

Castlepollard Quarry, Deerpark, Castlepollard, Co. Westmeath

Castlepollard Quarry

Environmental Impact Assessment Report

Appendix 13

Recent Noise Monitoring

Compliance Results

February 2022



Part of the Breedon Group

Prepared by:

J Sheils Planning & Environmental Ltd

31 Athlumney Castle, Navan, Co. Meath

Westmeath County Council Planning Authority - Inspection Purposes Only!



NOISE MONITORING SURVEY

AT

Lagan Materials Ltd., Castlepollard, Co. Westmeath

Report Ref 27705
TMS Environment Ltd.
20th September 2020

Prepared by: Denis Power
Environmental Scientist

Approved by:

20th September 2020

Tom Ryan
Senior Consultant

Westmeath County Council Planning Authority Inspection Purposes Only

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1.0 Scope

This report presents the results of the Q3 2020 environmental noise survey carried out on the 20th of August 2020 at four noise monitoring locations (N1 to N4) at the Lagan Materials Ltd. site near Castlepollard, Co. Westmeath.

The quarry is situated near the townland of Deerpark, Castlepollard, Co. Westmeath. This site is approximately 2km southeast of Castlepollard, adjacent to the R395 Road which runs between Castlepollard and Collinstown. The quarry is immediately surrounded by farmland with occasional dwellings, and a small copse to the east. Dwellings are located directly across from the quarry entrance, across the R395 Road.

2.0 Survey Protocol

2.1 Monitoring Locations

The monitoring locations were selected in accordance with the *ISO 1996 Acoustics - Description and Measurement of Environmental Noise* guidelines. Monitoring was carried out in accordance with the above-mentioned document and in all cases; the instrument was positioned in the location most sensitive to noise from the site. Due care was taken to minimise potential interference from wind generated noises from trees etc during the course of the measurement programme.

These locations are presented graphically in Appendix I. A summary of the locations is presented below in Table 1.

Table 1 Monitoring locations for noise survey at Lagan Quarries, Castlepollard, Co. Westmeath.

Monitoring Location	Description
N1	Adjacent to site entrance and nearby dwellings
N2	100m north of site (in field)
N3	150m west of site (in field)
N4	At southern boundary of site

2.2 Instrumentation and methodology

Noise measurements were made according to the requirements of *ISO 1996: Acoustics - Description and Measurement of Environmental Noise* and in addition, with reference to the 2016 EPA publication, “*NG4: Environmental Noise Survey, Guidance Document*”. The measurements were taken using the following equipment:

Equipment	Model
Integrating sound level meter	Bruel & Kjaer, Type 2250
Microphone	Bruel & Kjaer, Type 4950
Acoustical calibrator	Type 4231

The instrument was calibrated *in situ* at 94 dB prior to and after use. The sound level meter was orientated towards the noise source and mounted on a tripod at 1.5m above ground level. This instrument is a Type 1 instrument in accordance with IEC 651 regulations. The Time Weighting used was fast and the Frequency Weighting was A-weighted as per IEC 651.

2.3 Glossary of terms used

L_{Aeq} : The equivalent steady sound level in dB containing the same acoustic energy as the actual fluctuating sound level over a given period.

L_{A90} : the sound pressure level in dB(A) which is exceeded for 90% of the time.

L_{A10} : the sound pressure level in dB(A) which is exceeded for 10% of the time.

1/3 Octave Band Analysis: Frequency analysis of sound such that the frequency spectrum is subdivided into bands of one-third of an octave each. An octave is taken to be a frequency interval, the upper limit of which is twice the lower limit. (The unit of frequency is the Hertz Hz).

2.4 Survey implementation

TMS Environment Ltd personnel conducted the daytime survey on the 20th of August 2020 between 09:00 and 17:00, in accordance with the requirements set out in the EPA Environmental Noise Survey Guidance document which require that: “*Day time noise survey should be carried out between the stipulated times of 08:00 – 22:00*”.

The measurement parameters included meteorological observations of prevailing conditions at the time of the survey. The main measurement parameter was the equivalent continuous A-weighted sound pressure level, $L_{Aeq, T}$. Monitoring periods for the noise survey were 30-minute intervals. A statistical analysis of the measurement results was also completed so that the percentile levels, $L_{AN, T}$, for N = 90% and 10% over a 30-minute measurement interval was also recorded. The percentile levels represent the noise level in dB(A) exceeded for N% of the measurement time.

A 1/3 Octave Frequency assessment was carried out as required during the survey.

3.0 Survey Results

The results of the environmental noise survey are presented in Appendix II of this report. The weather conditions at the time of the survey were bright and humid with a South Westerly breeze of < 8kt/hr. These conditions were consistent throughout the survey.

4.0 Evaluation of Results

The noise levels recorded at monitoring location N1 were 47dB $L_{Aeq,30mins}$. The main source of noise at this location was intermittent passing of traffic on the nearby R395 road and birdsong. Noise emissions associated with site activity were observed to be intermittent and low level.

The noise levels recorded at monitoring location N2 were 36dB $L_{Aeq,30mins}$. The main source of noise at this location was traffic noise from the nearby R395 road and birdsong. Site activity noise was observed to be very faint and intermittent.

The noise levels recorded at monitoring location N3 were 38dB $L_{Aeq,30mins}$. The main source of noise at this location was birdsong, and agricultural activities in the distance. Site activity noise was observed to be very faint and intermittent.

The noise levels recorded at monitoring location N4 were 35dB $L_{Aeq,30mins}$. The main sources of noise at this location were from the distant traffic on the R395 and birdsong. Site activity noise was observed to be very faint and intermittent.

A 1/3 octave band analysis was also carried out at the monitoring locations and observations were made by TMS Environment personnel to identify the presence of any tonal or impulsive noise. There were no tonal components recorded in the spectra and no tonal or impulsive noise was noted.

Condition 5 of the Planning Permission (An Bord Pleanála Reference No. PL.25128072) for the site stipulates the follow limits at the site boundary:

- 55 dB(A) L_{eq} (30 minutes) during day time (08.00 to 22.00) and
- 45 dB(A) L_{eq} (30 minutes) during night time (22.00 to 08.00)

The results of the monitoring survey show that the noise emissions arising at the Lagan site in Castlepollard are within the proposed limits as set out in the Planning Permission for the site.

5.0 Conclusions

The $L_{Aeq,T}$ values from this daytime noise survey range from 35dB to 47dB $L_{Aeq,30mins}$. All measurement results comply with the planning permission limits. It was noted that the dominant noise source at all monitoring locations was passing traffic on the nearby R395 Road.

The results of the monitoring survey show that the Lagan facility in Castlepollard is operating within the noise limits as set out in the Planning Permissions for the site and is not a source of noise nuisance at local sensitive receptors.

APPENDIX I

MONITORING LOCATIONS

Westmeath County Council Planning Authority - Inspection Purposes Only



APPENDIX II
MONITORING RESULTS

Noise Monitoring Results Q3 2019

Site Name:	Lagan Materials Ltd. – Castlepollard
Survey Date:	20 August 2020

Location	Monitoring Time	Limit L_{Aeq,30mins}	L_{Aeq}	L_{A90}	L_{A10}	L_{AiT}
N1	16:03-16:33	55	47	33	51	47
N2	15:26-15:56	55	36	27	38	36
N3	14:49-15:19	55	38	27	39	38
N4	14:10-14:40	55	35	29	36	35



NOISE MONITORING SURVEY

AT

Lagan Materials Ltd., Castlepollard, Co. Westmeath

Report Ref 28001
TMS Environment Ltd.
23rd November 2020

Prepared by: Sean Foley
Environmental Scientist

Approved by:

23rd Nov 2020

Tom Ryan
Senior Consultant

Westmeath County Council Planning Authority Inspection Purposes Only

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Appendix I	Map illustrating noise monitoring locations
Appendix II	Monitoring results

1.0 Scope

This report presents the results of the Q4 2020 environmental noise survey carried out on the 23rd of November 2020 at four noise monitoring locations (N1 to N4) at the Lagan site near Castlepollard, Co. Westmeath.

The quarry is situated near the townland of Deerpark, Castlepollard, Co. Westmeath. This site is approximately 2km southeast of Castlepollard, adjacent to the R395 Road which runs between Castlepollard and Collinstown. The quarry is immediately surrounded by farmland with occasional dwellings, and a small copse to the east. Dwellings are located directly across from the quarry entrance, across the R395 Road.

2.0 Survey Protocol

2.1 Monitoring Locations

The monitoring locations were selected in accordance with the *ISO 1996 Acoustics - Description and Measurement of Environmental Noise* guidelines. Monitoring was carried out in accordance with the above-mentioned document and in all cases; the instrument was positioned in the location most sensitive to noise from the site. Due care was taken to minimise potential interference from wind generated noises from trees etc during the course of the measurement programme.

These locations are presented graphically in Appendix I. A summary of the locations is presented below in Table 1.

Table 1 Monitoring locations for noise survey at Lagan, Castlepollard, Co. Westmeath.

Monitoring Location	Description
N1	Adjacent to site entrance and nearby dwellings
N2	100m north of site (in field)
N3	150m west of site (in field)
N4	At southern boundary of site

2.2 Instrumentation and methodology

Noise measurements were made according to the requirements of *ISO 1996: Acoustics - Description and Measurement of Environmental Noise* and in addition, with reference to the 2016 EPA publication, “*NG4: Environmental Noise Survey, Guidance Document*”. The measurements were taken using the following equipment:

Equipment	Model
Integrating sound level meter	Bruel & Kjaer, Type 2250
Microphone	Bruel & Kjaer, Type 4950
Acoustical calibrator	Type 4231

The instrument was calibrated *in situ* at 94 dB prior to and after use. The sound level meter was orientated towards the noise source and mounted on a tripod at 1.5m above ground level. This instrument is a Type 1 instrument in accordance with IEC 651 regulations. The Time Weighting used was fast and the Frequency Weighting was A-weighted as per IEC 651.

2.3 Glossary of terms used

L_{Aeq} : The equivalent steady sound level in dB containing the same acoustic energy as the actual fluctuating sound level over a given period.

L_{A90} : the sound pressure level in dB(A) which is exceeded for 90% of the time.

L_{A10} : the sound pressure level in dB(A) which is exceeded for 10% of the time.

1/3 Octave Band Analysis: Frequency analysis of sound such that the frequency spectrum is subdivided into bands of one-third of an octave each. An octave is taken to be a frequency interval, the upper limit of which is twice the lower limit. (The unit of frequency is the Hertz Hz).

2.4 Survey implementation

TMS Environment Ltd personnel conducted the daytime survey on the 23rd November 2020 between 13:00 and 16:00, in accordance with the requirements set out in the EPA Environmental Noise Survey Guidance document which require that: “*Day time noise survey should be carried out between the stipulated times of 08:00 – 22:00*”.

The measurement parameters included meteorological observations of prevailing conditions at the time of the survey. The main measurement parameter was the equivalent continuous A-weighted sound pressure level, $L_{Aeq, T}$. Monitoring periods for the noise survey were 30 minute intervals. A statistical analysis of the measurement results was also completed so that the percentile levels, $L_{AN, T}$, for N = 90% and 10% over a 30-minute measurement interval was also recorded. The percentile levels represent the noise level in dB(A) exceeded for N% of the measurement time.

A $1/3$ Octave Frequency assessment was carried out as required during the survey.

3.0 Survey Results

The results of the environmental noise survey are presented in Appendix II of this report. The weather conditions at the time of the survey were overcast with a slight north-westerly breeze of < 8kt/hr. These conditions were consistent throughout the survey.

4.0 Evaluation of Results

The noise levels recorded at monitoring location N1 were 55dB $L_{Aeq,30mins}$. The main source of noise at this location was intermittent passing of traffic on the nearby R395 road and birdsong. There was low-level noise from farm animals throughout. Site activity noise was observed to be faint and intermittent.

The noise levels recorded at monitoring location N2 were 40dB $L_{Aeq,30mins}$. The main source of noise was from the nearby farm. Birdsong and passing traffic on the nearby R395 road were noted throughout the interval. Site activity noise was observed to be faint and intermittent.

The noise levels recorded at monitoring location N3 were 44dB $L_{Aeq,30mins}$. The main source of noise at this location was birdsong, wind rustling in the trees and passing traffic on the R395. Site activity noise was observed to be faint and intermittent.

The noise levels recorded at monitoring location N4 were 47dB $L_{Aeq,30mins}$. The main sources of noise at this location was from passing traffic on the R395 and birdsong. Site activity noise was observed to be faint and intermittent.

A 1/3 octave band analysis was also carried out at the monitoring locations and observations were made by TMS Environment personnel to identify the presence of any tonal or impulsive noise. There were no tonal components recorded in the spectra and no tonal or impulsive noise was noted.

Condition 5 of the Planning Permission (An Bord Pleanála Reference No. PL.25128072) for the site stipulates the following limits at the site boundary:

- 55 dB(A) L_{eq} (30 minutes) during day time (08.00 to 22.00) and
- 45 dB(A) L_{eq} (30 minutes) during night time (22.00 to 08.00)

The results of the monitoring survey show that the noise emissions arising at the Lagan site in Castlepollard are within the proposed limits as set out in the Planning Permission for the site.

5.0 Conclusions

The $L_{Aeq,T}$ values from this daytime noise survey range from 40dB to 55dB $L_{Aeq,30mins}$. All measurement results comply with the planning permission limits. It was noted that the dominant noise source at all monitoring locations was passing traffic on the nearby R395 Road.

The results of the monitoring survey show that the Lagan facility in Castlepollard is operating with the noise limits as set out in the Planning Permission for the site and is not a source of nuisance at local sensitive receptors.

APPENDIX I

MONITORING LOCATIONS

Westmeath County Council Planning Authority - Inspection Purposes Only



Westmeath County Council Planning Authority Inspection Purposes Only

APPENDIX II
MONITORING RESULTS

Noise Monitoring Results Q4 2020

Site Name:	Lagan Quarries – Castlepollard
Survey Date:	23 November 2020

Location	Monitoring Time	Limit	L_{Aeq}	L_{A90}	L_{A10}	L_{AiT}
		L_{Aeq,30mins}				
N1	13:25 - 13:55	55	55	40	58	55
N2	14:00 – 14:30	55	40	31	42	40
N3	14:32 – 15:02	55	44	37	46	44
N4	15:07 – 15:37	55	47	41	49	47



NOISE MONITORING SURVEY

AT

Lagan Materials Ltd., Castlepollard, Co. Westmeath

Report Ref 28199
TMS Environment Ltd.
31st March 2021

Prepared by: Omar Boush
Environmental Scientist

Approved by:

31 March 2021

Tom Ryan
Senior Consultant

Westmeath County Council Planning Authority Inspection Purposes Only

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Appendix I Map illustrating noise monitoring locations

Appendix II Monitoring results

1.0 Scope

This report presents the results of the Q1 2021 environmental noise survey carried out on the 8th of February 2021 at four noise monitoring locations (N1 to N4) at the Lagan site near Castlepollard, Co. Westmeath.

The quarry is situated near the townland of Deerpark, Castlepollard, Co. Westmeath. This site is approximately 2km southeast of Castlepollard, adjacent to the R395 Road which runs between Castlepollard and Collinstown. The quarry is immediately surrounded by farmland with occasional dwellings, and a small copse to the east. Dwellings are located directly across from the quarry entrance, across the R395 Road.

2.0 Survey Protocol

2.1 Monitoring Locations

The monitoring locations were selected in accordance with the *ISO 1996 Acoustics - Description and Measurement of Environmental Noise* guidelines. Monitoring was carried out in accordance with the above-mentioned document and in all cases; the instrument was positioned in the location most sensitive to noise from the site. Due care was taken to minimise potential interference from wind generated noises from trees etc during the course of the measurement programme.

These locations are presented graphically in Appendix I. A summary of the locations is presented below in Table 1.

Table 1 Monitoring locations for noise survey at Lagan, Castlepollard, Co. Westmeath.

Monitoring Location	Description
N1	Adjacent to site entrance and nearby dwellings
N2	100m north of site (in field)
N3	150m west of site (in field)
N4	At southern boundary of site

2.2 Instrumentation and methodology

Noise measurements were made according to the requirements of *ISO 1996: Acoustics - Description and Measurement of Environmental Noise* and in addition, with reference to the 2016 EPA publication, “*NG4: Environmental Noise Survey, Guidance Document*”. The measurements were taken using the following equipment:

Equipment	Model
Integrating sound level meter	Bruel & Kjaer, Type 2250
Microphone	Bruel & Kjaer, Type 4950
Acoustical calibrator	Type 4231

The instrument was calibrated *in situ* at 94 dB prior to and after use. The sound level meter was orientated towards the noise source and mounted on a tripod at 1.5m above ground level. This instrument is a Type 1 instrument in accordance with IEC 651 regulations. The Time Weighting used was fast and the Frequency Weighting was A-weighted as per IEC 651.

2.3 Glossary of terms used

L_{Aeq} : The equivalent steady sound level in dB containing the same acoustic energy as the actual fluctuating sound level over a given period.

L_{A90} : the sound pressure level in dB(A) which is exceeded for 90% of the time.

L_{A10} : the sound pressure level in dB(A) which is exceeded for 10% of the time.

1/3 Octave Band Analysis: Frequency analysis of sound such that the frequency spectrum is subdivided into bands of one-third of an octave each. An octave is taken to be a frequency interval, the upper limit of which is twice the lower limit. (The unit of frequency is the Hertz Hz).

2.4 Survey implementation

TMS Environment Ltd personnel conducted the daytime survey on the 8th of February 2021 between 14:50 and 17:10, in accordance with the requirements set out in the EPA Environmental Noise Survey Guidance document which require that: “*Day time noise survey should be carried out between the stipulated times of 08:00 – 22:00*”.

The measurement parameters included meteorological observations of prevailing conditions at the time of the survey. The main measurement parameter was the equivalent continuous A-weighted sound pressure level, $L_{Aeq, T}$. Monitoring periods for the noise survey were 30-minute intervals. A statistical analysis of the measurement results was also completed so that the percentile levels, $L_{AN, T}$, for N = 90% and 10% over a 30-minute measurement interval was also recorded. The percentile levels represent the noise level in dB(A) exceeded for N% of the measurement time.

A $1/3$ Octave Frequency assessment was carried out as required during the survey.

3.0 Survey Results

The results of the environmental noise survey are presented in Appendix II of this report. The weather conditions at the time of the survey were overcast with light snow and hail showers. There was a strong breeze in a westerly direction. These conditions were consistent throughout the survey.

4.0 Evaluation of Results

The noise levels recorded at monitoring location N1 were 57dB $L_{Aeq,30mins}$. The main source of noise at this location was intermittent passing traffic on the R395 road. Other sources of noise at this location were dogs barking, strong wind gusts, and a chainsaw being operated in the distance. Site activity noise was observed to be very faint and intermittent.

The noise levels recorded at monitoring location N2 were 44dB $L_{Aeq,30mins}$. The main source of noise at this location was intermittent passing traffic on the R395 road. Site activity noise was observed to be very faint and intermittent.

The noise levels recorded at monitoring location N3 were 41dB $L_{Aeq,30mins}$. The main source of noise at this location was intermittent passing traffic on the R395 road. Site activity noise was observed to be very faint and intermittent.

The noise levels recorded at monitoring location N4 were 42dB $L_{Aeq,30mins}$. The main sources of noise at this location were from birdsong, distant traffic and wind gusts rustling leaves. Site activity noise was observed to be very faint and intermittent.

A 1/3 octave band analysis was also carried out at the monitoring locations and observations were made by TMS Environment personnel to identify the presence of any tonal or impulsive noise. There were no tonal components recorded in the spectra and no tonal or impulsive noise was noted.

Condition 5 of the Planning Permission (An Bord Pleanála Reference No. PL.25128072) for the site stipulates the following limits at the site boundary:

- 55 dB(A) L_{eq} (30 minutes) during day time (08.00 to 22.00) and
- 45 dB(A) L_{eq} (30 minutes) during night time (22.00 to 08.00)

The results of the monitoring survey show that the noise emissions arising at the Lagan site in Castlepollard are within the proposed limits as set out in the Planning Permission for the site.

5.0 Conclusions

The $L_{Aeq,T}$ values from this daytime noise survey range from 40dB to 57dB $L_{Aeq,30mins}$. All measurement results comply with the planning permission limits with the exception of the measurement result at N1. The measured noise level at N1 was due to passing traffic on the adjacent R395 road and was not due to site activities. It was noted that the dominant noise source at all monitoring locations was passing traffic on the nearby R395 Road.

The results of the monitoring survey show that the Lagan facility in Castlepollard is operating with the noise limits as set out in the Planning Permission for the site and is not a source of nuisance at local sensitive receptors.

APPENDIX I

MONITORING LOCATIONS

Westmeath County Council Planning Authority - Inspection Purposes Only



Westmeath County Council Planning Authority Inspection Purposes Only

APPENDIX II
MONITORING RESULTS

Noise Monitoring Results Q1 2021

Site Name:	Lagan Quarries – Castlepollard
Survey Date:	8 th February 2021

Location	Monitoring Time	Limit	L _{Aeq}	L _{A90}	L _{A10}	L _{AiT}
		L _{Aeq,30mins}				
N1	14:53 – 15:23	55	57	32	58	76
N2	15:28 – 15:58	55	44	35	47	62
N3	16:02 – 16:32	55	41	33	44	60
N4	16:38 – 17:08	55	42	32	45	58



NOISE MONITORING SURVEY

AT

Lagan Quarries, Castlepollard, Co. Westmeath

Report Ref 28905
TMS Environment Ltd.
24th August 2021

Prepared by: Sean Foley
Environmental Scientist

Approved by:

26th August 2021

Tom Ryan
Senior Consultant

Westmeath County Council Planning Authority / Inspection Purposes Only

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Appendix I	Map illustrating noise monitoring locations
Appendix II	Monitoring results

1.0 Scope

This report presents the results of the Biannual #2 2021 environmental noise survey carried out on the 24th of August 2021 at four noise monitoring locations (N1 to N4) at the Lagan site near Castlepollard, Co. Westmeath.

The quarry is situated near the townland of Deerpark, Castlepollard, Co. Westmeath. This site is approximately 2km southeast of Castlepollard, adjacent to the R395 Road which runs between Castlepollard and Collinstown. The quarry is immediately surrounded by farmland with occasional dwellings, and a small copse to the east. Dwellings are located directly across from the quarry entrance, across the R395 Road.

2.0 Survey Protocol

2.1 Monitoring Locations

The monitoring locations were selected in accordance with the *ISO 1996 Acoustics - Description and Measurement of Environmental Noise* guidelines. Monitoring was carried out in accordance with the above-mentioned document and in all cases; the instrument was positioned in the location most sensitive to noise from the site. Due care was taken to minimise potential interference from wind generated noises from trees etc during the course of the measurement programme.

These locations are presented graphically in Appendix I. A summary of the locations is presented below in Table 1.

Table 1 Monitoring locations for noise survey at Lagan Quarries, Castlepollard, Co. Westmeath.

Monitoring Location	Description
N1	Adjacent to site entrance and nearby dwellings
N2	100m north of site (in field)
N3	150m west of site (in field)
N4	At southern boundary of site

2.2 Instrumentation and methodology

Noise measurements were made according to the requirements of *ISO 1996: Acoustics - Description and Measurement of Environmental Noise* and in addition, with reference to the 2016 EPA publication, “*NG4: Environmental Noise Survey, Guidance Document*”. The measurements were taken using the following equipment:

Equipment	Model
Integrating sound level meter	Bruel & Kjaer, Type 2250
Microphone	Bruel & Kjaer, Type 4950
Acoustical calibrator	Type 4231

The instrument was calibrated *in situ* at 94 dB prior to and after use. The sound level meter was orientated towards the noise source and mounted on a tripod at 1.5m above ground level. This instrument is a Type 1 instrument in accordance with IEC 651 regulations. The Time Weighting used was fast and the Frequency Weighting was A-weighted as per IEC 651.

2.3 Glossary of terms used

L_{Aeq} : The equivalent steady sound level in dB containing the same acoustic energy as the actual fluctuating sound level over a given period.

L_{A90} : the sound pressure level in dB(A) which is exceeded for 90% of the time.

L_{A10} : the sound pressure level in dB(A) which is exceeded for 10% of the time.

1/3 Octave Band Analysis: Frequency analysis of sound such that the frequency spectrum is subdivided into bands of one-third of an octave each. An octave is taken to be a frequency interval, the upper limit of which is twice the lower limit. (The unit of frequency is the Hertz Hz).

2.4 Survey implementation

TMS Environment Ltd personnel conducted the daytime survey on the 24th of August 2021 between 13:00 and 17:00, in accordance with the requirements set out in the EPA Environmental Noise Survey Guidance document which require that: “*Day time noise survey should be carried out between the stipulated times of 08:00 – 22:00*”.

The measurement parameters included meteorological observations of prevailing conditions at the time of the survey. The main measurement parameter was the equivalent continuous A-weighted sound pressure level, $L_{Aeq, T}$. Monitoring periods for the noise survey were 30 minute intervals. A statistical analysis of the measurement results was also completed so that the percentile levels, $L_{AN, T}$, for N = 90% and 10% over a 30-minute measurement interval was also recorded. The percentile levels represent the noise level in dB(A) exceeded for N% of the measurement time.

A $1/3$ Octave Frequency assessment was carried out as required during the survey.

3.0 Survey Results

The results of the environmental noise survey are presented in Appendix II of this report. The weather conditions at the time of the survey were dry and sunny with a slight North Westerly breeze ranging between 6-8kt/hr. These conditions were consistent throughout the survey.

4.0 Evaluation of Results

The noise levels recorded at monitoring location N1 were 61dB $L_{Aeq,30mins}$. The main source of noise at this location was intermittent passing traffic on the R395 road. Other sources of noise at this location were dogs barking and strong wind gusts. Site activity noise was observed to be faint.

The noise levels recorded at monitoring location N2 were 41dB $L_{Aeq,30mins}$. The main source of noise at this location was intermittent passing traffic on the R395 road. Site activity noise was observed throughout the monitoring interval.

The noise levels recorded at monitoring location N3 were 54dB $L_{Aeq,30mins}$. The main source of noise at this location was quarry activity including the operation of a nearby drilling rig. Passing traffic on the R395 road was also noted.

The noise levels recorded at monitoring location N4 were 42dB $L_{Aeq,30mins}$. The main source of noise at this location was intermittent passing traffic on the R395 road. Site activity noise was observed throughout the monitoring interval.

A 1/3 octave band analysis was also carried out at the monitoring locations and observations were made by TMS Environment personnel to identify the presence of any tonal or impulsive noise. There were no tonal components recorded in the spectra and no tonal or impulsive noise was noted.

Condition 5 of the Planning Permission (An Bord Pleanála Reference No. PL.25128072) for the site stipulates the follow limits at the site boundary:

- 55 dB(A) L_{eq} (30 minutes) during day time (08.00 to 22.00) and
- 45 dB(A) L_{eq} (30 minutes) during night time (22.00 to 08.00)

5.0 Conclusions

The $L_{Aeq,T}$ values from this daytime noise survey range from 41dB to 61dB $L_{Aeq,30mins}$. All measurement results comply with the planning permission limits with the exception of the measurement result at N1. The measured noise level at N1 was due to passing traffic on the adjacent R395 road and was not due to site activities. It was noted that the dominant noise source at all monitoring locations was passing traffic on the nearby R395 Road.

The results of the monitoring survey show that the Lagan facility in Castlepollard is operating with the noise limits as set out in the Planning Permission for the site and is not a source of nuisance at local sensitive receptors.

APPENDIX I

MONITORING LOCATIONS

Westmeath County Council Planning Authority - Inspection Purposes Only



Westmeath County Council Planning Authority Inspection Purposes Only

APPENDIX II
MONITORING RESULTS

Noise Monitoring Results BiA#2 2021

Site Name:	Lagan Castlepollard
Survey Date:	24 August 2021

Location	Monitoring Time	Limit	L_{Aeq}	L_{A90}	L_{A10}	L_{AMax}
		L_{Aeq,30mins}				
N1	13:58 – 14:28	55	61	39	65	78
N2	14:30 – 15:00	55	41	37	42	71
N3	15:02 – 15:32	55	54	38	60	77
N4	15:37 – 16:07	55	42	33	42	62