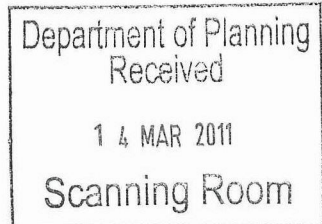




10 March 2011

Mr Sam Haddad
Director-General
NSW Department of Planning
GPO Box 39
Sydney NSW 2001



Attention: Daniel Keary, Director Infrastructure Projects

Dear Mr Haddad

**RE: Bulk Liquids Berth 2, Port Botany
Section 75W Modification to Condition 2.7 of Project Approval No. 07-0061**

Sydney Ports Corporation (Sydney Ports) is requesting the deletion of Condition 2.7 of Project Approval 07-0061 under Section 75W of the *Environmental Planning and Assessment Act 1979*. Condition 2.7 prohibits audible piling activities from occurring on the weekend or public holidays.

Condition 2.7

"Notwithstanding condition 2.5, no audible piling activities are permitted to occur on the weekend or public holidays."

Description of the Land

The Bulk Liquids Berth 2 will be located in Botany Bay adjacent to the existing Bulk Liquids Berth 1, at the south-western end of Brotherson Dock, Port Botany.

Discussion

Reference is made to a letter sent to the Department of Planning (the Department) from Sydney Ports (dated 24 November 2010) seeking the deletion of Condition 2.7, and to the response letter from the Department (dated 22 December 2011; your ref S07/00205). Whilst the Department did not agree to delete Condition 2.7 on the basis of the Sydney Ports letter, it was indicated that the Department would be supportive of considering pile driving activities during standard construction hours on a Saturday, in accordance with Condition 2.5, through the submission of a Section 75W modification request. As such, Sydney Ports is submitting this modification request to delete Condition 2.7 in order to allow for pile driving to occur on Saturdays between 8:00 am and 1:00 pm as per Condition 2.5.

It is noted that driving of piles Mondays to Fridays between 7:00 am to 6:00 pm was previously agreed to by the Department (your ref: S07/00205).

The predicted noise impacts from driving piles have been assessed and are discussed below. The predicted impacts are considered to be minor in nature and manageable with the implementation of appropriate mitigation measures.



Due to the required change in construction methodology to driven piles Sydney Ports commissioned a revised construction noise assessment report (see attached SKM report, dated 22 November 2010). The revised assessment considered a worst case piling driving scenario – utilising the noisiest pile hammer emissions for a construction period in excess of 26 weeks and adverse wind conditions. The predicted worst case noise levels at the receiver locations indicate a compliance with nominated construction noise levels with the exception of a 3dBA exceedance at one location (Location A), 21 Elaroo Avenue La Perouse. This exceedance is not considered significant given it is a worst case assessment that may not mirror actual impacts. In addition, the Bulk Liquids Berth 2 is more than 1700m from the nearest sensitive receiver and is located in the midst of other port operations in Port Botany.

To ensure noise impacts from pile driving activities are minimised, monitoring of noise levels at receiver locations will be undertaken to confirm the predictions during the initial stages of piling construction. If there are exceedances at sensitive receiver locations, additional mitigation measures would be implemented. These measures may include one or more of the following:

- the use of one or more of resilient dollies and/or noise barriers or shrouds, for the piling rig;
- review of equipment and piling methodology, including hammer type, driving impact and frequency; and
- introducing respite periods where continuous noisy operations exceed 3 hours in duration.

In the main areas of the BLB2 working platform and road bridge, installation rates of 1-2 piles per Saturday are currently expected. The time associated with set-up and moving between each pile installation would introduce natural respite periods.

Additionally, in accordance with Condition of Approval 6.2(d), a Construction Noise Management Plan (CNMP) will be prepared and implemented and it will reflect the piling methodology required to construct the wharf structures. This Plan will outline construction noise mitigation, monitoring and management measures to be implemented to minimise noise impacts during construction of the project. As required by the letter from the Department (dated 24/12/2010, S07/00205), the CNMP will include clear commitments in relation to the duration of driven piling activities, the provision of respite periods, and mitigation measures in response to noise criteria exceedances. The CNMP will be provided to the Department prior to the commencement of works.

Permitting pile driving works on Saturdays in accordance with Condition 2.5 will shorten the duration of piling installation and therefore the overall construction period and construction costs as well as shortening the duration of any noise impacts associated with pile driving. Additionally, berth occupancy levels at the existing bulk liquids berth at Port Botany have averaged approximately 75% in the last six months, with forecast occupancy levels set to increase further. Significant demurrage to the berth users due to the high berth occupancy will be incurred during any additional delay. Demurrage costs are in the order of US\$20,000 to US\$30,000 per day for a typical bulk liquids ship and these costs will be passed onto the end users.



In order to proceed with the procurement process for construction of these critical works, we request the deletion of Condition 2.7 through this Section 75W application.

Please don't hesitate to contact Shane Hobday, Sydney Ports' General Manager Safety, Security and Environment on 9296 4902 or myself on 9296 4674 should you require further information or to discuss any aspect of this letter.

Yours sincerely,

Ryan Bennett
Senior Environmental Planner

Request to modify a major project



NSW GOVERNMENT
Department of Planning

Date duly made: 14 / 3 / 11

Modification No. 07-0061 MOD 1

1. Before you lodge

This form is required under section 75W of the *Environmental Planning and Assessment Act 1979* (the Act) in order to request the Minister to modify the Minister's approval to carry out a project or concept plan to which Part 3A of the Act applies.

Before making this request, it is recommended that you first consult with the Department of Planning (the Department) concerning your modification. The Director-General may issue environmental assessment requirements that must be complied with before your request will be considered by the Minister. If the changes proposed by the modification will result in a project that is consistent with the existing approval, the Minister's approval for a modification is not required.

Disclosure Statement

Persons making a request to modify a project or concept plan are required to declare reportable political donations (including donations of or more than \$1,000) made in the previous two years.

Note: For more details about political donations disclosure requirements, including a disclosure form, go to www.planning.nsw.gov.au/donations.

Lodgement

All modification requests must be lodged with the Director-General of the Department of Planning, by courier or mail. An electronic copy should also be e-mailed to the assessment contact officer assigned to the project.

NSW Department of Planning
Ground floor, 23-33 Bridge Street, SYDNEY NSW 2000
GPO Box 39 SYDNEY NSW 2001
Phone 1300 305 695

2. Details of the proponent

Company/organisation/agency

Sydney Ports Corporation

ABN

95784452933

☒ Mr ☐ Ms ☐ Mrs ☐ Dr ☐ Other

First name

Ryan

Family name

Bennett

Position

Senior Environmental Planner

STREET ADDRESS

Unit/street no.

Level 4

Street name

20 Windmill Street

Suburb or town

Walsh Bay

State

NSW

Postcode

2000

POSTAL ADDRESS (or mark 'as above')

PO Box 25

Suburb or town

Millers Point

State

NSW

Postcode

2000

Daytime telephone

9296 4674

Fax

9296 4766

Mobile

Email

rbennett@sydneyports.com.au

3. Identify the land

STREET ADDRESS (where relevant)

Unit/street no.

Street or property name

Suburb, town or locality

Postcode

Local government area(s)

State Electorate(s)

REAL PROPERTY DESCRIPTION

Lot 6 DP 1053768, Port Botany

Note: The real property description is found on a map of the land or on the title documents for the land. If you are unsure of the real property description, you should contact the Department of Lands.

Please ensure that you place a slash (/) to distinguish between the lot, section, DP and strata numbers. If the proposed modification applies to more than one piece of land, please use a comma to distinguish between each real property description.

OR: detailed description of land attached: ☒

MAP: A map of the site and locality should also be submitted with this request.

4. Details of the original major project or concept plan

Briefly describe what the original approval allows

The construction and operation of a second bulk liquids berth facility adjacent to the existing bulk liquids berth facility at Port Botany comprising:

- a central working platform and working area, with berthing face and pipe manifold / marine loading arm arrangements;
- adjacent berthing dolphins on each side of the working platform;
- two mooring dolphins on each side of the working platform (4 in total);
- walkways connecting the dolphins and working platform.

What was the original project application no.?

07_0061

What was the date of the approval?

20/03/2008

What was the original application fee?

Note: Clause 245K of the *Environmental Planning and Assessment Regulation 2000* provides information on calculating the maximum fee for a request for modification.

5. Describe the modification you propose to make to the approval

Describe the proposed modification

Deletion of Condition 2.7 thereby allowing pile driving activities on Saturdays in accordance with Condition 2.5.

Your modification request may need to be accompanied by an Environmental Assessment, including plans. An electronic and hard copy of this document will be required.

ESTIMATED CAPITAL INVESTMENT VALUE

Please indicate the estimated capital investment value (CIV) of the modification to the project approval or concept plan (excluding GST).

\$0

FULL TIME EQUIVALENT JOBS

Please indicate the number of jobs created by the proposed modification. This should be expressed as a proportion of full time equivalent (FTE) jobs over a full year.

Construction jobs (FTE)

0

Operational jobs (FTE)

0

6. Landowner's consent (where required)

As the owner(s) of the above property, I/we consent to this request being made by the proponent:

Land

Land

Signature

Signature

Name

Name

Date

Date

Note: Under Clause 8F of the *Environmental Planning and Assessment Regulation 2000* (the Regulation), certain applications for approval under Part 3A of the Act do not require consent of the landowner, however, the proponent is required to give notice of the application (e.g. linear infrastructure, mining & petroleum projects, and critical infrastructure).

7. Political donation disclosure statement

Persons making a request to modify a project or concept plan are required to declare reportable political donations (including donations of or more than \$1,000) made in the previous two years.

Have you attached a disclosure statement to this request?

☐ Yes

☒ No

Note: For more details about political donations disclosure requirements, including a disclosure form, go to www.planning.nsw.gov.au/donations.

8. Proponent's signature

As the proponent(s) of the project and in signing below, I/we hereby:

- provide a description of the modification to the project approval or concept plan and address all matters required by the Director-General pursuant to Section 75W of the Act, and
- declare that all information contained within this form is accurate at the time of signing.

Signature



In what capacity are you signing if you are not the proponent

Name

Ryan Bennett

Name, if you are not the proponent

Date

10 March 2011

Sinclair Knight Merz
100 Christie Street
St Leonards NSW 2065 Australia
Postal Address
PO Box 164 St Leonards NSW 2065 Australia

Tel: +61 2 9928 2100
Fax: +61 2 9928 2500
Web: www.skmconsulting.com



Robert McQueen
Sydney Ports
L4, 20 Windmill Street
Walsh Bay
NSW 2000

22 November 2010

*Revised Construction Noise Assessment_Letter
20101122.docx
EN02912*

Dear Robert,

RE: Assessment of noise impacts from driven piles Bulk Liquids Berth 2

In March 2008, Sydney Ports received Project Approval from the Department of Planning for the Bulk Liquid Berth (BLB) 2 project.

Following this Project Approval, SKM has been requested to undertake an additional construction noise assessment in relation to proposed piling activities associated with the project. The design development carried out by Sydney Ports has identified that piling using bored or screwed methods only would not meet the size and depth requirements through the underlying dense sands for the BLB2 structures. This addendum to the construction noise assessment in the EA is to identify the potential for construction noise from driven piles to impact the community and to provide information to the Director-General to obtain approval for the use of driven pile construction methods.

The requirements of the Project Approval for construction noise have been reproduced here for convenience:

Noise Impacts

Construction Noise Impacts

2.5 To mitigate construction noise impacts associated with the project, the Proponent shall only undertake construction activities that are audible at any residential receptor during the hours listed below:

- a) all works undertaken on Mondays to Fridays shall only be carried out between 7:00 am to 6.00 pm;*
- b) all works undertaken on Saturdays shall only be carried out between 8:00 am and 1.00 pm; and*
- c) no construction works shall occur on Sundays or public holidays.*

This condition does not apply in the event of a direction from police or other relevant authority for safety or emergency reasons. Note: 'safety or emergency reasons' refers to emergency works

Sinclair Knight Merz Pty Limited

The SKM logo trade mark is a registered trade mark of Sinclair Knight Merz Pty Ltd. ABN 37 001 024 095

Offices across Australia, New Zealand, UK, South East Asia, Middle East, the Pacific and Americas



which may need to be undertaken to avoid loss of life, property loss and/or to prevent environmental harm.

2.6 The hours of construction activities specified under condition 2.5 of this approval may be varied with the prior written approval of the Director-General. Any request to alter the hours of construction specified under condition 2.5 shall be:

- a) considered on a case-by-case basis;*
- b) accompanied by details of the nature and need for activities to be conducted during the varied construction hours; and*
- c) accompanied by sufficient information for the Director-General to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site.*

2.7 Notwithstanding condition 2.5, no audible piling activities are permitted to occur on the weekend or public holidays.

2.8 No driven piles are permitted for the construction of wharf structures unless otherwise agreed by the Director-General.

Previous construction noise assessment

The previous noise assessment and corresponding Project Approval considered the construction noise objectives taken from the *Environmental Noise Control Manual* (ENCM) (EPA, 1994), Chapter 171 *Construction Site Noise*. The project specific criteria are dependent on the existing background noise levels at the receiver location and also the expected duration of the works. The construction noise criterion at a receiver location is expressed as an L_{A10} noise level as detailed in **Table 1**.

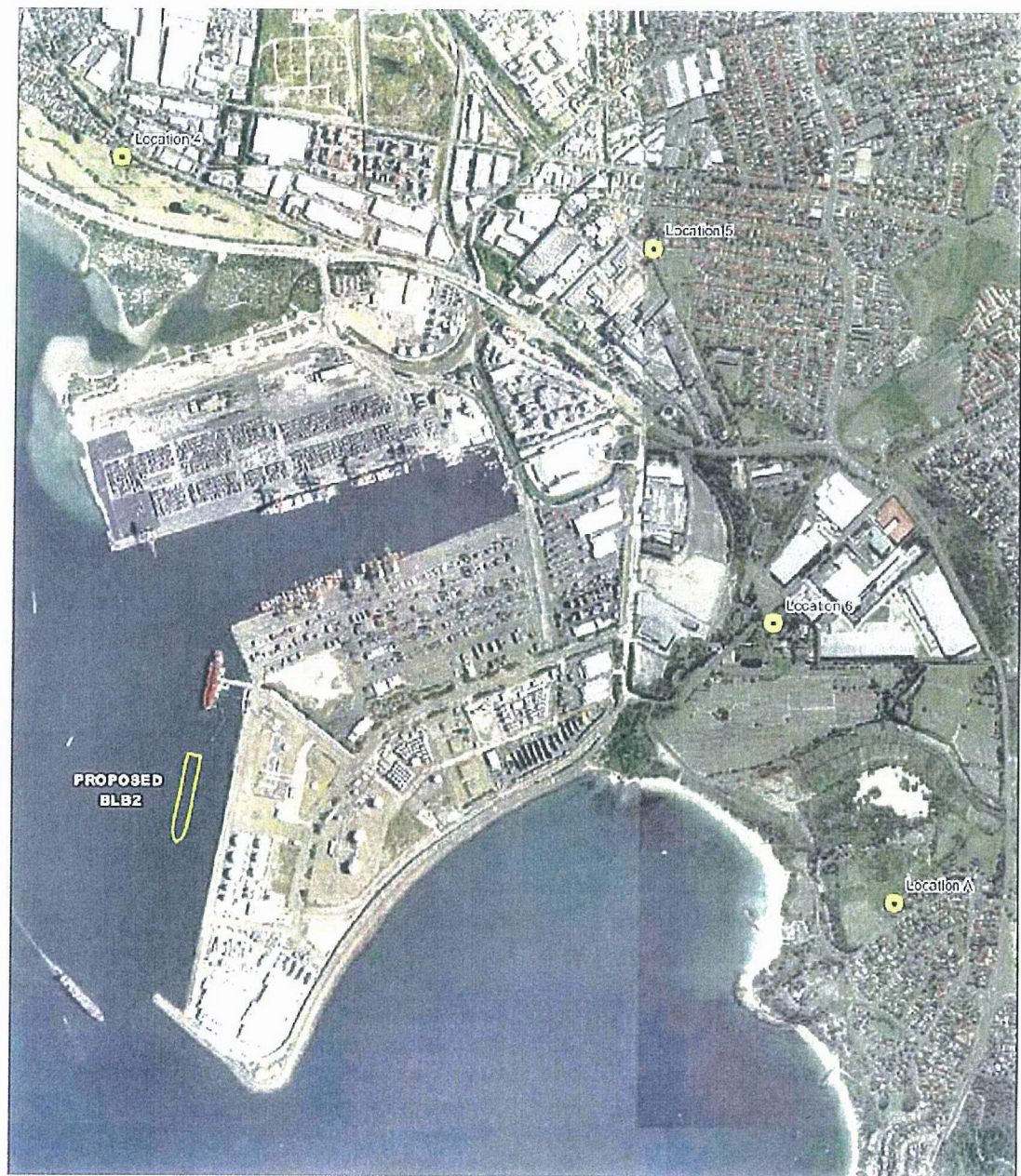
Table 1 Construction noise criterion

No.	Duration Of Works	DEC Noise Guidelines
1	Construction period of 4 weeks or less	The L_{A10} 15 minute noise level m must not exceed the background level by more than 20 dB(A).
2	Construction period between 4 weeks and 26 weeks	The L_{A10} 15 minute noise level m must not exceed the background level by more than 10 dB(A).
3	Construction period greater than 26 weeks	L_{A10} noise levels from the construction should not exceed a level of 5 dB(A) above background.

Figure 1 presents a graphical layout of the key noise sensitive receiver locations with respect to the BLB2.



■ Figure 1 Assessed receiver locations



From the ENCM, the project specific noise levels in **Table 2** were developed for the key receiver locations in **Figure 1**.

The SKM logo trade mark is a registered trade mark of Sinclair Knight Merz Pty Ltd.

U:\ENVIR\Projects\ENC2912\Deliverables\Reports\Revised Construction Noise Assessment_Letter 20101122.docx



Table 2 Project specific noise criterion

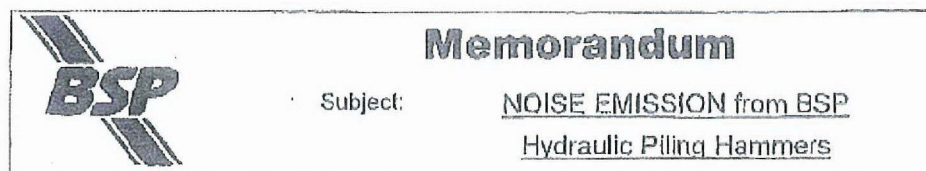
ID	Location Description	LA10 Construction Noise Objectives dB(A)
		Daytime (7.00am – 6.00pm)
Location 4	North of Golf Course	62
Location 5	Australia Avenue	47
Location 6	Military Road	51
Location A	Elaroo Avenue	43

It should be noted that the Project Approval for construction noise impacts does not specify noise level goals at residential locations however, the noise goals in **Table 2** identified in the previous assessment have been used as a guideline to determine the potential for noise impacts from driven piles.

Revised assessment of impacts

To assess the impact of driven piles a review of the potential piling noise levels was undertaken using data from BSP International, which is presented in **Figure 2**.

■ Figure 2 Piling noise data



• Sample of typical BSP hammers tested

Hammer	Energy (kJ.m)	BPM	Dolley type	Lwa (dB)	Lpc Peak @ 4m (dB)
CG300	300	36	Nylon x 280mm thick	124	135
HH16	240	39	Wire rope & steel impact plate	126	131
CX110	110	35	Nylon x 220 thick	125	137
CX65	85	44	100mm nylon with steel impact plate	128	134
HH15	60	43	100mm nylon with steel impact plate	125	135
SL30	30	84	Nylon x 220 thick	129	134
SL20	20	95	Nylon x 220 thick	131	135

The table of piling sound power levels indicates a variance of sound power levels of 7 dB(A) between the different machine types, which is largely dependent on the stroke rate of the hammer. This table was used to determine a worst case scenario for the piling being 131 dB



from the model SL20 hammer. In practice the hammer type and corresponding sound power level may change, which would affect the predicted results accordingly.

The outcome of the piling noise assessment is presented in Table 3 with the nominal L_{A10} noise goals for each of the key receiver locations.

Table 3 Predicted Construction Noise Levels

ID	Location Description	Predicted L_{A10} Construction Noise Levels dB(A)	L_{A10} Construction Noise Objectives dB(A)
		Daytime (7.00am – 6.00pm)	Daytime (7.00am – 6.00pm)
Location 4	North of Golf Course	46	62
Location 5	Australia Avenue	45	47
Location 6	Military Road	48	51
Location A ¹	Elaroo Avenue	46	43

The predicted levels at the receiver locations indicate a general compliance with nominated construction noise levels with the exception of Location A. The exceedance of the noise goal at Location A is not considered to be significant for construction noise impacts and should be considered to be a worst case scenario based on the data from Figure 2.

To ensure noise impacts are minimised when driven piling methods are used, monitoring of noise levels at receiver locations should be undertaken to confirm the impact predictions during the initial stages of piling construction. In the event that there are exceedances which generate complaints of noise impacts at sensitive receiver locations, additional mitigation measures would be implemented. These measures may include one or more of the following:

- The use of resilient dollies and/or noise barriers for the piling rig
- Respite periods where continuous noisy operations exceed 3 hours in duration
- Review of equipment selection

Conclusion

A revised noise impact assessment for the BLB2 has been undertaken to assess the potential for noise impacts from driven piling construction methods at nearby residential locations. The predicted noise impacts have considered a worst case scenario, which indicates the potential for a marginal exceedance of the nominal construction noise goals at only one location.

Compliance with the identified noise goals is expected to be satisfied by noise management

The SKM logo trade mark is a registered trade mark of Sinclair Knight Merz Pty Ltd.

I:\ENV\Projects\EN02912\Deliverables\Reports\Revised Construction Noise Assessment Letter 20101122.docx



measures in the Project CEMP and would be monitored to ensure this outcome. Additional mitigation measures should be implemented where exceedances generate complaints from the community.

Yours sincerely

A handwritten signature in black ink, which appears to read "Scott Hughes", is written over the typed name and title. The signature is fluid and cursive.

Scott Hughes
Senior Acoustics Engineer