



# CLIENT MONTHLY ENVIRONMENTAL REPORT

**SICTL Container International Container  
Terminal Limited**

**Contract Number:** 350

**Report Number:** 02

**Period:** August 2014

Prepared By: Simon Fisher



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# 1. Progress

## 1.1 Background

## 1.2 General Progress and Construction Activities

Burton Contractors continued with the electrical conduit installation works with major subcontractor Downer. The two main electrical Pits P104 and P105 were installed on the landside end.

KNF continued with the FRP works, which included construction of Beams H I J K and L and construction of the end beams on the landside end. Stripping Formwork and cutting cast in sleeves continued. Reefer substation basement preparation works also commenced.

The stormwater drainage works was completed with CNL plumbing. The Major Liquid detention Unit was also delivered and installed in line 56 on the landside end.

Structural steel components for the Reefer gantries, walkways and holding down bolts commenced with fabrication.

Hydro demolition works also commenced and was completed on beam G closest to the SICTL operational zone.

### 1.3 Environmental Action Summary

Table 1: Summary of environmental actions during August 2014

Detail	This Month	Total To Date
Toolbox (Includes Environment)	4	11
Awareness/Alerts/Training	1	1
Inspections	1	3
Audits	1	1
Non-Conformances	4	4
Out of Hours Request	0	0
Unexpected Find of Contamination	0	0
Hazard Reports / Minor Incidents (Class 3)	0	0
Reported Incidents (Classes 2 & 1)	0	0
Breaches/Fines	0	0
Innovation / Positive Actions	0	0

### 1.3 Environmental Inspections and Audit Findings

A total of 1 environmental inspection and audit was undertaken during the reporting period. These included a combination of daily site inspections, weekly internal and external inspections, monthly checklists, post rainfall inspections and any additional monitoring that was undertaken during the reporting period. These inspections identified a total of 4 minor issues all of which have since been closed out within the required timeframes. The majority of issues identified during these inspections can be attributed to site establishment and have since been rectified through the implementation of additional checking mechanisms to ensure that all issues are being comprehensively addressed.

## 2.0 Environmental Surveillance

### 2.1 *Environmental Inspections and Audit Findings*

A total of 1 environmental inspections and audits were undertaken during the reporting period. These included a combination of daily site inspections, weekly internal and external inspections, monthly checklists, post rainfall inspections and any additional monitoring that was undertaken during the reporting period. These inspections identified a total of 4 minor issues all of which have since been closed out within the required timeframes. The majority of issues identified during these inspections can be attributed to site establishment and have since been rectified through the implementation of additional checking mechanisms to ensure that all issues are being comprehensively addressed.

### 2.2 *Environmental Noise Monitoring*

Monthly construction noise monitoring was undertaken during August 2014. Noise monitoring was conducted at all of the locations outlined in the Environmental Impact Statement and the CEMP. The identification of these sites has 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 30 minutes at each location. During the monitoring event, observations were made on the weather as well as the surrounding noise sources and environment. Noise monitoring results and location maps are presented in Appendix B.

All noise monitoring conducted during the period indicated that the construction works were inaudible at noise-sensitive receivers. No noise related complaints were received by the Project for this reporting period.

### 2.3 *Environmental Dust Monitoring and Air Quality*

The environmental dust monitoring data presented in this report has been made available by Fulton Hogan, the contractor for the Sydney International Container Terminal Limited (SICTL) currently undertaking construction activities associated with the Terminal 3 expansion at Port Botany.

Due to the concurrent nature of the construction activities undertaken by Burtons and Fulton Hogan as part of the overall PBRP both parties agreed to share monthly environmental monitoring data.

Four dust deposition gauges are installed in the areas surrounding the Port Botany redevelopment. All results received for the deposition gauges were within EPA guidelines and Project criteria for the month of August. No residential properties or road networks have been impacted by dust emanating from the Port expansion construction works and there have been no dust complaints received by the project during this monitoring period.

The real-time dust monitor located at the Botany Golf Club for reporting of PM<sub>10</sub> particulate matter has been temporarily utilised by Burton's, from Fulton Hogan, for the month of August 2014.

No exceedences of project PM<sub>10</sub> particulate matter criteria were recorded during August 2014. Dust and PM<sub>10</sub> monitoring results and location maps can be seen in Appendix C.

## **2.4 Water Quality Monitoring**

During the reporting period water was discharged from site and tested prior to being discharged. A total of 262.5 mm of rain was received throughout the month of August. The rainfall was managed within the site boundaries with the aid of a sediment basin and the sediment basin in the Boral compound. Immediately following site establishment and the rain events, erosion and sediment controls including but not limited to a sediment basin and wheel wash were installed within the site.

## **2.5 Shorebird Monitoring and Predator Inspections**

Shorebird monitoring inspections were undertaken twice a day on site by the Site Foreman and Environmental Representative. These inspections indicated that no shorebirds or birds at all were observed to congregate on the site.

Daily predator inspections were also undertaken by the Site Foreman and Environmental Representative, although no sightings of predators was seen, there was suspicions/indications of a fox present in the Boral compound. Any sightings or evidence will be photographed and reported if found in future.

# **3.0 Community**

## **3.1 Community Issues**

N/A

Regards,

**Burton Contractors Pty Limited**

*Simon Fisher*

Simon Fisher

Environmental Coordinator

## Appendix A

### Site Photographs











## Appendix B

### Noise Monitoring Records

Monthly Noise Monitoring Results - Standard Hours 16 August 2014									
Context				EIS Data		Actual Measurements			
Noise sensitive area	Monitoring Location	Sample time	Weather conditions	RBL	Noise Goal	Min	Max	LA10	Comments
Chelmsford Ave	14 The Esplanade	1420-1435	Overcast light wind	49	54	42.5	57.8	66.3	Aircraft, local traffic noise, wind
Dent St	34 Dent St	1510-1525	Overcast light wind	47	52	45.5	49.7	52	Aircraft, local traffic noise, wind
Jennings St	42 Jennings St	1540-1555	Overcast light wind	40	45	44	74.6	67.3	Local traffic, wind
Golf Course	3 Anniversary Rd	1445-1500	Overcast light wind	57	62	53.9	71.3	67	local vehicles, Aircraft noise, wind
Australia Ave	74 Australia Ave	1605-1620	Overcast light wind	42	47	49.8	55.8	54.5	light wind, birds, local traffic, heavy wind
Military Ave	73 Wassell St	1630-1645	Overcast light wind	46	51	51.2	56.7	53	light wind traffic, heavy wind

1. Standard hours for weekdays are defined as 6.30am – 6.00pm
2. Measurements are not in response to a complaint
3. Works associated with FH are located within the western section of the port. It is noted that there are other contractors working within port botany on other sections of the redevelopment.
4. Measurements are not in response to a complaint

## Appendix C

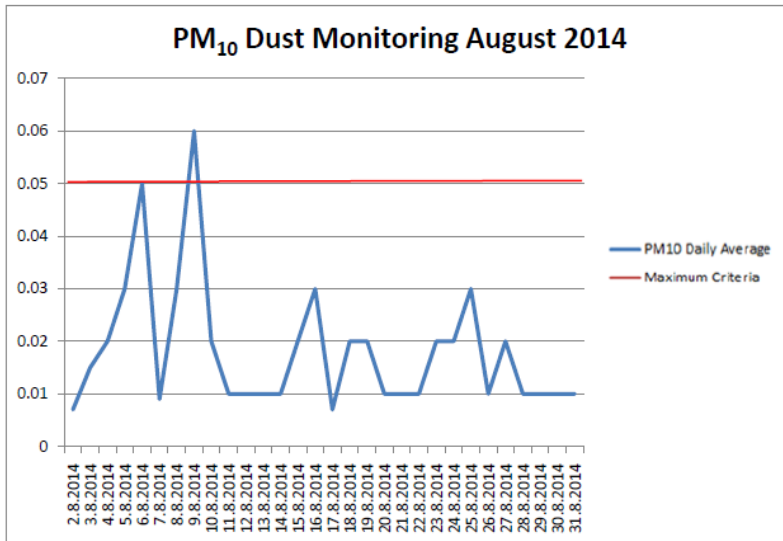
### Dust and Air Quality Readings

#### Analytical Results

Sub-Matrix: DUST (Matrix: AIR)				Client sample ID		Purcell Park	Estuary	Golf Course	Joseph Banks Park	---
Client sampling date / time						14/07/14 - 15/08/14 15-AUG-2014 13:25	14/07/14 - 15/08/14 15-AUG-2014 13:20	14/07/14 - 15/08/14 15-AUG-2014 13:10	14/07/14 - 15/08/14 15-AUG-2014 12:55	---
Compound	GAS Number	LOR	Unit			EW1402461-001	EW1402461-002	EW1402461-003	EW1402461-004	---
EA120: Ash Content										
Ash Content	---	0.1	g/m <sup>2</sup> .month			1.1	1.5	0.4	0.3	---
Ash Content (mg)	---	1	mg			20	29	8	6	---
EA125: Combustible Matter										
Combustible Matter	---	0.1	g/m <sup>2</sup> .month			0.6	0.7	0.4	0.2	---
Combustible Matter (mg)	---	1	mg			12	14	7	3	---
EA130: Calculated Rainfall										
Calculated Rainfall	---	1	mm			61	60	61	56	---
EA130: Volume										
Volume	---	1	mL			1050	1080	1130	1000	---
EA139: Total Soluble Matter										
Total Soluble Matter	---	0.1	g/m <sup>2</sup> .month			2.7	2.1	2.4	2.0	---
Total Soluble Matter (mg)	---	1	mg			51	40	46	37	---
EA141: Total Insoluble Matter										
Total Insoluble Matter	---	0.1	g/m <sup>2</sup> .month			1.7	2.2	0.8	0.5	---
Total Insoluble Matter (mg)	---	1	mg			32	43	15	9	---
EA142: Total Solids										
Total Solids	---	0.1	g/m <sup>2</sup> .month			4.4	4.3	3.2	2.5	---
Total Solids (mg)	---	1	mg			83	83	61	46	---

All units in g/m<sup>2</sup>.month. Dust limits are assessed as insoluble solids as per The Australian Standards (AS 3580.10.1-1991).

Summary taken from ALS report EW1402461. Reporting period: 14.07.2014 – 15.08.2014.



PM<sub>10</sub> daily dust averages for the month of August 2014. Readings are generally under the upper limit criteria of 0.05 with the exception of two readings on 6 and 9 July (0.05 and 0.06 respectively).

#### Dust Monitoring Locations





<b>CHAINAGE OF CONSTRUCTION ACTIVITY (Up/Down):</b>		<b>MONITORING LOCATION:</b> Botany Road	
<b>DATE OF TEST:</b> 27/08/2014		<b>TEST CONDUCTED BY:</b> Luke Bannon	
<b>ACTIVITY/ SERVICE:</b> Civil works for Port Botany Terminal 3 Phase 3		<b>OPERATOR:</b> All of site	
<b>DISTANCE FROM NOISE SOURCE:</b> <b>WIND SPEED/DIRECTION:</b> 54 KMPH / SSE		<b>INTERVENING GROUND (e.g. hard/soft, flat / fenced):</b> Port Botany sound wall / Foreshore Road	
<b>METEROLOGICAL CONDITIONS (i.e. cloud cover):</b> Cloudy			
<b>LABORATORY CALIBRATION:</b> Acoustic Research Laboratories calibration expires: Meter 1 /11/14, Calibrator 1/11/13			
<b>FIELD CALIBRATION:</b> Complete			
<b>TEST PROCEDURE:</b> AS 2659, INP & ICNG			
<b>EXISTING BACKGROUND (RBL)</b> <u>Reference Relevant Noise Catchment Area (NCA)</u>		<b>RBL:</b>	<b>NCA:</b>
<b>L<sub>10</sub> or L<sub>eq</sub> Noise Goal:</b> (RBL +10 stan +5 OOH)	<b>L<sub>A1</sub> Noise Goal:</b> (Refer to CNIS)	<b>PREDICTED NOISE LEVELS</b> <b>Reference (EA or other):</b>	
	70	<b>L<sub>eq</sub> 70</b>	<b>L<sub>A1</sub> 60 second</b>
<b>RESULTS</b>			
Start time: (24hr clock)	0920	End time: (24hr clock)	0935
Time weighting:	<input checked="" type="radio"/> Fast / Slow	Frequency weightings:	<input checked="" type="radio"/> A / C / Flat
<b>L<sub>eq</sub> 74</b>		<b>L<sub>A1</sub> 60 second (NIGHT WORKS ONLY)</b>	
Exceedance of Noise Goal: 4		<b>L<sub>eq</sub></b>	<b>L<sub>A1</sub></b>
Difference to Predicted (CNIS): 4		<b>L<sub>eq</sub></b>	<b>L<sub>A1</sub></b>
<b>Site Activities / Type of Plant in Operation</b>		<b>Monitoring Comments</b>	
Steel fixing, high pressure water blasting, deliveries.		Site was inaudible – traffic from Botany and Foreshore Roads was audible.	
<b>Site Diagram</b> (show monitoring location, buildings, construction zone other noise sources, distances, north up/down track)			
See diagram pp. 92 of CEMP.			

<b>CHAINAGE OF CONSTRUCTION ACTIVITY (Up/Down):</b>		<b>MONITORING LOCATION:</b> Chelmsford Avenue	
<b>DATE OF TEST:</b> 27/08/2014		<b>TEST CONDUCTED BY:</b> Luke Bannon	
<b>ACTIVITY/ SERVICE:</b> Civil works for Port Botany Terminal 3 Phase 3		<b>OPERATOR:</b> All of site	
<b>DISTANCE FROM NOISE SOURCE:</b> <b>WIND SPEED/DIRECTION:</b> 54 KMPH / SSE		<b>INTERVENING GROUND (e.g. hard/soft, flat / fenced):</b> Port Botany sound wall / Foreshore Road	
<b>METEROLOGICAL CONDITIONS (i.e. cloud cover):</b>			
<b>LABORATORY CALIBRATION:</b> Acoustic Research Laboratories calibration expires: Meter 1 /11/14, Calibrator 1/11/13			
<b>FIELD CALIBRATION:</b> Complete			
<b>TEST PROCEDURE:</b> AS 2659, INP & ICNG			
<b>EXISTING BACKGROUND (RBL)</b> <u>Reference Relevant Noise Catchment Area (NCA)</u>		<b>RBL:</b>	<b>NCA:</b>
<b>L<sub>10</sub> or L<sub>eq</sub> Noise Goal:</b> (RBL +10 stan +5 OOH)	<b>L<sub>A1</sub> Noise Goal:</b> (Refer to CNIS)	<b>PREDICTED NOISE LEVELS</b> <b>Reference (EA or other):</b>	
	55	<b>L<sub>eq</sub> 57</b>	<b>L<sub>A1</sub> 60 second</b>
<b>RESULTS</b>			
Start time: (24hr clock)	0900	End time: (24hr clock)	0915
Time weighting:	<input checked="" type="radio"/> Fast / Slow	Frequency weightings:	<input checked="" type="radio"/> A / C / Flat
<b>L<sub>eq</sub> 54</b>		<b>L<sub>A1</sub> 60 second (NIGHT WORKS ONLY)</b>	
Exceedance of Noise Goal: -1		<b>L<sub>eq</sub></b>	<b>L<sub>A1</sub></b>
Difference to Predicted (CNIS): -3		<b>L<sub>eq</sub></b>	<b>L<sub>A1</sub></b>
<b>Site Activities / Type of Plant in Operation</b>		<b>Monitoring Comments</b>	
Steel fixing, high pressure water blasting, deliveries.		Site was inaudible – traffic from Botany and Foreshore Roads was audible.	
<b>Site Diagram</b> (show monitoring location, buildings, construction zone other noise sources, distances, north up/down track)			
See diagram pp. 92 of CEMP.			

<b>CHAINAGE OF CONSTRUCTION ACTIVITY (Up/Down):</b>		<b>MONITORING LOCATION:</b> Dent Street	
<b>DATE OF TEST:</b> 27/08/2014		<b>TEST CONDUCTED BY:</b> Luke Bannon	
<b>ACTIVITY/ SERVICE:</b> Civil works for Port Botany Terminal 3 Phase 3		<b>OPERATOR:</b> All of site	
<b>DISTANCE FROM NOISE SOURCE:</b> <b>WIND SPEED/DIRECTION:</b> 54 KMPH / SSE		<b>INTERVENING GROUND (e.g. hard/soft, flat / fenced):</b> Port Botany sound wall / Foreshore Road	
<b>METEROLOGICAL CONDITIONS (i.e. cloud cover):</b> Cloudy			
<b>LABORATORY CALIBRATION:</b> Acoustic Research Laboratories calibration expires: Meter 1 /11/14, Calibrator 1/11/13			
<b>FIELD CALIBRATION:</b> Complete			
<b>TEST PROCEDURE:</b> AS 2659, INP & ICNG			
<b>EXISTING BACKGROUND (RBL)</b> <u>Reference Relevant Noise Catchment Area (NCA)</u>		<b>RBL:</b>	<b>NCA:</b>
<b>L<sub>10</sub> or L<sub>eq</sub> Noise Goal:</b> (RBL +10 stan +5 OOH)	<b>L<sub>A1</sub> Noise Goal:</b> (Refer to CNIS)	<b>PREDICTED NOISE LEVELS</b> <b>Reference (EA or other):</b>	
	61	<b>L<sub>eq</sub> 61</b>	<b>L<sub>A1</sub> 60 second</b>
<b>RESULTS</b>			
Start time: (24hr clock)	0940	End time: (24hr clock)	0955
Time weighting:	<input checked="" type="radio"/> Fast / Slow	Frequency weightings:	<input checked="" type="radio"/> A / C / Flat
L <sub>eq</sub> 58		L <sub>A1</sub> 60 second (NIGHT WORKS ONLY)	
Exceedance of Noise Goal: -3		L <sub>eq</sub>	L <sub>A1</sub>
Difference to Predicted (CNIS): -3		L <sub>eq</sub>	L <sub>A1</sub>
<b>Site Activities / Type of Plant in Operation</b>		<b>Monitoring Comments</b>	
Steel fixing, high pressure water blasting, deliveries.		Site was inaudible – traffic from Botany and Foreshore Roads was audible.	
<b>Site Diagram</b> (show monitoring location, buildings, construction zone other noise sources, distances, north up/down track)			
See diagram pp. 92 of CEMP.			