

# The Wrexham (Gas Fired Power Station) Order

## 6.4.4 Volume 4: Environmental Statement Appendix 9.1: Guidance and equipment tables

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**Planning Act 2008** The Infrastructure Planning  
(Applications: Prescribed Forms and Procedure) Regulations 2009

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<b>PINS Reference Number:</b>	EN010055
<b>Document Reference Number:</b>	6.4.4
<b>Regulation Number:</b>	5(2) (a)
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<b>Revision:</b>	<b>Date:</b>	<b>Description:</b>
0	March 2016	Submission version

## Appendix A9 ◆ Noise

**APPENDIX 9.1 - GUIDANCE TABLES****Common acoustic levels****Table A9.1: Sound power level of some common sources<sup>1</sup>**

Sound power level dB	Source
195	Saturn Rocket
170	Ram Jet Turbo jet engine with after burner
160	Turbo Jet Engine 3200 kg thrust
150	4 Propeller air liner
140	
130	75 Piece Orchestra Pipe Organ Small aircraft engine
120	Large Chipping Hammer B-flat Tuba
110	Blaring Radio Centrifugal fan (22,000m <sup>3</sup> /h)
100	1m loom Car on Motorway
90	Vaneaxial ventilation fan (2500 m <sup>3</sup> /h) Voice – Shouting (average long term RMS)
80	
70	Voice – conversational level (average long term RMS)
60	
50	
40	
30	Voice – very soft whisper

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<sup>1</sup> Woods Practical Guide to Noise Control page 12

**Table A9.2: Average sound pressure levels to be expected in some common environments<sup>2</sup>**

<b>Sound pressure level, dB</b>	<b>Source</b>	<b>Average subjective description</b>
140	30m from military aircraft at take off	Intolerable
130	Pneumatic chipping riveting (operators position)	
120	Ship Engine Room (full speed)	
110	Automatic punch press (operators position) Textile weaving room	Very Noisy
100	Automatic lathe shop Printing press room	
90	Heavy lorry at 6m Construction Site – pneumatic drilling	
80	Kerbside of busy street	Noisy
70	Loud Radio (in average domestic room)	
60	Restaurant Department store	
50	Conversational speech at 1m General office	Quiet
40	Average Suburban area Whispered Conversation at 2m Residential area at night	
30		
20	Background in TV and Recording studio	Very Quiet
10		
0	Normal Threshold of Hearing	

<sup>2</sup> Woods Practical Guide to Noise Control page 11

**Noise survey equipment****Table A9.3: Noise survey equipment**

<b>Set</b>	<b>Equipment</b>	<b>Serial number</b>	<b>Last calibrated</b>
Logger 1 Equipment	Rion NL-52 Sound Level Meter	620871	
	Rion NH-25 Pre-amplifier		
	Rion UC-59 Microphone		
	Rion NC-74 Calibrator		
Logger 2 Equipment	Rion NL-52 Sound Level Meter	01121405	
	Rion NH-25 Pre-amplifier		
	Rion UC-59 Microphone		
	Rion NC-74 Calibrator		
Sample Equipment	Norsonic 118 Sound Level Meter	31609	04/06/2014
	Norsonic 1209 Pre-amplifier	30512	04/06/2014
	Norsonic 1225 Microphone	52305	04/06/2014
	Norsonic 1251 Calibrator	31227	03/06/2014