From:	margot.cronin@marine.ie
To:	Jim Moriarty
Subject:	Aughinish DaS S0026-02
Date:	Thursday 28 March 2024 15:25:15
Attachments:	Aughinish 2024_MI obs.pdf

Hi Jim,

Attached are MI comments for Aughinish DaS application S0026-02.
If you need clarification on anything, let me know.

All the best, Margot

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To: Jim Moriarty, EPA
From: Margot Cronin, MI
RE: Aughinish Dumping at Sea application, 2024
EPA Ref: S0026-02
Date: 26/03/2024

Dear Jim,

Background: This application is for an eight-year permit to dredge and dump at sea sediment annually arising from maintenance dredging. Approximately 53,846 tonnes annually are proposed to be disposed of at the Foynes designated dumpsite, currently used by SFPC. Approximately 29,710 tonnes annually are proposed to be plough dredged.

Sediment sampling and chemical analyses were carried in November 2023 based on a recommended sampling and analyses plan from MI. The chemistry results demonstrate no parameters exceeding the lower action levels. These concur with the results of the January 2021 AER testing, which also did not show any exceedance above the lower action level. These sediments are categorised as Class 1 (i.e. essentially clean).

Titanium and iron concentrations were also provided but are not included in the dumping at sea assessment process. Irish guidance levels do not exist for titanium or iron in marine sediment. In the absence of an assessment procedure, iron concentrations from this report were compared with historic data from marine sediment samples from the Shannon Estuary and suggest that the Aughinish data are within normal iron ranges for marine sediment in that location. There appears to no background data for titanium in Irish marine sediment and so a assessment could not be made. Information from the ECHA[1] website advises that *"Sediment toxicity tests reveal that microsized TiO2 is not chronically toxic to sediment organisms up to concentrations of at least 100,000 and 14,989 mg/kg dw (nominal) in freshwater and marine sediment, respectively"*. The value of 14,989 mg/kg dw in marine sediment is well in excess of titantium concentrations measured in the Aughinish sediment.

The material to be dredged is predominantly silt/fine sand. Based on existing guidance for assessment of dredged material for disposal at sea, I'm satisfied that the sediment chemistry alone would not preclude the disposal of the material at the designated dumpsite, in the absence of alternative feasible use.

In line with OSPAR requirements, further testing of the sediment should be carried out at three-year intervals throughout the duration of the permit.

Best regards,

MCronin

Margot Cronin

[1] ECHA is the European Chemicals Agency
https://www.echa.europa.eu/web/guest/registration-dossier/-/registered-dossier/15560/6/3