

Keuper Gas Storage Project Case Team
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Our ref: SO/2016/115762/03-L01
Your ref: EN030002
Date: 05 July 2016

FAO Jonathan Green

Dear Sir

**RESPOND TO EXA'S SECOND ROUND OF QUESTIONS 1.7 AND 1.8
DEVELOPMENT CONSENT ORDER TO CONSTRUCT, OPERATE AND MAINTAIN
THE KEUPER UNDERGROUND GAS STORAGE FACILITY AND ASSOCIATED
DEVELOPMENT
LAND AT AND SURROUNDING THE HOLFORD BRINEFIELD, NORTH OF
MIDDLEWICH, CHESHIRE**

Thank you for your letter dated 14th June 2016.

In response to the Examining Authority's second round of written questions, we would like to make the following comments:-

Question 1.7 Main assessment area - Water quality

Is the Environment Agency satisfied with the conclusion of 'no deterioration' in relation to the Water Framework Status of Puddinglake Brook and local groundwater? Is it also satisfied that the project as a whole (including the Runcorn Outfall and the Main Assessment Area will not prevent the achievement of objectives for the North West River Basin Management Plan and the Dee River Basin Management Plan.

There should not be any significant change to the existing discharges to Puddinglake Brook, so there will not be any deterioration from the current water quality of the waterbody.

The site is located within the Weaver & Dane Quaternary Sands and Gravels groundwater body boundary. Geological maps show that the site is located above glacial till. We would not expect this development to lead to a deterioration in the Water Framework Directive status of the local groundwater body.

For the discharge from the Runcorn site the Water Framework Directive 10% no deterioration condition was applied to the key chemical elements to be taken into account for the application. The H1 Annex E – (Surface Water Discharges) document produced by the Environment Agency describes the 10% rationale. However, this document does not contain guidance in relation to salinity as this was without an

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environmental quality standard (EQS) but the principle as set out was used in relation to 10% above the background levels. Trace elements in the salt deposits, metals and other substance, were modelled against the relevant EQSs and the majority found to result in no significant impact. The elements which would potentially breach the no deterioration condition or the EQS limits were carried forward for further investigation and modelling resulting in the setting of limit conditions in the permit.

In relation to ecological effects under the Habitats Directive the project should not have an adverse effects on European sites. In this case the Mersey Estuary is a protected site (SPA, RAMSAR) with ornithological interest. The results of the assessments on the increased saline discharge did not show any significant effects on benthic invertebrates and in turn any effects on birds were considered unlikely.

Question 1.8 - Runcorn outfall - Water Quality

Shales, such as those at the main assessment area, may contain naturally occurring radioactive material (NORM). Can the Environment Agency confirm whether this issue was considered as part of the permitting process to grant a discharge consent and whether this meets the requirements of the UK Governments Strategy for the Management of NORM?

The determination process was very involved and included input from a lot of internal and external consultees to ensure environmental impacts were rigorously considered. A full hazardous pollutants review was done to determine the suitability of the discharge and numeric emission limits were set based on this review. However, NORM is not specifically mentioned in the decision document.

I hope you find these responses to your satisfaction, should you have any further questions or queries please do not hesitate to contact me.

Yours faithfully

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