

GALGLASS LTD

WOMBWELL

**ENVIRONMENTAL
NOISE SURVEY**

JULY 2010

GALGLASS
321 Hough Lane
Wombwell
Barnsley
South Yorkshire

Report on Environmental Noise Survey

23rd July 2010

**Prepared by : LEV Systems
Office Suite 1
Woodhouse
8 Cooke Street
Bentley
Doncaster
DN5 0BH**

Telephone 01302 876552

Report prepared by


.....
A. Littlewood BSc(Hon) C.Eng. CMIOSH, Dip. Acoustics

Report authorised by


.....
D. Gibson C.Eng. MIMMM

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Introduction

LEV Systems was commissioned to carry out noise measurements at four locations at the site boundary of the Galglass Ltd. premises at 321 Hough Lane, Wombwell, South Yorkshire, during normal operation of the factory.

Choice of Measurement Locations

Measurement locations along the factory boundary were chosen after consultation with the company's Safety Engineer, Mr J. Riley. Each location was chosen to ensure that the highest noise levels in the vicinity were being recorded. The location of each measuring point has been shown on the attached plan and is described in detail in the results.

Method of Noise Measurement

The measurements were obtained using a CEL Precision Impulse Integrating Sound Level Meter (Serial No. 517083), complying with IEC 651 with a Type 1P specification and a CEL microphone (Serial No. 1525).

The instrument was calibrated on site before and after the noise assessment using a CEL 177 Precision Sound Level Calibrator (Serial No. 653034).

In all cases the measurements were taken at a height of 1.3 metres above the ground and at least 3.5 metres from any reflecting surface other than the ground. All measurements were taken using a microphone windshield and Fast time weighting. The weather was fine and the wind speed was less than 2m/s during the measurement periods.

The noise measurements were taken on Friday 23rd July 2010. These measurements were taken between 12.00noon and 12.30 pm and between 1.00pm and 2.30 pm during normal production at the factory. No measurements were carried out during the factory lunch break between 12.30 pm and 1.00pm.

The measured Leq noise level is given for each location in the results. Table 1 shows the noise measurements recorded at the same locations during previous visits to the site.

Survey Personnel

The survey was undertaken by Alan Littlewood BSc.(Hons), C.Eng., Dip. Acoustics, who is a holder of a Noise Assessment and Control Certificate of Competency.

Noise Measurements Undertaken

Measurement Point A

Position - At the top of the car park near the Paint Plant 3.5 metres from the Paint Plant and 3.5 metres from the boundary between the factory and the private detached house at 317 Hough Lane.

Microphone pointing towards right hand of the main Factory building.

Weather - Temperature: 20 degrees Celsius. Sunny with patchy cloud cover. No breeze.

Date of Measurement : 23rd July 2010

Measurement start time : 1.02 pm

Duration of measurement : 30 minutes

Measured noise level L_{Aeq} : 55.5 dB(A)

Commentary - The three main doors in the main factory building were open throughout the measuring period.

The loudest noise sources during the measuring period were from the occasional clatter noises as metal items were dropped and the occasional use of hand grinders inside the main factory building. Faint radio noise could also be heard.

Occasional noise from birds singing in the trees at the side of the car park.

One forklift truck transported five loads of material in to the factory through the main factory door opposite the measuring point. The forklift truck was driving relatively slowly and the reversing warning bleeper was the loudest noise it generated.

Constant hum could be heard from the Paint Plant extraction fans.

Constant traffic noise could be heard from vehicles travelling along Hough Lane.

Measurement Point B

Position - On top of banking between the storage area and the boundary fence.
3.5 metres from the fence at the point where it bends towards the main factory building.
Microphone pointing at main factory building between middle and left door.

Weather - Temperature: 20 degrees Celsius. Sunny with patchy cloud cover. No breeze.

Date of Measurement : 23rd July 2010

Measurement start time : 1.35 pm
Duration of measurement : 30 minutes

Measured noise level L_{Aeq} : 58.1 dB(A)

Commentary - All three main factory doors were open throughout the measuring period.

The loudest noise generated during the measurement period was created by two employees who were dismantling and enlarging wooden packing crates in the stockyard throughout the entire measuring period. The employees were using hammers and nails and a nail gun to carry out this work

Occasional low level metal bagging noises and noises from the use of hand grinders could be heard being emitted from the middle and right side main factory doors. The occasional operation of the Punch machine in the Stores area could also be heard.

One forklift truck was operating through out the measuring period transporting material from the stores and loading a large lorry in the stockyard. A second forklift truck was also operating in the stockyard for approximately 10 minutes during the noise measuring period. These each generated low level engine noises and occasional rattling noises from the forks.

Traffic noise could be clearly heard from vehicles travelling along Hough Lane.

Measurement Point C

Position - In line with the front edge of the Maintenance Office and the centre line of the main factory building. Approximately 9 metres from the boundary edge. Microphone pointing towards the side of the main factory building.

Weather - Temperature: 21 degrees Celsius. Sunny with patchy cloud cover. No breeze.

Date of Measurement : 23rd July 2010

Measurement start time : 2.10 pm

Duration of measurement : 30 minutes

Measured noise level L_{Aeq} : 54.0 dB(A)

Commentary - All three main factory doors and the man access door in the side of the building nearest to the measuring point were open throughout the measuring period. The welding fume extractor fan with the discharge duct in the side wall of the factory opposite the measuring point was stood.

The loudest constant noise (53dB(A)) was generated by a lawn mower which was being used in a residential garden on the housing estate approximately 100 metres from the measuring point for the majority of the measuring period.

There was occasional clatter noises as metal items were dropped or moved within the main factory building.

One fork Lift Truck was moving material in the stockyard for 10 minutes of the measuring period and one small delivery van drove on to the site.

A faint hum could be heard from the Paint Plant extraction fan when the lawn mower was not being used.

Measurement Point D

Position - At the edge of the rear car park in line with the forth roof drain pipe (from the left hand side) of the main factory building. Approximately 27 metres from the main factory, 5 metres from a scrap skip and 4 metres from the boundary hedge between the car park and the house at 7 Tunstall Close.
Microphone pointing towards the rear of the main factory building.

Weather - Temperature: 18 degrees Celsius. Overcast. No breeze.

Date of Measurement : 23rd July 2010

Measurement start time : 12.00 noon

Duration of measurement : 30 minutes

Measured noise level L_{Aeq} : **53.2 dB(A)**

Commentary - None of the extractor fans with discharge ducts at the rear of the factory were operating.

Low level noise (47-49dB(A)) generated by the use of hand grinders in the main factory could be heard for approximately half of the measuring period.

A Forklift truck came within 5 metres of the measuring point to collect and transport one pallet of material from the car park to the stockyard.

TABLE OF PREVIOUS NOISE MEASUREMENTS

TABLE 1

DETAILS OF PREVIOUS NOISE MEASUREMENTS UNDERTAKEN AT GALGLASS

Measuring Location	24 th October 2006		22 nd January 2007		20 th April 2007		20 th July 2007		25 th October 2007		24 th & 25 th January 2008		28 th April 2008		28 th July 2008	
	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time
A	08.51	54.7	11.25	52.9	13.55	60.5	14.10	57.5	10.25	55.8	08.32	58.2	14.10	57.5	15.00	58.6
B	10.21	56.0	12.00	57.9	14.30	57.8	15.15	59.8	11.30	56.5	07.56	56.8	15.15	59.8	15.33	58.9
C	10.56	57.2	13.00	54.5	15.05	61.2	14.21	58.8	10.57	57.1	07.57	58.5	14.43	59.3	16.05	58.3

Measuring Location	27 th October 2008		13 th January 2009		23 rd April 2009		22 nd July 2009		7 th October 2009		20 th January 2010		9 th April 2010		23 rd July 2010	
	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))	Start Time	Leq (dB(A))
A	13.40	59.5	13.50	57.1	11.48	56.8	10.20	58.5	07.45	60.8	13.50	58.2	11.26	56.8	13.02	55.5
B	13.05	55.8	14.23	55.2	13.00	57.2	10.54	56.0	08.19	56.2	15.27	55.8	12.00	57.5	13.35	58.1
C	14.15	58.0	14.57	58.8	13.34	57.8	11.30	57.4	08.57	60.5	14.22	60.2	10.53	52.0	14.10	54.0
D	14.48	54.5	15.29	53.6	14.07	57.1	13.00	57.0	09.30	55.5	14.54	58.0	10.20	48.0	12.00	53.2

PLAN SHOWING LOCATION OF NOISE MEASUREMENTS