that the consultation period be extended until the end of February 2017.</p> <p>Council's request for an extension is based on the fact that the consultation process is occurring at the Christmas and summer holiday period when people are out of town or focused on other things. It is considered beneficial to provide an extended period to ensure all concerned parties are provided an opportunity to make a submission. Furthermore, Council was hoping to undertake a meeting with residents to aid in the formulation of its response.</p> <p>Please do not hesitate to contact me if you have any questions. I look forward to your response.</p>
37	30/01/2017	Refer to submission in Appendix A. (Inner West Council)

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38	30/01/2017	<p>Dear Sir/Madam,</p> <p>I have been a resident of [redacted], for over 38 years.</p> <p>I know that many in the community have regularly complained about the noise coming from White Bay when the cruise ships are in Port.</p> <p>Our household has no issue at all with the noise emanating from the cruise ships whilst in Port.</p> <p>You won't receive many emails from the residents in Grafton Street. I have spoken with almost all, from Adolphus St to Ewenton St, and the consensus is that we like the vessels. I can appreciate that many have a low tolerance to noise and I must be going deaf as I rarely hear the vessels coming and going from the Port. The ships do regularly make announcements, which I believe they are not supposed to do, and this is something that must be monitored. So many on the peninsula, numerous committees, speak on behalf of Grafton Street residents but no-one has knocked on our doors to ask our views.</p> <p>The main priority that I see is that there is a responsibility, to the whole suburb, to address any pollution emanating from the ships as the priority.</p> <p>Ship to shore power should be the only focus for the Port Authority. There are cables and a substation on the wharf and these were used when the gantry was operating when White Bay was in use by the container Ships. I know that there is a cost to all infrastructure but by having the ship to shore power you would make the whole suburb a very happy place. You would address the issue of air pollution. Many new ships are being built and all would be able to take shore power. If White Bay is to remain a working part of the Harbour then construction of Shore power should be the priority. You would not have to allocate the \$5 million to sound proof houses but use this money in a more positive way.</p> <p>I am sure a levy could be placed on all passenger tickets, like a departure tax, that could also go towards paying for the Ship to Shore power. I also can see that when development of the rest of White Bay, sometime but who knows when, you would be able to recoup money spent on all the infrastructure by charging all new tenants moving into the site for use of this power. A win, win for Ports.</p> <p>I would be happy to speak with you anytime about any of the issues raised.</p>
39	30/01/2017	<p>A form inquiry showed it was a serious error to place the cruise terminal there in the first place and every day it stays there is more air and noise pollution into my home with the adverse affects on my health and the health of my pregnant wife.</p> <p>The proposed noise mitigation strategy is far too loose and will easily be circumvented by careless ships.</p> <p>Not only is the air massively polluted but the horn from the ship at all hours is an unreasonable form of noise pollution on this residential area.</p> <p>You can even see the ships pumping out their exhaust while walking along Darling St.</p> <p>These ships need to be stopped or relocated immediately for the health of citizens.</p> <p>Restrictions weak</p> <p>Your fact sheet states:</p> <p>"a new policy restricting on-deck music and public announcements not related to safety and restrictions for ships which cause further exceedances of the attenuation eligibility threshold."</p> <p>Why are these not outright bans of on-deck music and public announcements?</p> <p>Who determines whether an announcement is related to safety? If a complaint is made, who will decide if the announcement was legitimate and what criteria will they use? This is far too vague.</p> <p>I have seen too many complaints to government agencies that get classified as "not a legitimate complaint" by some back-office staff member with no recourse, no transparency and no review.</p> <p>Residents should be able to see the complaint of other residents</p> <p>The wording of these sentences leave a gaping hole for cruise ships to continue to make noise.</p> <p>Penalties weak</p> <p>"Non-compliant ships will be given an initial warning to make improvements; a second non-compliance will result in a loss of priority booking status plus overnight relocation of the ship; and a third non-compliance will result in future bookings not being allowed."</p> <p>Again, this is far too lax and will allow cruise companies to easily circumvent the rules.</p> <p>1) Future bookings not being allowed -> But this means any current booking, presumably for at least a year or more ahead, will be honoured?</p> <p>2) If a cruise company has a ship that gets the 3 strikes, they can easily swap that ship out for another ship. Instead, the cruise company itself should be banned from White Bay for a period of 3 years (taking into account associated entities, subsidiaries and parent companies).</p>

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		<p>3) 3 Strikes is too many - it should be reduced to 2. Upon the first complaint the ship should be relocated overnight.</p> <p>This is far too soft on offending ships and cruise companies.</p> <p>Instead of these wishy-washy regulations we need regulations with teeth.</p> <p>This strategy looks like it was written to give the appearance of doing something while doing absolutely nothing to actually stop noise impact on residents.</p> <p>There are gaps in these regulations that are big enough to drive a ship through.</p> <p>If you are serious about helping residents - and given that you work for the people of NSW and not the cruise industry, you should be - you will make major changes to these regulations to give them teeth.</p> <p>Complaints process weak</p> <p>Currently the process to complain requires a phone call. What is it 1950?</p> <p>Complaints should be able to be made online (on a site that works on desktop, tablet and mobile device).</p> <p>You should have a website where residents can lodge complaints and where residents can see all lodged complaints for all to see publicly. Residents can then "up vote" or "me too" a complaint. All residents could also see the outcome of each of the complaints over time.</p> <p>The website should also show very clearly the current status for each of the ships/companies that have strike(s) against their name.</p> <p>Only with a website with this kind of transparency will local residents have any sense that this process is genuine, open and fair.</p>
40	30/01/2017	<p>Inner-West Council Representation Advisory Committee</p> <p>A cruise ship terminal at White Bay – “a serious error”</p> <p>Leichhardt Council, our State MP and our community have always made it clear that it is wrong to operate a cruise ship terminal at White Bay which is next to a high density residential community.</p> <p>This was supported by an Upper House Inquiry of State Parliament which stated that the location of the cruise ship terminal at White Bay was a serious error.</p> <p>The reasons for strong opposition to the cruise ship terminal continue to be borne out on a daily basis as cruise ships arrive at White Bay and cause residents to suffer air pollution, noise and vibrations which pose risk to their health and degrade their amenity.</p> <p>There is no hesitation or doubt in saying that the approval of the terminal would never have been granted by Leichhardt Council on the basis of its severe and ongoing impacts on the community.</p> <p>No other business would be given approval to operate in such a way. More so, any business having such relentless and unmanaged impacts on residential communities would have been closed down by Council until it resolved its impacts.</p> <p>Four years of impact on our inner-city high density residential population</p> <p>This year marks four years of the impact of air pollution, noise and vibration caused by the operation of the cruise ship terminal at White Bay on the nearby high density residential population. Operations commenced in April 2013.</p> <p>There has been no resolution of the impact on the residential population</p> <p>Residents are still living with the full impact of air pollution, noise and vibration caused by the operation of the cruise ship terminal and White Bay.</p> <p>A number of residents have sold their properties to escape the impact of the cruise ship terminal.</p> <p>Four years of non-compliance</p> <p>The inability of cruise ship industry or the managers of the site (NSW Ports) to manage compliance issues in regard to the cruise ship terminal operations confirms that choosing a location next to a high density residential population was an inappropriate and high risk decision.</p> <p>The acoustic consultant commissioned by Council to assist with its submission on the noise mitigation strategy commented at a community meeting held last week, that ‘he would be surprised if any cruise ship complied in terms of noise’. This was an astounding statement after four years of operation of the terminal but sadly, it simply confirmed what many residents already know.</p> <p>The implementation of a multi-agency forum to address problems caused by the cruise ship operations at White Bay (over the past three years) has had little effect on improving the lives of the residential community. While there have been high levels of technical expertise on this committee and solid representation from the community, this forum has simply been unable to address the problems</p>

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		<p>or effect positive change for the local community.</p> <p>Denying the risks and impacts on the community The lack of attendance, by representatives of the cruise ship industry, at community forums and other meetings demonstrates an unwillingness to come to terms with their impact on the community and has only served to prolong the problems being experienced by the community. The dismissiveness by the industry about its very significant impacts on people is unusual especially in the face of State Parliament, Council, experts and the community. It leads some to question why this industry can continue with levels of non-compliance and dismissiveness that no other industry would be allowed. Even so, the industry made it clear that White Bay was not their preferred location for a cruise ship terminal. They were forced there against their wishes. Regardless, the lack of an apology to the community by the cruise ship industry or NSW Ports has been disappointing and borders on denial that they are causing such major impact on the community.</p> <p>High volumes of ships exacerbates the noise problems The volume of ships coming into the White Bay cruise ship terminal is very high and the duration of stay of each ship is long. The number of ship arrivals is much higher than originally expected and vastly above the levels when the terminal was located at Darling Harbour 8. The 40 to 50 cruise ship arrivals at Darling Harbour 8 – a location which was much further away from residences – has escalated to around 130 at White Bay, an inner-city high density residential area. This brings 130 days of air pollution and noise disturbance. In the peak cruise ship season, the number of cruise ship visits can amount to over 20 in a given month. The peak volume months are also hot weather months with high humidity where pollution ‘sits’ in the air. These are the months where residents will keep doors and windows open at any opportunity to gain some respite from the heat but many are unable to do so if a ship is at White Bay. The huge volume of arrivals mean that noise is experienced on 130 days in a year. The noise is relentless and can go on and on for five days in a week. As such, when residents talk about a particular type of noise such as ‘announcements’ from ships being a disturbance, they are talking about several announcements in the course of a day which occurs several dozen times a year ... and that’s just announcements! In essence, the sheer volume of ship arrivals means that the incidence of noise disturbance is very high. Multiple noise impacts must be assessed and resolved There are multiple sources of noise caused by the operation of the cruise ship terminal. These occur throughout the day and, at any time of the day. The noise can start as early as 5.00am and, if a ship stays overnight, can last throughout the whole night. Therefore, there is no escape from the noise. It is important that any assessment, analysis and resolution of the impact of noise caused by the White Bay cruise ship terminal should address each of the noise types and aim to resolve these. Below is the list of noise types arising from the terminal that I have compiled. Other residents may have additional types.</p> <ol style="list-style-type: none"> 1. Noise from ships horn – how can this impact on the residential community be removed? 2. Noise from chimes, whistles, sirens and alarms - how can these impacts on the residential community be removed? 3. Noise from ship engines, generators, ventilation systems and air conditioning – residents are unanimous that this noise will be most effectively reduced by the use of on shore power and that on shore power must be prioritised to deal with this noise. 4. Noise from PA announcements – most cruise ship announcements which are made at the terminal do not need external speakers to be switched on. As such, external speakers should rarely be used. 5. Noise from entertainment, music – these activities should commence once the cruise ship is at a reasonable distance from residences. When faced with over 100 cruise ship departures each year, this is a significant impact on residences. 6. Noise from emergency drills – can these activities be conducted away from the terminal given its close proximity to the residential community. 7. Noise from maintenance activities – can these activities be conducted away from the terminal

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		<p>given its close proximity to the residential community.</p> <p>8. Noise from overnight stays of ships – residents clearly see this as untenable. Overnight stays of cruise ships should cease.</p> <p>9. Noise from multiple berths of cruise ships – residents clearly see this as untenable. Multiple berths of cruise ships should cease.</p> <p>10. Noise from very early morning arrival of ships – cruise ship and terminal activity before 6.00am is very disturbing for residents. Additionally, the area has a large working population and significant numbers of children. Can arrivals be better planned? Given that ships cannot meet the time-based noise compliance, it would seem that arrivals from 7.00am should be considered.</p> <p>11. Noise from various ancillary services associated with the terminal:</p> <ol style="list-style-type: none"> a. garbage and sewerage services b. traffic and transport services. <p>12. Vibrations in the surrounding area caused by cruise ships – some residents are particularly affected by vibrations. It is expected that on-shore power would assist with resolving or minimising this impact on the community.</p> <p>Health impacts from noise disturbance</p> <p>Air pollution and noise are two key public concerns which are vital considerations in the assessment of planning proposals such as cruise ship terminal operations. Unfortunately, there has never been any evidence that these were appropriately or correctly assessed prior to approval of the terminal. Both air and noise pollution can cause severe health impacts and are known to cause chronic health problems. As such, noisy industries must address these public concerns. Noise is such a key public priority that it is addressed in many areas of life. We have recently seen improvements to NSW Planning legislation in regard to the design of flats and units which specifically focuses on noise reduction.</p> <p>Assessment of the types of noise listed above should be informed by existing research so that noise is mitigated for those types with especially detrimental health impacts (both physical and psychological). For example, blasts of a ship horn in front of a bedroom or living room window would not be an ideal situation from an amenity or health perspective. If these blasts are critical and non-negotiable for ships then this is one good reason to suggest that the terminal should not be located in a high density residential location and that plans should be expedited to remove the cruise ship terminal from White Bay.</p> <p>On-shore power ... central to a multi-faceted solution</p> <p>The community and Council are of the unanimous opinion that if the cruise ship terminal is to stay – and the majority of us would prefer that it is relocated away from White Bay – that on-shore power must be the central focus of a multi-faceted solution to address the impacts of the cruise ship terminal on the residential community.</p> <p>This is not just an opinion of residents. It is supported by global best practice, the advice of experts, by Council and by State Government.</p> <p>On-shore power will assist significantly in reducing the impact of both air pollution and noise on the community. It is seen as the best use of public money to assist in reducing a broad range of impacts from the cruise ship terminal.</p> <p>Along with a range of other measures to mitigate noise, such as no arrivals before a reasonable time (e.g. 7.00am), no overnight stays of ships and only allowing internal ship announcements it would be possible to have a meaningful reduction in noise disturbance on the community.</p> <p>A billion dollar booming industry that can't address its impacts</p> <p>We constantly hear that the cruise ship industry is booming and that it now raises over \$1 billion in revenue in Australia alone. The cost of on-shore power and other air pollution and noise mitigation measures would be insignificant when compared with the annual revenue of this industry in one year alone.</p> <p>All other industries must respond to compliance and also with the costs associated with this. No industry should be seen as exempt from this.</p> <p>Noise mitigation at the source</p> <p>As the cause of the noise is coming from the operation of the cruise ship terminal then, like any other</p>

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		<p>business which causes noise disturbance, every effort must first be made to control this noise at the source, that is, from where the noise is produced. This is the clear desire of the community. The community should not have to experience solutions that would impact on their homes, which might entail them having to have the doors and windows of their homes closed for extended periods of time on each day that a cruise ship is in port.</p> <p>Such solutions are limited as they expect that in order to escape noise, families should stay indoors. In fact, a significant number of residents who experience noise from the terminal are impacted outdoors while they are using their properties – entertaining visitors, reading the paper in their back yard or working from home (outside).</p> <p>December 2016 and January 2017 has seen one of the hottest summers. Residents would have used any opportunity to open up doors and windows – to take advantage of a cooler breeze off the water. Any modifications which might be suggested to residences in order to reduce noise may impact on the heritage significance of their property. There may be some contention within Council as to whether some modifications would be approved.</p> <p>Additionally, the modification to homes could leave a lasting cost on the property owners by way of increased electricity bills or the eventual maintenance and replacement costs of any equipment installed.</p> <p>Ongoing monitoring and review It should not be assumed that any proposed noise mitigation strategy will automatically resolve the impacts of noise and vibrations from cruise ships. Noise monitoring and reviews of the effectiveness of any noise mitigation strategy and should occur at regular intervals (such as twice yearly) in consultation with experts and the community. Opportunities to improve noise mitigation should be discussed at these reviews and noise minimisation should not be limited to compliance standards if better outcomes can be achieved.</p> <p>Complaints handling The noise mitigation strategy should include a new, responsive and meaningful complaints policy. This policy should acknowledge the impacts of cruise ship terminals when these are located next to high density inner-city residential populations. The policy should show a willingness for the cruise ship industry and NSW Ports to understand community concerns and respond to these. It should use complaints data to inform better practice and provide annual reporting on this. The policy should aim to consult with residents about noise problems which occur at the terminal so that noise mitigation can be improved and so that residents feel that they are being heard.</p>
41	31/01/2017	Refer to submission in Appendix A. (CLIA / ACA)
42	31/01/2017	<p>1 Noise Attenuation Program I do not wish for my property to be attenuated. I cannot be any more sealed in than I am now every time a cruise ship berths at White Bay. Prior to the Terminal being built residents were told by PANSW staff during the public consultation process there would be "60-70 ships per year and NO overnight stays except in an emergency i.e. a storm at sea". • Last year there were 157 cruise ships berthed at White Bay. • That is almost 3 times the original number quoted to residents. • There were over 10 overnight stays at White Bay in 2016. That is almost half of the year where residents have had to close windows & doors due to noise and air pollution caused by cruise ships moored 100-130metres from family homes. Residents were told at the consultation meetings "the ships would come in at 7am & leave at 4pm". It was also said "you won't hear a thing and it will be gone by the time you arrive home from work". None of this is true. Nor was the '60-70 ships per year'. Nor was the 'No overnight stays'. Nor was the "come in at 7am & leave by 4pm". The exposure to loud and intrusive PA announcements, chimes, horns & whistles going 24/7 were never mentioned during the public consultation process. Noise and air pollution issues were never raised during the public consultation process with residents. The subsequent impact on quality of life and health issues were also not mentioned during the public consultation process. • The Terminal has a set of noise approval conditions that have not been complied with for the past 4 years. • Not one cruise ship has been able to comply with the 49dB required noise level for night . If cruise ships cannot comply with their</p>

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		<p>approved noise conditions they should not be allowed to berth at White Bay overnight. Residents find the overnight stays extremely distressing. It has taken 4 years for PANSW to acknowledge there is a problem with noise and operations at the White Bay Cruise Terminal. The shore power could have been up and running years ago, for roughly the same cost PANSW has quoted for the attenuation of residential properties. Attenuation will not solve the problem of noise, nor will noise barriers. Noise barriers are another way of sealing residents in, as well as intimidating residents to stop making complaints. • It is not the responsibility of residents to mitigate the noise caused by cruise ships. • It is the responsibility of the operators. • Remedial attenuation should not be an option. • The issues with noise and pollution should be addressed at the source. • The attenuation quote of \$5.3m should be invested in shore power. Should properties be attenuated, the ships will continue to be as non-compliant as ever, but PANSW will argue this absolves their responsibility. The truth is the Terminal is too close to residential properties to be able to comply with any of its approval conditions. If it was a factory that failed to comply with its noise approval conditions - council would shut it down. Council or the factory owners would not expect residents to attenuate their properties in order that the factory could continue to operate non-compliantly. MITIGATE THE PROBLEM AT ITS SOURCE. I do not wish to be sealed into my property any further. The current situation is bad enough, particularly in peak cruising season, where the houses have to remain closed on consecutive days and nights during December, January and February. Noise and pollution issues from cruise ships should not be referred back to the residents to fix. Solving this is not my responsibility, and I resent it being made my problem. I am not in breach of a set of approval conditions. Grafton Street is an extremely quiet cul-de-sac when there is no cruise ship in port. The noise levels are around the 44dB mark day and night. The baseline noise approval conditions for the Terminal have been manipulated to meet the needs of the operators. Given the very generous noise approval conditions, the cruise ships are still unable to comply. The ships continue to operate outside of their approved noise conditions. The ships' noise and pollution issues should be mitigated at source.</p> <p>2. Noise Restriction Policy Reference is made to: The Carnival Good Neighbour Policy April 2013 & Memo from PANSW December 2013. http://jacksonslanding.net.au/wp-content/uploads/2013/09/130326-Carnival-Good-Neighbour-Policy.pdf http://www.sydneyports.com.au/__data/assets/pdf_file/0010/29962/Cruise_ships_-_smoke_and_noise.pdf</p> <p>Despite the above 'promises' none of the above has ever been implemented or enforced. These Memos were distributed to residents in 2013. Just the existence of the Memos indicate that PANSW and Carnival are aware of the problems caused by cruise ships at berth, particularly when they are 100-130 metres from family residences. Although many complaints have been made by residents over the past 4 years in regard to these issues, there has been no implementation or enforcement of the above recommendations/promises. Again the issues remain unresolved. In fact, it is getting worse daily, with loud and intrusive announcements and music. Although I would like to believe this could happen as outlined in the Noise Restriction Policy, I don't. It would be good if it could happen, but given the Terminal's track record of non-compliance, I don't believe it ever will happen. It's a nice try, but after 4 years of noise, air pollution and non-compliance, there is no credibility left in regard to the White Bay Terminal being able to operate compliantly or efficiently. I hold out little hope of best standard practice ever being conducted at the Terminal.</p> <p>3. Noise Logging: A good idea. Should have commenced 4 years ago. However, noise logging should also be carried out by the regulator, Dept of Planning. Similarly, the EPA should be installing their own air monitoring system at White Bay. It is inappropriate for PANSW to have complete control of the noise and air monitoring. They have a vested interest for any subsequent reporting to reflect their own requirements. I do not believe PANSW have the capability, capacity or commercial will to change operations at White Bay. The ship borne operations noise at White Bay i.e. the incessant chimes, whistles, horns, continual loud PA announcements and music have not been stopped or modified for the past 4 years. Compliance in this regard can easily be achieved by making these announcements internal, as stated in Carnival's 'Good Neighbour Policy'. Even this hasn't been resolved to date. And if that can't be stopped or modified, not much else can.</p> <p>Summary: Nothing has happened to address these issues. Now, PANSW has developed a 'strategy' that will make residents responsible for mitigating the noise by sealing them into their homes. The</p>

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		<p>latest Noise Mitigation Policy proposed by PANSW confirms residents' concerns that the agency is intent on defraying the issue with threats and innuendo, rather than tackling any real solutions. The amended Commonwealth legislation for low sulphur fuel changeover at port, rather than en-route, is not effective. The neighbourhood stinks of bunker fuel whoever a cruise ship berths or departs here. The health of Sydney residents appears to be dependent on which way the wind is blowing. • The decision to build the Terminal at White Bay was negligent.</p> <p>• It was a commercially expedient quick fix, in lieu of Public Policy. • If shore power is not going to be installed at White Bay, the Terminal should be relocated. The ports facility enjoys public funding on extremely valuable land assets. It should be professionally managed by an agency with the commercial skills and management expertise necessary to achieve the maximum return on this public asset's use by the cruise industry, without compromising the health and welfare of Sydney residents. PANSW's strategy for managing this facility needs to reflect world's best practice. Shore power is the cost of entry to first world ports.</p>
43	31/01/2017	<p>We wish to make a submission on the impact to us of ships using the Cruise Passenger Terminal. Since the Cruise Passenger Terminal started in 2013, and increasingly in 2016, we have been affected by the operation of the terminal;</p> <p>Noise and vibration:</p> <p>The ships engines stay on the whole time they are docked, be it during the day, or, for some ships, all night and can be readily heard in our home. As well, the vibration from the engines is often at a frequency that carries into our home, rattling windows.</p> <p>Trucks servicing the ships begin to arrive as early as 4.00am for a ship docking that day. The beeping as they reverse carries that noise loudly to our bedroom as do the engines that run continuously for refrigerated trucks awaiting to offload to the cruise ships.</p> <p>The overuse of on-board PA systems needs to be stopped. Despite being advised that the PA was restricted to emergency drills only announcements are made continuously without concern for the effect on neighbours. Why can't those announcements be made after the ship leaves the residential area and prior to passing through the heads?? The worst offenders in this regard are the Holland America Line ships the Noordam and Oosterdam.</p> <p>Pollution:</p> <p>The exhaust from the ships engines smells strongly of spent diesel, so much so that we have to close windows and doors on the days the ships are in and the wind is blowing our way. Outside use is not possible on such days as the stink from the exhaust is overwhelming, forcing us back inside - as happened this last Christmas.</p> <p>The provision of shore power and adherence to a code of conduct that respects the adjoining residential area must be implemented immediately. Disruption from noise and pollution to our neighbourhood will never be accepted.</p>
44	31/01/2017	<p>Regarding the noise mitigation strategy, I believe shore power is still a preferred solution to residents. Not only will it help abate the engine noise , but also improve air quality by reducing fumes from cruise ships.</p> <p>It seems ironic that planning laws for new dwellings require designs to allow a 'flow through ' of breezes to assist in cooling, yet we are being expected to retrofit our homes with new glazing and air ventilators to block outside noise.</p> <p>Shore power is</p>
45	31/01/2017	<p>Please accept this submission in respect of the proposed noise mitigation strategy.</p> <p>I have read the strategy prepared by SLR and I disagree with the recommended noise mitigation strategies on page 25 of the report.</p> <p>On shore power</p> <p>In particular I suggest that the most appropriate response considering the long time line for the operation of the terminal is the provision of on shore power. This is essential in preventing the low frequency noises emitted by the ship's turbines used to generate power.</p> <p>A comprehensive cost/benefit analysis should be conducted taking into account the increasing number of vessels able to connect to on shore power over the life of the terminal.</p> <p>The polluter pays principle should be applied in respect of noise emitted from the cruise ships. Where cruise ships are not connected to on shore power they should be charged for polluting the environment, not only in respect of noise they emit but also emissions from burning bunker fuel.</p> <p>These polluter payments can be used to offset the cost of installing the on shore power facility.</p>

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		<p>Continuous noise monitoring For the immediate future I suggest more vigorous enforcement of the noise pollution controls. I note the proposal to install a continuous noise monitoring system on page 33 of the report. I support this proposal as a means of providing evidence for enforcement action.</p> <p>The noise monitoring should be conducted by a competent organisation independent from the Ports Authority and the cruise ship companies and needs to be comprehensive to ensure that noise from the cruise ships can be fully evaluated.</p> <p>Enforcement action I note on page 33 of the report that the Port Authority will enforce the noise mitigation policy by first warning, then penalising and potentially excluding non-compliant cruise vessels from utilising the cruise ship terminal. I urge that this be implemented as soon as possible and that the continuous noise monitoring regime be introduced without delay to facilitate this enforcement action.</p> <p>Noise pollution standards The current standards applying for the cruise ship terminal take into account the Industrial Noises Policy and do not specifically address shipping operations where there are infrequent elevated noise levels with potential low frequency components (page 20 of the report).</p> <p>I urge that the current standards be reviewed and changed to take into account the specific nature of the noise pollution from the cruise ships. I note that the Inner West Council has commissioned an independent report from Rodney Steven Acoustics and on page 12 of that report more appropriate noise criteria are specified.</p> <p>The Port Authority must act as soon as possible to ensure that the quality of life is restored for residents affected by this noise pollution.</p>
46	31/01/2017	<p>Please consider this submission under this strategy. Although I live a little beyond the identified residences, I am very close at [redacted] and have suffered continually from the Cruise Ship Terminal and other large ships berthed in the White Bay/Glebe Island area.</p> <p>Because of the geological structure of the hill that my house is on, my position seems to be a catchment spot for both noise and air pollution, that it may or may not be, if the land structure was flat. Also my house is a two story old terrace style building with the two bedrooms at the front of the property. My bedroom is on the first floor at the front with two French style glass doors that open on to a balcony.</p> <p>There is no dispute that my property is affected as I have suffered breathing difficulties, wheezing and ongoing interrupted sleep from the emissions and noise of the generators that run all night from the ships because the Bay area does not have Shore to Ship power.</p> <p>I have spent a lot of my time, including weekends and public holidays ringing the EPA and the Ports Authority to complain about the noise and the smell and making submissions, attending meetings, etc. These organisations would have a log of my complaints.</p> <p>I have been late to work because of interrupted nights due to the noise and smell and have had a great deal of stress placed upon me. I have sought medical assistance for the effects on my breathing difficulties.</p> <p>I welcome the relief of heavy rain to block out the sounds of the ships.</p> <p>I have spent \$1800 on glazing for the bedroom doors, which could not accommodate the full double glazing due to the size of the glass apertures. This has not alleviated the noise problem.</p> <p>Please consider this request as I have a genuine need for financial assistance to address the noise pollution in my house as a result of the ships and I also seek the refund of the \$1800 which I have wasted on attempting to address the problem myself.</p> <p>If this type of source of air and noise pollution at this grand scale and for such long periods of time was placed so close to other residences it would not be allowed in the first place and subsequent complaints about such air and noise pollution would be addressed.</p>
47	31/01/2017	<p>As you can see from above details I live directly in front of the White Bay Cruise Terminal. I believe that the only permanent solution to the noise and pollution from the cruise ships is to provide shore to ship power. While Carnival likely opposes this, their management does not live in front of their ships. It is time that the government supported residents rather than corporations. The cost of the shore to ship power could be passed back to cruise passengers as a levy, which would be a small increment on the total ticket price.</p> <p>Some ships should not be permitted to dock, since they clearly do not meet noise guidelines. The noisiest ship by far was the Costa Romantica. I could not sit outside in my own garden while it was docked and even inside there was a constant loud hum for 3 days. The worst regular offender is the</p>

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		<p>Dawn Princess and on Australia day(2017) I was woken by Pacific Dawn. I have not seen this ship before and hope it does not return. It seems that 'Dawn' in the name relates to when they wake you. I know when the Dawn Princess has docked before I open my blinds. The sound is so distinctive. There was also extremely loud noise on Saturday 28th January (2017) when I believe the Pacific Pearl was docked and the Pacific Eden on Sunday was noisier than usual.</p> <p>I believe that the Noise Attenuation Program is a poor second compared to shore to ship power and it does not take into consideration the fumes and sooty deposits. However, since I live directly in front of the terminal and I have French doors at both ground and first floor level, which are far from airtight, I would be interested to hear what the program offers.</p>
48	31/01/2017	<p>Whilst this consultation specifically refers to a Noise Impact Mitigation Strategy, the fact is there is a noise and air pollution problem at White Bay and the two cannot be dealt with in isolation. Shore power is the best solution to deal with both issues and must be urgently pursued to catch up to the rest of the world.</p> <p>With respect to the strategy, I make the following comments:</p> <ol style="list-style-type: none"> 1. When there is a problem with noise, punishing the victim rather than the perpetrator is not the answer <ul style="list-style-type: none"> • Residents should not have to modify their homes because of the failure of the cruise ships to comply with noise limits. Responsibility sits with the cruise lines to make modifications • Presumably it is Ports' intention that residents lock themselves inside and run air conditioning continuously at the residents' own considerable cost? This is a clear case of punishing the victim • The Dawn Princess is a case study which demonstrates that the cruise lines can take steps to address the noise issues at the source – it now has significantly lower engine noise emanating from it since on-board modifications were made in late 2016 • You state of on-ship noise controls that “such mitigation measures are not reasonably achievable as each individual vessel would require significant vessel mechanical redesign, retrofitting and or repurposing” – well we could say the same of redesigning our homes! Again, the perpetrator should bear the responsibility, not the victim 2. The community have a right to enjoy their outdoor space (courtyards and gardens) <ul style="list-style-type: none"> • The only two solutions which will reduce outdoor noise are on-board modifications and shore power • The Dwelling Noise Attenuation program does not address noise issues outdoors • Further, the Dwelling Noise Attenuation Program does not appear to have council approval and given the heritage nature of many houses in the area, may never be approved – meaning that this exercise is a fruitless waste of time and simply further delays getting to the real solution – shore power 3. Our lack of regulation and failure to keep pace with international developments means we get the oldest, noisiest, most polluting ships at White Bay <ul style="list-style-type: none"> • The recent experience of the Pacific Eden – a 24 year old ship rebadged and promoted by P&O as “new” – where it had engine problems which caused it to stay, unscheduled, for several nights is the perfect example. Not only did it generate unbelievably acrid fumes, it was also running roughly, exacerbating noise pollution. • Over the year, three ships will account for 50% of the visits to White Bay. Their average age is 27 years old. Imagine standing next to a 27 year old bus or truck – they simply do not run as smoothly as new ones do. These old ships have been recycled from the northern hemisphere to homeport in Sydney because we have become a lucrative dumping ground. We must take action to ensure these ships have technically advanced solutions installed to protect the environment by reducing air and noise pollution • Australia is one of the fastest growing cruise markets in the world and Sydney Harbour is at the forefront of that growth. It is a cruise marketer's dream. They are not going anywhere and it is up to our authorities to ensure that not only is Sydney Harbour the fastest growing port but also the cleanest and most technically advanced – and we're way behind the rest of the world right now 4. The references to “a low proportion of overnight visits” is misleading <ul style="list-style-type: none"> • The tricky language used implies that the overnight visits are so few that they're not even worth considering. However using a proportional figure as opposed to an actual figure is blatantly misleading when the Port Authority well knows that the overall number is increasing at an exponential rate • According to the cruise schedule published by the Port Authority, in 2017 there are 22 nights when a ship is scheduled to stay overnight and of that number six nights will have two ships berthed • In addition, already, we have had three unscheduled nights, putting the overnight stays at 25 nights – given it's very early in the year, based on previous experience, we can expect that number to rise to

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		<p>around 30</p> <ul style="list-style-type: none"> • 30 nights is significant! That's one whole month of the year • The impact on the community from noise and air pollution is so much greater at night – ships must either plug into to shore power or not be allowed to stay overnight <p>5. There is an answer – shore power</p> <ul style="list-style-type: none"> • Instead of spending millions on modifying residents' homes, that money should be directed to installing shore power which deliver both reductions in noise and improvements to air quality • If the Port Authority want to locate such large polluting engines right in the middle of our suburb, then they must ensure international best practices are in place • Shore power has been rolled out in other international cities including New York, Vancouver, Hamburg, Los Angeles, Seattle, San Diego, Halifax, Juneau – it's even being implemented in Shanghai. Why is Sydney, with its residential community located closer than any other to these massive polluting ships, missing out on these advancements? • The argument that shore power is too expensive is simply ridiculous. The international experience shows that the cost lies in the \$5m to \$15m region. Given the massive revenue generated by cruising in Sydney (as frequently touted by the industry), this is a mere rounding error, and in any case, what price our health? • The argument that only 25% of ship visits would have the capacity to plug into shore power today is also ridiculous. Firstly, one in four would be a significant relief compared to what we have today. Secondly, if you want to locate a cruise terminal so close to a high density residential area, then you must take the appropriate steps to protect that community. If you don't want to do that then don't place the terminal there • The government must place the health of the community first and if that means introducing incentives for the cruise ships to implement modifications so they can plug in to shore power then it must do so • Ultimately, if ships can't comply then they can't stay at White Bay – we cannot value the economic contribution of the cruise line over and above the health of the community – as pointed out by the NSW Upper House Parliamentary Inquiry into the EPA in 2015 • Surely the government does not want the significant environmental impacts of a terminal without shore power to devalue its White Bay Power station project and Bays Precinct development? <p>6. Does the Noise Restriction Policy provide an out for cruise ships?</p> <ul style="list-style-type: none"> • The policy states under the third non-compliance that "For those vessels which have pre-existing bookings within the current financial year, the vessel may be permitted to utilise the White Bay Cruise Terminal for turnaround activities only". Isn't it the case that the cruise ship would consider its whole nine hour visit to consist of turn around activities? Is it right then that you really have no intention of banning the ship in the short term, despite it being the third non-compliance? <p>7. Continuous noise monitoring</p> <ul style="list-style-type: none"> • The implementation of continuous noise monitoring is long overdue • Reports on this monitoring should be made available to the community monthly
49	31/01/2017	<p>We have lived in Balmain for 24 years and 11 years at our present address. We do not find that any noise mitigating measure have been effective. We live [redacted] with a direct view to berthed vessels. While we may be more than 100 meters as the crow flies, as we are on the ridge, there is nothing between us and the vessels. It is important to consider the location of all residents who are affected as I suspect there are more than are being considered.</p> <p>It is very disturbing to hear the rumble of engines, especially at night when the noise from some ships can be felt as vibration when lying in our beds. This low frequency noise can be physically uncomfortable and make sleep difficult. I think this aspect needs to be investigated as I am sure the issue is not just about the volume of the noise but about the source of the noise and all its effects. We especially find the use of the PA system disturbing. They are very loud, and depending on the direction of the wind, we can often hear every word as if the announcer was in our own lounge room. My husband works from home most of the time and, as a teacher, I spend a lot of time on the weekend doing work at home. These regular loud announcements are incredibly disruptive to our work. During the warmer months it seems like there are vessels here every day so this constant disturbance has a big impact on us, especially as we are reluctant to close the windows when it is hot to block out the noise a bit.</p> <p>While I hear a lot about Sydney's water related industry heritage as if it was some justification for noise, any casual observer will note that this is and has been for many years, a residential area.</p>

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		Except for Bailey's Marine, the hospital and the school, there are only houses on this side of the harbour. The amenity of the residents needs greater attention.
50	31/01/2017	In reply to the offer made at meetings at Clontarf cottage in regard to sound and pollution reduction to my house at [redacted] I would decline and ask the money be spent to fix the problem at the source and adhere to the original promises made to all residents at the time we agreed to the ships docking ,when we enjoyed our quiet clean suburb.
51	31/01/2017	<p>We are relatively new residents (Sep 2016) to [redacted]. After attending the information sessions and reading the reports we are not convinced the best solution is to attenuate people's properties. We believe it should be the responsibility of the cruise ship operators to mitigate the noise and pollution - and stop it at the source.</p> <p>We believe providing ship-to-shore (s-t-s) power should be the first priority and incentives and rewards provided to those ships who use/have the capability to encourage them to White Bay. Could higher fees and even fines be given to those noisy, polluting ships - to help pay for the s-t-s power? Even if only 25% of cruise ships used it, it would provide some respite from the constant noise and pollution throughout the summer months. We understand the huge boost that tourism provides to our economy but surely we want to attract operators who respect our beautiful harbour and its residents. Could you ensure at least two days per week are 'ship-free' during the summer months? This would also provide respite for residents.</p> <p>I am completely opposed to the physical noise barrier idea and delighted it has been discarded. It would be an eyesore, block the view and stop the cooling breeze. We are not opposed to the view of the ships - in fact my family and I enjoy watching them - we just want to reduce the constant noise and pollution.</p> <p>My greatest concern about attenuating properties is that people will feel 'sealed in' and have no way of cooling their homes, especially during summer when there are cruise ships arriving almost everyday. We don't have air-conditioning and rely on the sea breeze through our front door to keep our home cool.</p>
52	7/02/2017	<p>Happy New Year to you. We have been away from Balmain since before Christmas and have only just got to the submission on the Noise Mitigation Strategy. I know it is late but hope you'll consider it anyway.</p> <p>Overall we endorse all the comments made by Katrina Horrobin in her submission. We particularly endorse Shore Power as the best solution to both the noise and the more pervasive and very damaging air quality issues.</p> <p>In addition we believe that any interim measures to alleviate the very significant impacts on local residents should involve greater restrictions on hours of visitation and overnight stays for cruise ships. The following points should assist:</p> <p>One of the key issues in relation to cruise ships berthing at White Bay is the uncertainty which surrounds their arrival, and occasionally their departure. Sydney Ports Cruise Ship Schedule (to which most residents now routinely refer) will frequently indicate a ship will arrive at 6am, but in reality that ship will arrive anything up to an hour beforehand. This means that residents are often woken very early and unexpectedly by the noise or foul odour and coughing, as windows in houses will often be open to take advantage of a change or cooling breeze overnight. The main effect of this lack of certainty is that residents affected by noise (and the highly toxic fumes) have to wake much earlier than the scheduled arrival time often by 5am to close windows and then there is little chance of returning to sleep. Many residents close windows the night before to be on the safe side. They then suffer interrupted and less comfortable sleep because of the captured heat and a lack of air in their homes. The numbers of people currently affected by noise would be reduced if residents knew that no ship would be at berth before the exact stated time, and this should ideally be a time when most households would be awake and able to take preventative measures at a reasonable hour in the morning rather than the prior evening.</p> <p>More importantly, if the Government was serious about alleviating the impacts on residents, then there would be no overnight stays until Shore Power is introduced. Given that ships routinely are breaking the noise standards set by the Government's Approval, residents, most of whom were here long before the cruise ships, should not be forced to so modify their lives and put up with sleepless nights in hot airless homes. We believe that no overnight stays would also reduce the number of people currently affected by noise.</p>

No.	Date received	Submission details
		<p>If the approach suggested in 1 and 2 above was combined with setting hours for ships to be at berth which largely corresponded with working hours or children's waking hours, such as between 7am and 7pm, then again the overall numbers of people affected by noise would be reduced, and residents could enjoy the outdoors in the summer months, like most others in this city.</p> <p>There needs to be a system whereby Balmain residents who request it, are notified by Sydney Ports when there is a late change to an arrival or departure time (not showing on the published schedule), to enable preventative measure to be taken. A procedure for achieving this was discussed with you and Joe James at the Government's interagency meeting more than 12 months ago, but no procedure has been implemented. Again, if the Government is serious about the impacts of the cruise ships on residents' health, and NSW Health has now published a study which indicates the additional community and health cost impact in lost life years due to Cruise Ship emissions, then such a system would be implemented.</p> <p>As the Government's plans for the Bays Precinct and the Balmain Power Station sites involve attracting businesses to the area, your Minister should be aware that such businesses are unlikely to undertake any investment in this location if the health and amenity of their company and their employees is likely to be compromised in the appalling way that the residents of Balmain has been.</p>
53	21/02/2017	<p>Clean Air for NSW Report: Submission into the Draft White Bay Noise Mitigation Study</p> <p>I am an owner/resident who has lived in our family home in [redacted] for about 19 years, living on the ridge line, where the western half my house faces towards White Bay. I believe that over this period, the way the White Bay precinct has operated has fundamentally changed, resulting in preventable excessive breaches (in both noise and air particulate pollution), and that the Noise Mitigation management strategy has abysmally failed. I consider it grossly unfair that this strategy resulted in Ports NSW abdicating responsibility by governmental and ship entities involved. Practices to date repeatedly leave residents to face the consequence of the intrusive acoustics, as well as to do the monitoring and surveillance. While simultaneously bearing the disadvantage of noise pollution repeatedly occurring at White Bay by the Cruise Ships that port, we find that Port NSW is not taking responsible preventative action, nor show responsible accountability for public acoustic health. To add to this strain, when – maybe several times a year - I finally do get fed up with the cruise ships docked that are responsible of the intrusion and ring Ports NSW complaints, rarely have I received a conclusive response at all. When I have had a conversation regarding the cruise ships, the rare reply has been totally inadequate or notifies me of the complaint remains in some vague form of abeyance, and at best, leaves the responsibility back on to me to follow up if the complaint is not responded to or addressed in the protocol. On the edge of a prime global city and paying very high land tax, we are treated as if we lived in a third world country! As the mitigation strategy and the complaints process has failed me, I require that ships are warned of eviction if they breach much tighter (noise and air particulate) pollution controls, or risk not being able to re-enter port. I urge that best practice of 24 hour monitoring/surveillance of noise levels plus the instituting Ship to Shore Power are vital to the health of our community in Balmain.</p> <p>Firstly, I appear to have not been included in the target area or area of concern for this entire Noise Mitigation project. I am affected by White Bay port management of noise and seek to be included in considerations, especially those ensuring of best practice. I ask that I be included in correspondence, considerations and contacts on these matters.</p> <p>The Anzac bridge and traffic – and noise levels - are not original to the area, and bring their own higher levels of sound. Also, the Cruise Ships are a new industry to the port, and they bring their own problems if new technologies are not managed. I am repeatedly exposed to incidences of loudspeaker misuse, at intrusive levels. I would say that it is the exception that when a cruise ship stays, that it does not use its loudspeaker for frequent voiceovers, of at least 3 times a day, and that this use does not pertain to emergency calls or emergency drills.</p> <p>For some ships, the external TV acoustics or loudspeaker commentary is able to be heard from my position, across the water and up the ridgeline. Any emergency drills tend to be short, and loudspeaker voiceovers – while many are inarticulate, they are clear in tones and excessive volume levels. Each ship varies in what they do, but most will engage in some kind of commentary at least a few to several times a day.</p> <p>Clearly the worst acoustic intrusion was throughout the afternoon of the 25 January 2017, from the P&O ship, for which I made a formal complaint to the Port Authority NSW. I still have not had contact to inform me of the process nor to resolve my noise complaint pertaining to sustained and excessive noise pollution for most of that afternoon, and that it was to the extent that my windows were</p>

No.	Date received	Submission details
		<p>repeatedly rattled by the air pressure several times . I have received an email in relation to me not being able to get through on telephone to the correct off The constant and loud electrified music reached crescendos that were so extreme, several times throughout the day, the multi-window panes (set in wooden window frames) in my kitchen rattled in unison with the sound pulsing from across the water. This was so intense I was worried that the windows may shatter. I have never had such sustained and repeated window rattling, despite fireworks and rare close thunderstorms – the air pressure was incredible to reach that level of effect. I had got thoroughly fed up by about 4pm and began ringing to find out where the sound came from exactly. A patrol officer had confirmed that Pirramma Park had no event nor signs of structures for acoustic event. It was suggested to me soon after that the P&O ship had a scheduled event –and the intrusive sounds was coming from this specific site. When I did ring Port Authority NSW, I was redirected to a telephone number that rang out and was not answered at all (I held on for at least 10-20 minutes each time). While I have today received a letter apologizing for some telephone error (which I still find unacceptable), this is the first and only time I have had any return correspondence, and it still failed to address or explain the process for handling the core issue that was my original complaint lodged a week ago! I am saying that the complaint process has failed me entirely, even when I am unfairly expected to bear the burden of receiving noise pollution, and conducting monitoring practices and surveillance. I am still awaiting information about the complaint process, and any details that addresses the ship emitting excessive noise for an entire afternoon and what can be done to deter/avoid this occurring in future. I find the reduction option of 'double glazing' houses totally inadequate. The noise can be so pervasive, and also I do not consider I should confine myself indoors with all entries double glazed only because noise pollution emitted from ships due to a lack of will to treat us like a first class world (not third) and have shipping be regulated, monitored and managed. Certainly many ships port in seasons when it is necessary for me to keep windows open to cool the house, rather than close them and make life outside the house and inside unbearable during the heat especially. Wide range of options should be considered in how to protect residents from incurring excessive noise, and in a preventative way.</p> <p>I do not understand why my street/house was not included in the zone for consideration, as me and my neighbours do experience frequent breaches of noise pollution – use of loudspeakers for other than emergency only notice or drills.</p> <p>With today's technology, I do not understand why ships should not be able to enforce clear output limits on loudspeaker/PA use and range. Also, preventative and early warning measuring devices are still to be installed and used, to take the burden off residents to be responsible for monitoring/surveillance. If claims are that noise levels are subject to errors like relative ship to road or ship to rail etc, I seek that we simply identify the level k restrict the output from particular devices used.</p> <p>I understand that Ports NSW had committed to installing a continuous 24 hour noise monitoring system in Grafton St, yet this is still not done. The failure to do this is of concern to residents and indicates a neglect of duties by Port NSW.</p> <p>Regarding the error analysis of noise measurements, the failure of the report to</p> <p>It appears that the true record of noise sound reductions is not made routinely at/near the White Bay port or Dockside Apartments, and that the failure to document routinely acoustic/noise levels places an inexact and unfair burden on local residents.</p> <p>While distance of my or any dwelling from the ship to shore areas exist, it should not override or negatively interfere with noise pollution level concerns.</p> <p>While the Anzac Bridge does emit noise regularly, it is quite different to the significantly louder ships that port at White Bay. Background noise in the ports area or the urban/industrial interface can get high but it should not be used to compromise what would be the noise pollution level readings, nor allow ship readings to be further elevated. Cumulative noise is a problem, and not just isolated to one source of sound.</p> <p>I expect that the Mitigation Strategy include taking the offensive noise seriously, and closely regulate and monitor unacceptable levels emitted by ships. For those who breach, they should be removed and denied further access.</p> <p>I urge that Ship to Shore power be installed as an investment in the noise and air quality responsibilities of Ports NSW. Cruise ships are insufficiently restricted and show a poverty of self management in being good neighbours to local residents. I urge that best practices be adopted by</p>

No.	Date received	Submission details
		<p>Ports NSW. We have too long been subject to third world practices, and as a affluent city and suburb that attracts very high taxes and rates, we expect the highest standards (not the lowest). To provide ship to shore power is a worthwhile provision for the community and the cost of this should be borne by the public purse, for the health of its citizens.</p> <p>Accurate assessment of acoustic levels is vital, as a 24 hour monitoring system. This 24 monitoring of the industry plus ship to shore power is a beneficial and preventative form of investment in the local residents health. Such a monitoring system and on shore power would be much more effective and desirable than the limited and limiting 'double glazing' approach (which as a sole strategy, I consider is a waste of public money).</p>
54	25/01/2017	<p>Spoke on phone - discussed: some windows already treated - but others they hadn't touched yet. Discussed treatment options. Also MVS would need filters as concerned about air quality. Wanted to know if needed to make a submission to have home treated - advised no we will be in touch and builder will also discuss more detail at the time.</p> <p>Said she will be putting in a brief submission saying that the treatment program is good, but shore power would definitely be better.</p>
55	21/02/2017	Refer to submission in Appendix A. (NSW Health)

Appendix C

- SLR response to technical submissions (letter dated 17 March 2017)

17 March 2017

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Port Authority of New South Wales
Level 4, 20 Windmill Street
WALSH BAY NSW 2000

Attention: Christa Sams

Dear Christa

**White Bay Cruise Terminal - Cruise Operations
Draft for Consultation - Final Noise Impact Mitigation Strategy
Response to Submissions**

Attachment A presents SLR's response to submission numbers 4, 29, 36 and 37 in relation to the Draft for Consultation Final Noise Impact Mitigation Strategy (NIMS) dated 9 November 2016.

Let me know if you require any further assistance with this matter.

Yours sincerely



GLENN THOMAS
Director

Checked/
Authorised by: JS

Submission No. 4 dated 6/12/2016

Request to reassess number 7 Vincent St as a 2 storey residence under the eligibility guidelines for treatment as it has not been assessed.

Response

Appendix K of the NIMS report released for consultation identified the property at 7 Vincent Street as residential single floor. The updated NIMS report has been amended to appropriately identify this property as two floors.

As presented in NIMS Table 15, the predicted night-time intrusive LAeq(15minute) level for the nominated typical operating scenario at 7 Vincent Street (ground floor level) is 53 dBA. The intrusive level has been calculated at the second floor as 54 dBA, being generally consistent with the surrounding properties, and also complies with the proposed VNAP Eligibility Noise Criteria 55 dBA at night. This result has been included in the updated NIMS Report.

Notwithstanding the above, in accordance with the WBCT VNAP Dwelling Treatment Schematic Plan (NIMS Appendix K), based on the submission the subject property may be eligible for special consideration.

Submission No. 29 dated 24/01/2017

No acoustic study has been done. The only control measure is that the noise level at one site be less than 70db. This is inadequate. What is required is an acoustic study which determines that the INP noise standards are observed and to recognise that loud noise is a health risk. This involves the acoustician:

- a. *Estimate noise maps indicated areas of high exposure.*
- b. *Ensure the following INP noise standards are met.*

<i>Time</i>	<i>Acceptable dB</i>	<i>Recommended maximum dB</i>
<i>Day</i>	<i>55</i>	<i>60</i>
<i>Evening</i>	<i>45</i>	<i>50</i>
<i>Night</i>	<i>40</i>	<i>50</i>

- c. *Determine whether there are modifying factor corrections.*
 1. *Low frequency noise from ship engines.*
 2. *Other modifying factors.*
Impulsive noise.
Duration noise.
- d. *Consider mitigation.*
 - Doubly glazing.*
Requires air conditioning.
Is ineffective with low frequency noise.
 - Source.*
Control ship operations.
On shore power generation. This is mandated by the damage done to the amenity of the residents of East Balmain by the presence of the terminal.

It is surprising that the behaviour of the Sydney Port is so lacking with the experience they have had when the container ships were in port at White Bay.

Response

This submission is noted, however it is considered that the claim that “*No acoustic study has been done*” is unfounded, as the background and purpose of the NIMS is clearly set-out in Sections 1 and 2 of the report.

Notwithstanding the above, SLR generally agrees with the noise assessment guidance as outlined in points a, b, c and d, and notes that these requirements have been addressed in the NIMS.

To further assist with interpreting the NIMS, **Table 1** presents cross references to the relevant sections of the report and provides additional comments where appropriate.

Table 1 Submission Noise Assessment Guidance and NIMS Cross References

Point	Submission Noise Assessment Guidance	NIMS Report Cross Reference	Comment												
a	<i>Estimate noise maps indicated areas of high exposure.</i>	Table 15; and Appendix L	-												
b	<p><i>Ensure the following INP noise standards are met.</i></p> <table border="1"> <thead> <tr> <th>Time</th> <th>Acceptable dB</th> <th>Recommended maximum dB</th> </tr> </thead> <tbody> <tr> <td>Day</td> <td>55</td> <td>60</td> </tr> <tr> <td>Evening</td> <td>45</td> <td>50</td> </tr> <tr> <td>Night</td> <td>40</td> <td>50</td> </tr> </tbody> </table>	Time	Acceptable dB	Recommended maximum dB	Day	55	60	Evening	45	50	Night	40	50	Sections 4.1 and 4.6	<p>The submission nominates the INP’s urban residential noise amenity levels. However, as discussed in Section 4.1.1 of the report, the WBCT NIA nominates the INP’s urban/industrial interface to determine the extent of any noise exceedance zone. Hence the INP’s urban/industrial interface noise amenity levels form the basis of the WBCT VNAP Eligibility Noise Criteria (Table 7).</p>
Time	Acceptable dB	Recommended maximum dB													
Day	55	60													
Evening	45	50													
Night	40	50													
c	<p><i>Determine whether there are modifying factor corrections.</i></p> <ol style="list-style-type: none"> <i>Low frequency noise from ship engines.</i> <i>Other modifying factors.</i> <ul style="list-style-type: none"> <i>Impulsive noise.</i> <i>Duration noise.</i> 	Sections 3.3.2 and 4.6	<p>As discussed in Section 3.3.2 of the report, vessel operating noise attracts a low frequency noise (LFN) modifying factor. The LFN modifying factor has been incorporated into the WBCT VNAP Eligibility Noise Criteria (Table 7). Vessel operating noise (ie engine, generators, fans, exhaust etc) is generally continuous and therefore does not attract adjustments for impulsive and or intermittent characteristics. Any adjustments for duration would result in a relaxation of the criteria. Hence, no such adjustments have been considered.</p>												
d	<p><i>Consider mitigation.</i></p> <ol style="list-style-type: none"> <i>Doubly glazing.</i> <ul style="list-style-type: none"> <i>Requires air conditioning.</i> <i>Is ineffective with low frequency noise.</i> <i>Source.</i> <ul style="list-style-type: none"> <i>Control ship operations.</i> <i>On shore power generation.</i> <i>This is mandated by the damage done to the amenity of the residents of East Balmain by the presence of the terminal.</i> 	Section 5.5	<p>Table 12 of the report reviews the feasible and reasonable noise and mitigation measures together with recommended approach for implementation. Port Authority is unaware of any such “mandate” associated with shore power and the approved operation of the WBCT.</p>												

Submission No. 36 (Extract) dated 30/01/2017 – Curtis Road

18. Proposed alternative Noise Reduction Program

The SLR report provides little assistance with addressing offensive noise emitted by the White Bay cruise ship facility. As set out in the INP, a noise reduction program should have been implemented from the first day operations commenced as the existing facility causes offensive noise on a regular basis.

My suggested noise reduction program includes the following:

- Impose absolute noise limits for ships using the facility and a timetable for introduction of more stringent limits. Supplement these limits with a berthing noise fee which encourages lower noise cruise ships. The provision of ship to shore power is an integral element of this noise reduction measure.*
- Impose limits on arrival and departure times and include a berthing fee for early arrivals or late departures.*
- Impose a berthing fee structure for overnight stays.*
- Establish at least two sites with independent 24 hour noise monitoring with full resident access to data online. Sites to include recording of elevated noise events including source direction.*

Response

The author's background and experience in considering this complex matter is acknowledged.

In general terms however, the submission appears to contain several misunderstandings with regard to the requirements of the current project approval.

As a result, a large component of the submission is directed toward criticising previous noise procedures and assessment outcomes associated with the WBCT approvals process, with the remainder of the submission aimed at discrediting and finally rejecting the NIMS and ONMP reports, and then asserting the author's alternative noise reduction program.

There are many examples in the submission where the author asserts that SLR has technically "failed" or acted on "false premise" or made "claims" or the like. So numerous are the assertions of "failure" "falsity" or "claims" it could be reasonably argued that the submission itself is somewhat misleading.

For example, submission section 2, states:

"...the SLR report is based on a false premise and the permitted noise levels should be based upon a proper application of the INP."

However, as discussed in the NIMS Section 4.1, the WBCT NIA foreshadows that the INP (urban/industrial interface) noise amenity levels be used to determine the extent of any noise exceedance zone. This is not a "false premise" but rather a fact and a noise assessment outcome presented in the WBCT NIA and endorsed by SLR.

For example, submission section 3, states:

"... these reports failed to identify whether the emitted noise had tonal, low frequency or intermittent components or other elements which would cause the measured noise to be subject to a weighting for those annoying components as specified in the INP."

However, the NIMS Appendix C (Sub Appendix A) SLR Letter entitled "Low Frequency Noise Assessment" dated 25 February 2015, concludes *"...that WBCT noise emissions do contain 'dominant low frequency content', on occasion, in accordance with the INP's assessment procedures"*. Furthermore, NIMS Section 3.3.2 goes on to present a detailed assessment of low frequency noise (LFN) modifying factors.

For example, submission section 10, states:

“... that the SLR report attempts to claim that the INP does not apply to this project because it relates to shipping noise.”

However, no such “claim” is contained in the report. NIMS Section 4.1 merely points out that the WBCT operations are not scheduled activities and the INP does not specifically address this situation. In fact, Section 4.1 reviews the WBCT project approval procedure carried-out in accordance with the INP.

Put simply, Port Authority has approval to operate WBCT in accordance with Project Approval (MP 10_0069) dated 2 February 2011 (as modified) and unless otherwise directed by the DP&E, Port Authority is obligated to follow the procedures set-out in Condition D1. The NIMS and ONMP have been prepared in response to the requirements of Condition D1, where in the event that the WBCT Noise Criteria (refer **Section 3.1**) cannot be met, then Port Authority shall submit a report to the Director General of the DP&E. Port Authority is not required to submit a new development application as asserted in the submission section 5.

The author’s proposed alternative noise reduction program is outlined in Section 18 and reproduced above. The first three (3) suggestions are underpinned by punitive measures involving the imposition of fees or charges which the Port Authority is unable to support. The Port Authority concurs with the final suggestion as outlined in the NIMS and ONMP.

Submission No. 37 (Extract) dated 30/01/2017 - Inner West Council

...In response to the public exhibition of the draft Strategy and Plan; with the limited time provided, Council has sought independent expert advice from an acoustic consultant in relation to:

- *The strength, accuracy and validity of the Strategy and Plan,*
- *The level of enforceability of the Strategy and Plan,*
- *Any complications for enforcement that could be foreseen from the wording in the Strategy and Plan,*
- *Any improvement of the Strategy and Plan in terms of environmental health impacts and mitigation works, and*
- *Any other general comments and/or concerns.*

As a result, Rodney Stevens (Principal/Manager, Rodney Stevens Acoustics) has provided a review of the draft Strategy and Plan. The key points of his review are detailed as follows:

- *Deck announcements and music were clearly audible from some cruise ships when in port;*
- *Noise monitoring has identified that there is likely going to be breaches of the Project Approval noise limits during the evening and night time periods;*
- *Implementation of real time noise monitoring would result in transparency of noise levels emanating from noise sources;*
- *Shore to ship power would result in considerable noise reductions of up to 10dBA;*
- *Installation of a permanent noise barrier/wall would reduce noise levels however could have significant visual impact;*
- *Dwelling noise attenuation to a defined area of residences should be based on the Amenity Criteria and would reduce noise levels within those homes, however continue to cause disturbances to those residences not currently identified in the defined area; and*
- *Noise in external residential recreation areas will remain as an adverse impact to residents.*

To provide greater detail and clarity for your consideration on the key points listed above, a copy of Rodney Stevens' advice is attached to this letter (Appendix A).

In addition to this, Council held a public meeting on 24 January 2017 at Balmain Town Hall to present the findings of Rodney Stevens' peer review and to inform residents on how to make a submission on the draft Noise Impact Mitigation Strategy and Operational Noise Management Plan. I have also provided a copy of the main topics discussed at this meeting (Appendix B).

It is the opinion of both Inner West Council and affected residents that implementation of real time noise monitoring and the installation of ship to shore power be the two (2) main priorities for Ports of New South Wales in terms of short and long term noise mitigation.

One of the key benefits of real time noise monitoring is the ability for cruise ship operators to effectively use the received feedback as a mitigation tool. This means that the operator can view or be notified of the noise levels that are being recorded a certain distance away in real time and adjust the activity accordingly. Secondly, receiving live feedback on noise emissions can aid the quick identification of potential mechanical faults.

Real time noise monitoring will also strengthen transparency associated with regulatory action, in that, the community and stakeholders would know when a noise breach is occurring and take action accordingly. This would assist in the successful and accurate implementation of the three (3) warning letters procedure.

Shore to ship power is the best long term noise solution for White Bay Cruise Terminal in that, it allows cruise ships to turn off their diesel engines whilst in port and connect to the local power grid. Not only does this result in a significant reduction in noise levels by 25% but it also assists in reducing the health impacts associated with toxic airborne pollutants such as particulate matter and sulphur dioxide.

Shore to ship power is the only mitigation option that provides a holistic solution for both noise and air pollution at White Bay Cruise Terminal. Council strongly recommends that ship to shore power be investigated in great depth with a further feasibility study to be undertaken and made available to the public...

Response

Council's position in reflecting the concerns of local residents is acknowledged, and the associated documents including the Peer Review (Rodney Stevens Acoustics, 2017) and summary of the public meeting held 24 January 2017 are noted.

In general terms, the submission aligns with the recognition of the major noise issues as presented in the NIMS and ONMP reports. However, there remains some divergence with regard to the proposed and recommended feasible and reasonable noise mitigation measures.

Table 2 presents a summary of the Peer Review's key points with cross references to the relevant sections the reports, and provides additional comments where appropriate.

Table 2 Peer Review Key Points with Cross References to the NIMS and ONMP Reports

Peer Review Key Points	NIMS and ONMP Cross Reference	Comment
<i>Deck announcements and music were clearly audible from some cruise ships when in port;</i>	NIMS Sections 3.3.4 and 8.1.2; and ONMP Appendix B	Port Authority recognises that the use of external public address systems on vessels is a major source of the community complaint (NIMS Figure 5) and proposes the WBCT Noise Restriction Policy to address this issue.
<i>Noise monitoring has identified that there is likely going to be breaches of the Project Approval noise limits during the evening and night time periods;</i>	NIMS Section 3.3, in particular Section 3.3.3.	Port Authority recognises that cruise vessel operating noise levels are likely to remain above the approved noise criteria at some of the nearest receivers and this outcome has triggered the preparation of the NIMS and ONMP reports in accordance with Project Approval Condition D1. While the approved noise criteria are not currently being met, Port Authority is seeking to address the situation in accordance with Condition D1.
<i>Implementation of real time noise monitoring would result in transparency of noise levels emanating from noise sources;</i>	NIMS Section 8.1.1; and ONMP Section 6.2.	Port Authority concurs and this is proposed in the ONMP.
<i>Shore to ship power would result in considerable noise reductions of up to 10dBA;</i>	NIMS Sections 5.2.2 and 5.5, in particular Table 12.	Shore based power noise mitigation may be technically feasible and the potential noise reduction has been estimated to be up to 10dBA. However, it is recommended that consideration of shore based power noise mitigation be deferred due to the low number of vessels able to connect to it and alternative noise mitigation prioritised.
<i>Installation of a permanent noise barrier/wall would reduce noise levels however could have significant visual impact;</i>	NIMS Sections 5.2.1 and 5.5, in particular Table 12.	Port Authority concurs and this mitigation option has not been considered further (Table 12).
<i>Dwelling noise attenuation to a defined area of residences should be based on the Amenity Criteria and would reduce noise levels within those homes, however continue to cause disturbances to those residences not currently identified in the defined area; and</i>	Sections 4.1 and 4.6	The Peer Review nominates the INP's urban residential noise amenity levels. However, as discussed in Section 4.1.1 of the NIMS report, the WBCT NIA nominates the INP's urban/industrial interface to determine the extent of any noise exceedance zone. Hence the INP's urban/industrial interface noise amenity levels form the basis of the WBCT VNAP Eligibility Noise Criteria (Table 7).

Peer Review Key Points	NIMS and ONMP Cross Reference	Comment
<i>Noise in external residential recreation areas will remain as an adverse impact to residents.</i>	Sections 4.1 and 4.6	Port Authority notes that at some of the nearest receivers, noise impacts in areas external to residences is a residual outcome arising from the implementation of the WBCT Vessel Noise Attenuation Program (VNAP). However, external residential recreation areas will benefit from WBCT Noise Restriction Policy which aims to control and manage noise from external public address systems and associated activities on vessels, and address significantly noisy ships. In addition, a number of the nearest affected residences are orientated so that their associated outdoor area is located at the rear, which may benefit to some extent from shielding by the dwelling or neighbouring buildings.

Port Authority also notes both Council's and the affected residents' position "*...that implementation of real time noise monitoring and the installation of ship to shore power be the two (2) main priorities for Ports of New South Wales in terms of short and long term noise mitigation.*"

As discussed in **Table 2**, shore based power noise mitigation may be technically feasible, however it can only be accommodated by a very small number of cruise vessels, and the vast majority of operating cruise vessels are not designed to accept shore power. The installation of shore power (in terms of land-side cost) is understood to be in the order of tens of millions of dollars, and with low current utilisation (i.e. just 25%) by cruise vessels makes this potential noise mitigation essentially ineffective and in any case unreasonably cost prohibitive.

It is also considered (and perhaps mutually agreed) that the installation of a permanent noise barrier would introduce significant visual impact and unlikely to be reasonably acceptable to the nearest affected residents on Grafton Street.

For these reasons, it was found that the noise wall be discarded as a mitigation option, and shore based power noise mitigation be deferred, allowing three (3) alternative noise mitigation measures to be prioritised and commenced following consideration by the Department of Planning and Environment (DP&E) in accordance with Project Approval Condition D1. This would involve the immediate implementation of (i) WBCT Noise Restriction Policy; (ii) WBCT Continuous (real-time) Noise Monitoring System and (iii) WBCT Vessel Noise Attenuation Program (VNAP).