

Drummarnock

Post-submission Response

for Atmos

Conor Tickner, Hayes McKenzie Partnership Ltd

3410_N05_EXT3, 27 August 2025

1. INTRODUCTION

- 1.1 This technical note reflects the most up-to-date understanding, at the time of writing, of the noise situation relating to Drummarnock Wind farm. This includes the change in status of the Ryecroft receptor, which is confirmed to be financially involved with the Drummarnock Wind Farm.
- 1.2 An application (ref: 24/00494/FUL) was submitted in July 2024 for a proposed wind farm ('the proposed development' or 'Drummarnock Wind Farm') comprising four turbines within the Stirling Council area. Hayes McKenzie Partnership Ltd (HMPL) provided the noise chapter of the EIA report, including an assessment of noise from the proposed development.
- 1.3 A post-submission consultation response was provided by Stirling Council, requesting clarification, updates, or additional information to be provided in relation to ten points regarding the noise from the proposed development. The consultation queries are provided in full below.

1: The Proposed Development is stated to include up to 4 borrow pits, but only 3 are shown in Figure 1-2: Site layout. The location of the fourth borrow pit should be confirmed and the findings of the assessment of blast induced vibration and air overpressure updated accordingly.

2: The source documentation for the sound power levels of the adopted candidate turbine (the Nordex N163 6.8MW with Serrated Trailing Edge (STE) blades) should be provided to allow it to be checked for the full range of wind speeds and operational modes.

3: It is unclear whether the IoA GPG barrier attenuation cap has been applied correctly. A capped barrier attenuation of -2dB should only be applied where there is no line of sight between the receiver and the turbine tip. Where that is not achieved, no barrier

attenuation should be applied. The applicant should confirm if this has been calculated and applied correctly.

4: The wrong turbine type has been modelled for the Craigannet single turbine. The assessment should be updated to account for the turbine type that was approved for installation with the assessment and findings updated accordingly.

5: The sound power level data adopted for the Craigengelt Wind Farm and the Kingsburn Wind Farm appear to be incorrect. That data has no change in level between 3 and 7m/s and it is different to that which a) we have on file and b) is used in Appendix 12.1: Noise of the Earlsburn Extension Wind Farm EIAR. Those data should be updated with the assessment and findings revised accordingly. Alternatively, a copy of the data sources should be provided for checking.

6: The applicant should confirm the approach that has been adopted to demonstrate cumulative limit compliance where predictions for an existing development are in excess of its conditioned noise limits. In that circumstance, the Remaining Noise Budget (RNB) (applicable to the development in isolation) should be set at the cumulative limit -10dB, not the predicted level from those other developments -10dB, otherwise there remains the potential for a cumulative effect to arise from the introduction of the Proposed Development.

7: The prediction results for the Proposed Development operating in isolation are in question and should be revisited (the differences between adjacent integer wind speed results are not the same as the corresponding differences in the adopted sound power level data).

8: The wrong direction corrections have been applied (including in the cumulative assessment). These will give rise to predicted receptor noise levels that are too low. The direction corrected results should be recalculated assuming a 'complex' landscape (see IoA GPG Figure 6b (not 6a)).

9: A curtailment strategy will be required to avoid an exceedance of the cumulative noise level limits. This should be revisited once required prediction updates are addressed.

10: The sound power level data that are presented for the candidate turbine operating in different noise reduced modes (Table A4-1) are incorrect. These should be checked and updated.

- 1.4 HMPL requested for additional context to be provided to ensure that an appropriate response was able to be provided, but were informed that Stirling Council indicated that there was no additional context that could be provided.
- 1.5 HMPL have therefore provided responses to these points in the absence of any context or discussions, based solely on a good faith attempt to interpret the responses raised.
- 1.6 As part of the responses to these points, noise levels have been recalculated adopting different assumptions and input data, as appropriate. The details of these recalculations are set out where relevant to the respective points raised.

2. RESPONSES TO QUERIES

Borrow Pits

- 2.1 The comment raised was:

The Proposed Development is stated to include up to 4 borrow pits, but only 3 are shown in Figure 1-2: Site layout. The location of the fourth borrow pit should be confirmed and the findings of the assessment of blast induced vibration and air overpressure updated accordingly.

- 2.2 This comment appears to arise from a misinterpretation of Figure 1-2. The two westernmost borrow pits are very close together either side of the proposed access track and may appear, upon first review, to be one single borrow pit. Therefore, the assessment as written is considered to be accurate and no update is required.

Nordex N163 6.8MW Source Document Reference

- 2.3 The comment raised was:

The source documentation for the sound power levels of the adopted candidate turbine (the Nordex N163 6.8MW with Serrated Trailing Edge (STE) blades) should be provided to allow it to be checked for the full range of wind speeds and operational modes.

- 2.4 The source document used to inform the noise assessment predictions was the document:
Delta4000_N163_6.X_Sound Level_Octave_2017735EN_CC01_EN_F008_277_A14_R01
. Available hub heights for this model are 138 m, 159 m and 164 m. The proposed hub heights for the proposed development are identified as 98.5 m, based on a tip-height of 180 m.

- 2.5 Specified sound power levels for the candidate turbine were therefore adjusted, by converting the hub-height sound power levels for the lowest available hub height, 138 m, to 98.5 m sound power levels using a standardised wind profile with a ground roughness length of 0.05 m.
- 2.6 In addition, the specification includes 31.5 Hz octave band data which is not used in the noise calculations. In the absence of this octave band, the remaining octave band levels were normalised to maintain the stated A-weighted total sound power levels. The maximum A-weighted sound power level specified is 106.4 dB.
- 2.7 A further review of document *2017733EN_5_CC01_EN_F008_277_A12-Noise-level,-Power-curves,-Thrust-curves* was conducted. Within this document, a Mode 0 is available, with stated maximum sound power levels of 106.6 dB, 0.2 dB higher than Mode 1 (the highest available in the previous document). No octave band data is available for this mode, so for the purposes of the recalculation, Mode 0 was calculated using a +0.2 dB adjustment to all sound power levels identified for Mode 1. Low wind-speed sound power levels typically do not change significantly for noise-reduced modes, so this adjustment is considered a reasonable worst-case assumption. These data are given in **Table 1** and are incorporated into recalculated predictions (applying a +2 dB uncertainty factor to the levels specified).

Table 1 – Nordex N163 STE 6.8 MW, Mode 0 Sound Power Levels, dB L_{WA}

Standardised 10 m height wind speed, m/s	Octave band centre frequency, Hz								Total
	63	125	250	500	1000	2000	4000	8000	
3	81.7	85.5	88.4	89.5	89.4	85.4	75.3	53.7	95.2
4	83.3	87.1	90.0	91.1	91.0	87.0	76.9	55.3	96.9
5	87.4	91.2	94.1	95.2	95.1	91.1	81.0	59.4	101.0
6	91.7	95.5	98.4	99.5	99.4	95.4	85.3	63.7	105.3
7	93.1	96.9	99.7	100.8	100.7	96.7	86.7	65.0	106.5
8	93.1	96.9	99.8	100.9	100.8	96.8	86.7	65.1	106.6
9	93.1	96.9	99.8	100.9	100.8	96.8	86.7	65.1	106.6
10	93.1	96.9	99.8	100.9	100.8	96.8	86.7	65.1	106.6
11	93.1	96.9	99.8	100.9	100.8	96.8	86.7	65.1	106.6
12	93.1	96.9	99.8	100.9	100.8	96.8	86.7	65.1	106.6

- 2.8 Note that precise calculated values for the total A-weighted sound power and spectral contributions are used in the calculations. However, the values are shown in **Table 1** to 1 decimal

place. As a result, some differences in rounding of up to 0.1 dB can occur when summing the given values as presented.

IoA GPG Barrier Attenuation

2.9 The comment raised was:

It is unclear whether the IoA GPG barrier attenuation cap has been applied correctly. A capped barrier attenuation of -2dB should only be applied where there is no line of sight between the receiver and the turbine tip. Where that is not achieved, no barrier attenuation should be applied. The applicant should confirm if this has been calculated and applied correctly.

2.10 It is confirmed that the -2 dB barrier attenuation correction has only been applied where there is no line of sight to the turbine tip height. Details of the noise prediction methodology and the barrier corrections that have been applied are given in the proposed development submission documents *Technical Appendix 11-1: Noise Prediction Methodology* and *Technical Appendix 11-2: Matrix of Corrections for Ground Profile & Barriers* respectively.

Craigannet Turbine Type

2.11 The comment raised was:

The wrong turbine type has been modelled for the Craigannet single turbine. The assessment should be updated to account for the turbine type that was approved for installation with the assessment and findings updated accordingly.

2.12 It is agreed that the turbine type was incorrectly identified as an EWT-54 as approved in the planning consent, whereby later communications changed the proposed turbine to a Vensys 82 1.5 MW turbine type. Sound power levels for this turbine are given in **Table 2** and are incorporated into recalculated predictions (applying a +2 dB uncertainty factor to the levels specified).

2.13 It is noted that in all cases the Craigannet turbine provides minor contributions to overall predicted sound levels.

Table 2 – Vensys 82 1.5 MW, Mode 0 Sound Power Levels, dB L_{WA}

Standardised 10 m height wind speed, m/s	Octave band centre frequency, Hz								Total
	63	125	250	500	1000	2000	4000	8000	
3	65.1	75.2	79.9	81.1	79.6	77.3	72.3	60.6	86.3

Standardised 10 m height wind speed, m/s	Octave band centre frequency, Hz								Total
	63	125	250	500	1000	2000	4000	8000	
4	65.1	75.2	79.9	81.1	79.6	77.3	72.3	60.6	86.3
5	67.6	77.7	82.4	83.6	82.1	79.8	74.8	63.1	88.8
6	72.0	82.1	86.8	88.0	86.5	84.2	79.2	67.5	93.2
7	76.5	86.6	91.3	92.5	91.0	88.7	83.7	72.0	97.7
8	80.9	91.0	95.7	96.9	95.4	93.1	88.1	76.4	102.1
9	83.3	93.4	98.1	99.3	97.8	95.5	90.5	78.8	104.5
10	83.3	93.4	98.1	99.3	97.8	95.5	90.5	78.8	104.5
11	83.3	93.4	98.1	99.3	97.8	95.5	90.5	78.8	104.5
12+	83.3	93.4	98.1	99.3	97.8	95.5	90.5	78.8	104.5

Document Reference: Power_Curves_Sound_Power_Levels_VENSYS82_1_5MW_EBT40_Rev.A

Craigengelt and Kingsburn Sound Power Levels

2.14 The comment raised was:

The sound power level data adopted for the Craigengelt Wind Farm and the Kingsburn Wind Farm appear to be incorrect. That data has no change in level between 3 and 7m/s and it is different to that which a) we have on file and b) is used in Appendix 12.1: Noise of the Earlsburn Extension Wind Farm EIAR. Those data should be updated with the assessment and findings revised accordingly. Alternatively, a copy of the data sources should be provided for checking.

2.15 Multiple sources of information were reviewed in the production of the noise assessment for Drummarnock Wind Farm. A number of different sound power levels were identified in relation to Nordex N90 turbines, as in the case of Craigengelt and Kingsburn developments. Sound power levels specified in the Shelloch (Craigton and Spittalhill) Wind Farm Environmental Statement included no reduction between 3 and 7 m/s wind speeds as a worst-case assumption. As these levels had been accepted and were the highest of the available specifications, these sound power levels, were adopted for the Drummarnock calculations as a worst-case assumption.

2.16 Levels are recalculated incorporating the same Nordex N90 sound power levels as presented in *Appendix 12.1: Noise of the Earlsburn Extension Wind Farm EIAR*, as suggested, and as given in **Table 3**

Table 3 – Nordex N90 Sound Power Levels, dB L_{WA}

Standardised 10 m height wind speed, m/s	Octave band centre frequency, Hz								Total
	63	125	250	500	1000	2000	4000	8000	
3	80.2	84.3	88.7	89.1	87.6	86.5	82.5	75.2	95.0
4	84.2	88.3	92.7	93.1	91.6	90.5	86.5	79.2	99.0
5	87.7	91.8	96.2	96.6	95.1	94.0	90.0	82.7	102.5
6	90.7	94.8	99.2	99.6	98.1	97.0	93.0	85.7	105.5
7	91.7	95.8	100.2	100.6	99.1	98.0	94.0	86.7	106.5
8	92.2	96.3	100.7	101.1	99.6	98.5	94.5	87.2	107.0
9	92.2	96.3	100.7	101.1	99.6	98.5	94.5	87.2	107.0
10	92.2	96.3	100.7	101.1	99.6	98.5	94.5	87.2	107.0
11	92.2	96.3	100.7	101.1	99.6	98.5	94.5	87.2	107.0
12+	92.2	96.3	100.7	101.1	99.6	98.5	94.5	87.2	107.0

RNB Calculation Method

2.17 The comment raised was:

The applicant should confirm the approach that has been adopted to demonstrate cumulative limit compliance where predictions for an existing development are in excess of its conditioned noise limits. In that circumstance, the Remaining Noise Budget (RNB) (applicable to the development in isolation) should be set at the cumulative limit -10dB, not the predicted level from those other developments -10dB, otherwise there remains the potential for a cumulative effect to arise from the introduction of the Proposed Development.

2.18 The scenario described does not occur through application of the methodology described in the EIA chapter, and is no longer applicable due to the financial involvement of Ryecroft. Noise limits are met in all scenarios and no RNB calculations are required.

Proposed Development Predicted Levels

2.19 The comment raised was:

The prediction results for the Proposed Development operating in isolation are in question and should be revisited (the differences between adjacent integer wind speed results are not the same as the corresponding differences in the adopted sound power level data).

- 2.20 A review of the development sound power level data identified that the sound power levels specified in the EIA chapter Table 11-4 related to the sound power levels for 10 m height standardised wind speeds in relation to the 138 m hub height, i.e. the data stated in the turbine specification, normalised to remove the 31.5 Hz octave band. The data used in the calculations, included an appropriate adjustment to 98.5 m hub height. Sound power levels in relation to 98.5 m hub height are given in **Table 4**. Note that the recalculated results are based on the Nordex turbines operating in Mode 0.

Table 4 – Nordex N163 STE 6.8 MW, Mode 1 Sound Power Levels, dB L_{WA}

Standardised 10 m height wind speed, m/s	Octave band centre frequency (Hz)								Total
	63	125	250	500	1000	2000	4000	8000	
3	81.5	85.3	88.2	89.3	89.2	85.2	75.1	53.5	95.0
4	83.1	86.9	89.8	90.9	90.8	86.8	76.7	55.1	96.7
5	87.2	91.0	93.9	95.0	94.9	90.9	80.8	59.2	100.8
6	91.5	95.3	98.2	99.3	99.2	95.2	85.1	63.5	105.1
7	92.9	96.7	99.5	100.6	100.5	96.5	86.5	64.8	106.3
8	92.9	96.7	99.6	100.7	100.6	96.6	86.5	64.9	106.4
9	92.9	96.7	99.6	100.7	100.6	96.6	86.5	64.9	106.4
10	92.9	96.7	99.6	100.7	100.6	96.6	86.5	64.9	106.4
11	92.9	96.7	99.6	100.7	100.6	96.6	86.5	64.9	106.4
12	92.9	96.7	99.6	100.7	100.6	96.6	86.5	64.9	106.4

- 2.21 Note that precise calculated values for the total A-weighted sound power and spectral contributions are used in the calculations. However, the values are shown in **Table 4** to 1 decimal place. As a result, some differences in rounding of up to 0.1 dB can occur when summing up the given values as presented.

Direction Corrections

- 2.22 The comment raised was:

The wrong direction corrections have been applied (including in the cumulative assessment). These will give rise to predicted receptor noise levels that are too low. The direction corrected results should be recalculated assuming a 'complex' landscape (see IoA GPG Figure 6b (not 6a)).

- 2.23 It is not agreed that the landscape in this area would be considered 'complex' for the purposes of undertaking noise calculations. HMPL generally assume that wind farm sites

in the UK and Ireland are located on gently rolling undulating hills which can be considered to be flat terrain for the purposes of wind direction dependant predictions. HMPL experience and measurements suggest that for a the 'complex landscape' directional assumption to be more applicable than the 'flat' landscape assumption, the area should have large areas of steep slopes of around 20° or more, and with changes in elevation of around 200 m or more.

- 2.24 While it is acknowledged that there is no strict criteria to determine a threshold for the 'complex landscape' effect, the area of the development would not, in our opinion, warrant the use of 'complex landscape' assumptions. The predictions incorporate several conservative assumptions and are considered to be sufficiently robust, whereby it is unlikely that the predicted noise levels would be under-estimated.

2.25 **Curtailment Strategy Update**

- 2.26 The comment raised was:

A curtailment strategy will be required to avoid an exceedance of the cumulative noise level limits. This should be revisited once required prediction updates are addressed.

- 2.27 The curtailment strategy is no longer required, following confirmation of the financial involvement of Ryecroft.

Noise-Reduced Mode Sound Power Levels

- 2.28 The comment raised was:

The sound power level data that are presented for the candidate turbine operating in different noise reduced modes (Table A4-1) are incorrect. These should be checked and updated.

- 2.29 It is agreed that the Appendix Table A4-1 contains incorrect values. This was identified as a transcription or copy/paste error in the appendix table only. The correct data are presented in **Table 5**. It is confirmed that the correct values were utilised in the mitigation calculations. However, these calculations are no longer applicable due to the financial involvement of Ryecroft. No curtailment or other mitigation is required.

Table 5 – Nordex N163 Mitigation Mode Sound Power Levels, dB L_{WA}

Standardised 10 m height wind speed, m/s	Overall Sound Power Level by Operational Mode, dB(A)										
	1	2	3	9	10	11	12	13	14	15	16
3	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
4	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.6
5	102.8	102.8	102.8	102.2	101.8	101.4	101.0	100.6	100.2	99.8	99.4
6	107.1	106.9	106.6	103.0	102.5	102.0	101.5	101.0	100.5	100.0	99.5
7	108.3	108.0	107.5	103.0	102.5	102.0	101.5	101.0	100.5	100.0	99.5
8	108.4	108.0	107.5	103.0	102.5	102.0	101.5	101.0	100.5	100.0	99.5
9	108.4	108.0	107.5	103.0	102.5	102.0	101.5	101.0	100.5	100.0	99.5
10	108.4	108.0	107.5	103.0	102.5	102.0	101.5	101.0	100.5	100.0	99.5
11	108.4	108.0	107.5	103.0	102.5	102.0	101.5	101.0	100.5	100.0	99.5
12	108.4	108.0	107.5	103.0	102.5	102.0	101.5	101.0	100.5	100.0	99.5

3. NOISE RECALCULATIONS

Development in Isolation

- 3.1 The revised noise predictions for Drummarnock are presented below. Results where integer noise levels are increased compared to previously reported values are given in red bold text (all of which amount to a +1 dB change due to alterations to rounding from small changes). No changes to assessment conclusions are identified.

Table 6 – Predicted Downwind Operational Noise Levels for Drummarnock, dB L_{A90}

Location	Standardised 10m height wind speed, m/s									
	3	4	5	6	7	8	9	10	11	12
Easter Cringate Cottage	26	27	32	36	37	37	37	37	37	37
Ryecroft	29	30	34	39	40	40	40	40	40	40
Craigengelt	23	24	28	33	34	34	34	34	34	34
Craigengelt Bungalow	19	21	25	29	31	31	31	31	31	31
Muirpark	20	22	26	30	32	32	32	32	32	32
Todholes Farm Cottage	21	23	27	31	33	33	33	33	33	33
Shankhead	21	22	26	31	32	32	32	32	32	32
Shankhead Farm	20	22	26	30	31	31	31	31	31	31
Townhead Farm	20	21	25	30	31	31	31	31	31	31

Location	Standardised 10m height wind speed, m/s									
	3	4	5	6	7	8	9	10	11	12
Greathill House	19	20	25	29	30	30	30	30	30	30

Cumulative Noise

3.2 The noise levels from all cumulative developments are recalculated, including relevant changes sound power levels and assumptions described previously in this document. No other concerns were raised with other turbine models or sound power levels, so these are retained as per the original assessment. Updated values for EIA Report Table 11-9 are given below as **Table 7**. It is noted that the financially involved noise limit of 45 dB is applicable at Easter Cringate Cottage and Ryecroft. Noise limits are not exceeded for any scenario.

Table 7 – Predicted Cumulative Noise Levels (excluding Drummarnock), dB L_{A90}

Location	Wind Direction, °	Standardised 10m height wind speed, m/s									
		3	4	5	6	7	8	9	10	11	12
Easter Cringate Cottage	0	27	30	33	37	38	38	38	38	38	38
	30	28	31	35	38	39	40	40	40	40	40
	60	30	33	36	40	41	41	41	41	41	41
	90	31	35	38	42	43	43	43	43	43	43
	120	31	35	38	42	43	43	43	43	43	43
	150	31	35	38	42	43	43	43	43	43	43
	180	31	35	38	42	43	43	43	43	43	43
	210	31	35	38	41	42	43	43	43	43	43
	240	30	34	38	41	42	42	42	42	42	42
	270	28	32	35	38	39	39	39	40	40	40
	300	26	29	33	36	37	37	37	37	37	37
	330	26	29	32	35	36	37	37	37	37	37

Location	Wind Direction, °	Standardised 10m height wind speed, m/s									
		3	4	5	6	7	8	9	10	11	12
Ryecroft	0	25	28	31	35	36	36	36	36	36	36
	30	26	28	32	36	38	38	38	38	38	38
	60	28	30	34	38	40	40	40	40	40	40
	90	30	32	36	40	41	41	41	41	41	41
	120	30	33	37	40	42	42	42	42	42	42
	150	30	33	37	41	42	42	42	42	42	42
	180	30	33	37	41	42	42	42	42	42	42
	210	31	33	37	41	42	42	42	42	42	42
	240	30	33	37	40	41	42	42	42	42	42
	270	29	32	35	39	40	40	40	40	40	40
	300	27	29	33	37	38	38	38	38	38	38
	330	25	28	32	35	36	36	36	36	36	36
Craigengelt Bungalow	0	23	26	30	33	34	35	35	35	35	35
	30	22	24	28	32	33	33	33	33	33	33
	60	18	20	24	28	29	29	29	29	29	29
	90	13	16	20	23	25	25	25	25	25	25
	120	12	15	19	22	23	23	23	23	23	23
	150	13	17	20	23	24	25	25	25	25	25
	180	18	21	25	28	29	30	30	30	30	30
	210	22	25	29	32	33	33	33	33	33	33
	240	23	26	30	33	35	35	35	35	35	35
	270	24	27	30	34	35	35	35	35	35	35
	300	24	27	30	34	35	35	35	35	35	35
	330	24	27	30	34	35	35	35	35	35	35

Location	Wind Direction, °	Standardised 10m height wind speed, m/s									
		3	4	5	6	7	8	9	10	11	12
Todholes Farm Cottage	0	19	22	26	29	30	31	31	31	31	31
	30	16	19	22	26	27	27	27	27	27	27
	60	13	16	20	23	24	24	24	24	24	24
	90	13	16	19	23	24	24	24	24	24	24
	120	16	18	22	26	27	27	27	27	27	27
	150	21	23	27	31	32	32	32	32	32	32
	180	23	26	30	34	35	35	35	35	35	35
	210	24	26	30	34	35	35	35	35	35	35
	240	24	26	30	34	35	35	35	35	35	35
	270	24	26	30	34	35	35	35	35	35	35
	300	24	26	30	34	35	35	35	35	35	35
	330	23	25	29	33	34	34	34	34	34	34
Shankhead	0	24	27	30	34	35	35	35	35	35	35
	30	22	25	28	32	33	33	34	34	34	34
	60	18	20	24	28	29	29	29	29	29	29
	90	14	16	20	24	25	25	25	25	25	25
	120	13	16	19	23	24	24	24	24	24	24
	150	15	18	21	25	26	26	26	26	26	26
	180	19	23	26	30	31	31	31	31	31	31
	210	23	26	30	33	34	35	35	35	35	35
	240	24	27	31	34	36	36	36	36	36	36
	270	24	27	31	34	36	36	36	36	36	36
	300	24	27	31	34	36	36	36	36	36	36
	330	24	27	31	34	36	36	36	36	36	36

Location	Wind Direction, °	Standardised 10m height wind speed, m/s									
		3	4	5	6	7	8	9	10	11	12
Shankhead Farm	0	24	26	30	34	35	35	35	35	35	35
	30	21	24	27	31	32	32	33	33	33	33
	60	17	20	23	27	28	28	28	28	28	28
	90	13	16	20	23	24	25	25	25	25	25
	120	12	15	19	22	23	24	24	24	24	24
	150	14	17	21	24	25	26	26	26	26	26
	180	19	22	26	29	30	31	31	31	31	31
	210	23	26	29	33	34	34	34	34	34	34
	240	24	27	30	34	35	35	35	35	35	35
	270	24	27	30	34	35	35	35	35	35	35
	300	24	27	30	34	35	35	35	35	35	35
	330	24	27	30	34	35	35	35	35	35	35
Townhead Farm	0	18	21	25	28	29	29	29	29	29	29
	30	15	18	22	25	26	26	26	26	26	26
	60	13	15	19	23	24	24	24	24	24	24
	90	14	16	20	24	25	25	25	25	25	25
	120	19	21	25	29	30	30	30	30	30	30
	150	21	24	28	32	33	33	33	33	33	33
	180	22	25	29	32	33	34	34	34	34	34
	210	23	25	29	33	34	34	34	34	34	34
	240	23	25	29	33	34	34	34	34	34	34
	270	23	25	29	33	34	34	34	34	34	34
	300	22	25	29	32	33	33	34	34	34	34
	330	20	23	27	30	31	31	31	31	31	31

- 3.3 Following the confirmation that Ryecroft is now financially involved with the proposed development, the conclusions of the EIA chapter would be revised to reflect that the cumulative noise limit is not exceeded at any location in any scenario.

Remaining Noise Budget

- 3.4 No Remaining Noise Budget evaluation is required, due to noise limits being met in all scenarios.

Curtailment Strategy

- 3.5 No curtailment strategy is required to be presented, due to all noise limits being met for all scenarios.