Date: 25 March 2025
Our ref: 497689
Your ref: **EN010128**

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

The Planning Inspectorate
National Infrastructure Directorate
Temple Quay House
Temple Quay
Bristol BS1 6PN

CoryDP@planninginspectorate.gov.uk

BY EMAIL ONLY

Dear Sir/ Madam

NSIP Reference: EN010128

The Examining Authority's further written questions and requests for information (ExQ2).
Examining Authority's submission deadline: 25 March 2025

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Natural England is pleased to provide our answer to the Examining Authority's further Written Questions within this letter.

Natural England hopes our Deadline 5 answers are helpful and we will continue to work collaboratively with the Applicant to try and resolve the matters provided below.

Question 2.1.2 – Impacts on ecological sites – Air Quality

i) Natural England have provided a written copy of our response of the 24th January 2025.

ii) Although the Applicant has addressed many of our concerns relating to Air Quality in their submission [REP4-033], we provide more detail on the further information required below. We confirm that an Adverse Effect on Integrity, either alone or in-combination with other projects or plans, **can be ruled out** for Epping Forest Special Area of Conservation.

Methodology used to assess air quality impacts
The information provided by the applicant within [REP4-033] is helpful in understanding the process used in the assessment. However, Natural England (NE) still does not accept that the impact of the proposed development should be assessed against the 'Future Baseline'. Riverside 2, though consented, is not yet operational. It does not form part of the current (i.e. Air Pollution Information System (APIS) 2021) air quality baseline. While NE accept that the proposed development is only viable/possible with both R1 and R2 operational (which is why both are included in the proposed development scenario) and that emissions from the CC stack are dependent on the operation of R1 and R2, we do however, not accept that R2 should form part of the baseline. Schedule 4 of the Infrastructure

Planning (Environmental Impact Assessment) Regulations 2017 notes that environmental statements should include (NE emphasis):

3. A description of the relevant aspects of the ***current state of the environment (baseline scenario)*** *and an outline of the likely evolution thereof without implementation of the development as far* ***as natural changes from the baseline scenario*** *can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.*

This therefore considers the baseline scenario to be the current state of the environment (i.e. the state of the environment at whatever point the baseline surveys etc were undertaken). The assessment should therefore consider how any proposed development will cause a change from this baseline scenario.

Although the applicant's 'future baseline' is relevant in terms of emissions should the proposed development not go ahead, we advise it is not a baseline scenario in terms of the EIA regulations. It is an alternative scenario which would proceed if the proposed development did not go ahead and this is a valid comparison to make in the ES alternative assessment (i.e. the proposed alternative with the CC would result in a lesser environmental impact than the consented alternative of R1+R2 without CC). It can also be considered as a (partial) cumulative/ in-combination assessment which is an important consideration. However, the purpose of the EIA is to address how the proposed development will change the environmental baseline both alone and cumulatively (and whether that would result in a significant environmental impact). NE's position is that this should be against the current baseline.

Despite the difference in opinion, NE recognises that the applicant has undertaken the assessment requested, and considered impacts from the carbon capture, R1 and R2 separately (Tables 1-3), with the "with proposed scheme" information (both CC stacks and marine combined) in Tables 4-6 comprising the PC of the proposed development alone. The "comparison with baseline scenario" compares the "with proposed scheme" PC set against the impact from R1 only as requested.

The "with proposed scheme" information (both CC stacks and marine combined) as the project alone PC is as follows (tables 4-6):

- 0.98kgN/ha/yr Ndep (9.8% of the critical load) at Inner Thames Marshes
- 0.13ug/m3 ammonia (4.3% of the critical level) at Inner Thames Marshes
- 2.29ug/m3 NOx (7.6% of the critical level) at Inner Thames Marshes

- 0.05kgN/ha/yr Ndep (1% of the critical load) at Epping
- 0.004ug/m3 ammonia (0.4% of the critical level) at Epping
- 0.08ug/m3 NOx (0.26% of the critical level) at Epping

Therefore, there is a potentially significant impact at Inner Thames Marshes from Ndep, ammonia and NOx, and at Epping from Ndep from the project alone.

However, it is recognised that these emissions will take place alongside the "loss" of the R1 emissions in the baseline. The "comparison with baseline" scenario removes these R1 emissions – resulting in:

- 0.16kgN/ha/yr Ndep (1.6% of the critical load) at Inner Thames Marshes (table 4 indicates 3.1% of the Clo – but the relevant Clo is 10, not 5kgN/ha/yr)
- 0.009ug/m3 ammonia (0.31% of the critical level) at Inner Thames Marshes
- 0.73ug/m3 NOx (2.42% of the critical level) at Inner Thames Marshes

- 0.02kgN/ha/yr Ndep (0.33% of the critical load) at Epping

- 0.001ug/m3 ammonia (0.09% of the critical level) at Epping
- 0.03ug/m3 NOx (0.11% of the critical level) at Epping

There is therefore no longer a significant impact at Epping from the project alone, with the maximum increase of 0.33% of the critical load of Ndep.

The residual impact at Inner Thames Marshes is over 1% for Ndep and NOx from the project alone. **A consideration of impacts of other developments cumulatively at Inner Thames Marshes should therefore be undertaken to assess whether there would be harm to the site in combination** (it is recognised that the site is a SSSI so the requirements of the Habitats Regulations re. in-combination assessment do not apply.

However, the EIA Regulations do require a consideration of "*the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected…")*. This should include not just impacts from related projects (including the "non emissions" from R2 as well as R1, so the cumulative assessment could use the "impact" scenario in table 4-6 as the project's impacts i.e. the carbon capture emissions minus the 'future baseline') **but also** impacts from other developments in the area that were not operational by 31 Dec 2021 (the APIS baseline). These do not appear to have been listed/ assessed to date, as the applicant had assessed the project alone to have a positive impact compared to the future baseline.

When considering the impact of the project (cumulatively/ in-combination), factors as indicated in NEA001 can be considered including:

- The sensitivity of the relevant designated features, in this case the Eurasian teal species, vascular plant assemblages, lowland damp grassland and invertebrate assemblages. Information on APIS could be used to provide evidence for this. For example, if the species features are considered to be sensitive to nutrient N impacts on their broad habitat, or how food species could be affected. This evidence could be used to justify another critical load or indicate that a critical load may not apply in this case.
- Trends in pollution. The applicant refers to trends in declining Ndep in the area (a decline of approx. 1.6% per year since 2003) meaning the proposed development alone would retard this trend by approximately 1 year. NOx is similarly declining, though still exceeding its critical level. Consideration of in-combination retardation could be made.

In-combination assessment for Epping Forest SAC.
Although our standard advice dictates that an in-combination assessment should be carried out to assess whether in-combination an increase of >1% is experienced alongside impacts from other plans and projects, we recognise the distance of the Project from the site makes modelling difficult and we consider that the Proposed Scheme would have a low risk of undermining the integrity of the site in combination with other projects (including those much closer to the SAC, such as adjacent vehicle emissions). It is acknowledged that the key issue at this SAC is impact from vehicle emissions on roads close to the site.

Overall, the risk at Epping Forest SAC from this project is considered low, and it is recognised that any mitigation would likely be more effectively achieved by reductions in traffic emissions close to Epping Forest rather than point sources several km distant. We therefore advise that no further assessment of the impact at Epping is required.

Emission Limit Values and Mitigation
NE would accept that the defined ELVs can be considered as embedded mitigation (operating parameters) and can therefore be considered at the screening stage of the

assessment under HRA. These ELVs must be incorporated in the environmental permit/ DCO as indicated at paragraph 2.3.3.

Question 2.3.3 – Water Voles
The Applicant has confirmed to us that the requested documentation will be provided in their Deadline 5 submissions.

For further advice on this consultation please contact the case officer [redacted]@naturalengland.org.uk and copy to consultations@naturalengland.org.uk.

Yours faithfully,

[redacted]
Senior Officer
Thames Solent Area Team
Natural England