

Note / Memo

**HaskoningDHV UK Ltd.
Water & Maritime**

To: Lindsey Stuart
From: Tim Britton
Date: 12 September 2024
Copy: N/a
Our reference: PC3999-RHD-XX-XX-ME-X-0003
Classification: Confidential
Checked by: Caroline Martin

Subject: Updated noise and vibration comments on Viking CCS project

Dear Lindsey,

This memo relates to the support being provided by Royal HaskoningDHV to East Lindsey District Council (ELDC) on responding to the Development Consent Order (DCO) application for the proposed Viking CCS Pipeline project. My outstanding concerns relating to the applicant's noise and vibration assessment (document 6.2.13 Environmental Statement - Volume II - Chapter 13: Noise and Vibration [APP-055]), were discussed in Issue Specific Hearing (ISH) 3, and are summarised as follows:

- Relatively high (i.e. less onerous) construction noise level criteria (referred to as the significant observed adverse effect level (SOAEL)) were used in the assessment, of 75 dB $L_{Aeq, 07:00 \text{ to } 19:00}$ and 55 dB $L_{Aeq, 23:00 \text{ to } 07:00}$. These are based on the criteria applicable to eligibility for noise insulation identified in Section E.4 of British Standard (BS) 5228-1:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites – Part 1: Noise' (ASS-088).
- The assessment did not identify or account for the duration of the predicted construction noise impacts. Without information to show that the impact durations are shorter than one month, it is considered that more conservative threshold values of should be applied, of 65 dB $L_{Aeq, 07:00 \text{ to } 19:00}$ and 45 dB $L_{Aeq, 23:00 \text{ to } 07:00}$, as per Section E.3 of ASS-088.
- The assessment did not include calculated construction noise levels at receptors and therefore did not demonstrate that the proposed mitigation (noise barriers) would reduce noise levels below the adopted thresholds for potentially significant effects. Hence, it was impossible to be confident that residual noise effects are not significant.

Subsequently, the applicant submitted the following documents to the examination at Deadline 4:

- 9.61 Noise Assessment - Justification of Approach (REP4-038)
- 9.58 Technical Note on Construction Traffic Noise (REP4-042)
- 9.51 Technical Note on Noise Assessment (REP4-047)

The applicant also provided comment on noise and vibration matters in 9.64 Applicant's Response to the Examining Authority's Second Written Questions (REP5-063). These submissions and the implications for the Statement of Common Ground (SoCG) were discussed in a meeting held with the applicant's consultant (AECOM) on 11th September 2024.

The updated assessment submitted in REP4-047 provides predicted noise levels from the construction works at the identified receptors. It assesses the potential for significant construction noise effects to occur against the more conservative threshold levels identified in Section E.3 of ASS-088. The updated

assessment indicates that exceedances of these levels for one month or more would indicate a potential significant effect. These criteria were agreed in the meeting with the applicant and AECOM on 11th July 2024. Whilst exceedances of these lower thresholds are predicted, they are anticipated to last for a maximum of 14 days; hence the resultant effects are concluded to be not significant without the need for further mitigation. I have not identified any reasons to disagree with this conclusion.

The updated assessment also identifies that significant effects may occur due to predicted exceedances of the day and night-time SOAEL values (the less onerous criteria used in APP-055). It therefore proposes mitigation in the form of barriers, which are expected to reduce noise levels by 5 dB from auger boring, and by 10 dB from HDD crossing works. These assumptions were discussed in the meeting on 11th September and are considered acceptable. The maximum predicted exceedances of the identified SOAEL values are as follows:

- Daytime auger boring works – 5 dB at R56
- Night-time HDD crossing works near R29 – 8 dB

The proposed mitigation is therefore expected to avoid construction noise levels from exceeding the identified SOAEL and the residual effects are not significant. I have not identified any reasons to disagree with this conclusion.

I therefore conclude that the applicant has adequately resolved the concerns I raised in ISH3 regarding the construction noise assessment. Concerns raised previously regarding other aspects of the noise and vibration assessment were resolved in other documents submitted by the applicant to the Examination. I therefore recommend that all noise and vibration aspects of the Statement of Common Ground between the applicant and ELDC are now agreed.