



National Infrastructure Planning
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our ref: AE/2018/123154
Your ref: EN010079
Date: 16 January 2019

Dear Sir/Madam

**APPLICATION BY NORFOLK VANGUARD LIMITED FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE NORFOLK VANGUARD OFFSHORE WIND FARM
THE EXAMINING AUTHORITY'S WRITTEN QUESTIONS AND REQUESTS FOR INFORMATION (EXQ1)**

This response relates to the Examining Authority's first set of written questions dated 19 December 2018, in relation to the proposed development for an offshore wind farm. This letter contains responses to the questions directed to the Environment Agency only. As advised in your letter and due our responses being limited to a small number of questions, we have chosen to respond by letter rather than tabulated format.

Question 1.2:

Please provide comments on any relevant information contained in the Change Report [AS-009] and Errata document [AS-010], and whether you agree with the conclusions reached by the Applicant. In the event that the amendments are accepted please indicate any consequential amendments which you require to the dDCO.

Environment Agency answer:

The amendments as detailed in the errata document [AS-010] are acceptable in the form they are written. The Environmental Statement (document 6.1) chapter 22, will need to be updated to include the changes described in Table 2.1 of the errata (points 22.1-22.7 inclusive). These are the points that relate to ecology and potential impacts during construction.

Question 16.4:

Please explain what further consideration should be given to the impacts of mobilising existing contamination on excavation, how contaminants and sediments involved can be judged of 'high reversibility' or otherwise and what

further measures to the embedded mitigation measures referred to in paragraph 114 of Chapter 19, ES [APP-343] you consider to be necessary.

Environment Agency answer:

The embedded mitigation refers to submitting a written scheme based on the guidance document Model Procedures for the Management of Land Contamination CLR11. If contamination is identified, the procedure set out in this document should be followed. This may include a risk assessment to determine whether contamination identified poses a risk to the water environment. All contamination whether of local spatial extent or of intermittent occurrence has the potential to cause an impact on the water environment, which once occurred, may not be highly reversible. As long as the procedure in CLR11 is followed, contamination identified should be able to be managed so as to ensure the magnitude is considered low.

In addition to CLR11, the embedded mitigation should also refer to piling risk assessments to ensure the protection of groundwater quality. Piling or any other foundation designs using penetrative methods can result in risks to potable supplies from, for example, pollution / turbidity, risk of mobilising contamination, drilling through different aquifers and creating preferential pathways. Thus it should be demonstrated that any proposed piling will not result in contamination of groundwater. The assessment should be submitted and approved by the Local Planning Authority.

Question 16.8:

Would the Applicant please supply the ground investigation reports by Terra Consult (2017) and GHD (2018) referred to in [APP-343].

Please comment on whether a protocol could be agreed between the Environment Agency and the Applicant for the use of HDD at each sensitive location to include site and ground investigations, risk assessment, appropriate mitigation and remediation?

Environment Agency answer:

We confirm that the ground investigation reports have been made available.

We are confident that it will be possible to agree a protocol with the applicant. The applicant should provide a protocol which includes site and ground investigations, and risk assessments regarding ecological sites and any local abstractions and the possibility of changing surface water/aquifer hydraulic continuity; appropriate mitigation and remediation measures will also need to be detailed. It will be important to assess the depth of the HDD with respect to aquifer depths and characteristics, and to agree drilling fluids and measures for monitoring and dealing with break outs.

Question 17.15:

Please comment on [RR-261] referred to above, providing documentation in your possession regarding investigations you undertook as a result of the incident and with what results.

Please provide your assessment of whether there are areas of land in the Order Limits that should not be disturbed pending further investigation and what remediation and/or precautionary measures, if any, are appropriate to consider including in the DCO if consent is granted.

Environment Agency answer:

It appears from the information provided that it has not yet been established if the land is contaminated with radiation. The type of information and the extent of any investigation of radioactive contaminated land very much depends on the information contained in the evidence. The Part 2 A guidance on Radioactive Contaminated land contains a section on 'identifying radioactive contaminated land'. This section states the following:

- Local authorities have a duty to inspect land under the extended Part 2A regime, but there must be reasonable grounds for inspecting land for radioactivity. Reasonable grounds are defined in the statutory guidance.
- Inspecting potential radioactive land may involve desk studies, site visits for visual inspection and limited sampling of surface deposits or surface radiation surveys. We will carry out an intrusive investigation on behalf of the local authority if the results of desk studies and non-intrusive surveys show the need for one.

Hence before any site investigation scoping can be considered or discussed, it must be established by the local authority if there are reasonable grounds for an inspection. If it is determined that there are reasonable grounds, then the Local Authority will need to carry out an inspection as explained above.

Please find below links to guidance to help local authorities carry out an initial assessment, and a link to the statutory guidance respectively:

<https://www.gov.uk/government/collections/radioactive-contaminated-land>

<https://www.gov.uk/government/publications/statutory-guidance-covering-radioactive-contaminated-land#history>

RR261 states: 'The handwritten report includes the statement 'IPC have informed MAFF of radioactive substance risk', this is taken from a copy of a fax which was transmitted on the day of the incident. This is the only document that was held by the Environment Agency and we are not aware of any documents that had been held by the Environment Agency. A member of the public has emailed to the Environment Agency documents that have been obtained by them which originate from several sources, but these documents were not previously held by the Environment Agency.

In respect of other potential contaminants mentioned in RR261:

From the documents submitted to the Environment Agency it is noted that recovery and remediation works were undertaken which included the removal of removal of wreckage parts as well as excavation of contaminated soils. RAF records show that EA concluded that there is little risk to the aquifer or nearby stream. Based on this, the nature of any impact and associated (conventional, i.e. non-radioactive) contamination was likely to have been localised, and any potential risks to controlled waters appear to have been addressed and mitigated to our satisfaction. As such, we would not expect additional site investigation prior to the commencement of the development. A robust discovery strategy should be in place during the works in case unsuspected contamination is encountered. We note that control measures are referenced in the Outline Code of Construction Practice (APP025) and secured by Requirement 20(2)(d).

Therefore, it not possible to state at this stage that an area of land should not be disturbed.

Question 20.51:

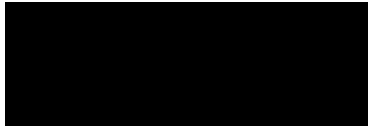
The Environment Agency Comment on how, if at all, Requirement 20 should be varied in light of your concerns to safeguard areas within your remit.

Environment Agency answer:

Following assurances that are documented in the Statement of Common Ground we are content that the areas in our remit are adequately safeguarded and as such variation to Requirement 20 is no longer necessary.

We trust that these responses are of assistance.

Yours faithfully



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