

Appendix 11A
Noise Survey Data

[THIS PAGE INTENTIONALLY LEFT BLANK]



F. R. MARK & ASSOCIATES

Noise and Acoustic Consultants

City East Business Centre
68-72 Newtownards Road, Belfast BT4 1GW
Tel: 02890 941621
Email: info@frmark.com.com

**Tynagh Power Station Noise Survey
July 2021**

Tynagh Power Station Noise Survey

The noise survey was conducted on 1st and 2nd July 2021. Weather conditions were ideal for noise surveys with dry, warm conditions and very low wind speeds as required under the guidance of BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound.

Noise Monitoring

A noise survey was conducted at 4 no. locations in the vicinity of the closest residential properties to the power station boundary during the daytime (07:00 – 19:00), evening (19:00 – 23:00) and night-time (23:00 – 07:00).

A description of each location is provided below.

Location M1

Measurement recorded in field opposite house at similar distance from edge of road (19 m from road edge). Road noise dominant during daytime and no perceptible noise from the power station observed in the very low background noise levels.



Location M2

Measurement recorded in field opposite house at similar distance from edge of road (15 m from road edge). Road noise and plant noise from industrial site both perceptible during the daytime and night-time. It is noted that during the night-time there was metal clanging perceptible at this location which is likely to be from Sperrin Galvanisers plant.



Location M3

Measurement recorded in field opposite house. During the daytime it was difficult to obtain a representative measurement due to significant agricultural activity in the vicinity. The house is located up a long lane with little passing traffic apart from agricultural vehicles. A measurement was recorded on the second morning just before agricultural work started. Plant noise from power station was perceptible during the daytime and night-time.



Location M4

Measurement recorded in field adjacent to house. During the daytime and evening there were a lot of tractors on the road moving silage bales. Plant noise from the power station, perceptible during the daytime and night-time in lulls between tractors, was reflected in the background levels.



Survey Results (free-field)

Location	Date	Time	Duration	L _{Aeq} dB	L _{AFmax} dB	L _{A10} dB	L _{A50} dB	L _{A90} dB
M1	1st July 2021	15:01	(1:0:1.0)	54.9	89.4	60.4	40.1	30.7
M1	1st July 2021	22:00	(1:0:1.0)	45.3	70.7	40.4	25.4	22.1
M1	1st July 2021	23:00	(0:15:0.0)	37.6	62.7	34.5	22.5	21.0
M1	1st July 2021	23:15	(0:15:0.0)	47.0	70.8	37.6	22.5	21.1
M1	1st July 2021	23:30	(0:15:0.0)	30.1	52.9	32.1	22.2	20.8
M1	1st July 2021	23:45	(0:15:0.0)	44.8	63.6	45.5	24.4	20.8
M2	1st July 2021	14:57	(1:0:0.0)	53.6	83.0	50.6	40.8	38.5
M2	1st July 2021	22:00	(1:0:0.0)	52.5	82.3	44.6	41.0	37.8
M2	1st July 2021	23:00	(0:15:0.0)	45.9	70.3	42.3	40.9	40.0
M2	1st July 2021	23:15	(0:15:0.0)	52.6	80.9	43.8	41.3	40.1
M2	1st July 2021	23:30	(0:15:0.0)	44.9	70.9	41.5	40.6	39.9
M2	1st July 2021	23:45	(0:15:0.0)	53.0	79.6	48.6	41.2	39.8
M3	1st July 2021	20:35	(1:0:0.0)	32.7	58.8	34.1	30.0	27.6
M3	2nd July 2021	00:10	(0:15:0.0)	35.7	65.9	31.3	28.6	27.5
M3	2nd July 2021	00:25	(0:15:0.0)	26.9	31.7	27.9	26.7	26.0
M3	2nd July 2021	00:40	(0:15:0.0)	29.0	54.0	28.3	27.3	26.3
M3	2nd July 2021	00:55	(0:15:0.0)	30.0	35.2	31.8	29.7	27.4
M3	2nd July 2021	10:00	(0:26:0.0)	35.2	68.2	30.8	27.3	26.0
M4	1st July 2021	16:35	(1:0:1.0)	51.7	92.9	54.4	37.0	29.4
M4	1st July 2021	17:35	(1:0:1.0)	52.6	91.8	55.0	38.9	30.1
M4	1st July 2021	18:35	(1:0:1.0)	48.8	88.2	47.9	35.1	29.2
M4	1st July 2021	19:35	(1:0:1.0)	50.0	88.4	50.4	32.7	28.2
M4	1st July 2021	20:35	(1:0:1.0)	55.2	86.8	33.1	27.9	25.3
M4	2nd July 2021	00:37	(0:15:0.0)	27.3	45.5	28.4	26.5	25.2
M4	2nd July 2021	00:52	(0:15:0.0)	26.8	50.1	28.0	26.0	25.0
M4	2nd July 2021	01:07	(0:15:0.0)	27.9	42.9	30.0	26.2	25.0
M4	2nd July 2021	01:22	(0:15:0.0)	28.8	49.9	30.8	26.5	25.1