

Date: 20 October 2023
Your ref: EPR/PP3501LR/A001



Tom Tartelin
Principal Permitting Officer
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BY EMAIL ONLY

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Dear Tom,

Application type: Installation: Environmental Permit (Industry Regulation)
Application reference: EPR/PP3501LR/A001
Operator: Net Zero Teesside Limited
Facility/Project name: Net Zero Teesside
Location: NZ 56858 25420 (456858,525420)

Natural England's interim advice to the Environment Agency's Habitats Regulations Assessment consultation (Regulation 63(3) of The Habitats Regulations 2017) and Appendix 4 consultation (Section 28H of the Wildlife and Countryside Act 1981).

Following on from the joint meeting on 12th October 2023 (Environment Agency, Natural England and Net Zero Teesside limited 'the Applicant') we would like to take the opportunity to summarise Natural England's advice.

We advised that the Applicant should undertake further modelling to provide a more realistic assessment of the potential air quality impacts, including impacts from amines, to understand whether or not they can be avoided or mitigated. The Applicant agreed to provide this, and we will continue to advise the Environment Agency as additional information comes forward. This letter summarises Natural England's current advice to the Environment Agency as the regulatory authority for the Environmental Permit application.

By way of background, Natural England first provided advice on this matter in relation to potential impacts on the Coatham Dunes part of the Teesmouth and Cleveland Coast SSSI during pre-application discussions with the Applicant between January and April 2021. In September 2022, we signed a Statement of Common Ground with the Applicant, which reiterated our advice of 2021. We provided advice to the Planning Inspectorate as part of the Development Consent Order ("DCO") process, via our Relevant Representations in December 2021 and Written Representations in June 2022.

Subsequent to the submission of the Development Consent Order application to the Planning Inspectorate, the Environment Agency undertook further air quality modelling for the Proposed Development as part of its own Environmental Permit application assessment. The findings of the modelling were presented in the Environment Agency's Appendix 4 consultation (Section 28H of the Wildlife and Countryside Act 1981), which Natural England has been consulted on, has reviewed and is continuing to advise on. This modelling takes into account the impact of the use of solvents in

the carbon capture process and shows that these solvents could produce amines. These emissions could double the level of aerial nutrient nitrogen deposition at Coatham Dunes to 8-10% of the relevant critical load. The Environment Agency has stated that their modelling is based on worst-case assumptions.

The background levels of nutrient nitrogen deposition at Coatham Dunes are currently above the lower critical load and the notified sand dune habitat is sensitive to elevated levels of aerial nutrient nitrogen deposition. As such, we have advised that there is the potential for aerial deposition of nutrient nitrogen from the Proposed Development to damage the notified features.

We recognise that the Proposed Development will use novel technologies and processes as part of the carbon capture facility. We also recognise that the evidence-base for how to assess impacts arising from amine emissions is still emerging. Natural England, the Environment Agency, Scottish Environmental Protection Agency and Natural Resources Wales formed a joint working group in late 2022 to ensure that amine impacts to habitats are included in air quality assessments and regulatory decision-making. However, the Applicant would not have been expected to include amine impacts within their own air quality assessments during the DCO application stage due to the uncertainty of evidence-based assessments for amines at that time.

We advised the Planning Inspectorate during the DCO application that a process contribution of 3.9% would not be likely to damage the notified features of the SSSI. However, as a result of our current knowledge of the background levels of nutrient nitrogen deposition and the new evidence provided by the Environment Agency about amines, we now advise that anything above a 1% process contribution is likely to cause damage to the notified features of the SSSI. This was discussed with the applicant during the meeting and the additional modelling they will undertake will focus on how emissions of nutrient nitrogen and the potential impacts to Coatham Dunes can be reduced using the most up to date available evidence and information. Once this is available, we will provide further detailed advice.

In summary, as a result of the Environment Agency's Environmental Permit consultation, Natural England has had cause to revisit the advice we gave during the statutory consultation phase for this application.

We now advise that there is the potential for aerial deposition of nutrient nitrogen from the Proposed Development to damage the notified features at the Coatham Dunes area of the SSSI. We welcome an ongoing dialogue with the Environment Agency and the Applicant to understand the scale of these potential impacts and how they can be avoided or mitigated.

This letter is specific to the potential for impacts on the SSSI and does not change our advice provided during the DCO process regarding the potential for adverse effects on the Teesmouth and Cleveland Coast Special Protection Area ("SPA") and Ramsar sites.

If you have any queries relating to the advice in this letter please contact me at [REDACTED]@naturalengland.org.uk

Yours sincerely

[REDACTED]

Christine Venus
Deputy Director, Northumbria Area Team

Cc
David Wagstaff, Department for Energy Security and Net Zero