

Viking CCS Pipeline

**Environmental  
Statement Volume IV –  
Appendix 3-6:  
Operational Phase  
Mitigation**

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Applicant: Chrysaor Production (U.K.) Limited,  
a Harbour Energy Company  
PINS Reference: EN070008  
Planning Act 2008 (as amended)  
The Infrastructure Planning (Applications: Prescribed Forms  
and Procedure) Regulations 2009 - Regulation 5(2)(a)  
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# 1 Draft Operation/Maintenance Mitigation Register

- 1.1.1 As part of the development of the Environmental Statement (ES), this Draft Operational Phase Mitigation Register has been developed which outlines all of the currently identified environmental commitments, mitigation measures, and measures to ensure compliance with legislation and requirements of Statutory Environmental Bodies and monitoring programmes specifically for the operational and decommissioning phases of the Viking CCS Pipeline (hereafter called the Proposed Development).
- 1.1.2 The Draft Operational Phase Mitigation Register will detail the responsible party for each commitment and mitigation measure to be undertaken. As the Proposed Development develops, the Register will be continually reviewed and updated as required.
- 1.1.3 The Draft Mitigation Register (Operational/Maintenance Phase) is presented below in **Table 1**.

**Table 1: Draft Mitigation Register (Operational Phase)**

Commitment Reference Number	Commitment	Responsible Person
Op01A	Should ground gas investigations and the GGRA determine that the site is at risk from ground gas then there may be a requirement for ground gas protection measures for above ground facilities. The requirement for ground gas protection measures will be assessed in line with British Standard 8485:2015+A1:2019 - Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings	Contractor
Op02	A Generic Quantitative Risk Assessment (GQRA) will be undertaken in line with LCRM guidance to identify potential risks to identified human health and groundwater receptors from soil, soil vapour and groundwater contamination. Although the CEMP assumes a GQRA will be undertaken in line with LCRM, this is particularly pertinent at the Reception Facilities where permanent above-ground, potentially manned buildings will be present. A contamination inspection and discovery strategy will be devised and agreed with the regulatory authorities prior to any remedial works, if required. The determination of the risks through ground investigation and risk assessment, and the potential remediation of areas may result in the reduction of the	Contractor

Commitment Reference Number	Commitment	Responsible Person
	significance, or even removal, of some of the potential effects identified	
Op03	In the event that construction activities, including watercourse crossings, result in deposition of sediment within watercourses resulting in siltation of river beds, changes to morphology or result in loss of channel capacity, post-works restoration will be applied.	Contractor and the Applicant
Op04	Critical electrical equipment should be raised a minimum of 300mm above the 2115 0.1% AEP breach depth. Achieved by raising infrastructure or locating vulnerable infrastructure within a watertight surround.	Contractor and the Applicant
Op05	A Flood Warning and Evacuation Plan should be provided.	Contractor and the Applicant
Op06	Use of flood resistant and resilient construction materials.	Contractor
Op07	Facility users to sign up to the EA Flood Warning Service to receive flood warnings.	Contractor and the Applicant
Op08	No maintenance visits during periods when a Flood Warning is in force.	Applicant
Op09	Establish an aftercare period to monitor all habitat reinstatement/creation/mitigation measures/net gain assessment by a suitably qualified ecologist to assess success. Where necessary, identify and implement remedial measures such as replacement of failed trees within newly planted hedgerows;	The Applicant
Op10	Careful design (e.g., selection plant species for landscape planting that will be beneficial to a range of bird and insect species)	The Applicant
Op11	Controls on noise generation and propagation will be included where necessary;	The Applicant
Op12	The design of the Proposed Development will allow for it to be safely shutdown in an emergency situation	The Applicant
Op13	Any lighting required will be designed to ensure there is reduced potential for impacts on neighbouring properties or habitats.	The Applicant
Op14	Close coordination and communication between other nearby operators would be undertaken to ensure all relevant emergency	The Applicant

Commitment Reference Number	Commitment	Responsible Person
	procedures are made available to the Proposed Development.	
Op15	Fire detection and fire protection systems will be installed at other developments, and at the Proposed Development.	The Applicant
Op16	Implement measures to minimise storage volumes of high hazard materials.	The Applicant
Op17	The venting of CO <sub>2</sub> will be undertaken at a rate whereby the noise at the nearest Noise Sensitive Receptor will be no greater than 10db above daytime background levels, which are 51 dB at Immingham and 38 dB at Theddlethorpe. These levels will be back calculated to the perimeter of the facility and monitored as such.	The Applicant
Op18	Fixed plant is required to achieve BS4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound'. These requirements are detailed from paragraph 13.4.31 to 13.4.35 in <i>ES Volume II Chapter 3: Description of the Proposed Development</i> and criteria has been outlined in Table 13.15 of <i>ES Volume II Chapter 13 Noise and Vibration (Application Document 6.2.13)</i> .	The Applicant
Op19	<p>Little Ringed Plover, Theddlethorpe Facility Option 1</p> <p>A reduction in the number of breeding pairs at the former TGT (currently 2) is considered to be unavoidable without mitigation. However, it may be possible to retain the little ringed plover breeding population in the locality if the project can influence the management at the Lincolnshire Coastal Grazing Marsh Project area which are located immediately adjacent (to the east) of the former TGT. Appropriate management at the wetlands might include long-term changes to the strategy for marginal vegetation cutting regimes to reduce the threat of loss of little ringed plover nesting habitat due to encroaching vegetation. Additionally, any gravel/cobble substrate won from the former TGT during site clearance/construction could be used to create wader breeding islands at the wetlands immediately adjacent to the Coastal Grazing Marsh Project area. Prior approval would need to be sought from The Lincolnshire Coastal Grazing Marsh Project</p>	The Applicant

<b>Commitment Reference Number</b>	<b>Commitment</b>	<b>Responsible Person</b>
	and relevant consultees, including Natural England.	

