

17 April 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 15th of January and the 26th of February 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 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} (15 min)	Evening L _{Aeq} (15 min)	Night L _{Aeq} (15 min)
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
15 Jan 2013	10:41	St. Joseph's	2 Octa	25 °C	1 to 1.5 m/s	ESE	Slightly reduced OneSteel Levels
15 Jan 2013	11:44	Shamrock St	7 Octa	27 °C	1 to 1.5 m/s	SSE	Slightly increased OneSteel Levels
26 Feb 2013	10:07	St. Joseph's	4 Octa	26 °C	0 to 1.5 m/s	NE	Slightly reduced OneSteel Levels
26 Feb 2013	11:23	Shamrock St	7 Octa	28 °C	0 to 2 m/s	SSW	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						
15 Jan 2013	10:41	St. Joseph's	47.6	50.2	42	34.6	53	34.3	47.1	OneSteel Trains Traffic & Other	41 to 52 41 to 55 41 to 62
15 Jan 2013	10:56	St. Joseph's	48.8	50.9	45.1	39.3	53	37.7	47.9	OneSteel Trains Traffic & Other	44 to 52 43 to 53 43 to 57
15 Jan 2013	11:44	Shamrock St	57.6	59.7	53.1	52.5	47	55.7	44.2	OneSteel Trains Traffic & Other	50 to 68 52 to 68 50 to 67
15 Jan 2013	11:59	Shamrock St	56.8	58.7	51.4	52.4	47	53.9	48.2	OneSteel Trains Traffic & Other	48 to 65 49 to 77 47 to 67
26 Feb 2013	10:07	St. Joseph's	53.2	55	49.8	45.8	53	45.8	51.2	OneSteel Trains Traffic & Other	48 to 57 48 to 64 47 to 61
26 Feb 2013	10:22	St. Joseph's	53.2	55.1	50.2	44.7	53	46.8	51.1	OneSteel Trains Traffic & Other	46 to 58 50 to 63 48 to 58
26 Feb 2013	11:23	Shamrock St	53.5	55.8	49.1	Nil	47	51.4	49.4	OneSteel Trains & Aircraft Traffic & Other	Nil 49 to 73 47 to 60
26 Feb 2013	11:38	Shamrock St	55.1	52.9	48.3	31.4	47	53.3	50.2	OneSteel Trains & Aircraft Traffic & Other	46 to 52 49 to 79 47 to 60

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	15 January 2013 St. Joseph's dB(A)	15 January 2013 Shamrock St dB(A)	26 February 2013 St. Joseph's dB(A)	26 February 2013 Shamrock St dB(A)
Metal Handling	Barely Audible 46 – 52	55 – 68	55	Barely Audible 48 – 51
Mill	Not Audible	55 – 64	51 – 55	Not Audible
Loader Beepers	Barely Audible 45 – 47	53 – 57	Barely Audible 48 – 52	Barely Audible 47 – 53
Z-Box Conveyor	Barely Audible 45 – 48	Barely Audible 49 – 53	Barely Audible 51 – 52	Not Audible
Mag Drum	Not Audible	Not Audible	Not Audible	Not Audible
Mill Siren	Not Audible	Not Audible	Not Audible	Not Audible
Trucks Unloading/Loading	Not Audible	53 – 60	53	Not Audible

Discussion

Surveys on the 15th of January, 2013

The survey on the 15th of January, 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 47 & 48 dB(A). The mill at OneSteel Recycling was audible and seen to be operational over the entire survey period, with metal handling and the conveyor audible for most of 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 $L_{Aeq\ 15\ min}$ contributions of 34 & 38 dB(A).

The survey on the 15th of January, 2013 at Shamrock Street showed that Trains & OneSteel were both dominant noise sources over the survey period. The mill at OneSteel Recycling was seen to be operational for the entire survey period, with metal handling, loading beepers and conveyor audible for most of the survey period. OneSteel Recycling had $L_{Aeq\ 15min}$ contributions of 52 dB(A) for both 15 minute periods of the survey. Trains were intermittently audible over the survey and had $L_{Aeq\ 15min}$ contributions ranging between 54 & 56 dB(A) over the survey period. Traffic noise was constantly audible over the survey period with $L_{Aeq\ 15\ min}$ contributions of 44 & 48 dB(A).

Surveys on 26th of February, 2013

The survey on the 26th of February, 2013 at St. Joseph's Retirement Village showed that Traffic was the dominant noise source over the survey period with $L_{Aeq\ 15\ min}$ contributions of 51 dB(A) for both 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 audible for the entire survey period. OneSteel Recycling had $L_{Aeq\ 15min}$ contributions of 46 dB(A) & 45 dB(A) for the two 15 minute periods of the survey. Trains were intermittently audible during the both 15 minute periods, with similar $L_{Aeq\ 15\ min}$ contributions of 46 & 47 dB(A).

The survey on the 26th of February, 2013 at Shamrock Street showed that Trains & Traffic were the dominant noise sources over the survey period. The mill at OneSteel Recycling was seen to be operational for the entire survey period, yet was not audible due to increased traffic noise levels. Traffic noise was constantly audible over the survey period with $L_{Aeq\ 15\ min}$ contributions ranging between 51 and 53 dB(A). Trains were intermittently audible over the survey and had $L_{Aeq\ 15min}$ contributions ranging between 49 and 50 dB(A), while One Steel was barely audible with an $L_{Aeq\ 15min}$ contributions for the second 15 minute period only, of 31 dB(A).

Logged Sound Level Data

Time traces of the logged $L_{Aeq\ 15\ min}$ and $L_{A90\ 15\ min}$ 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 January to March 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 January to March 2013 reporting period.

Noise levels recorded at the logger show that the 15 minute L_{Aeq} 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.

April 17, 2013

Compliance with noise limits

The survey on the 15th of January, 2013 at Shamrock Street has shown that OneSteel Recycling has exceeded it's noise limit of 47 dB(A) by 5.5 dB(A).

All other 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

Prepared by



Matthew Weston MDesSc (Audio & Acoustics)
Acoustics Technician

Reviewed and Authorised by



Matthew Bain MDesSc (Audio & Acoustics)
Acoustic Consultant/ Technician

Date 17 April 2013

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

15/01/2013

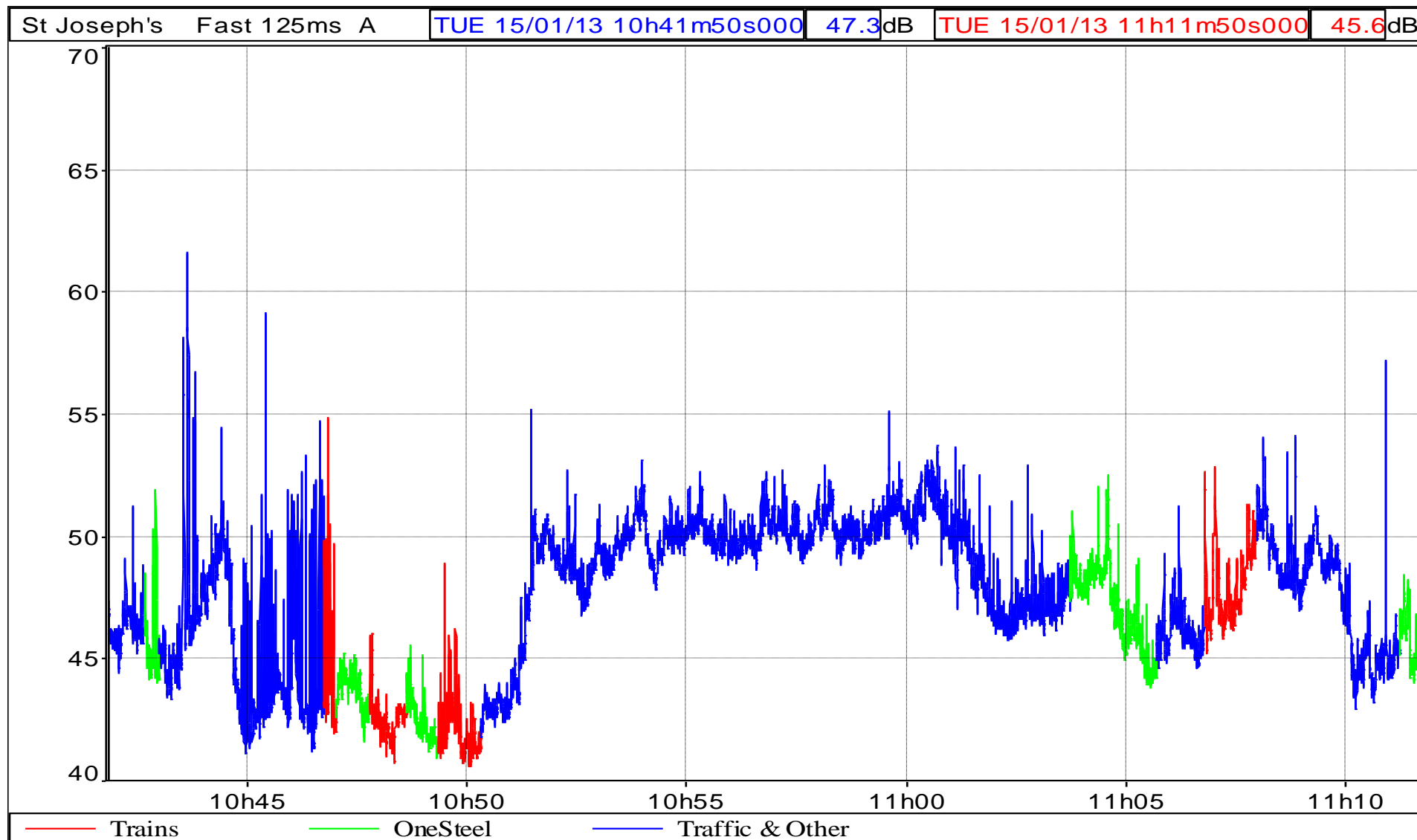


Figure 2 Sound Level Chart, Attended Survey at Shamrock Street 15/01/2013

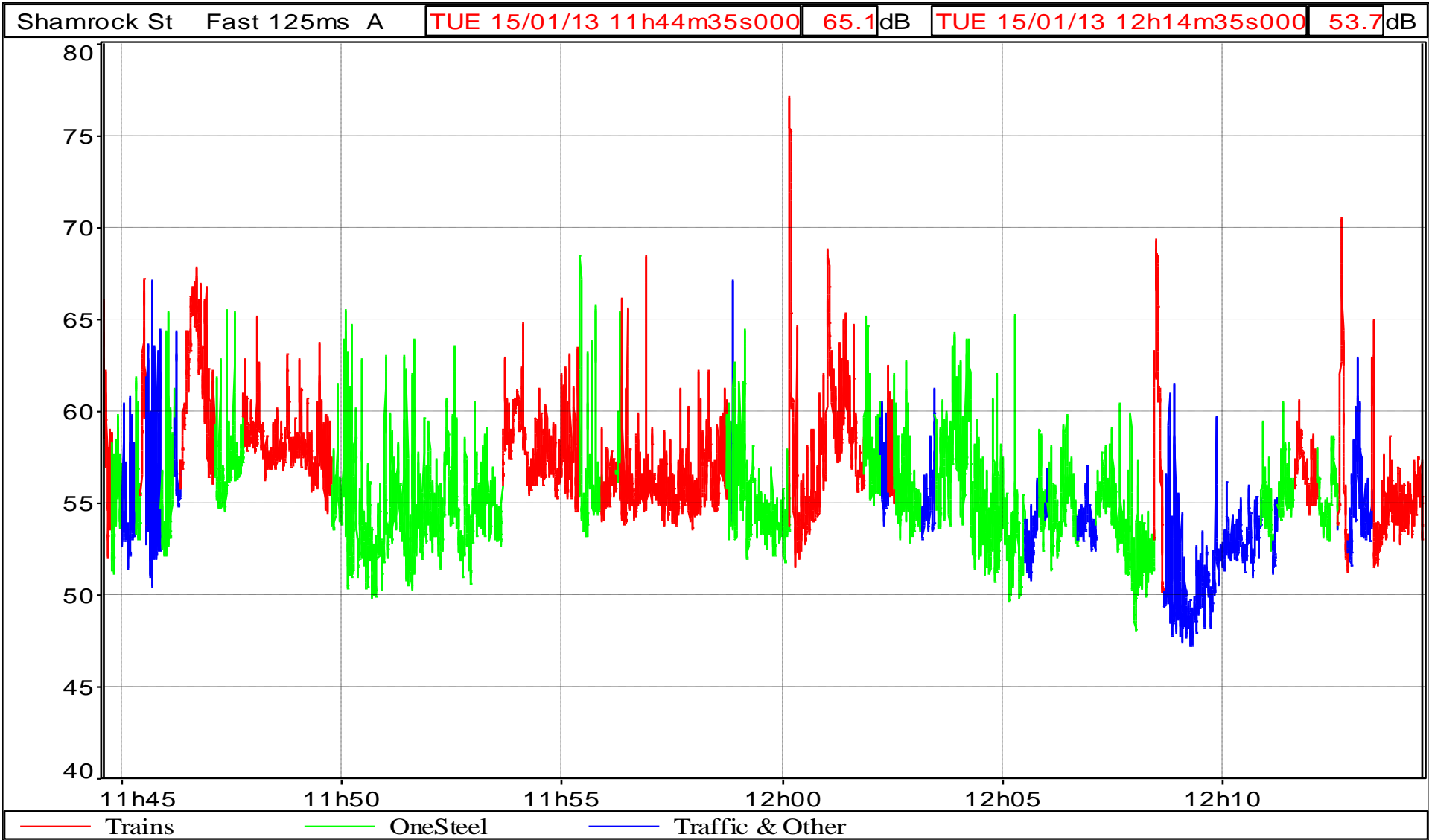


Figure 3 Sound Level Chart, Attended Survey at St Joseph's Retirement Village

26/02/2013

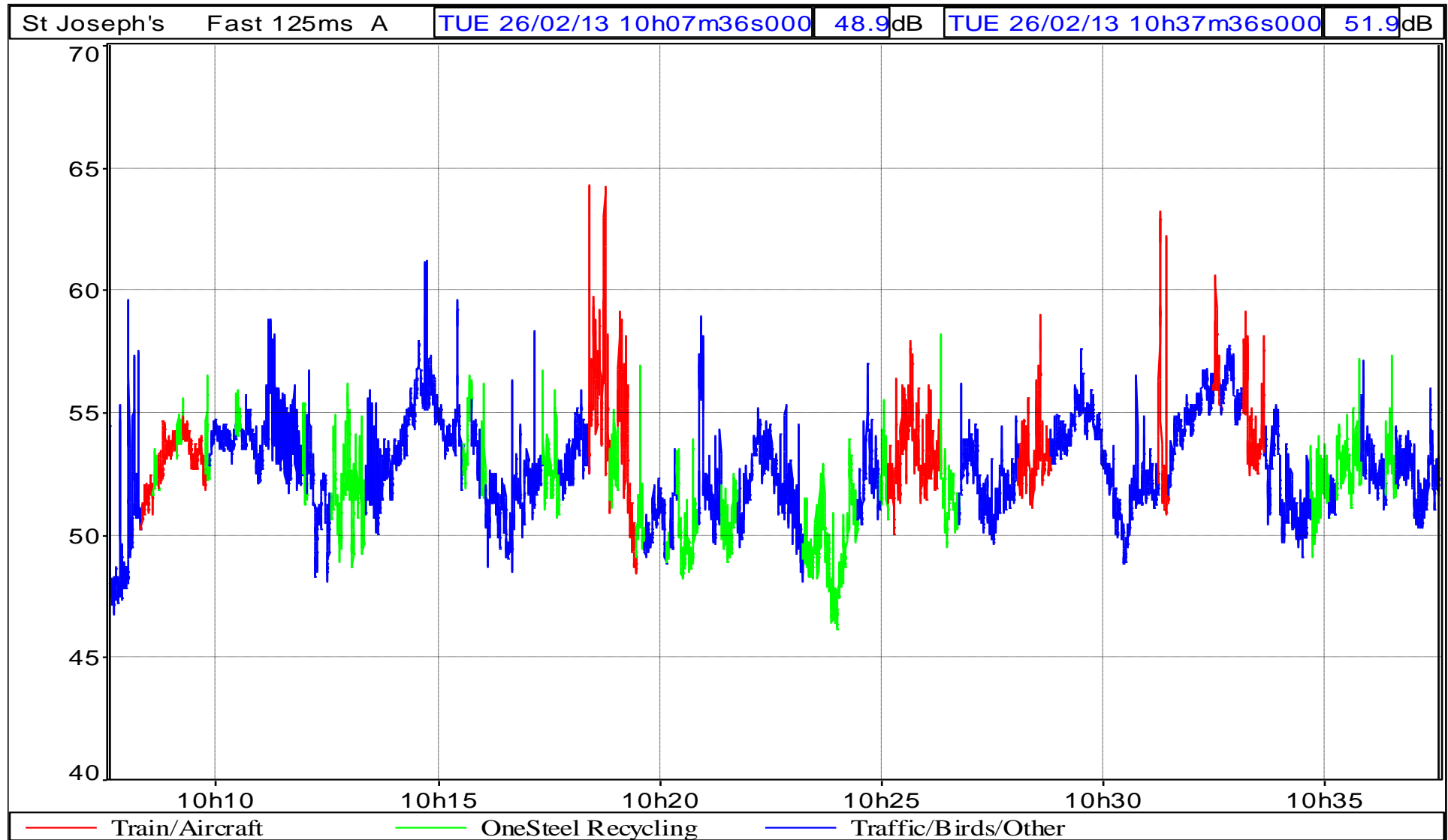


Figure 4 Sound Level Chart, Attended Survey at Shamrock Street 26/02/2013

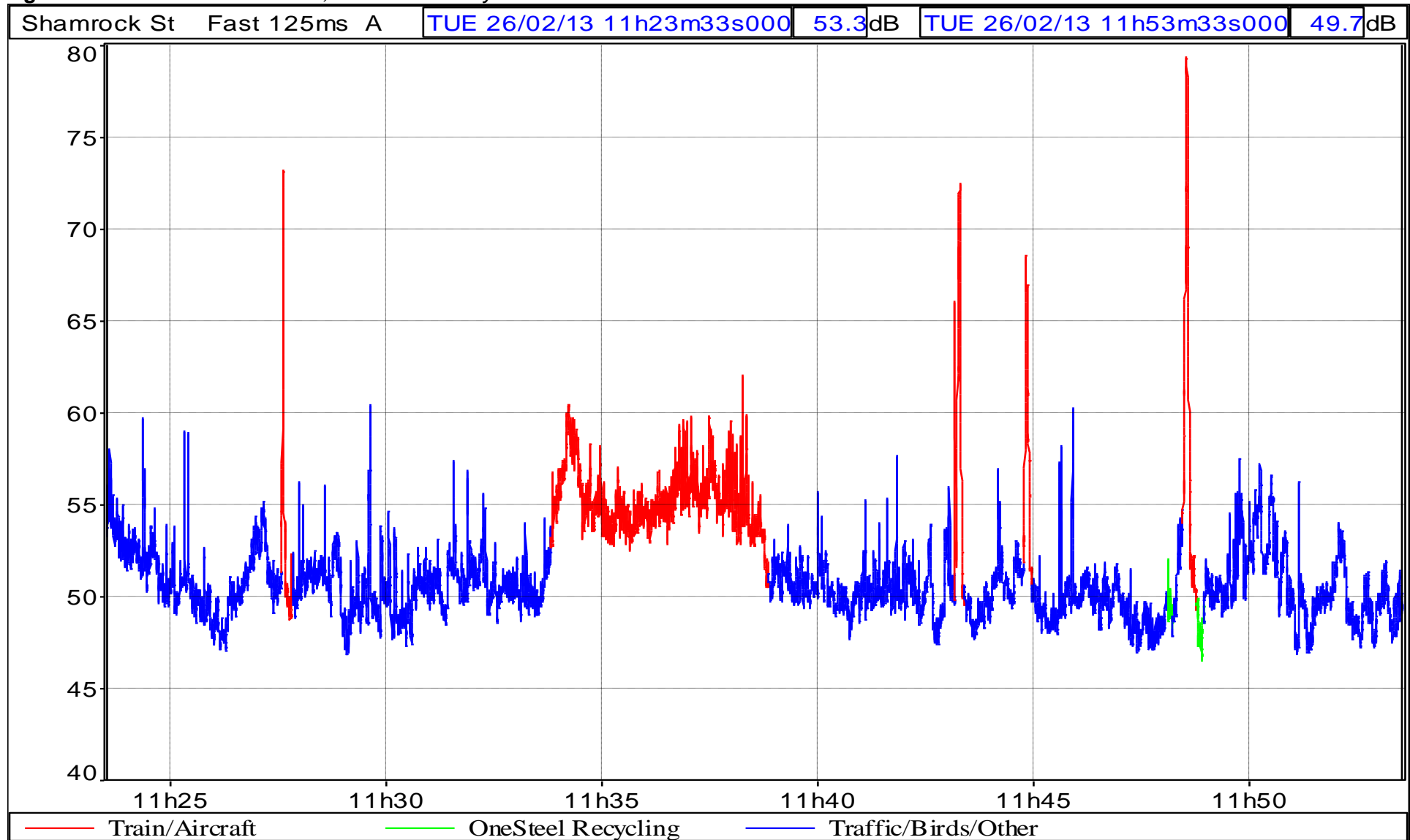


Figure 5 Sound Level Chart, St. Joseph's Retirement Village Noise Logger Data for January, 2013

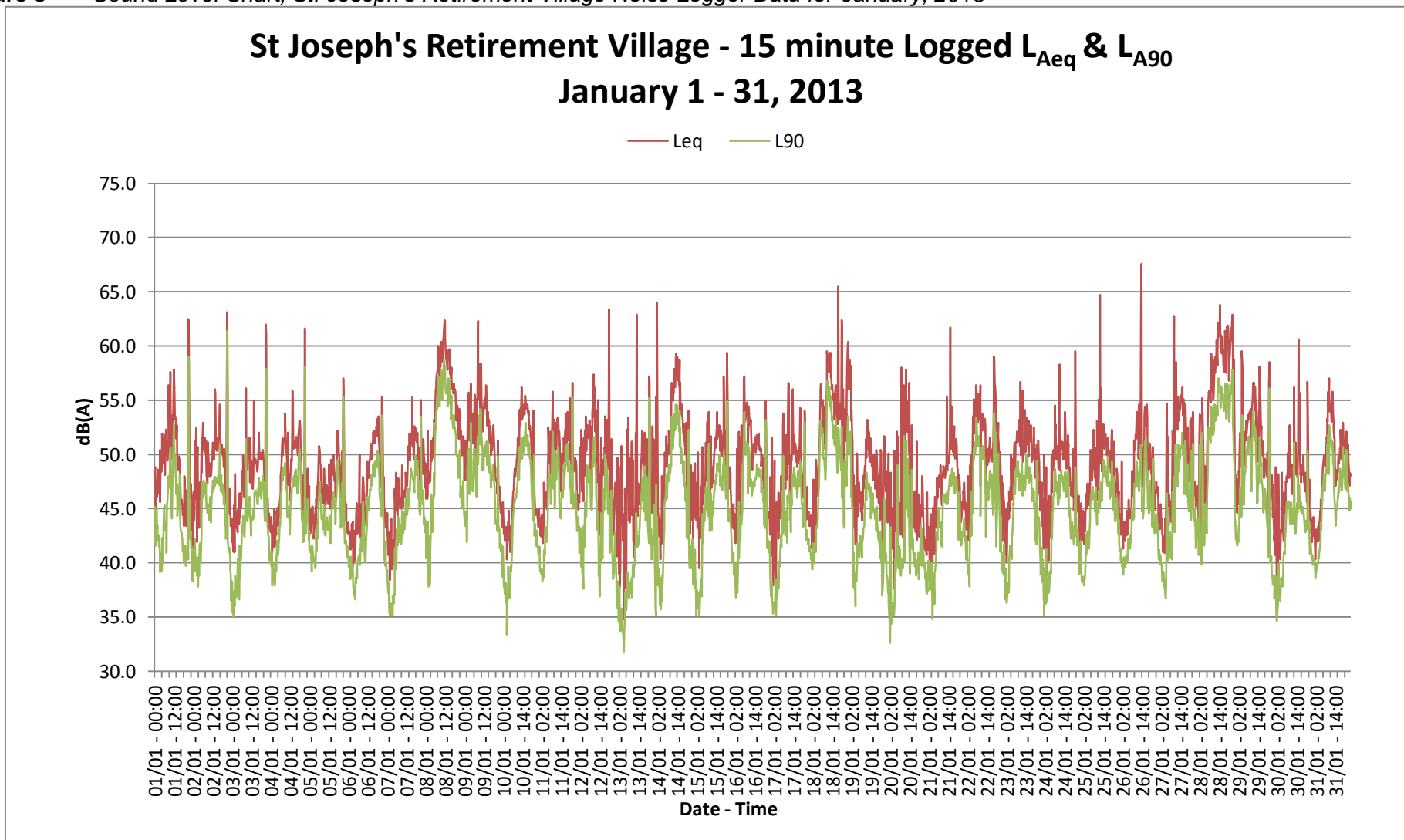


Figure 6 Sound Level Chart, St. Joseph's Retirement Village Noise Logger Data for February, 2013

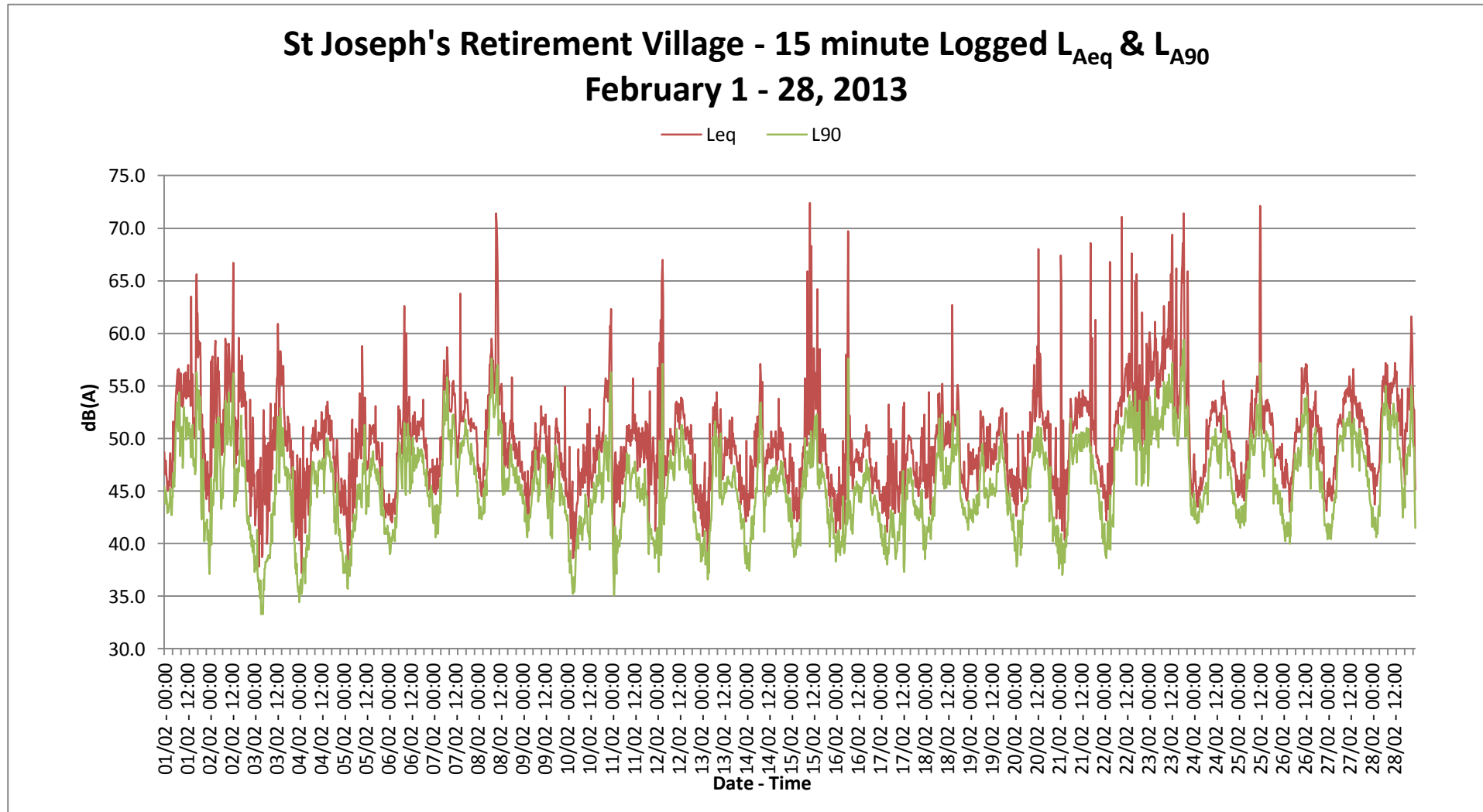


Figure 7 Sound Level Chart, St. Joseph's Retirement Village Noise Logger Data for March, 2013

