

Liverpool Bay CCS Project

Marine Licence CML2365 - CEMP#3 Rev D

APPENDIX M

Chemical Risk Assessment for Douglas CCS Platform Grouting Operations (WIA/2030) Rev 0

Supporting document referenced in Section 2.10 of CEMP#3 Rev D in relation to grouting operations and marine discharges associated with installation of the new Douglas CCS Platform.



Chemical Risk Assessment for Douglas CCS Platform Grouting Operations (WIA/2030)

Introduction

This Chemical Risk Assessment (CRA) presents key technical information relating to Chemical Permit Subsidiary Application Template (SAT) (DESNZ reference not available until first submission). This application is seeking a term permit to use and discharge chemicals under the Offshore Chemicals Regulations 2002 (As Amended) (OCR), whilst undertaking grouting activities during the installation of the new Douglas Carbon Capture Storage (CCS) platform. It should be read in conjunction with the Environmental Assessment Justification (EAJ) memorandum, provided in Master Application Template (MAT) WIA/2030.

Operational Information

Transportation and installation of the Douglas CCS platform is scheduled from 1st September 2026 to 31st December 2026, lasting for up to 18 days. Installation of the Douglas CCS platform will be undertaken by Heerema Marine Contractors (HMC) using the Deepwater Construction Vessel (DCV) Balder. Transportation of the jacket, piles, and topsides will be carried out using barge H-408. A Heavy Lift Vessel (HLV) will be utilised to load the topsides onto the H-408 barge.

Grout stations will be deployed on the Douglas CCS platforms spider deck with hoses running alongside the jacket legs. Grout will be pumped into the annular gap between the piles and jacket sleeves. Once overflow is observed at the pile stabbing cone, a further 25% of grout will be injected into the pile sleeve to ensure a uniform grout composition throughout the full height of the sleeve and mitigate the potential for voids.

Discharge Routes

When in its slurry form, limited diffusion of grouting chemicals into the water column may occur. Losses via this pathway are expected to be negligible due to the relatively high density of the slurry, limited exposed grout surface area and rapid setting of liquid slurry into its solid state.

Following completion of grouting activities, all equipment will require cleaning to prevent the setting of the grout within the machinery. Seawater will be pumped through the system to drive the cleaning prior to discharge to the sea surface. It has been estimated that up to 10% of the total grouting chemicals may be discharged in this process.

Chemical Information

Chemical Name	Chemical Supplier	Cefas Registration Number	Chemical Labels	Expiry Date
Dyckerhoff Class G	Dyckerhoff GmbH	29331	OCNS E PLONOR	07/12/2026

Conclusion

Only one product is required for the grouting operation. This product has been assigned the OCNS grouping of E, the lowest risk category, and is labelled as Poses Little Or NO Risk to the marine environment (PLONOR). This product is comprised of inorganic solids that will rapidly be dispersed and diluted upon discharge by the dynamic oceanographic conditions prior to becoming incorporated in the seabed sediments. As this product does not have the potential for toxic harm and will become rapidly diluted, no environmental risk has been identified from this discharge. It is therefore considered that the use and discharge of chemicals for grouting during the installation of the Douglas CCS platform constitutes an **Acceptable** risk to the environment.



Compliance

Eni's HSE Management processes will ensure that compliance with the chemical permit applied for is maintained throughout the consent period. Specific controls and management processes relating to the management of chemicals offshore include:

- The implementation of a Chemical Tracker to monitor use and discharge of chemicals,
- Routine reviews and updates of chemical usage and stocks,
- Training and awareness of all operational personnel with roles related to chemical management, the Offshore Chemicals Regulations (2002) (as amended 2011), and their implications in relation to everyday use and discharge offshore,
- Operational Chemical Management Procedures, and
- HSE Monitoring and Reporting Schedules for the necessary data capture and reporting.

Tracking of cumulative use against permitted amounts occurs, with warnings being raised when values exceed 80% of the permitted quantity. If this occurs, the Well Services Supervisor will establish the reason for any abnormal patterns and determine whether the circumstances require a variation, non-conformance or PON1 to be issued.