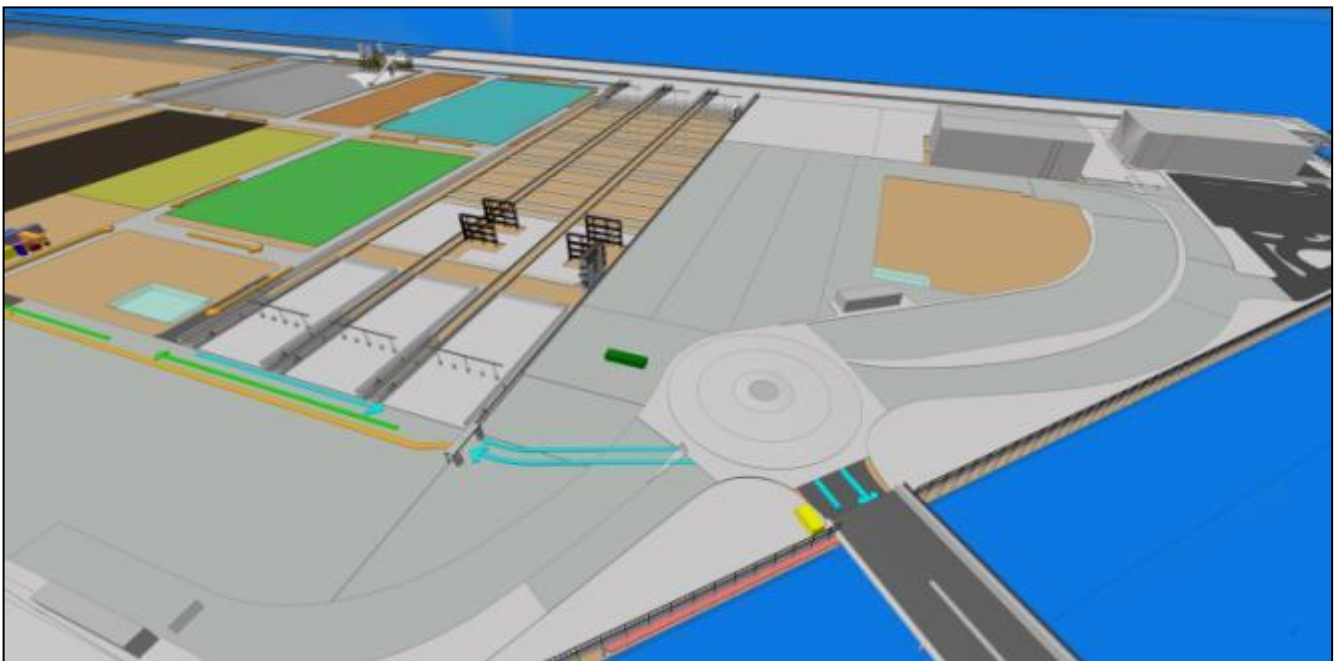


# Sydney Port Botany Terminal 3 Monthly Environmental Report September 2012



# SPBT3 Monthly Environmental Report – Sep 12

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LORA Contract No.:	G52

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## Revision History

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## Management Reviews

Review Date	Reviewed By	Details	Initial	Date

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### 1.0 Introduction

This report provides results for environmental monitoring activities associated with the Terminal 3 expansion at Port Botany for the month of September 2012.

Monitoring is undertaken for dust, noise, soil and water quality (where required).

There have been no environmental complaints received this month in regards to the Terminal 3 expansion works.

#### 1.1 Construction Activities

Construction activities undertaken for the month of September 2012 included the following:

- Site establishment including delivery and setting up site sheds, offices and facilities and creating temporary access roads on the site
- Installation of environmental controls such as wind erosion fencing and sediment fencing
- Eastern drainage depression installation within Penrhyn Estuary

### 2.0 Dust Monitoring and Air Quality

Dust deposition monitoring during September has been undertaken by Boulderstone as part of the Grade Separation works and can be found on the Sydney Ports website - [http://www.sydneyports.com.au/\\_data/assets/pdf\\_file/0020/18380/ENVIRONMENTAL\\_MONITORING\\_REPORT\\_SEPT\\_2012.PDF](http://www.sydneyports.com.au/_data/assets/pdf_file/0020/18380/ENVIRONMENTAL_MONITORING_REPORT_SEPT_2012.PDF).

Laing O'Rourke will manage and report the dust monitoring results from October 2012.

### 3.0 Noise Monitoring

Monthly construction noise monitoring was undertaken during September 2012. Noise monitoring locations have been based on noise-sensitive receptors in the project Environmental Impact Statement and approved for the Port Botany Expansion construction activities.

Attended noise measurements were carried out for a period of 15 minutes at each location. During the monitoring event, observations were made on the weather as well as the surrounding noise sources and environment.

#### 3.1 Day time noise monitoring

Noise measurements were undertaken on 17<sup>th</sup> September 2012. Work activities being undertaken on the Terminal 3 project included installation of environmental controls, eastern drainage depression works and material deliveries.

The Interim Construction Noise Guideline (2009, DECCW) sets out management levels for noise at residences and how they are to be applied. This guideline has been used in conjunction with the project Environmental Impact Statement to determine noise goals for the project. Recorded LAeq levels exceeded the noise goals for noise emissions from the Port Botany expansion Project at all locations except one, 3 Anniversary Road, Botany. However at each monitoring location, extraneous, non-project related noises were the dominant noise sources. These noise sources included road traffic and aircraft noise.

Construction activities at the Terminal 3 project site were inaudible in all cases.

It is noted that the intent of the Interim Construction Noise Guideline is to minimise noise impact from the construction works and is only applicable to the contribution of the noise from the Port Botany construction site. At the attended monitoring events, as has been noted on other stages of the Port Botany expansion project, the measured noise levels were controlled and dominated by other extraneous noise sources as listed above.

Day-time noise monitoring results are shown in Appendix 1.

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### 3.2 Night time noise monitoring

No night time monitoring was required to be undertaken for the Terminal 3 project site.

### 4.0 Soil and Water Quality Monitoring

Physical water parameters required to be monitored are pH, turbidity and visible oil and grease when dewatering activities are undertaken. Other contaminants may be tested for in areas of concern if the presence of contamination is observed.

#### 4.1 Water Monitoring

Water monitoring has been undertaken during September for dewatering activities undertaken during the installation of drainage headwalls and approaching drainage lines on the border of the Terminal 3 site. All dewatering results have been compliant with the discharge criteria set in the project Environmental Impact Statement. Dewatering results are summarised in Appendix 2.

#### 4.2 Soil Monitoring

No soil sampling was required during September. Soil sampling may be required for future works if materials are to be taken off site or if potential acid sulphate soils (PASS) are encountered during excavations. No acid sulphate soils were identified this month.

### 5.0 Penrhyn Estuary

In order to install the eastern drainage depression, as part of the operational terminal stormwater system to minimise erosion of the estuary, removal and relocation of an area of Saltmarsh established as part of previous enhancement works for the Penrhyn Estuary was required.

The enhancement works had taken place within the design footprint for a rock lined drainage corridor required for the operational Terminal 3 stormwater outlets. Laing O'Rourke engaged specialist Saltmarsh and wetlands ecologists to assist in developing the methodology and required controls for the removal and replanting of the Saltmarsh elsewhere in the Estuary.

The project team successfully replanted 100% of approximately 7000 square meters of removed Saltmarsh to other areas within the estuary and the drainage depression has been completed.

No migratory shorebirds were encountered during the works.

### 6.0 Environmental Inspections and Audits

Weekly environmental inspections were undertaken during September for the Terminal 3 project site. No significant environmental issues were observed or identified. Completed inspection sheets may be available on request.

## **7.0 Appendices**

**Appendix 1 – Day-time Noise Monitoring Results**

**Appendix 2 – Water Monitoring Results**

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## Appendix 1 – Day-time Noise Monitoring Results

Noise Monitoring Results - SPBT3 September 2012															LAING O'ROURKE
Noise Sensitive Area	Monitoring Location	Date	Time (24hr)	Construction Activities	Standard or Out of Hours Works (Day/Evening/Night)	Weather Conditions	In Response to Complaint?	RBL (dBA) - from EIS	Noise Goal <sup>1</sup> (RBL+5dBA)	Recorded Noise Level LAeq (15 min) (dBA)	Recorded Noise Level LA1 (dBA)	Recorded Noise Level LA10 (dBA)	Recorded Noise Level L90 (dBA)	Noise Goal Difference (dBA)	Comments / observations
Location 1 - Chelmsford Avenue	14 The Esplanade	17/09/2011	1000	Installation of enviro controls Eastern drainage depression Material deliveries	Standard Day	Overcast Moderate wind	No	49	54	60	73	59	47	6	Noise from Foreshore Rd traffic, aircraft noise, local traffic, S winds
Location 2 - Dent Street	34 Dent St	17/09/2011	1030	Installation of enviro controls Eastern drainage depression Material deliveries	Standard Day	Overcast Moderate wind	No	47	52	55	62	57	52	3	Local traffic noise, aircraft noise, S winds
Location 3 - Jennings Street	42 Jenning St	17/09/2011	1230	Installation of enviro controls Eastern drainage depression Material deliveries	Standard Day	Overcast Moderate wind	No	40	45	62	74	63	45	17	Local traffic noise, some aircraft noise, S/SE winds
Location 4 - North of Golf Course	3 Anniversary Rd	17/09/2011	1115	Installation of enviro controls Eastern drainage depression Material deliveries	Standard Day	Overcast Moderate wind	No	57	62	55	63	55	54	-7	Local traffic noise, aircraft noise, trees rustling in wind, S/SE winds
Location 5 - Australia Avenue	74 Australia Ave	17/09/2011	1150	Installation of enviro controls Eastern drainage depression Material deliveries	Standard Day	Overcast Moderate wind	No	42	47	53	63	54	42	6	Local/distant traffic noise, some aircraft noise, S winds
Location 6 - Military Road	73 Wassell St	17/09/2011	1320	Installation of enviro controls Eastern drainage depression Material deliveries	Standard Day	Overcast Moderate wind	No	46	51	65	74	68	52	14	Noise from Bunnerong Rd

Note 1: Noise goals are applicable to the noise contribution from the Terminal 3 Port Botany Expansion related construction activities only



Appendix 2 – Water Monitoring Results

Dewatering Discharge Monitoring						
Dewatering Location	Date	Meets Criteria	Discharge Location	Horiba Water Monitor		
				Oil and Greese (visual)	pH	Turbidity
SC5 - Headwalls	26/09/12 am	Yes	Penrhyn Estuary	None	7.89	4.2
SC5 - Headwalls	26/09/12 pm	Yes	Penrhyn Estuary	None	7.54	2.2
SC5 - Headwalls	27/09/12 am	Yes	Penrhyn Estuary	None	8.01	4.6
SC5 - Headwalls	27/09/12 pm	Yes	Penrhyn Estuary	None	8.35	3.3
SC5 - Headwalls	28/09/12 am	Yes	Penrhyn Estuary	None	7.78	1.0
SC5 - Headwalls	28/09/12 pm	Yes	Penrhyn Estuary	None	7.16	2.5
Estuary Reading	26/09/12 am	N/A	N/A	None	7.86	3.4
Estuary Reading	27/09/12 am	N/A	N/A	None	7.63	3.4