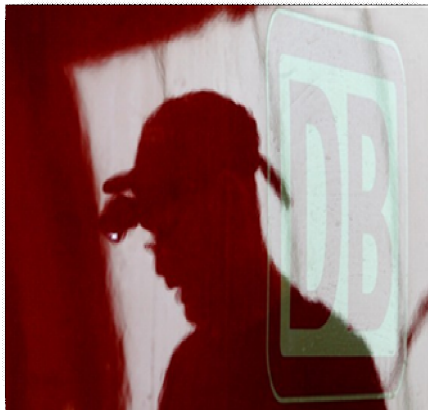


Southern Sydney Freight Line Environmental Protection Licence Monthly Report

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The following table records the revision history of this document.

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Document Review and Approval

The following people reviewed this document:

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1. INTRODUCTION

The Australian Rail Track Corporation (the ARTC) is a Commonwealth Government-owned company responsible for operating the interstate rail freight network that links Australia's major mainland capital cities, including Perth, Brisbane, Adelaide, Melbourne and Sydney.

The ARTC is presently undertaking a program of works to improve the efficiency and cost-effectiveness of rail freight services along the North-South Rail Corridor between Melbourne, Sydney and Brisbane. A major bottleneck in the rail freight network currently exists in southern Sydney, where freight trains share existing rail lines with the Sydney metropolitan passenger services operated by RailCorp. During morning and afternoon peak periods, freight services are not permitted to run due to passenger priority. As a result, freight services cannot arrive or depart Sydney at the optimum times.

To alleviate this bottleneck, the ARTC is constructing the Southern Sydney Freight Line (the SSFL), which will provide a dedicated freight line for a distance of 30 kilometres between Macarthur and Sefton in southern Sydney. The SSFL will provide a third track in the rail corridor specifically for freight services, allowing passenger and freight services to operate independently.

The SSFL will be constructed under a number of discrete contracts which have now been awarded to various contractors. The works that occurred during the period of July 2009 were mostly undertaken by Arenco, with bridge piling works carried out by Reed. Gartner Rose has continued its work on a number of stations and service relocations were carried out by O'Donnell Griffin (ODG), John Holland Rail and, to a lesser extent, Lang O'Rourke.

The Weekend 01 rail possession was held on the 4th and 5th of July. Contractors Arenco, Reed, Gartner Rose, ODG and John Holland Rail all worked during this possession. Arenco used the possession to undertake piling work at Sefton Dive and at the Chester Hill Road overbridge. During this possession Arenco also load lifted one of the pedestrian bridges at Liverpool Hospital and progressed in the pier and deck construction at the Liverpool Deck Bridge. In this period critical piling was completed by Reed at the Sussex Street Underbridge and the Hume Highway Deflection Wall. Reed also undertook earthworks at the Glenfield flyover as well as clearing and grubbing works at the Cabramatta Creek Bridge. ODG used the possession to relocate services and JHR removed redundant over head wiring and overhead wiring structures.

2. PURPOSE OF THE REPORT

The purpose of this report is to provide environmental monitoring, compliance and complaints management information to meet the requirements of condition R4 of Environmental Protection Licence No. 12971.

3. SUMMARY OF ACTIVITY IN JULY 2009

A breakdown of the on-site activities during July has been provided in Table 1.

Table 1: Summary of Activity in July 2009

Location	Description of Works	Contractor
(21.202km to	Piling, pilecap and asphalt work at Auburn Road	Arenco

Location	Description of Works	Contractor
22.38km)	Deck Bridge. Precast head stock installation. Installation of piles and jersey barrier. Clearing and grubbing at Southside rock nail wall.	
Chester Hill Overbridge (22.21km)	Deck poured, bond beam poured, footpath poured, roof cladding works	Arengo
Hector Street Underbridge (21.62km)	Bearing pads completed, pier headstock stripped. Sheet piling anchor stressing completed.	Arengo
Llewellyn Culvert (23.80km)	Bearing pads installed	Arengo
Leightonfield Culvert (24.14km)	Link slabs, abutment and wing walls completed.	Arengo
(26.20km)	Headstock construction and piling	Arengo
(35.12km to 35.32km)	Bored piling and anchor installation.	Arengo
Liverpool Hospital Bridges (34.00km to 35.00km)	Installation of pedestrian bridge truss. Roofing, glazing works and truss cladding.	Arengo
Generally throughout site	Continued potholing works to investigate underground services	Reed
Generally throughout site	Detailed site survey, boundary setout, control setout and re-survey	Reed
37.120km to 37.170km	Piling works for retaining wall structures RW 240 and RW 250	Reed
37.20km to 37.519km	Piling works for retaining wall structures RW 280 and 290.	Reed
Cabaramatta Creek Bridge (32.9km to 33.05km)	Piling works and foundation works. Commenced columns and headstocks	Reed
Sussex Street Bridge (36.29km)	Continued piling work and commenced pile caps, columns and headstocks.	Reed
Mill park 1 and 2, Woodbrook rd Bridges (27.36km to 37.3km)	Complete pile caps, columns and headstocks	Reed
Glenfield Creek	Complete pile caps, columns and headstocks	Reed

Location	Description of Works	Contractor
Bridges (37.6km to 37.7km)		
Bunbury Curran Bridge (47.100km to 47.30km)	Piling works and commenced caps for Bridge.	Reed
Sefton Station (Ch21.10km)	Centre platform and up side lifts poured. Poured Wellington Street pile cap and lift pit.	Gartner Rose
Leightonsfield (23.490km)	Pile cap poured and deflection wall started	Gartner Rose
Carramar Station (25.9km to 26.0km)	Footings poured and stormwater modified	Gartner Rose
Warwick Farm Station (34.000km)	Sheet piling, trees removed and preparation of the area for platform extension- screw piling undertaken	Gartner Rose
Casula Station (38.710 km to 38.835km)	Commenced form reinforcement pour to up and down lift pits.	Gartner Rose
Leumeah Station (52.5km to 52.6km)	Piling complete, pile cap blinding slab installed, pile caps trimmed to levels.	Gartner Rose
MacArthur Station (56.00km)	Pile cap base key cap poured, deflection wall first lift poured.	Gartner Rose
20.9km to 57.9km	Cable relocation and optic fibre relocation	ODG
Chullora Goods Line, Amy Street- Regents Park (20.100km to 20.300km)	Pre-build of Crossover and Installation of Crossover	John Holland Rail
Birrong (21.600km to 21.700km)	Overhead wiring and support works for Birrong	John Holland Rail
Liverpool Hospital (31.134km to 31.578km)	Supply and install new cantilevers and droppers, re-profile 6 bays on each up and down tracks to suit new bridges.	John Holland Rail
Glenfield Flyover (40.11km 40.103km)	Supply and install new Over Head Wiring Mast Footings	John Holland Rail
36.360km to 36.550km	Piling, preparation of bond slab, provisions of alternative services route.	Lang O'Rourke

4. NOISE AND VIBRATION MONITORING RESULTS

Noise and vibration monitoring continued throughout July 2009, undertaken periodically in accordance with Condition M7 of the Environmental Protection Licence.

4.1 NOISE MONITORING

In accordance with R4.1 (c) of the EPL the ARTC will be providing graphical representations of noise monitoring results obtained over the life the project. To date, noise monitoring locations have varied from month to month. When these locations become consistent and sufficient data is accumulated, results will be displayed graphically. Included in the appendix (Appendix A) is a table indicating the locations where noise monitoring has been undertaken.

During the month of July noise monitoring was undertaken at thirteen (13) locations along the length of the project. The results of the monitoring are provided in Table 2.

Table 2: Summary of Noise Monitoring – July 2009

Location	Date	Background Noise (Noise Goal) dB(A)	Equipment/Activities	Result dB(A)
Unit 8 Dana Parade, Sefton Dive	4 July 2009	39	Tamping at Arenco's Sefton Dive Site	42
Unit 11 Dana Parade, Sefton Dive	4 July 2009	36	Tamping at Arenco's Sefton Dive Site	47
22 Hope Street, Regents Park	4 July 2009	37	Tamping at Arenco's Sefton Dive Site	47
Liverpool Hospital	4 July 2009	41-42	Cranes operating at Arenco's construction site	6-7
Child Care Centre in vicinity of Liverpool Hospital	4 July 2009	41-42	Cranes operating at Arenco's construction site	16-17
10 Sussex Street, Cabramatta	15 July 2009	73	Cranes	7
86 Riverpark Drive	15 July 2009	68	Hammering	7
15 Slessor Road	15 July 2009	62	Excavator Tracking	7
64A Freeman Cct, Ingleburn	15 July 2009	54	Metal Clanging	0
20 Kulgoa Street, Leumeah	15 July 2009	58	Excavator	0

Location	Date	Background Noise (Noise Goal) dB(A)	Equipment/Activities	Result dB(A)
Meangle Road, Campbelltown	15 July 2009	70	Grader	0
101 Nottingham Road	5 July 2009	56	Petrol Powercutting	3 dBA
39 Cutcliffe Avenue	5 July 2009	55	Sledge Hammer	12 dBA

* Measurements carried out at close distance to works and projected to sensitive receptor

The results for a number of the activities exceeded the background noise level (noise goal) by more than 10 dB(A) and according to the EPA New South Wales Construction Noise Guideline. ARTC's contractors have undertaken all reasonable and feasible mitigation measures to minimise construction noise and have adopted measures outlined in Section 04 of the EPL and in accordance with the recommendations contained within the Construction Noise & Vibration Impact Statements prepared for the SSFL Project.

ARTC will continue to provide additional mitigation measures for 'moderately intrusive noise levels' in accordance with the CEMP. Details of mitigation measures to be applied in each case where the noise level of construction activities exceeded the background noise level (noise goal) by more than 10 dB(A) are listed below in Table 3.

Table 3: Summary of Additional Noise Mitigation Measures – July 2009

Location	Date	Equipment/Activities	Level above Background Noise dB(A)	Mitigation Measures to be applied
Unit 8 Dana Parade, Sefton Dive	4 July 2009	Tamping at Arenco's Sefton Dive Site	42	Noise was generated from tamping machine on the Goods Line. This operation is now complete at this location. Arenco will undertake tamping activities in future at the Bankstown Line. This activity, however, will occur for shorter 3 hour periods. Respite periods will be ordered if necessary. If work continues through the night alternative accommodation arrangements for the most affected residents will be made.
Unit 11 Dana Parade, Sefton Dive	4 July 2009	Tamping at Arenco's Sefton Dive Site	47	(as above)

22 Hope Street, Regents Park	4 July 2009	Tamping at Arenco's Sefton Dive Site	47	(as above)
Child Care Centre in the vicinity of Liverpool Hospital	4 July 2009	Cranes operating at Arenco's construction site	16-17	Noise in this area was generated by the installation of bridges. This activity is now complete. In the event of similar noisy activities, there will be investigations into respite periods and work will be undertaken within approved hours and monitoring will be in place.
39 Cutcliffe Avenue	5 July 2009	Sledge Hammer	12	This activity is now complete. In the event of similar noisy activities, there will be investigations into respite periods and work will be undertaken within approved hours and monitoring will be in place.

It is noted that there were two (2) complaints regarding construction noise received from residents in this area during July 2009.

For full details of the noise monitoring undertaken in July 2009, please refer to Appendices B, C, D and E.

4.2 VIBRATION MONITORING

Vibration monitoring was undertaken in accordance with condition M7 at Prospect Creek during June 2009. The results of the monitoring undertaken are provided in Table 4. For details of the vibration monitoring that was undertaken in July 2009, please refer to Appendix D and F.

Table 4: Summary of Vibration Monitoring- July 2009

Location	Date	Equipment/Activities	Result
10 Sussex Street Cabramatta	15 July 2009	Heavy vehicle movement	Well below acceptable Vibration Dose Value for intermittent vibration at residences from the DECC Assessing Vibration: a technical guide. AND Lower than the structural damage vibration levels for residential dwelling from the German Standard: Structural vibration –Part 3: Effects of vibration on structures (DIN 4150-3)
Menangle Road, Campbelltown	15 July 2009	Heavy vehicle movement (Grader and roller)	Well below acceptable Vibration Dose Value for intermittent vibration at residences from the DECC Assessing Vibration: a technical guide. AND Lower than the structural damage vibration levels for residential dwelling from the German Standard: Structural vibration –Part 3: Effects of vibration on structures (DIN 4150-3)

<p>9 Manning Street, Warwick Farm</p>	<p>30 July – 5 August</p>	<p>Vibratory Rolling</p>	<p>Levels are well within site specific vibration goal of 5mm/s (DIN 4150) and are unlikely to have potential to cause cosmetic damage.</p>
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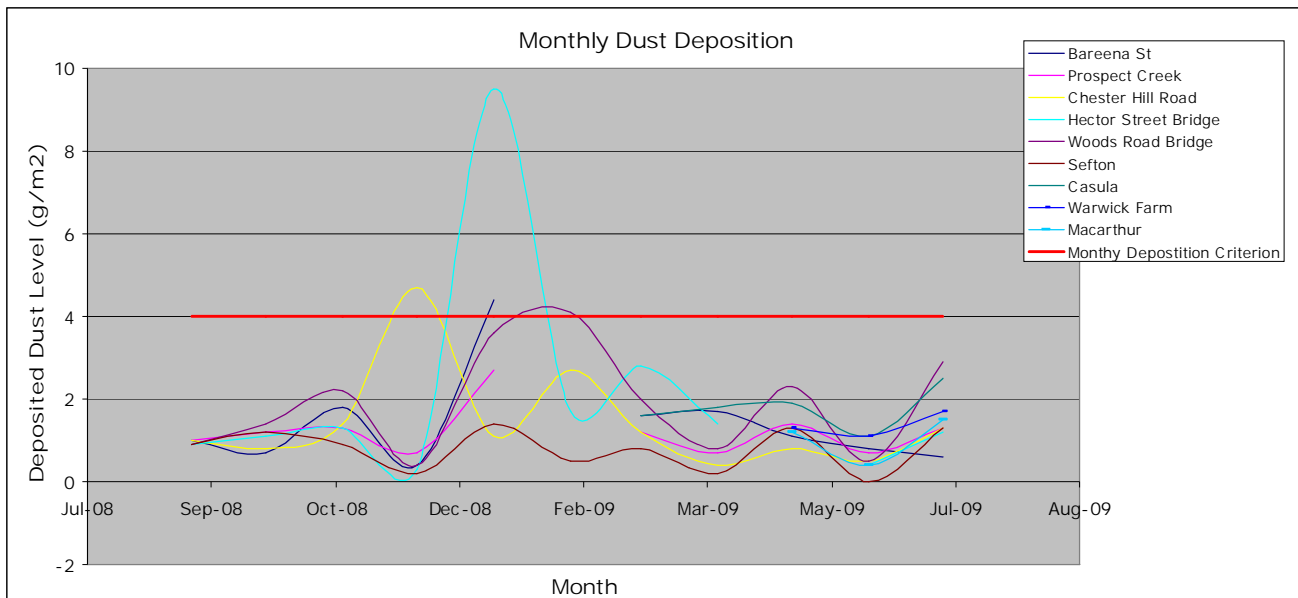
4.3 COMPLAINT NOISE AND VIBRATION MONITORING

There was one (1) complaint during July 2009 in relation to vibration and two (2) complaints in relation to construction noise. For details of complaints received in July 2009, please refer to **Section 7**.

5. DUST MONITORING RESULTS

Dust monitoring was carried out during July 2009 in accordance with Condition M8 of the EPL. The results of this analysis can be found in Appendix G. In accordance with requirements set out under R4.1(c) of the license, ARTC has prepared a graphical representation of monthly dust deposition results measured at the following project sites:

- Bareena Street
- Prospect Creek Bridge
- Chester Hill Road Bridge
- Hector Street Bridge
- Woods Road Bridge
- Sefton
- Casula Station
- Warwick Farm Station
- Macarthur Station



The results show that the level of deposited dust along the length of the SSFL Project, during the month of July was below the maximum total deposited dust level of $4\text{g/m}^2/\text{month}$, stipulated in the DECC's Approved Methods for Modelling and Assessment of Air Pollutants in NSW (2005), at all locations.

5.1 DESCRIPTION AND EVALUATION OF ON SITE DUST MONITORING

There were no complaints relating to dust during this reporting period. For full details of complaints received in July, please refer to **Section 7**.

5.2 DUST MANAGEMENT MEASURES

A set of comprehensive controls were employed to minimise dust from on site activities. The range of controls is detailed in the Dust Management Sub Plan (ARTC CEMP).

Controls utilised during the reporting period included:

- Using water carts to control dust emissions during works and keeping exposed excavation surfaces dampened to control dust generation;
- Ensuring vehicle speeds within the worksite areas are kept to a minimum;
- Preventing and where necessary cleaning any dirt tracked onto public roadways from construction vehicles;
- Covering spoil loads and securing tailgates prior to trucks leaving the worksite;
- Being prepared to cease/ modify work practices if excessive dust generation from construction activities occurs (e.g. from high winds, surface dirt accumulation etc), until dust emissions can be controlled. This action was not required during the month; and
- Conducting regular visual inspections of worksites to assess effectiveness of dust control measures.

5.3 WIND MONITORING

Weather stations are in place at two (2) locations along the length of the project, one at Llewellyn Avenue, Villawood and the other at Manning Street, Warwick Farm. These weather stations monitor wind conditions, directional and velocity as well as temperature and humidity.

At the Llewellyn Avenue Site, the average wind speed for the period of July 2009 was 2.974 km/h, with the maximum wind gust recorded at 29.2 km/h on 4 July 2009.

At the Manning Street Site, the average wind speed for the period of July 2009 was 3.277 km/h, with the maximum wind gust recorded at 27.5km/h on 4 July 2009.

The Meteorological Monitoring Results, including wind roses, for July 2009 are included in Appendix H and I.

6. RE-USE OF SUITABLE EXCAVATED MATERIAL WITHIN THE PREMISES

Areco have recorded the removal and placement of all excavated material in accordance with condition R8 of the Environmental Protection License. This information is provided in Appendix J.

7. COMMUNITY CONSULTATION AND COMPLAINTS MANAGEMENT

7.1 COMPLAINTS SUMMARY

There were eleven (11) community complaints received by ARTC in association with SSFL project work during the month of July. Of these, two (2) were noise related and eight (8) were non-environmental. Graphical representations of the complaints received during July 2009 and the preceding months are provided in Appendix K.

7.2 COMMUNITY CONSULTATION

The following Community Liaison Group meetings have been held during July.

- Fairfield CLG 1st July 2009
- Bankstown CLG 8th July 2009
- Liverpool/Campbelltown CLG 15th July 2009

Agenda and meeting notes are available on the project website www.ssfl.artc.com.au.