

11 July 2013

 OneSteel Recycling Pty Ltd
 55 – 57 Riverside Road,
 Chipping Norton, NSW 2170
 Attention Roger Baines

By email

Dear Roger

RE Attended Surveys at Hexham Shredder

This letter report provides the results of attended surveys conducted on the days of the 6th of May and the 1st of July 2013 to assess the noise impact of operations at the OneSteel Recycling Pty Ltd facility located at No. 14 and No. 41 Sparke Street, Hexham. The surveys have been conducted in response to the noise monitoring requirements in the Environment Protection License for the site and have been conducted in accordance with the requirements of AS 1055 - Acoustics - Description and Measurement of Environmental Noise. The target noise goals for the premises are set out in **Table 1** below.

This report also contains logged 15 minute sound level data recorded over this reporting period at the permanent noise monitoring station located at the St. Joseph's Retirement Village.

Table 1 Target Noise Goals

Location	Day L _{Aeq} (15min)	Evening L _{Aeq} (15min)	Night L _{Aeq} (15min)
Any residence in Shamrock Street	47	48	45
St. Joseph's Retirement Village & any associated residence on Old Maitland Road	53	42	41

Table 2 Weather Conditions

Survey Date	Start Time	Location	Cloud	Temp	Wind Speed	Wind Direction	Effects of Weather
6 May 2013	10:45	St. Joseph's	1 Octa	23 °C	0 to 1.5 m/s	W	Slightly reduced OneSteel Levels
6 May 2013	11:30	Shamrock St	2 Octa	24 °C	1.5 to 2.5 m/s	SSE	Slightly increased OneSteel Levels
1 July 2013	10:11	St. Joseph's	7 Octa	14 °C	0 to 1 m/s	W	Slightly reduced OneSteel Levels
1 July 2013	13:10	Shamrock St	7 Octa	16 °C	1 to 2.5 m/s	SSE	Slightly increased OneSteel Levels

Table 3 Measured Noise Levels

Survey Date	Survey Start Time	Location	Overall			OneSteel L _{Aeq} 15min Contribution	OneSteel L _{Aeq} 15min Limit	Trains & Aircraft L _{Aeq} 15min Contribution	Traffic & Other L _{Aeq} 15min Contribution	Noise Sources and Level Range dB(A)	
			L _{Aeq} 15min	L _{A10} 15min	L _{A90} 15min						
6 May 2013	10:45	St. Joseph's	46.7	47.1	42.5	35.7	53	40.9	44.9	OneSteel 42 to 52 Trains 43 to 64 Traffic & Other 41 to 67	
6 May 2013	11:00	St. Joseph's	47.4	48.7	43.6	38.6	53	41.3	45.3	OneSteel 42 to 57 Trains 44 to 55 Traffic & Other 42 to 65	
6 May 2013	11:32	Shamrock St	52.6	51.1	46.5	44.4	47	50.1	47.3	OneSteel 44 to 61 Trains 52 to 75 Traffic & Other 44 to 59	
6 May 2013	11:47	Shamrock St	60	64.2	47.3	47.7	47	59.4	47.9	OneSteel 46 to 72 Trains 48 to 80 Traffic & Other 45 to 63	
1 July 2013	10:11	St. Joseph's	50.8	54.4	46.3	36.7	53	49.2	45.2	OneSteel 46 to 56 Trains 46 to 63 Traffic & Other 45 to 60	
1 July 2013	10:26	St. Joseph's	50	52.6	46.3	34.1	53	48	45.5	OneSteel 46 to 56 Trains 46 to 62 Traffic & Other 45 to 60	
1 July 2013	13:10	Shamrock St	61.2	65.5	45.3	46.9	47	61	40.7	OneSteel 43 to 62 Trains & Aircraft 47 to 86 Traffic & Other 44 to 54	
12 July 2013	13:25	Shamrock St	47.8	50	44.4	46.8	47	NIL	41.1	OneSteel 43 to 63 Trains & Aircraft Nil Traffic & Other 43 to 55	

Operating Equipment and Noise Source Identification

The equipment that was observed to be operating at the OneSteel Recycling plant and the Sound Pressure Levels associated with that equipment are listed in **Table 4** below.

Table 4 *Plant Activity*

Activity	6 May 2013 St. Joseph's dB(A)	6 May 2013 Shamrock St dB(A)	1 July 2013 St. Joseph's dB(A)	1 July 2013 Shamrock St dB(A)
Metal Handling	Barely Audible 46 – 52	55 – 70	49 – 55	53 – 62
Mill	Barely Audible 44 – 49	53 – 64	Barely Audible 43 – 47	Barely Audible 50 – 52
Loader Beepers	Barely Audible 47	50 – 59	Barely Audible 46 – 51	Barely Audible 45 – 50
Z-Box Conveyor	Barely Audible 47 – 50	Barely Audible 47 – 54	Barely Audible 45 – 47	51 – 54
Mag Drum	Not Audible	Barely Audible 46 – 51	Not Audible	Not Audible
Mill Siren	Not Audible	Barely Audible 49	Not Audible	52
Trucks Unloading/Loading	Barely Audible 45	Not Audible	Barely Audible 44 – 47	Barely Audible 48 – 52

Discussion

Surveys on the 6th of May, 2013

The survey on the 6th of May, 2013 at St. Joseph's Retirement Village showed that Traffic was the dominant noise source over the survey period with $L_{Aeq\ 15min}$ contributions of 45 dB(A) for both 15 minute periods. OneSteel Recycling was seen to be operational over the entire survey period, with metal handling and the Z-box conveyor audible intermittently over the survey period. OneSteel Recycling had $L_{Aeq\ 15min}$ contributions of 35 & 39 dB(A) for the 15 minute periods of the survey. Trains were intermittently audible with $L_{Aeq\ 15min}$ contributions of 41 dB(A) for both 15 minute periods.

The survey on the 6th of May, 2013 at Shamrock Street showed that Trains were the dominant noise sources over the survey period, while traffic and OneSteel Recycling were both significant contributors to the acoustic climate throughout the two 15 minute periods. The mill at OneSteel Recycling was seen to be operational for the entire survey period, with metal handling, loader beepers and the Z-box conveyor audible for most of the survey period. OneSteel Recycling had $L_{Aeq\ 15min}$ contributions of 44 & 48 dB(A) while traffic noise was constantly audible over the survey period with $L_{Aeq\ 15min}$ contributions of 47 & 48 dB(A). Trains were intermittently audible over the survey yet had the largest $L_{Aeq\ 15min}$ contributions ranging between 50 & 59 dB(A) over the survey period.

Surveys on 1st of July, 2013

The second round of surveys were conducted on the 1st of July due to adverse weather conditions, in which attended noise surveys could not be conducted, throughout June.

The survey on the 1st of July, 2013 at St. Joseph's Retirement Village showed that Trains were the dominant noise source over the survey period with $L_{Aeq\ 15min}$ contributions of 49 dB(A) & 48 dB(A) for the two 15 minute periods over the survey. The mill at OneSteel Recycling was audible and seen to be operational for the entire survey period, with the metal handling and conveyor intermittently audible. OneSteel Recycling had $L_{Aeq\ 15min}$ contributions of 37 dB(A) & 34 dB(A) for the two 15 minute periods of the survey. Traffic was intermittently audible during the both 15 minute periods, with $L_{Aeq\ 15min}$ contributions of 45 & 46 dB(A).

The survey on the 1st of July, 2013 at Shamrock Street showed that Trains were the dominant noise source over the first 15 minute period of the survey with an $L_{Aeq\ 15min}$ contribution of 61 dB(A). OneSteel Recycling plant recorded $L_{Aeq\ 15min}$ contributions of 47 dB(A) for both 15 minute periods and was seen to be operational for the entire survey period. Metal handling and the Z-box conveyor produced the highest sound pressure levels, while the Mill, Loader Beepers and Trucks unloading were all audible. Noise enhancing wind conditions were present throughout the survey. Traffic noise was faintly audible over the survey period with $L_{Aeq\ 15min}$ contributions for both of 41 dB(A).

Logged Sound Level Data

Time traces of the logged $L_{Aeq\ 15min}$ and $L_{A90\ 15min}$ sound pressure levels at the permanent noise monitoring station located at St. Joseph's Retirement Village are shown below by month in **Figures 5 to 7** for the months of April to June 2013 respectively.

Data from the permanent sound logger at the St. Joseph's Retirement Village has shown that the Logger has been operating satisfactorily for the April to June 2013 reporting period.

Noise levels recorded at the logger show that the $L_{Aeq\ 15min}$ values during the daytime period are generally consistent with the noise level target of 53 dB(A) at St. Joseph's Retirement Village, with several periods exceeding the target which are likely attributable to wind conditions - increasing the received noise levels of either OneSteel Recycling or traffic noise from Maitland Road.

July 11, 2013

Compliance with noise limits

All surveys at St. Joseph's Retirement Village and Shamrock Street show that OneSteel Recycling complies with its Environment Protection Licence during this reporting period and, in our opinion is unlikely to be a consistent source of offensive or intrusive noise at nearby residential receptors.

Thank you for the opportunity to provide this assessment please do not hesitate to contact the undersigned if you have any questions regarding this report or any other acoustic matter.

Yours Sincerely
RCA Acoustics

Document Control

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Reviewed and Authorised by



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Date 11 July 2013

Figure 1 Sound Level Chart, Attended Survey at St Joseph's Retirement Village

06/05/2013

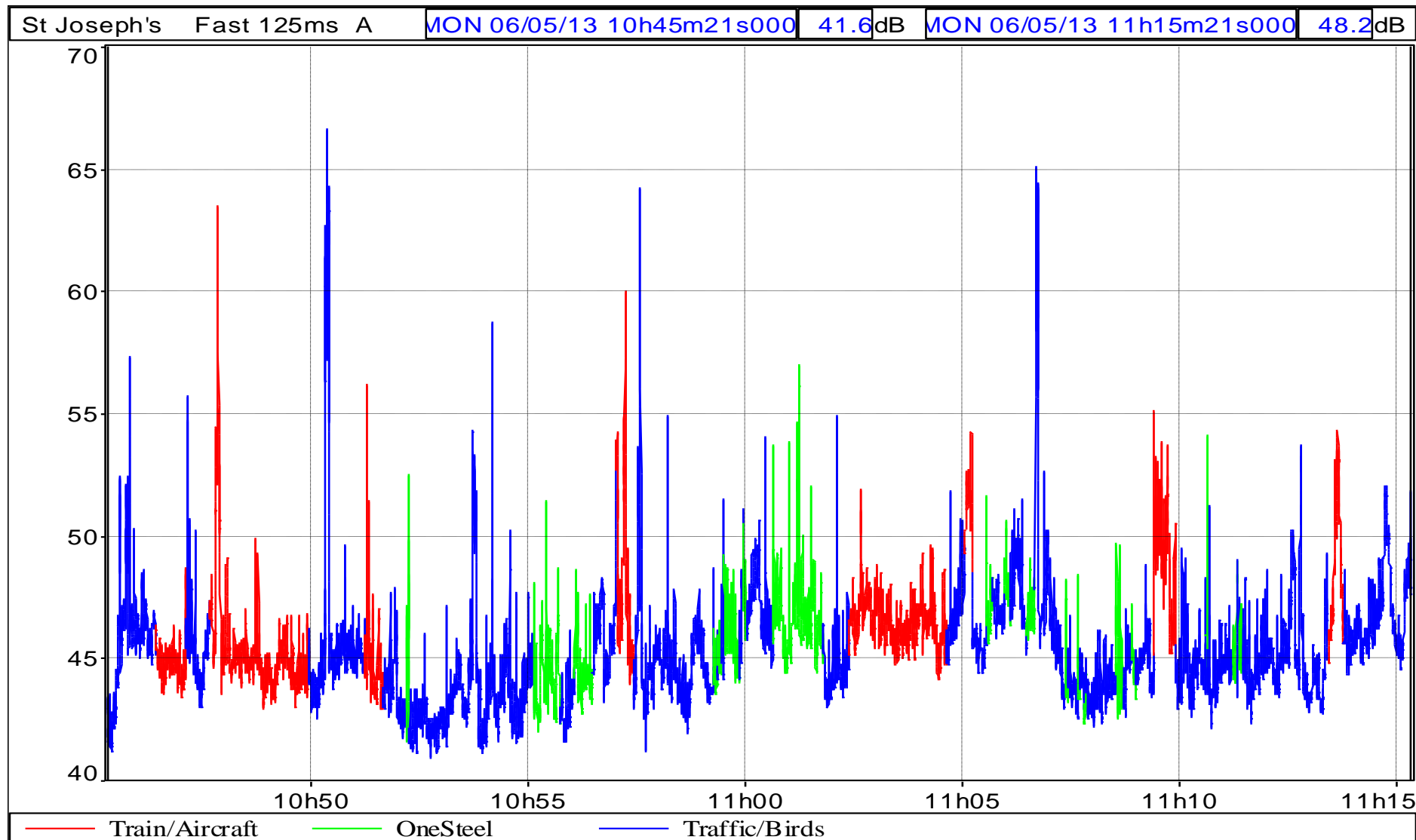


Figure 2 Sound Level Chart, Attended Survey at Shamrock Street 06/05/2013

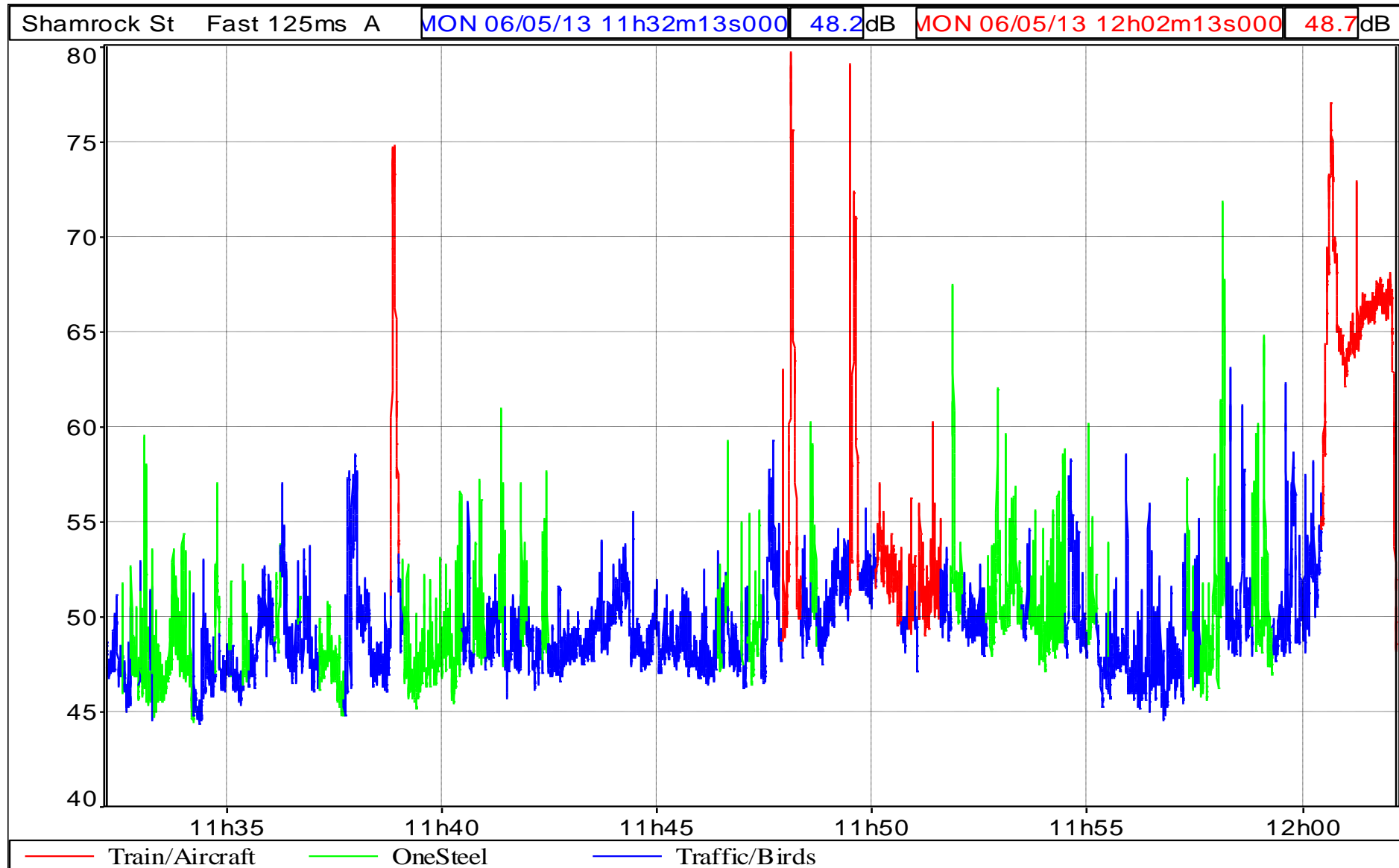


Figure 3 Sound Level Chart, Attended Survey at St Joseph's Retirement Village

01/07/2013

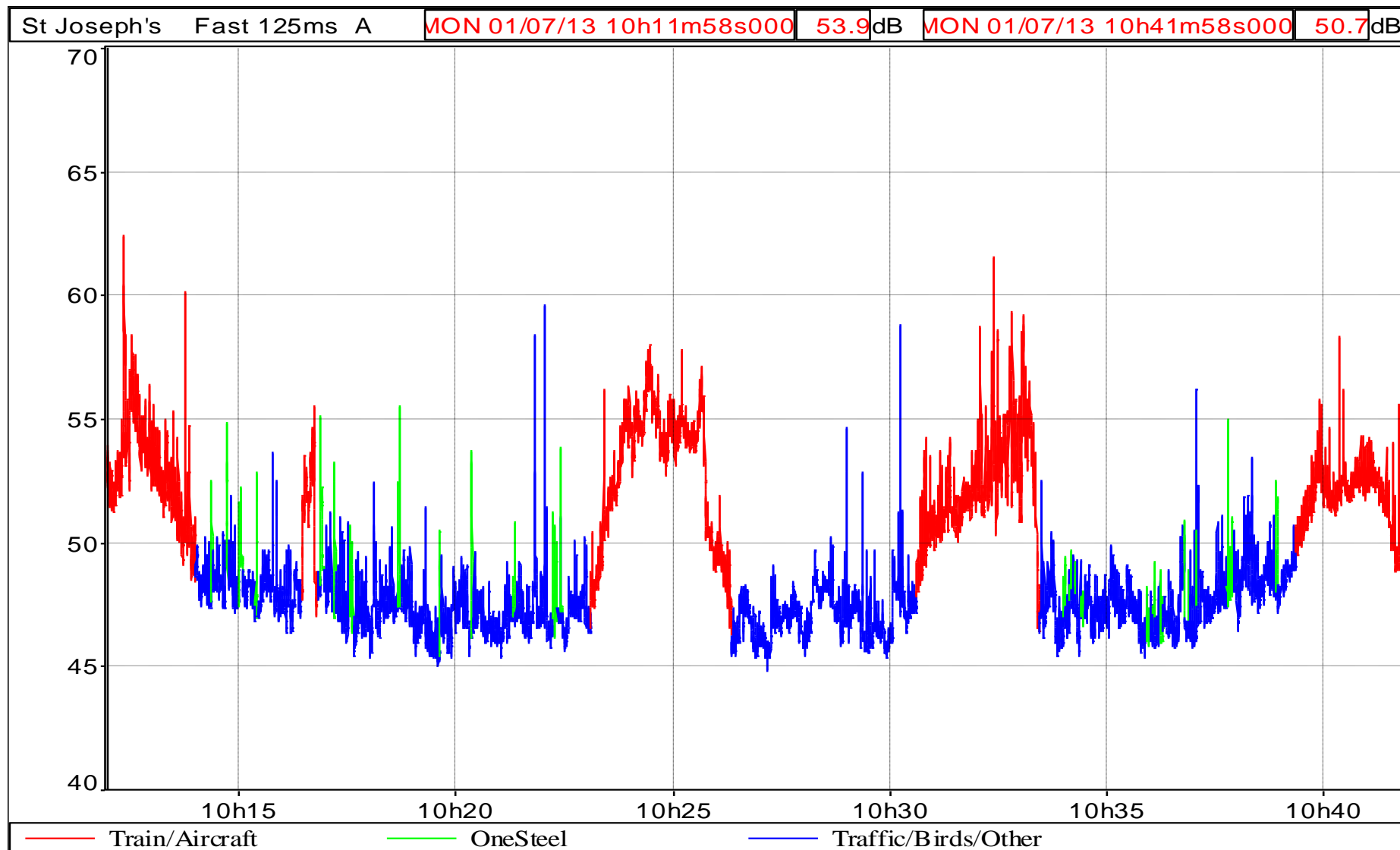


Figure 4 Sound Level Chart, Attended Survey at Shamrock Street 01/07/2013

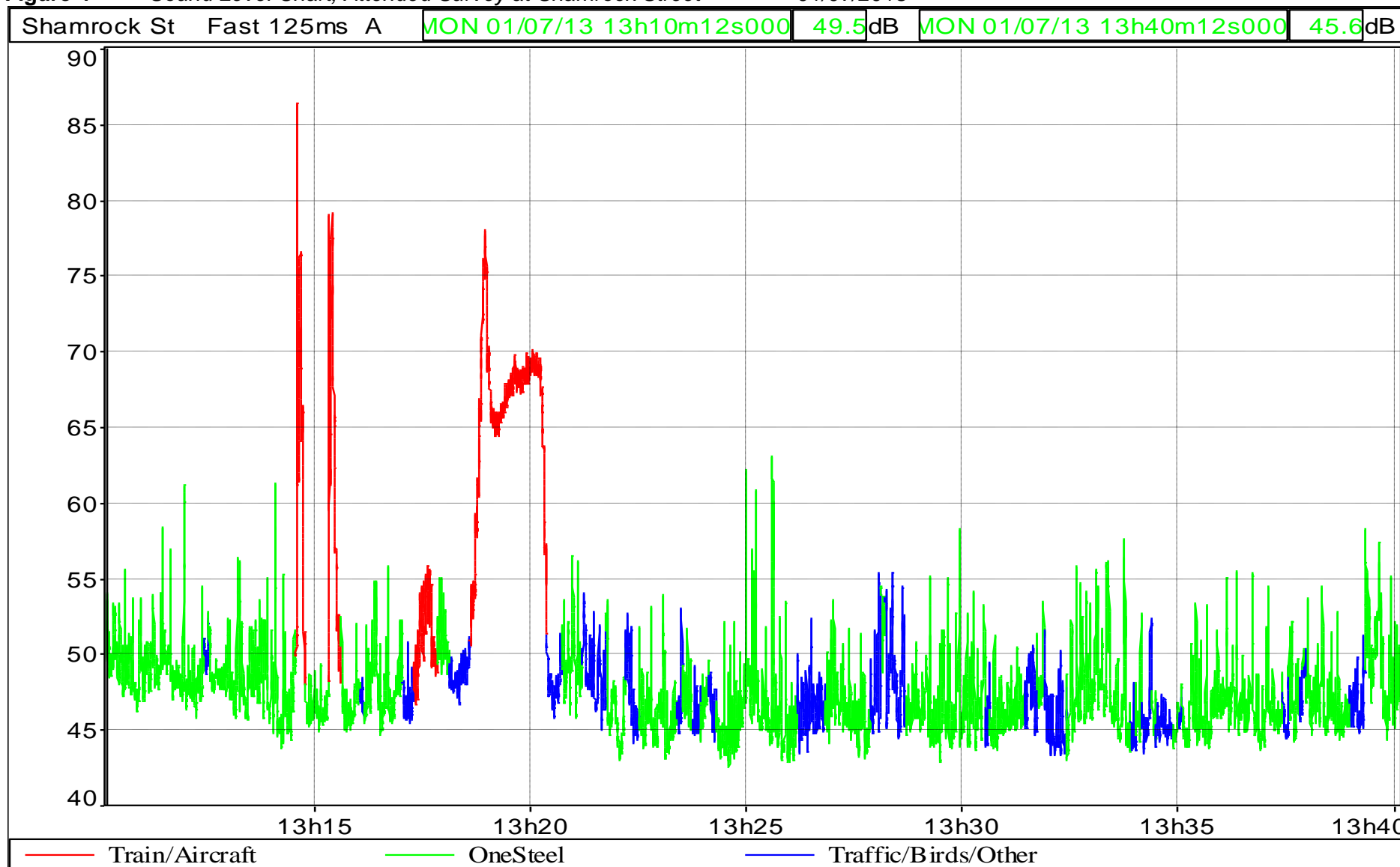


Figure 5 Sound Level Chart, St. Joseph's Retirement Village Noise Logger Data for April, 2013

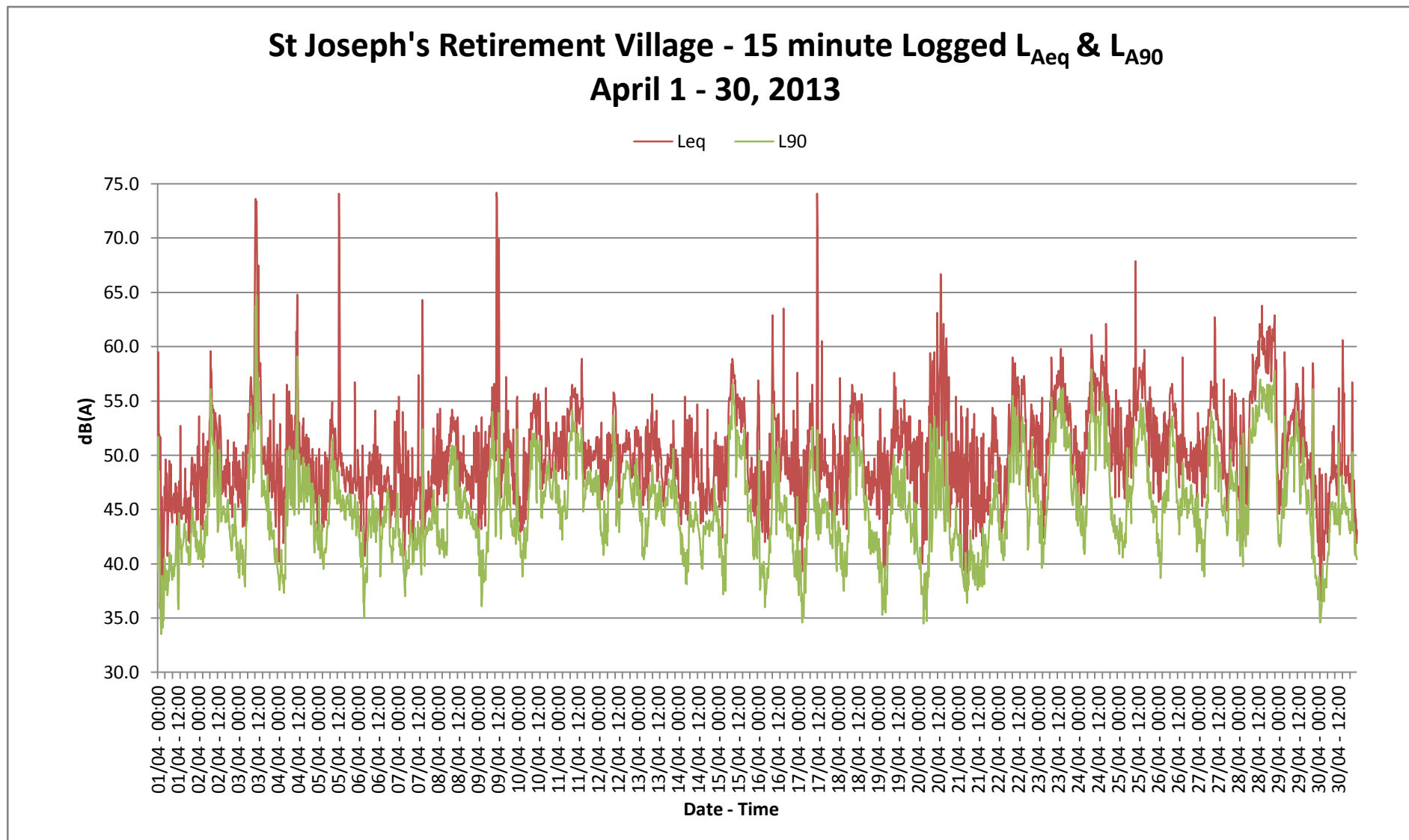


Figure 6 Sound Level Chart, St. Joseph's Retirement Village Noise Logger Data for May, 2013

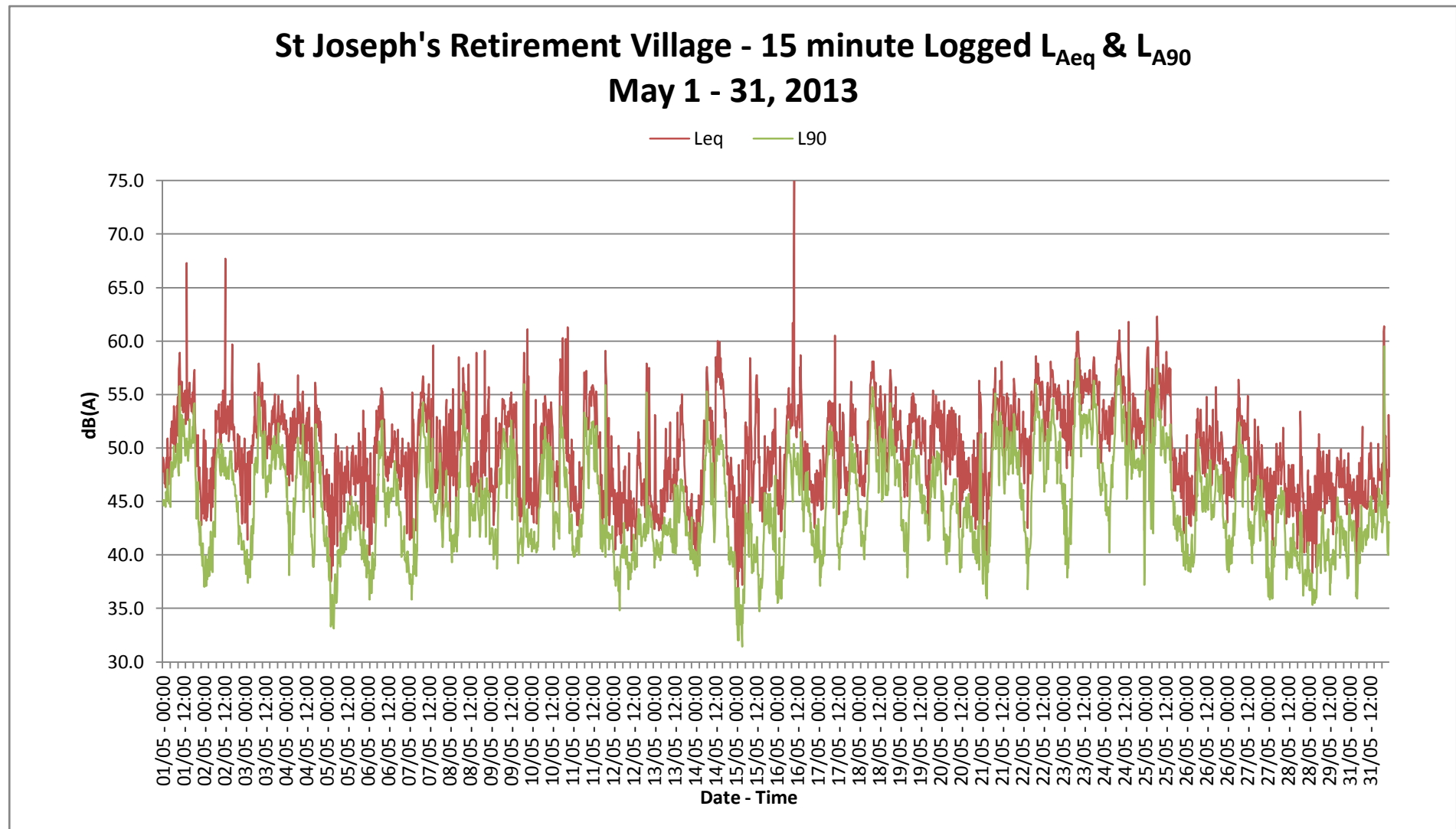


Figure 7 Sound Level Chart, St. Joseph's Retirement Village Noise Logger Data for June, 2013

