

## Viking CCS Pipeline

# 9.51 Technical Note on Noise Assessment

## Document Reference: EN070008/EXAM/9.51

Applicant: Chrysaor Production (U.K.) Limited, a Harbour Energy Company PINS Reference: EN070008 Planning Act 2008 (as amended) The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Regulation 5(2)(q) Date: July 2024





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1	Introduction	. 4
2	Applicant's Responses	. 5
2.1	Construction Noise Criteria	. 5
2.2	Duration of Activities	. 5
2.3	Updated Noise Calculation Methodology	. 7
2.4	Construction Noise Calculations	. 8
2.5	Summary of Significant Effects	13
2.6	Mitigation	14
2.7	Summary	14
Apper	ndix A – Meeting Minutes	15

### **Tables**

Table 2.1: Thresholds of Potential Effects of Construction Noise at Residential Buildings	5
Table 2-2 Duration of Noisy Construction Activities	
Table 2-3 Section 1 Pipeline Construction Noise Calculations	
Table 2-4 Section 1 Pipeline Crossing Noise Calculations	8
Table 2-5 Section 2 Pipeline Construction Noise Calculations	9
Table 2-6 Section 2 Pipeline Crossing Noise Calculations	9
Table 2-7 Section 3 Pipeline Construction Noise Calculations	9
Table 2-8 Section 3 Pipeline Crossing Noise Calculations	. 10
Table 2-9 Section 4 Pipeline Construction Noise Calculations	11
Table 2-10 Section 4 Pipeline Crossing Noise Calculations	11
Table 2-11 Section 5 Pipeline Construction Noise Calculations	. 12
Table 2-12 Section 5 Pipeline Crossing Noise Calculations	
Table 2-13 Summary of Significant Construction Noise Effects	. 13



## **1** Introduction

- 1.1.1 This document has been prepared for the Viking CCS Pipeline (the 'Proposed Development') on behalf of Chrysaor Production (UK) Limited ('the Applicant'). The document contains detailed information following on from a meeting with East Lindsey District Council (ELDC) and their noise consultant regarding the assessment of construction noise and the approach adopted.
- 1.1.2 The following actions were agreed in the meeting as per minutes attached in Appendix A:
  - Provide evidence on the duration of noisy construction activities; and
  - Update construction noise prediction to account for moving plant.
- 1.1.3 This note presents information on the duration of noisy construction activities and updated predictions to account for moving plant. Where significant effects are identified, additional mitigation has been provided such that significant effects can be avoided.



# 2 Applicant's Responses

## 2.1 Construction Noise Criteria

- 2.1.1 The construction noise criteria presented in Table 13-11 of Chapter 13 [**APP-055**] was based on the Association of Noise Consultants Construction Noise Guide<sup>1</sup> (ANC Guide). The ANC Guide was issued in 2021 and, although it is primarily aimed at providing a consistent approach to Section 61 applications, it also represents the most modern interpretation of example assessment methods in Annex E of BS5228-1 and the latest industry standard.
- 2.1.2 The ANC Guide defines the Lowest Observed Adverse Effect Level (LOAEL) and the Significant Observed Adverse Effect Level (SOAEL) for construction noise, as presented in Table 2.1.

## Table 2.1: Thresholds of Potential Effects of Construction Noise at ResidentialBuildings

Time Period	Threshold Value (L <sub>Aeq,T</sub> dB)			
	LOAEL	SOAEL		
Day (07:00 – 19:00) Saturday (07:00 – 13:00)	65	75		
Evening (19.00 – 23.00) Weekends (13.00–23.00 Saturdays and 07.00–23.00 Sundays)	55	65		
Night (23.00 – 07.00)	45	55		

2.1.3 Through discussions with ELDC and their noise consultant, it was agreed to expand the criteria to account for the duration of exposure to noise above the LOAEL when identifying a significant effect. Example method 2 in Annex E of BS5228-1 states:

"Noise levels generated by site activities are deemed to be potentially significant if the total noise (pre-construction ambient plus site noise) exceeds the pre-construction ambient noise by 5 dB or more, subject to lower cut-off values of 65 dB, 55 dB and 45 dB LAeq, T from site noise alone, for the daytime, evening and night-time periods, respectively; and a duration of one month or more, unless works of a shorter duration are likely to result in significant effect".

2.1.4 As the levels quoted above are equivalent to the defined LOAELs in Table 2.1, it was agreed with ELDC and their noise consultant that a significant effect would be identified if the LOAEL was exceeded but the SOAEL was not exceeded during works lasting for a duration of one month or more.

## 2.2 Duration of Activities

2.2.1 Table 3.5 in ES Chapter 3 Description of the Proposed Development [**APP-045**] provides a breakdown of activities that would occur over a 1km stretch of pipeline over a seven-month period. A review of this table has been undertaken to determine the noisy activities and what distance they would cover over the course of a day. Estimates of likely distances covered per day and the duration of activity affecting an individual location are presented in Table 2-2.



### Table 2-2 Duration of Noisy Construction Activities

Description of Activities	Noisy Activity	Distance per day covered (m)	Number of Days Affecting an Individual Receptor
Installation of access and laydown area and/or crossing point including Prow/field access modification (as applicable	Yes (if there is an access road or laydown area present)	500m	Up to 5 days (location dependent)
Erect temporary fencing to mark out the 30m working width	No	-	-
Removal of any hedges and trees (may be completed as part of initial installation works)	No	-	-
Strip top soil and store on side of working width	Yes (concurrent	1,000m	2
Subsoil grading, benching and running track installation	activities)	1,00011	2
Mark out pipeline route with stakes	No	-	-
Installation of pre-construction land drainage (if required)	No	-	-
12m pipe lengths are transported to the location and laid out on wooden skids in preparation for welding	Yes	1,000m	1
Cold field bending of pipe	Yes	1,000m	2
Pipeline sections are welded together	Yes	500m	2
Welds are tested for integrity (starting as close as possible to first weld completion)	No	-	-
Field coating of welds (based on notification of weld integrity test confirmations)	No	-	-
Pipe trench is excavated with removed material stored on opposite side of the working width to the top-soil	Yes	1,000m	2
Welded pipe "string" is lowered into the trench using side boom crane including pipeline GPS survey	Yes	1,000m	1
Trench is back filled (using same material and compacted)	Yes	1,000m	2
Hydrostatic testing, cleaning, drying and gauging (if applicable, dependent upon test sections)	Covered on a case-by-case basis	-	-
Test section areas tied-in and backfilled (as applicable)	No	-	-



Description of Activities	Noisy Activity	Distance per day covered (m)	Number of Days Affecting an Individual Receptor
Fibre optic cables installed	No	-	-
Cathodic Protection installed (as applicable)	No	-	-
Sub Soil ripping and grading			
Top-spoil re-spread over working width	Yes (concurrent	4.000.00	
Top soil harrowing, stone picking and re-planting to make suitable for agricultural use again (as applicable)	activities)	1,000m	2
Re-planting of hedge rows (can commence on top soil re-spread or earlier, by agreement)	No	-	-
Temporary fencing removed (may be commenced on sub soil or top soil works, by agreement)	No	-	-
Installation or pipeline marker and test posts	No	-	-

- 2.2.2 The detailed information on construction works durations indicates that there would be, at worst, approximately 14 days of non-continuous pipeline construction activity at an individual receptor over the course of the construction programme with up to 5 days where construction of Right of Way (RoW) access or a laydown area is required.
- 2.2.3 Pipeline crossing where there are surface obstacles includes the following techniques and durations:
  - Horizontal Directional Drilling (HDD) 48 hours continuous activity during pull-back; and
  - Auger boring three days set up, three days augering and three days reinstatement over a 30mx10m area.

## 2.3 Updated Noise Calculation Methodology

- 2.3.1 Details of the original construction calculation methodology, including details of plant, are presented in Appendix 13-2 [APP-109].
- 2.3.2 Construction noise was calculated in ES Chapter 13 Noise and Vibration [APP-055] on a worst-case basis assuming that plant would be static and operating at the closest location within the Order Limits to a noise sensitive receptor. Noise predictions have been updated to account for the distance covered over the course of a typical day based on information in Table F.2 of Annex F of BS 5228-1.
- 2.3.3 The Order Limits are almost entirely set in rural location made up of agricultural land. Ground absorption has been set with reference to Section 7.3 of ISO 9613:2024. ISO 9613 defines 'porous ground' as "ground covered by grass, trees or other vegetation, and all other ground



surfaces suitable for the growth of vegetation, such as farming land' and suggests setting a ground absorption value of G=1 for such locations.

2.3.4 Although the Order Limits are within agricultural land, there are minor areas where there are reflective features such as roads. As such, a more conservative approach has been adopted when setting the ground absorption value at G=0.8 to account for any roads or reflective features that may exist between receptors and the Order Limits.

## 2.4 Construction Noise Calculations

- 2.4.1 Construction noise calculations are provided for receptors identified in Table 13-21 to Table 13-20 of ES Chapter 13 Noise and Vibration [APP-055]. Receptor locations have been reviewed to identify where specific receptors would be affected by pipeline construction works or Right of Way/ laydown area construction works see Figure 3-30 [APP-064] for laydown area locations. Additionally, pipeline crossing receptors have been reviewed with reference to crossing locations illustrated in Figure 3-9 [APP-064]. As such, the updated calculations account for receptors within the relevant study area distance of 300m (defined in section 13.5 of Chapter 13 Noise and Vibration [APP-055]) to specific work sites. Receptors that were previously identified as being 5m from the Order Limits (R45 and R46) have been removed as the Order Limits relate to the electrical connection for BVS1 (R45) and the access road to the Dunes Valve (R46).
- 2.4.2 A review of pipeline crossings has indicated that crossings would be auger-bored at locations nearby to receptors. As auger boring is undertaken within a trench, noise calculations have been undertaken for trench digging activities, which would result in the higher noise levels than the auger bore process itself, which is partially screened. The auger boring calculations account for works being undertaken over 10m long working area.

#### Section 1

2.4.3 The results of pipeline construction noise calculations are presented in Table 2-3.

## Table 2-3 Section 1 Pipeline Construction Noise Calculations

	Distanc	Distance	tance Representativ	Calculated LAeq,T dB				
Receptor s	e to Order Limits (m)	to Laydow n Area (m)	e Ambient Noise Conditions	Laydown Area Preparatio n Works	Pipe Stringin g	Trench Excavatio n	Pre/post Drainag e	
R3	10	40	71dB L <sub>Aeq,T</sub>	62	67	70	70	

- 2.4.4 Pipeline construction noise calculations indicate that the LOAEL would be exceeded for up to 14 non-continuous days at R3, but the SOAEL is not exceeded. As such, no significant effect is identified.
- 2.4.5 The results of pipeline crossing noise calculations are presented in Table 2-4.

#### Table 2-4 Section 1 Pipeline Crossing Noise Calculations

	Distance Representative		Calculated LAeq,T dB		
Receptors	to Crossing (m)	Ambient Noise Conditions	HDD	Auger Boring	
R3	15	71dB L <sub>Aeq,T</sub>	-	79	



2.4.6 Pipeline crossing noise is calculated to exceed the SOAEL at R3 for up to 9 days. As such, significant effects are identified.

#### Section 2

2.4.7 The results of pipeline construction noise calculations are presented in Table 2-5.

#### Table 2-5 Section 2 Pipeline Construction Noise Calculations

	Distance			Calculated LAeq,T dB				
Receptors	to Order Limits (m)	to Laydown Area (m)	Ambient Noise Conditions	Laydown Area Preparation Works	Pipe Stringing	Trench Excavation	Pre/post Drainage	
R4	200	-	56dB L <sub>Aeq,T</sub>	-	44	44	45	
R5	25	65	56dB L <sub>Aeq,T</sub>	62	59	62	62	
R6	80	-	56dB L <sub>Aeq,T</sub>	-	49	52	51	

2.4.8 Pipeline construction noise calculations indicate that the LOAEL would not be exceeded at any receptor. As such, no significant effect is identified.

2.4.9 The results of pipeline crossing noise calculations are presented in Table 2-6.

#### Table 2-6 Section 2 Pipeline Crossing Noise Calculations

	Distance			LAeq,T dB
Receptors	to Crossing (m)	Ambient Noise Conditions	HDD	Auger Boring
R5	30	56dB L <sub>Aeq,T</sub>	-	74
R5a	205	56dB L <sub>Aeq,T</sub>	58	-

- 2.4.10 Pipeline crossing noise calculations indicate that the LOAEL would be exceeded for up to 9 days at R5, but the SOAEL is not exceeded. As such, no significant effect is identified.
- 2.4.11 The nearest residential properties to the North Beck Drain HDD crossing are at R5a, which is calculated as experiencing an exceedance of the night-time SOAEL for up to 2 days. As such, a significant effect is identified.

#### Section 3

2.4.12 The results of pipeline construction noise calculations are presented in Table 2-7.

#### Table 2-7 Section 3 Pipeline Construction Noise Calculations

		Distance	Representative		Calculated	LAeq,T dB	
Receptors	to Order Limits (m)	to Laydown Area (m)	Ambient Noise Conditions	Laydown Area Preparation Works	Pipe Stringing	Trench Excavation	Pre/post Drainage
R7	280	280	56dB L <sub>Aeq,T</sub>	-	41	42	42
R8	95	-	59dB L <sub>Aeq,T</sub>	-	47	49	48
R9	170	-	59dB L <sub>Aeq,T</sub>	-	45	45	46
R10	180	-	62dB L <sub>Aeq,T</sub>	-	44	45	45



	Distance	Distance	Representative		Calculated	LAeq,T dB	
Receptors	to Order Limits (m)	to Laydown Area (m)	Ambient Noise Conditions	Laydown Area Preparation Works	Pipe Stringing	Trench Excavation	Pre/post Drainage
R11	30	-	62dB L <sub>Aeq,T</sub>	-	59	57	60
R12	65	-	62dB L <sub>Aeq,T</sub>	-	51	51	52
R13	125	-	62dB L <sub>Aeq,T</sub>	-	46	47	47
R14	105	-	62dB L <sub>Aeq,T</sub>	-	48	48	49
R15	60	-	62dB L <sub>Aeq,T</sub>	-	52	51	53
R16	140	-	56dB L <sub>Aeq,T</sub>	-	46	47	46
R17	80	-	59dB L <sub>Aeq,T</sub>	-	49	49	50
R18	110	-	56dB L <sub>Aeq,T</sub>	-	47	48	48
R19	110	-	56dB L <sub>Aeq,T</sub>	-	47	48	48
R20	210	-	56dB L <sub>Aeq,T</sub>	-	43	43	44
R21	140	140	56dB L <sub>Aeq,T</sub>	60	46	47	46
R22	150	-	56dB L <sub>Aeq,T</sub>	-	45	46	46
R23	45		55dB L <sub>Aeq,T</sub>	-	55	53	56
R24	120	-	55dB L <sub>Aeq,T</sub>	-	47	47	48
R25	80	-	55dB L <sub>Aeq,T</sub>	-	49	49	50
R52	65	180	59dB L <sub>Aeq,T</sub>	55	51	51	52
R54	260	-	40dB L <sub>Aeq,T</sub>	-	42	43	43

2.4.13 Pipeline construction noise calculations indicate that the LOAEL would not be exceeded at any receptor. As such, no significant effect is identified.

2.4.14 The results of pipeline crossing noise calculations are presented in Table 2-8.

#### Table 2-8 Section 3 Pipeline Crossing Noise Calculations

	Distance to	Representative	Calculated LAeq,T dB		
Receptors	Crossing (m)	Ambient Noise Conditions	HDD	Auger Boring	
R11	230	62dB L <sub>Aeq,T</sub>	-	53	
R12	60	62dB L <sub>Aeq,T</sub>	-	67	
R15	200	62dB L <sub>Aeq,T</sub>	-	54	
R23	230	55dB L <sub>Aeq,T</sub>	-	54	
R29	130	59dB L <sub>Aeq,T</sub>	63	-	
R25	80	55dB L <sub>Aeq,T</sub>	-	64	
R52	150	59dB L <sub>Aeq,T</sub>	-	54	

- 2.4.15 Pipeline crossing noise calculations indicate that the LOAEL would be exceeded for up to 9 days at R12, but the SOAEL is not exceeded. As such, no significant effect is identified.
- 2.4.16 The nearest residential properties to the Louth Canal HDD crossing are at R29, which is calculated as experiencing an exceedance of the night-time SOAEL. As such, a significant effect is identified.



#### Section 4

2.4.17 The results of pipeline construction noise calculations are presented in Table 2-9.

	Distance Distance		Representative	Calculated LAeq,T dB			
Receptors	to Order Limits (m)	to Laydown Area (m)	Ambient Noise Conditions	Laydown Area Preparation Works	Pipe Stringing	Trench Excavation	Pre/post Drainage
R26	15	-	40dB L <sub>Aeq,T</sub>	-	66	64	67
R27	55	260	40dB L <sub>Aeq,T</sub>	50	53	51	54
R28	135	135	40dB L <sub>Aeq,T</sub>	61	46	47	47
R29	85	-	59dB L <sub>Aeq,T</sub>	-	49	49	49
R30	130	-	59dB L <sub>Aeq,T</sub>	-	46	46	47
R31	160	-	59dB L <sub>Aeq,T</sub>	-	45	45	46
R32	35	50	59dB L <sub>Aeq,T</sub>	65	58	56	59
R33	230	-	59dB L <sub>Aeq,T</sub>	-	43	42	44
R34	60	-	50dB L <sub>Aeq,T</sub>	-	52	51	53
R35	240	-	50dB L <sub>Aeq,T</sub>	-	43	42	44
R36	85	-	50dB L <sub>Aeq,T</sub>	-	49	49	49
R56	15	20	59dB L <sub>Aeq,T</sub>	70	66	64	67

#### Table 2-9 Section 4 Pipeline Construction Noise Calculations

2.4.18 Pipeline construction noise calculations indicate that the LOAEL would be exceeded for up to 14 non-continuous days at R26 and R56 with an additional exposure of noise above LOAEL at R56 for up to 5 days; however, the SOAEL is not exceeded. As such, no significant effect is identified.

2.4.19 The results of pipeline crossing noise calculations are presented in Table 2-10.

#### Table 2-10 Section 4 Pipeline Crossing Noise Calculations

	Distance to	Representative	Calculated LAeq,T dB		
Receptors	Crossing (m)	Ambient Noise Conditions	HDD	Auger Boring	
R26	20	40dB L <sub>Aeq,T</sub>	-	78	
R27	240	40dB L <sub>Aeq,T</sub>	-	53	
R32	35	59dB L <sub>Aeq,T</sub>	-	72	
R56	20	59dB L <sub>Aeq,T</sub>	-	80	
R34	60	50dB L <sub>Aeq,T</sub>	-	67	
R36	85	50dB L <sub>Aeq,T</sub>	-	63	

2.4.20 Pipeline crossing noise is calculated to exceed the SOAEL at R26 for up to 9 days and R56 for up to 18 days (two crossing points are nearby). As such, significant effects are identified. Additionally, calculations indicate that the LOAEL would be exceeded for up to 9 days at R32 and R34, but the SOAEL is not exceeded. As such, no significant effect is identified.



#### Section 5

2.4.21 The results of pipeline construction noise calculations are presented in Table 2-11.

	Distanc Distance Representativ			Calculated LAeq,T dB			
Receptor s	e to Order Limits (m)	to Laydow n Area (m)	e Ambient Noise Conditions	RoW/ Laydown Area Preparatio n Works	Pipe Stringin g	Trench Excavatio n	Pre/post Drainag e
R37	90	-	48dB L <sub>Aeq,T</sub>	-	48	48	49
R39	90	-	51dB $L_{Aeq,T}$	-	48	48	49
R40	90	90	51dB L <sub>Aeq,T</sub>	63	48	48	49
R41	90	110	51dB L <sub>Aeq,T</sub>	57	59	57	60
R42	70	70	51dB L <sub>Aeq,T</sub>	66	48	48	49
R43	20	-	48dB L <sub>Aeq,T</sub>	-	63	61	64
R48	40	-	40dB L <sub>Aeq,T</sub>	-	56	54	47
R57	215	-	40dB L <sub>Aeq,T</sub>		43	43	44
R58	170	-	40dB L <sub>Aeq,T</sub>		45	45	46

2.4.22 Pipeline construction noise calculations indicate that the LOAEL would be exceeded for up to 5 days at R42, but the SOAEL is not exceeded. As such, no significant effect is identified.

2.4.23 The results of pipeline crossing noise calculations are presented in Table 2-12.

#### Table 2-12 Section 5 Pipeline Crossing Noise Calculations

	Distance		Calculated LAeq,T dB		
Receptors	to Crossing (m)	Ambient Noise Conditions	HDD	Auger Boring	
R41	100	51dB L <sub>Aeq,T</sub>	-	61	
R42	100	51dB L <sub>Aeq,T</sub>	-	61	
R48	150	40dB L <sub>Aeq,T</sub>	61	-	



- 2.4.24 Pipeline crossing noise calculations indicate that the LOAEL would not be exceeded. As such, no significant effect is identified.
- 2.4.25 Residential properties at R48, may experience noise levels exceeding the SOAEL if continuous HDD works are required under the Old Engine Drain and Great Eau West of Theddlethorpe during the night. As such, a significant effect is identified.

## 2.5 Summary of Significant Effects

2.5.1 A summary of identified significant effects are presented in Table 2-13.

#### **Table 2-13 Summary of Significant Construction Noise Effects**

	Estimated Duratio	n of LOAEL Exc Days	Estimated Duration of SOAEL Exceedance in Days		
Receptors	Laydown Area Preparation Works	Pipeline Construction	Auger Bored Crossing	Auger Bored Crossing	HDD (night- time works)
R3	-	14	-	9	-
R5	-	-	9	-	-
R5a	-	-	-	-	2
R12	-	-	9	-	-
R26	-	-	-	9	-
R29	-	-	-	-	2
R32	-	-	9	-	-
R34	-	-	9	-	-
R42	5	-	-	-	-
R56	5	14	-	18	-
R48				-	2



## 2.6 Mitigation

2.6.1 There are no significant effects relating to the RoW works, so only Auger Bore and HDD works are included below.

#### **Auger Bored Crossing Mitigation**

- 2.6.2 The exact location of auger bore crossings has not been determined at this stage of the project. The typical width of the construction corridor is 100m with the working width of an auger boring site is 30m. As such, there is some flexibility on where the pipeline, and therefore the auger bore crossing, would be located within the construction corridor.
- 2.6.3 To avoid significant effects due to auger boring, the following mitigation will be secured in the Draft Construction Environmental Management Plan (CEMP):
  - Auger boring activities should be undertaken at least 30m away from residential properties where practicable.
  - Where works are required within 30m of a residential property, temporary barriers will be used to screen nearby properties from noisy activities.
- 2.6.4 Partial screening by 2.4m barriers could reduce noise by approximately 5dB, which would reduce the predictions at R3, R26 and R56 (worst-case of 79 dB L<sub>Aeq,T</sub> Table 2-4) ensuring the SOAEL is not exceeded.

#### **Horizontal Directional Drilling Mitigation**

2.6.5 HDD mitigation is secured in the Draft Construction Environmental Management Plan [APP-068]. This includes the use of barriers, which would be installed around the HDD drill rig site to block line-of-sight to receptors. As such, it is expected that HDD noise would be reduced by up to 10 dB and below the night-time SOAEL at all affected receptors.

### 2.7 Summary

- 2.7.1 Updated construction noise calculations have been undertaken that include detailed estimation of the duration of high noise generating construction activities. The duration of high noise generating works will last for approximately up to 37 non-continuous days at R56 with the next most exposed property being R3 for approximately up to 23 non-continuous days.
- 2.7.2 Significant effects are identified at seven receptor groups with mitigation measures identified to avoid significant effects. If required, additional mitigation measures will be agreed with ELDC and their noise consultant which will be secured within a further iteration of the Draft CEMP.



## **Appendix A – Meeting Minutes**



## ΑΞϹΟΜ

## Minutes

Meeting n	ame
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Viking CCS Pipeline Construction Noise

### Meeting date 11/07/24

Location Teams

#### Prepared by Eddie Robinson

Time

13:30

Eddie Robinson (ER) - AECOM Attendees Eddie Robinson (ER) – AECOM Mike Williams (MW) – AECOM Adam Wilson (AW) – AECOM Ian Martin (IM) – Harbour Energy Lindsey Stuart (LS) – East Lindsey District Council Tim Britton (TB) – Royal HaskoningDHV

#### <u>Overview</u>

The meeting was held to discuss several points regarding the noise assessment submitted as part of the EIA for the Viking CCS pipeline project DCO. The aim being to provide more detail of the assessment to East Lindsey District Council and Royal Haskoning and to agree a common approach to resolving outstanding issues. The agenda of discussion points for the meeting was as follows:

- Construction noise assessment criteria:
  - ANC Guide to Construction Noise vs DMRB LA111
  - o Programme of construction works and duration of effects
  - Use of baseline ambient noise data
  - Further mitigation best practicable means
- When a Section 61 consent application would be submitted

#### Minutes of meeting

ER stated that the construction noise assessment criteria followed guidance in ANC Guide to Construction Noise but acknowledged that there were different criteria in DMRB LA111. ER stated that the Applicant was confident that the ANC construction noise criteria was appropriate and would not be adopting DMRB LA111 as it related to highway works only and not relevant to a pipeline project.

TB identified that the ANC Guide and DMRB LA111 provided different interpretations of BS 5228-1 and how the LOAEL/ SOAEL are defined. TB felt that DMRB LA111 was the correct interpretation and the SOAEL should be 65dB in low noise environments but acknowledged that, if the duration of exposure to noise is for a very short time, then 75dB SOAEL is acceptable. TB referenced 10 days of construction noise in a 15-day period as an indicator of a very short period.

ER provided some information on a seven-month period of work covering a 1km section of pipeline. ER identified several noisy activities that would affect receptors and that activity would last over the 1km stretch for up to two weeks covering, on average, 100m per day. ER stated that an individual property would only likely be exposed to noisy activities during the days that each activity passed by the property.

MW added that a series of activities would happen at one location for a short period; with activities often covering up to 500m per day. Table 3-5 from Chapter 3 [APP-045] gives an idea of what the activities would be. ER acknowledged that the construction noise assessment should be clearer regarding duration of works. TB identified that information on duration and whether the duration of noise exposure constituted a significant effect was not covered in the noise chapter.

# ER suggested providing additional information on duration of effects to supplement the construction noise assessment and identify whether the duration would be substantial enough to warrant a significant effect. TB acknowledged that this would be acceptable.

TB identified another concern was that noise predictions were not identified in Chapter 13 [APP-055], which only identified whether the SOAEL was exceeded or not. This meant it was difficult to identify whether mitigation would be sufficient to reduce noise to below 75dB. ER stated that the construction noise assessment considered a worst-case noise level when activities were static at the closest location to a receptor and did not account for the fact the plant would



be moving up to 500m per day. TB acknowledged that taking moving plant into account would provide more realistic construction noise predictions. ER asked if it would be helpful to update construction noise predictions using assumptions on the distance plant would move per day. TB acknowledged that this information would be helpful.

TB stated that he would like to see more information on what further mitigation might be needed in the event the SOAEL was exceeded. ER asked if any requirements for further mitigation could be reviewed once the additional information on the construction noise assessment. ER suggested another meeting could be arranged to discuss further mitigation once the additional information was provided. TB agreed that this would be acceptable.

ER suggested additional information could be provided as a technical note. IM suggested that the main chapter could be updated at a later date if it was felt necessary.

TB queried what the criteria for submitting a Section 61 application was and whether something more definitive could be adopted. ER stated that there's no statutory requirement to follow the Section 61 process and it is more a means of risk management against having to stop work due to complaints. IM added that an S61 would not be relied upon for mitigation and is something to be used if required. TB stated that he was satisfied with the approach if a Section 61 was not relied upon to reduce significant effects.

IM summarised the approach to provide additional information on the construction noise assessment was agreeable to East Lindsey and stated that this would be the Applicant's updated position at the hearing. ER would draft minutes summarising the discussion and distribute so the approach could be formally agreed.

#### **Summary of Actions**

Ref	Item	Action	Responsible
01	Meeting minutes	Draft meeting minutes	ER
02	Construction noise information	Provide technical note covering the duration that an individual property may be exposed to construction noise and updated noise predictions accounting for moving sources	ER
03	Additional meeting to discuss further mitigation	Arrange an additional meeting to discuss further mitigation, if required, after issuing of the technical note	ER