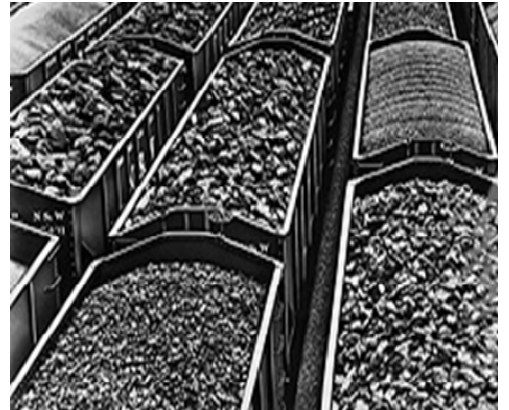


Southern Sydney Freight Line Environmental Protection Licence Monthly Report

Rev 0

October 2009



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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 were awarded to various contractors. On October 20th ARTC directed a partial suspension of the Arenco and Gartner Rose contracts. This follows the suspension of Reed construction activity in some areas of the project during September. The Contractor suspensions are to provide ARTC with opportunity to clear services affecting completion of civil works by way of removal, relocation or re-design. Accordingly, priority has now been given to the expedition of service relocations under the ODG contract.

The Weekend 17 rail possession was held on the 24th and 25th of October. Contractors Reed, Gartner Rose, ODG, John Holland Rail and Laing O'Rourke all worked during this possession. Reed used the possession to install noise walls and barriers at the Shepherd Street Bridge and undertake piling work in the Casula area, North of Glenfield substation, Bunburry Curran Creek and Bow Bowing Bridge. Gartner Rose carried out lift work at Casula and Minto train station, potholing and excavation works at Leumeah station and piling work at Campbelltown train station. ODG used the possession to relocate services, John Holland Rail relocated cable and transfer rail legs and Laing O'Rourke continued their work at the Liverpool Sectioning hut.

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 OCTOBER 2009

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

Table 1: Summary of Activity in October 2009

Location	Description of Works	Contractor
Sefton Dive (21.02km to 22.38km)	Rock nail wall installation, shotcreting work, piling work, capping beam construction.	Arenco

Location	Description of Works	Contractor
Woods Road, Sefton to Chester Hill Road, Chester Hill (20.77km to 22.15km)	Piling works, retaining wall works, earthworks, footing slab for crib wall, shotcreting.	Arengo
Chester Hill Road, Chester Hill to Woodville Road (22.15km to 23.1km)	Earthworks, removal of power poles with overhead power lines, level crossing installed to enable construction work to commence.	Arengo
Villawood Station Road to Prospect Creek (24.1km to 26.2km)	Earthworks, rock nail work, shotcreting work, installation of noise barriers- involving piling, pile caps and structural steel columns.	Arengo
Prospect Creek to Bareena Street (26.2km to 27.65km)	Piling work, earthworks.	Arengo
Chester Hill Road Overbridge (22.21km)	Flashing installed to covered walkway transition section.	Arengo
Miller Road Overbridge (22.830km to 22.930km)	Bridge planks installed, Western structural steel walkway installed, bridge deck completed- involves reinforcement fixing, formwork erection, concreting and asphaltting. Drainage and service conduits completed, gas main permanently relocated, protection screen installed, transition between old and new footpath on Northern side of the bridge completed.	Arengo
Hector Street Underbridge (21.62km)	Under bridge works completed- involves construction of piles, pile caps, piers and erection of prestressed precast elements.	Arengo
Bareena Street Overbridge (27.70km)	Bridge planks installed, Western structural steel walkway installed, bridge deck completed, walkway completed, drainage and service conduits completed, transition between old and new foot path on Northern and Southern side of the bridge completed.	Arengo
Woodville Road Deflection Wall (24.248km to 24.320km)	Complete main wall pour- Deflection wall involves reinforcement fixing, formwork erection and concreting. Construction also includes piles and pile caps. Earthworks.	Arengo

Location	Description of Works	Contractor
Prospect Creek Bridge (26.200km)	Walkway structural steel installed, footpath handrail installed and minor steel works and concrete touch-ups completed.	Arenco
Throughout site	Box culvert works at E&RW3- (Woodbrook road to city side of Glenfield station) and E&RW4- (Country side of Ingleburn station to approx 58,700km).	Reed
(37.120km to 37.519km)	Piling works and retaining wall structures RW, 280, 290 (Shepherd Street towards Woodbrook Road).	Reed
Bunbury Curran Bridge (47.100km to 47.30km)	Concrete works to abutments.	Reed
Bow Bowing Bridge (57.000km)	Piling works at Bow Bowing.	Reed
Throughout Site	Works carried out to tidy up and make safe (environmental and OHS controls) areas suspended by ARTC as of the 23 rd September 2009.	Reed
Sefton Station (Ch21.10km)	Rectify lift pits.	Gartner Rose
Leightonfield Station (23.49km)	Anti graffiti paint to deflection wall.	Gartner Rose
Carramar Station (25.9km to 26.0km)	Fit grill and beam to culvert roof.	Gartner Rose
Cabramatta Station (31.9km to 32.1km)	Bulk excavate pile cap, concrete to platform, pour blinding slap and shotcrete. Pothole sewer main, pothole stair case footing, excavate stair footing, pour stair support footing, install mesh to ring footing, pour ring footing. Start block work and fill block work.	Gartner Rose
Warwick Farm Station (34.000km)	Install reinforcement to lift pit and pile caps to centre down side, pour lift pit base and pile caps to centre down side, install reinforcement to lift pit pile caps and stair footing.	Gartner Rose
Leumeah Station (52.5km to 52.6km)	Strip topsoil.	Gartner Rose
MacArthur Station (56.00km)	Paint wall with anti graffiti sealant.	Gartner Rose

Location	Description of Works	Contractor
Minto Station (49.600km to 49.785km)	Span out bitumen and concrete; removal of bitumen on concrete; sucker truck top area of old pile cap; backfill trench; removal of spoil top area; sucker truck around old stairs and pile cap; removal of old stairs pile cap and piles and sucker truck top area of new pile cap.	Gartner Rose
Campbelltown Station (54.65km)	Fit reinforcement to stair, pour stair. Excavate new set of stair, reinforcement to stair, erect stair support column, excavate stair and install reinforcement, install stairs. Install screw piles, pour screw pile grout, erect hoarding stairs. Pour stair footings and pile caps.	Gartner Rose
Sefton Station (20.900km to 21.400km)	Stand poles.	ODG
Sefton Dive (21.400km to 21.600km)	Connect conductors.	ODG
Auburn Road Bridge (22.756km)	Energy Australia cable re-route.	ODG
Miller Road (22.800km to 24.700km)	String wires.	ODG
Glenfield Road near substation (41.900km)	Cable relocation.	ODG
Wellington Road (21.299km)	Cable relocation.	ODG
Various locations across project	Super sucking material.	ODG
Main South Line, Broomfield Street Cabramatta (32.250km to 32.850km)	Relocation of Galvanised Steel Trough, enabling and signalling work.	John Holland Rail
Near Glenfield Station (41.600km to 42.400km)	Loading of rail sets downside Glenfield Station.	John Holland Rail
Liverpool Sectioning Hut (36.360km to 36.550km)	Install portal footings, driveway and footway works.	Lang O'Rourke

4. NOISE AND VIBRATION MONITORING RESULTS

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

4.1 NOISE MONITORING

Condition R.41(c) of the EPL requires that ARTC provide graphical representations of noise monitoring results obtained over the life of the project. Noise monitoring locations vary from month to month. Sufficient data has now been gathered at: 86 Riverpark Drive, Slessor Road Casula, Dana Parade Sefton Drive, 10 Sussex Street Cabramatta and the Jacqui Osmond Softball Centre for trends to be observed. The results of the noise variations at these sites over the last 6 months are displayed graphically below. Appendix A includes a comprehensive list of locations where noise monitoring has been undertaken.

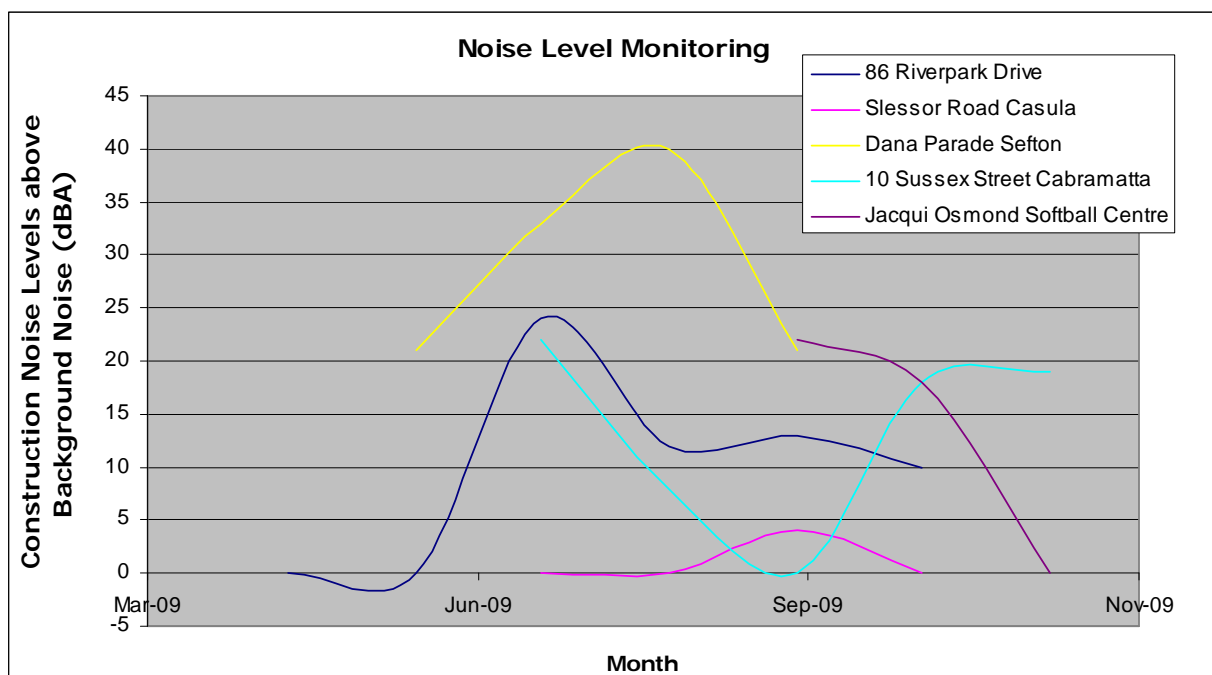


Figure 1: Noise Monitoring Trend Summary

During the month of October noise monitoring was undertaken at six (6) locations along the length of the project. The results of the monitoring are provided in Table 2.

Table 2: Summary of Noise Monitoring – October 2009

Location	Date	Background Noise Levels dB(A)	Equipment/Activities	Result dB(A)
1 Belmont Road, Glenfield	24-25 October 2009	42	Loading of rail sets downside Glenfield Station works	72
136 Railway Parade, Glenfield	24-25 October 2009	42	Loading of rail sets downside Glenfield Station works	71.9

Location	Date	Background Noise Levels dB(A)	Equipment/Activities	Result dB(A)
63 Auburn Road, Sefton	30 October 2009	40	Concrete pump truck idling and pumping.	78.8
10 Sussex Street, Cabramatta	30 October 2009	64	Excavator	83
Jacqui Osmond Softball Centre, 300m East of Cabramatta Creek Bridge	30 October 2009	57	Truck being loaded	57
18 Lakewood Crescent, Casula	30 October 2009	68	Truck Tail Gate	75
* Measurements carried out at close distance to works and projected to sensitive receptor				

The noise monitoring results for a number of the activities exceeded the background noise level by more than 10 dB(A) and, according to the EPA New South Wales Construction Noise Guideline, all reasonable and feasible mitigation measures should be implemented to reduce this. ARTC Contractors have adopted measures outlined in Section 04 of the EPL as well as 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' adhering to requirements under 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 – October 2009

Location	Date	Equipment/Activities	Level above Background Noise dB(A)	Mitigation Measures to be applied
1 Belmont Road, Glenfield	24-25 October 2009	Loading of rail sets downside Glenfield Station works	30	This activity occurred from 7am to 5pm on Saturday 24 th and Sunday 25 th . Residents were not impacted by noise generated by the activity through the night or late into the evening. Respite periods were incorporated into the activity. Affected residents were made aware of this work by community notification. This was a one off activity and will not occur again.
136 Railway Parade, Glenfield	24-25 October 2009	Loading of rail sets downside Glenfield Station works	30	This activity occurred from 7am to 5pm on Saturday 24 th and Sunday 25 th . Residents were not impacted by noise generated by the activity through the night or late into the evening. Respite periods were incorporated

				into the activity. Affected residents were made aware of this work by community notification. This was a one off activity and will not occur again.
63 Auburn Road, Sefton	30 October 2009	Concrete pump truck idling and pumping.	38.8	The Contractor reduced the noise impact of this activity by limiting the works to one evening of the week and staging noisy works for the shortest duration possible. This activity was essential for the completion of the project and was required to be undertaken during a night time track possession. ARTC offered residents affected by this activity alternative accommodation for the evening that work was to take place. This activity will not need take place again for several months.
10 Sussex Street, Cabramatta	30 October 2009	Truck Tail Gate	19	This reading was generated by the back of a tipper truck impacting with its tail gate while unloading spoil. This is a loud noise which occurs over a short period. This activity is typically undertaken within approved hours. Equipment used is well-maintained and operated to manufacturers specifications. Monitoring will continue for similar activity.

It is noted that there was 1 (one) complaint regarding construction noise received from residents in this area during October 2009.

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

4.2 VIBRATION MONITORING

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

Table 4: Summary of Vibration Monitoring- October 2009

Location	Date	Equipment/Activities	Result
10 Sussex Street Cabramatta	30 October 2009	45m from heavy machinery	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)

17 Lakewood Crescent, Casula	30 October 2009	50m from a piling rig	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)
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4.3 COMPLAINT NOISE AND VIBRATION MONITORING

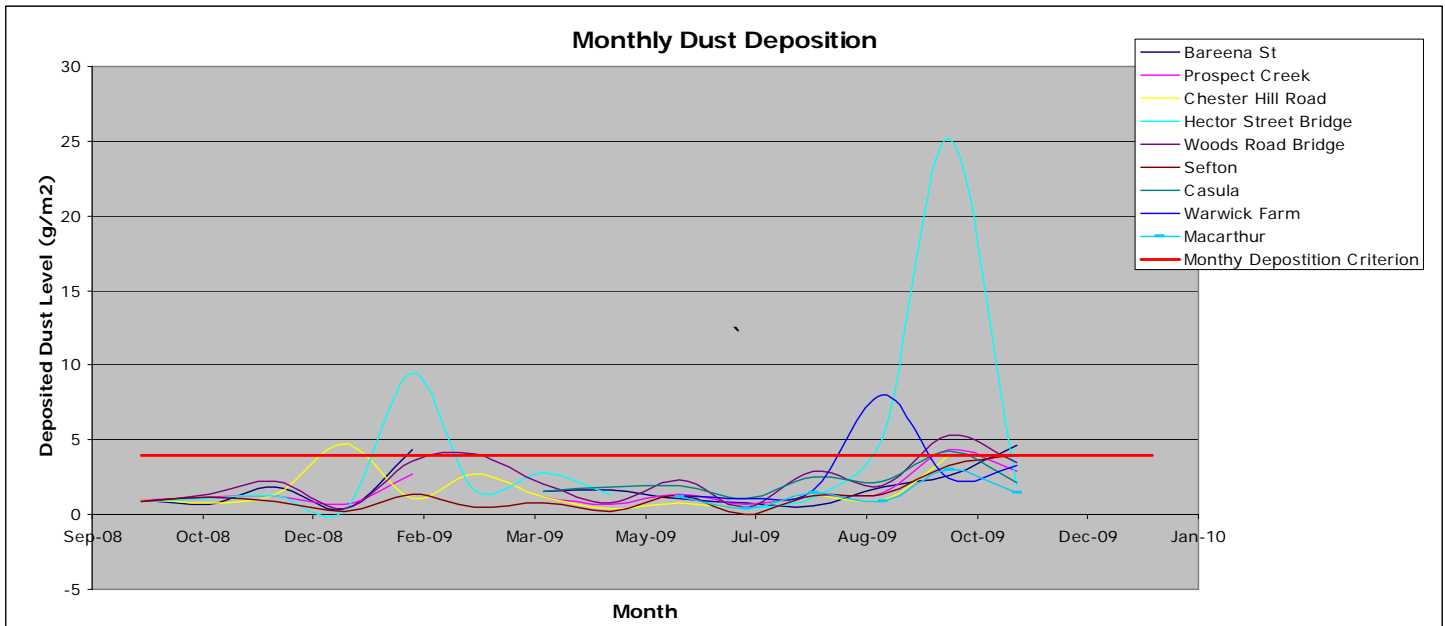
There were zero (0) complaints during October 2009 in relation to vibration and one (1) complaint in relation to construction noise. For details of complaints received in October 2009, please refer to **Section 7**.

5. DUST MONITORING RESULTS

Dust monitoring was carried out during October 2009 in accordance with Condition M8 of the EPL. The results of this analysis can be found in Appendices E and F. See also Appendix G for the September dust monitoring report for Warwick Farm, Casula and Macarthur. This report was not available at the time the September EPL report was produced.

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 October was below the maximum total deposited dust level of 4g/m²/month, stipulated in the DECC's Approved Methods for Modelling and Assessment of Air Pollutants in NSW (2005), at all locations except Bareena Street Bridge.

Increased deposited dust at Bareena Street Bridge, where the total level was 4.6 g /m² /month, was the result of new earthmoving works commencing in the vicinity. Arenco, the Contractor responsible, has advised that this activity has been suspended and intend to vegetate the area by hydro-seeding.

5.1 DESCRIPTION AND EVALUATION OF ON SITE DUST MONITORING

There was one (1) complaint relating to dust during this reporting period. For full details of complaints received in October, 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 October 2009 was 4.471 km/h, with the maximum wind gust recorded at 27.7 km/h on 14 October 2009.

At the Manning Street Site, the average wind speed for the period of October 2009 was 4.352km/h, with the maximum wind gust recorded at 29.1 km/h on 14 October 2009.

The Meteorological Monitoring Results, including wind roses, for October 2009 are included in Appendices 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 ten (10) community complaints received by ARTC in association with SSFL project work during the month of October. Of these, one (1) was noise related and eight (8) were non-environmental. Graphical representations of the complaints received during October 2009 and the preceding months are provided in Appendix K.

7.2 COMMUNITY CONSULTATION

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

- Fairfield CLG 7th October 2009
- Bankstown CLG 14th October 2009
- Liverpool/Campbelltown CLG 21st October 2009

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

Appendix A – Noise Monitoring Locations

APPENDIX B–“Night Time Noise Measurements of Concrete Pour at Sefton Dive- Sefton” Email Dated 3 November 2009

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