2024

2024 Environmental Report

INEOS E&P (UK) LIMITED

INEOS Energy

CONTROLLED DOCUMENT

Title:

INEOS E&P (UK) Limited

2024 Environmental Report

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Contents

Glossary

BMS	Business Management System
EMS	Environmental Management System
HSE	Health and Safety Executive
ISO	International Standards Organisation
NUI	Normally unattended installation
OCNS	Offshore Chemical Notification Scheme
OPEP	Oil Pollution Emergency Plan
OSPAR	Oslo Paris convention for the protection of the marine environment of the NE Atlantic
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning
PLONOR/ PLO	Poses Little or No Risk to the environment
PON1	Petroleum Operations Notice 1
PWT	Produced water treatment plant
SHE	Safety, health and environment
SHEMS	Safety, Health and Environment Management System
SNS	Southern North Sea
SUB	Chemical is a candidate for substitution
VOC	Volatile Organic Compounds

1 Introduction

This document is the 2024 Environmental Report for INEOS E&P (UK) Ltd (hereafter referred to as 'INEOS'), detailing the offshore operations conducted throughout the year.

As a public statement, this report is designed to:

- Outline the scope of the company's offshore activities;
- Provide an overview of the INEOS Environmental Management System (EMS);
- Present the company's environmental policy, along with its goals, objectives and targets; and
- Summarise performance achievements for 2024.

This document is the tenth annual Environmental Report to be issued as a public statement by INEOS E&P (UK) Limited.

2 Scope of Activities

This Section summarises activities undertaken in 2024.

2.1 Overview of INEOS

INEOS Group is a global manufacturer of petrochemicals, speciality chemicals and oil products. Comprising 30 individual businesses, INEOS operates across 173 sites in 32 countries. The group generates annual revenues of approximately $55 billion.

In 2024, INEOS was the operator of the Breagh and Clipper South gas production fields. Additionally, the Cavendish and Windermere installations and Topaz subsea well were decommissioned in 2024.

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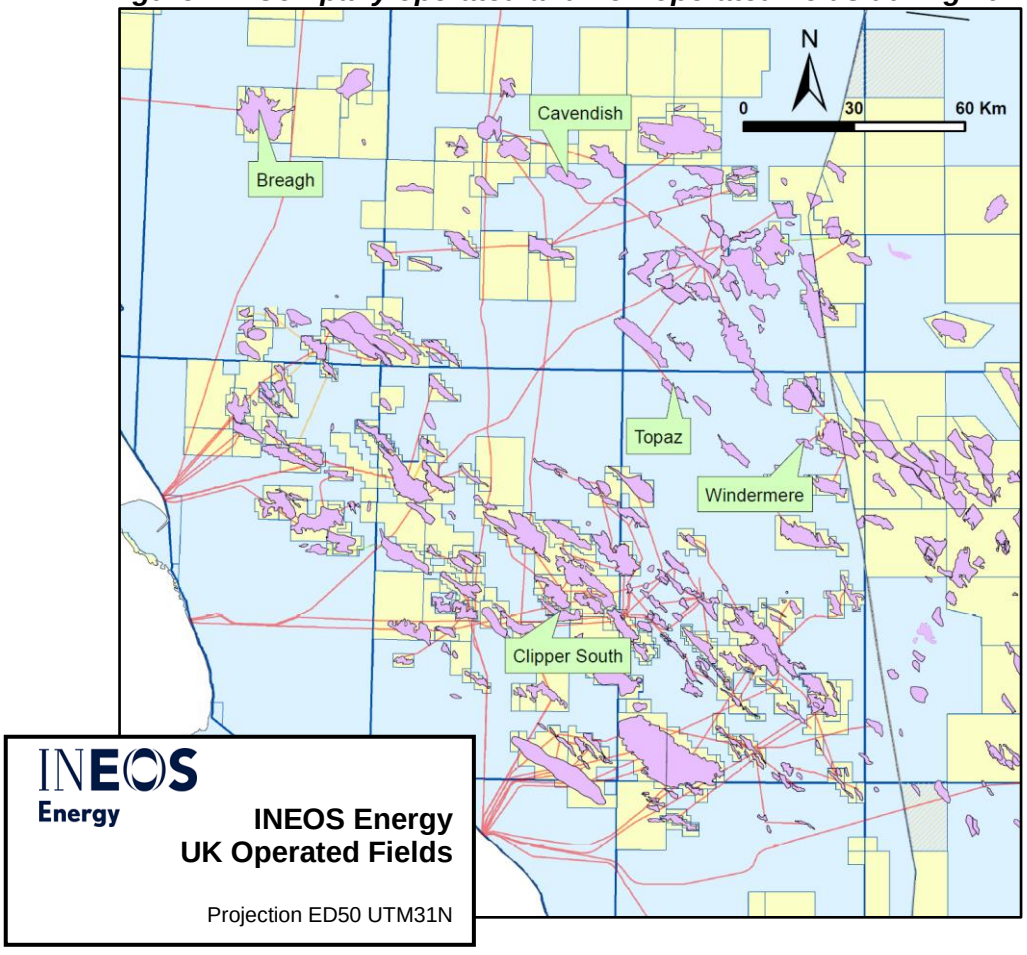
2.2 Location of Offshore Activities during 2024

The locations of INEOS operated fields are shown in Figure 2.1 below.

Figure 2-1 Company operated and non-operated fields during 2024



2.2.1 Production Operations

2.2.1.1 Breagh

The Breagh A platform is situated in SNS Block 42/13a, approximately 65 km off the UK coast, in a water depth of 62m. Installed in late 2011, the platform began production in October 2013. It is a Normally Unmanned Installation (NUI), with maintenance visits typically one week in every four.

In 2024, INEOS managed the Breagh platform for production purposes. Well interventions were also undertaken to remove sliding sleeves as part of the electric onshore compressor being commissioned. No drilling campaigns were conducted on the platform during this period.

2.2.1.2 Clipper South

Production at the Clipper South platform commenced in August 2012. The platform is located within SNS Block 48/19, positioned in a water depth of 23.5 meters. It is operated as a NUI, with maintenance visits typically lasting six days per month.

Initially, Clipper South exported gas via the ConocoPhillips-owned LOGGS platform. However, following its decommissioning in October 2018, a new pipeline was established to connect Clipper South to the Shell-owned Clipper platform was installed. Additionally, a produced water treatment plant was installed in 2018 to manage the liquid handling requirements at the Clipper platform.

2.2.2 Other Operations

2.2.2.1 Cavendish

Decommissioning activities were fully completed in 2024. This involved complete removal of the topsides and jacket for recycling in the Netherlands. The seabed verification surveys were also conducted in July 2024.

2.2.2.2 Windermere

Windermere was fully decommissioned in 2024, with the jacket being removed and brought onshore to the Netherlands on the 13th of April, and seabed verification surveys being completed in July 2024.

2.2.2.3 Topaz

The Topaz subsea well was plugged and abandoned in 2024 and the subsea wellhead protection structure removed by the end of the year.

3 EMS Summary

This Section provides a brief description of the company's Environmental Management System (EMS) as it operated in 2024.

3.1 Introduction

The EMS serves as a critical component of the overarching Business Management System (BMS). It defines the organisational framework, planning activities, responsibilities, procedures, business processes and resources necessary for developing, implementing, reviewing and maintaining the environmental policy.

The EMS is a tool for identifying and managing the impact the business has on the environment. It works to reduce this impact by controlling the quantity of materials and energy used and the amount of waste produced. As well as facilitating the management of environmental impacts in a credible way, the EMS provides a practical tool to help evaluate and improve performance.

The following guiding principles and methodologies are incorporated into the OSPAR Strategy and integrated, as appropriate, into the EMS:

- the precautionary principle;
- the polluter pays principle;
- best available techniques and best environmental practice, including, where appropriate, clean technology;
- sustainable development;
- the application of an integrated ecosystem approach; and
- the waste management hierarchy, prioritizing avoidance, reduction, reuse, recycling, recovery, and residue disposal.

3.2 Verification

The offshore operations undertaken by the business have had ISO 14001 certification since 2010, which was first obtained by previous owners of the business and has continued through into INEOS ownership. This covers the management of all the company's exploration, drilling, development and production operations. Recertification was achieved in December 2022 (valid for 3 years).

3.3 Review

A formal review of SHEQ performance is conducted annually. This is an essential step required to assess the effectiveness of the SHEMS in achieving the aims of the company's policy and objectives and to achieve continuous improvement in the control system.

The review process enables the company to:

- review progress against existing objectives and targets;
- consider evidence of performance, such as audits and other reports;
- consider the sufficiency of the organisational structure, the available resources, the policy and the management system in general; and
- agree new objectives and targets.

Internal auditing is used to objectively investigate how each element of the management system is being applied. Internal audit reports provide input to management review, along with other performance indicators.

4 Environmental Policy

This Section provides a brief description of the company's environmental policy, including relevant environmental goals, objectives and targets set for significant environmental aspects and impacts.

4.1 Introduction

In line with the OSPAR Strategy, the company has established an environmental goal of protecting and conserving the maritime area against any potentially adverse effects resulting from its activities. To achieve this goal, programmes and measures to identify, prioritise, monitor and prevent/reduce/eliminate any emissions, discharges or losses of substances which could cause pollution, have been developed.

Non-polluting activities, that may have potentially adverse effects on the ecosystems and biological diversity of the maritime area, include exploration activities and the installation or decommissioning of structures, cables and pipelines.

4.2 SHE Policy Statement

The components of the SHE Policy Statement that relate to environmental management are stated in the remainder of this Section.

The Company recognises its moral and legal obligations to conduct all activities in a manner which protects the natural environment with the prevention of pollution. All employees are required to act responsibly to protect the environment.

In relation to environmental management, the company will:

- annually set SHEQ objectives, seeking to achieve continual improvement;
- ensure that a competent workforce is established and receives all necessary information, instruction and training and that all personnel have a clear understanding of their roles and responsibilities;
- provide all personnel with opportunities for participation in SHE decisions, risk assessments and aspects of SHE management as well as undertaking consultation and communication regarding SHE issues;
- monitor and record SHEQ performance and assess compliance through internal audits;
- annually conduct management review of performance against objectives, including review and development of the Policy and BMS and communicate the results of this review with the workforce;
- ensure that sufficient resources are provided to achieve its objectives.

For all business activities and projects, the company will:

- comply, as a minimum, with all SHE legislation applicable in the UK, to discharge its Duty of Care, applying best industry practice and undertaking steps to improve safety or environmental protection levels where appropriate
- ensure that systematic hazard identification, assessment of risk and incorporation of measures to minimise and control risks are central to all our activities;
- apply all necessary control measures in the design, construction and operation of offshore facilities to prevent the occurrence of major accident events;

- select competent contractors with regard to their SHEQ management capability and provide them with all necessary information, including definition of INEOS's SHEQ requirements;
- monitor and audit contractors as necessary to ensure satisfactory quality assurance and SHE performance; and
- maintain emergency and contingency plans.

The company requires each of its contractors and suppliers to:

- operate effective SHEQ management systems; and
- comply with INEOS's SHEQ requirements including appropriate SHEQ planning, hazard identification, risk control, performance monitoring and reporting.

4.3 Objectives and targets for 2024

The environmental management objectives and targets for the period between January and December 2024 were determined to progressively achieve the commitments set out in the SHEQ Policy Statement. Section 5.2 provides further detail.

5 Performance Summary

This Section provides a summary of performance in relation to compliance with relevant legislative requirements and compliance with the environmental policy, goals, objectives and targets. A summary of offshore environmental aspects, and their associated emissions and impacts, is also provided.

5.1 Introduction

The company's internal and external auditing processes enabled reporting on the areas of environmental performance defined in Section 4, i.e. the extent to which the environmental goals listed below have been achieved:

- compliance with legislation;
- progress made in achieving environmental goals; and
- continual improvement in environmental performance.

5.2 2024 Environmental Performance Summary

Progress against the identified objectives and targets for 2024 is considered in the annual Management Review. Key objectives and targets are related to incidents, BMS development and certification, competence, emergency preparedness and response, audit and review and the offices. In 2024, all objectives were achieved and the audit schedule continued throughout the year to ensure that progress against objectives and targets is maintained.

5.2.1 Production Activities

Production operations during 2024 were undertaken at Breagh and Clipper South. Section 5.2.2 provides information concerning other activities.

5.2.1.1 PON1 Incidents

On the 12th of September 2024, a PON1 incident occurred on the Clipper South platform, resulting in the discharge of approximately 201.4kg of Oceanic HW 540 hydraulic fluid into the sea. The release was caused by a failure in the hydraulic system. The spill which was located on the grated area of the cellar deck, was unable to be contained and subsequently spilled into the surrounding areas. The spill was later contained during manned operations and the authorities were notified.

5.2.1.2 Chemical Use and Discharge

During 2024, methanol (**category E, PLO**) was used by the Breagh platform to prevent hydrate formation during well start up. The methanol is used in a dosing system; it is stored in a tank and then transported back to shore with production. Similarly, Monoethylene Glycol (all dilutions) was used as part of the well intervention work during 2024. It was returned to the platform where it was stored over before returning onshore for treatment. SOBO S Gold 08 was permitted but not used during 2024.

During 2024, three products were used regularly for Clipper South operations: pipeline hydro test, Ethylene Glycol MEG, Champion X (OCNS Category E); corrosion inhibitor, CORR13610A, Champion X (colour band Gold); and corrosion inhibitor, CORR2617A, Champion X (OCNS colour band Silver). These products prevent corrosion in the pipeline between Clipper South and its host platform. These products are not discharged during normal operations. Chemical EC6671A (Champion X) and SOBO S Gold 08 (Oil Technics Ltd) were permitted but not used.

Table 5-1 below presents the quantities of chemicals used and discharged at Breagh and Clipper South during 2024 based on label and ranking categories.

Table 5.1 Summary of Chemical Types Used and Discharged during normal platform operations

OCNS category or colour band ranking	Additional Label	Quantity (kg)	
		Use	Discharge
Breagh			
E	PLONOR	6332	12
Clipper South			
E	PLONOR	1771	0
Gold	-	6683	0
Silver		22142	0
Total			
E	PLONOR	8103	12
Gold	-	6683	0
Silver		22142	0

5.2.1.3 Produced Water Discharges

The Breagh platform uses a closed production system and there are no separation facilities or disposal caissons; therefore, there are no discharges of produced water.

Clipper South is equipped with a produced water treatment (PWT) plant, designed to remove produced water prior to export to Clipper. Table 5-2 provides details of the volume of water processed To by the PWT plant, along with the sampling results of the treated and discharged water.

Table 5.2 Clipper South PWT Discharge Results

Month	Total Volume of Water Discharged (m^3)	Average Oil in Water (mg/l)	Weight of Oil Discharged (t)
January	10615.86	13.52	0.143
February	8288.00	10.36	0.086
March	8021.00	12.55	0.101
April	7066.00	14.53	0.103
May	5025.00	9.38	0.047
June	3778.00	1.13	0.004
July	10381.00	7.18	0.075
August	10737.00	9.47	0.102
September	10328.00	6.94	0.072
October	10054.00	3.03	0.030
November	10170.00	4.70	0.048
December	10078.00	6.94	0.070
Total	**104541.86**	**-**	**0.881**

5.2.1.4 Waste

In 2024, Breagh and Clipper South collectively generated 61.3 tonnes of waste, with Breagh producing 18.8 tonnes and Clipper South producing 42.5 tonnes. The waste generated from Clipper South also represents the small percentage of waste produced from the well surveillance campaign (broken down in Section 5.2.2.5). The majority of the waste from both platforms was either recycled or converted into energy. No waste was directed to landfill. A summary for Breagh and Clipper South is provided in Table 5.3 and

Table *5.4*, respectively.

Table 5.3 Summary of Group I-II Waste from Production Operations* from Breagh *(tonnes), 2024

Group	Type	Reuse	Re-cycling	Waste to Energy	Incinerate	Landfill	Other	Total	Comments
Group I	Chemicals / Paints	0	0	0	0	0	0	0	
	Drums / Containers	0	0.150	0	0	0	0	0.150	
	Oils	0	0.020	0	0	0	0	0.020	
	Misc	0	0.438	0.116	0	0	0.820	1.374	Other is 'treatment'
	Sludges/ Liquids/ Washings	0	0	0	0	0	0	0	
Group II	Chemicals / Paints	0	0.035	0	0	0	0	0.035	
	Drums / Containers	0	0	0	0	0	0	0	
	Scrap Metal	0	7.010	0	0	0	0	7.010	
	Segregated recyclables	0	2.337	0	0	0	0	2.337	
	General	0	1.872	6.048	0	0	0	7.920	
	Sludges/ Liquids/ Washings	0	0	0	0	0	0	0	
Total		0	11.862	6.164	0	0	0.820	**18.846**	

Table 5.4 *Summary of Waste from Production Operations* from Clipper South *(tonnes), 2024*

Group	Type	Reuse	Re-cycling	Waste to Energy	Incinerate	Landfill	Other	Total	Comments
Group I	Chemicals / Paints	0	0.239	0	0	0	0	0.239	
	Drums / Containers	0	0.151	0	0	0	0	0.151	
	Oils	0	0.810	0	0	0	0	0.810	
	Misc	0	3.700	0.440	0	0	0.165	4.305	Treatment
	Sludges/ Liquids/ Washings	0	0	1.900	0	0	0	1.900	
Group II	Chemicals / Paints	0	0.025	0	0	0	0	0.025	
	Drums / Containers	0	0.010	0	0	0	0	0.010	
	Scrap Metal	0	9.375	0	0	0	0	9.375	
	Segregated recyclables	0	6.625	0	0	0	0	6.625	
	General	0	4.066	14.984	0	0	0	19.050	
	Sludges/ Liquids/ Washings	0	0	0	0	0	0	0	
Group III	Asbestos	0	0	0	0	0	0	0	
	Radioactive materials (exc. NORM)	0	0	0	0	0	0	0	
	Clinical	0	0	0	0.005	0	0	0.005	
	Explosives	0	0	0	0	0	0	0	
Total		0	25.001	17.324	0.005	0	0.165	**42.495**	

In addition to the above wastes, the liquid waste generated at the Breagh platform during routine maintenance visits was minimal, comprising small volumes of wastewater from sinks and showers, along with sewerage from toilets, which was discharged to sea. The Clipper South platform has a macerator to process all black waste. The small portion of domestic waste generated during NUI visits is bagged and transported onshore. As per company policy, no rubbish, including plastic, is permitted to be disposed of overboard.

5.2.1.5 Atmospheric Emissions

The Breagh and Clipper South platforms operate with self-sufficient power supplies using standalone diesel generators. Operational emissions to air from the combustion of diesel fuel to power these generators is summarised in Table 5.5 below.

Table 5.5 Emissions to Air from Breagh and Clipper South, 2024

		Emissions to Air (tonnes)							
Asset	Diesel used (t)	CO_2	NO_X	N2O	SO2	CO	CH4	VOC	CO2e*
Breagh	**63.0**	**202**	**3.7**	**0.01**	**0.25**	**0.99**	**0.01**	**0.13**	**206**
Clipper South	**138.3**	**443**	**8.2**	**0.03**	**0.55**	**2.17**	**0.02**	**0.28**	**451**

* CO_2e value shown is a combination of the CO_2, N_2O and CH_4 emissions.

Additional atmospheric emissions associated with production operations at Breagh and Clipper South were generated through the combustion of fuel by the helicopters and supply/standby vessels used during planned maintenance visits.

In addition to the above, emissions to air from operational facilities arose from the manual venting of produced gas during maintenance activities. The calculated emissions of direct gas from operational facilities in 2024 due to maintenance venting are shown in Table 5.6.

Table 5.6 Gas vented in 2024

Asset	Gas vented (t)	CO_2e*
Breagh	**5.26**	**116.7**
Clipper South	**0.88**	**22.1**

* CO2e value shown takes account of gas CO2 and CH4 composition.

5.2.1.6 Oil Spills

Oil Pollution Emergency Plans (OPEPs) were in place to cover all operations at Breagh, Clipper South, Cavendish and Windermere during 2024. Each OPEP lists the required offshore and onshore actions and responses, defines roles and responsibilities in the event of an oil spill and provides a risk assessment.

5.2.2 Other Activities

The section below details any additional activities outside of production. In 2024, decommissioning activities continued at Cavendish, Windermere, and Topaz fields. These activities encompassed the removal of the installation jackets and topsides, marking the final stages of the decommissioning process.

A well surveillance campaign was conducted on Clipper South using the Seafox 2 vessel. A coiled tubing production logging tool was run into all four wells to assess the water contribution from each perforated zone. A well test package measured production rates of gas, water, condensate and solids.

5.2.2.1 PON1s

No PON1s were submitted in association with the additional activities.

5.2.2.2 Chemical Use

The Topaz field decommissioning project, which included plugging and abandoning the well using MSV Seawell, required the use of specific chemicals. As such a new chemical permit, CP/3424, was obtained which predominantly consisted of OCNS E chemicals or HQ colour Gold, as shown in Table 5.7. A limited number of SUB-class chemicals were used sparingly, where no alternatives were available.

The well surveillance campaign which was conducted on Clipper South necessitated the creation of a second chemical permit, CP/3378, which lists several OCNS E and HQ colour Gold chemicals. To maintain the integrity of the well systems and support the enhancement of gas production, chemicals that prevent hydrate and scale formation, control microbial growth, and minimise corrosion were used. The breakdown of chemical usage by category are presented in Table 5.7.

Table 5.7 Chemicals Used and Discharged During the Topaz Decommissioning project and Clipper South Well Surveillance Campaign.

OCNS category or colour band ranking	Additional Label	Quantity (kg)	
		Use	Discharge
MSV Seawell (CP/3424/0/3)			
B	O-VII SUB	432.15	0
C	-	0	0
C	SUB	539.7	0
E	-	0	0
E	PLONOR	10844.5	0
Gold	-	2338.63	0
Silver	-	193.14	0
SEAFOX 2 (CP/3378)			
E	-	47.00	0
Gold	-	29.00	0

5.2.2.3 Discharge of Water

The total amount of fluid discharged during the plugging and abandonment of Topaz via the MSV Seawell vessel (OTP/1527) was 114m^3 of fluids, with an average concentration of oil of 2.46 mg/l. This equated to a total of 0.00028 tonnes of dispersed oil discharged.

The total amount of fluid discharged during the well surveillance campaign for Clipper South operations using the Seafox 2 vessel (OTP/1502) was 551.67m^3 of produced water, with an average dispersed oil concentration of 4.39 mg/l This equated to a total of 0.00242 tonnes of dispersed oil discharged.

5.2.2.4 Emissions to Air

During the Clipper South well surveillance project, a ‘donor well’ was used to allow gas downstream of the well test package to be routed to the production system rather than sent to flare. The process was successful and resulted in approximately 95.7% reduction in emissions compared to flaring. A summary of the savings from each four wells is outlined in Table 5.8.

Table 5.8 Summary of gas sent to flare vs to ‘donor well’ from the Clipper South well surveillance campaign.

	Gas to Flare		Gas to ‘return well’	
	Total (mmscf)	%	Total (mmscf)	%
Well 1	0.15	1.03	14.43	98.87
Well 2	1.22	7.95	14.12	92.04
Well 3	0	0	15.6	100
Well 4	1.92	8.4	20.95	91.6
Total	**3.29**	**4.3**	**65.1**	**95.7**

5.2.2.5 Waste

During decommissioning operations, jacket and topside waste was transported to shore for processing by recycling. The remaining waste from removal of the jacket and topside structures for the Cavendish and Windermere assets is shown in Table 5.9 and 5.10. Group II waste from the well

surveillance campaign from Clipper South using the Seafox 2 vessel is also broken down in Table 5.11.

Other decommissioning activities in 2024 included the plug and abandonment of Topaz, executed in two stages. The first stage, completed in August, involved plugging and abandoning the well, removing the wellhead, and clearing the debris and off-cuts from the wellhead protection structure. This phase generated 13.3 tonnes of scrap metal, which was processed via recycling. The second stage, carried out in October, involved the retrieval of the wellhead protection structure, which was also processed for recycling, contributing to an additional 30.94 tonnes of scrap metal. Altogether, the Topaz decommissioning project generated a total of 44.24 tonnes of recyclable scrap metal waste.

Table 5.8 Summary of Group I & II Waste from Cavendish Decommissioning Operations in 2024

Group	Type	Reuse	Re-cycling	Waste to Energy	Incinerate	Landfill	Other	Total	Comments
Group I	Chemicals / Paints	0	0	0	0	0	0	0	
	Drums / Containers	0	0	0	0	0	0	0	
	Oils	0	2.520	0	0	0	0	2.520	
	Misc	0	0	0	0	0	0	0	
	Sludges/ Liquids/ Washings	0	0	0	0	0	0	0	
Group II	Chemicals / Paints	0	0	0	0	0	0	0	
	Drums / Containers	0	0	0	0	0	0	0	
	Scrap Metal	0	1058.26	0	0	0	0	1058.26	General scrap & Anodes.
	Segregated recyclables	0	12.740	0	0	0	0	12.740	Concrete
	General	0	4.820	0	0	0	0	4.820	
	Sludges/ Liquids/ Washings	0	0	0	0	0	0	0	
Total		**0**	**1078.34**	**0**	**0**	**0**	**0**	**1078.34**	

Table 5.9 Summary of Group I & II Waste from Windermere Decommissioning Operations in 2024

Group	Type	Reuse	Re-cycling	Waste to Energy	Incinerate	Landfill	Other	Total	Comments
Group I	Chemicals / Paints	0	0	0	0	0	0	0	
	Drums / Containers	0	0	0	0	0	0	0	
	Oils	0	3.060	0	0	0	0	3.060	
	Misc	0	0	0	0	0	0	0	
	Sludges/ Liquids/ Washings	0	0	0	0	0	0	0	
Group II	Chemicals / Paints	0	0	0	0	0	0	0	

Group	Type	Reuse	Re-cycling	Waste to Energy	Incinerate	Landfill	Other	Total	Comments
	Drums / Containers	0	0	0	0	0	0	0	
	Scrap Metal	0	954.960	0	0	0	0	954.690	General scrap, Anodes & Duplex
	Segregated recyclables	0	43.940	0	0	0	0	43.940	Concrete
	General	0	13.140	0	0	0	0	13.140	
	Sludges/ Liquids/ Washings	0	0	0	0	0	0	0	
Total		**0**	**1014.83**	**0**	**0**	**0**	**0**	**1014.83**	

Table 5.11 Summary of Group II Waste from Seafox 2 during the Well Surveillance Campaign on Clipper South in 2024.

Group	Type	Reuse	Re-cycling	Waste to Energy	Incinerate	Landfill	Other	Total	Comments
Group II	Chemicals / Paints	0	0	0	0	0	0	0	
	Drums / Containers	0	0	0	0	0	0	0	
	Scrap Metal	0	0	0	0	0	0	0	
	Segregated recyclables	0	0.130	0	0	0	0	0.130	Cardboard
	General	0	0.952	3.808	0	0	0	4.760	
	Sludges/ Liquids/ Washings	0	0	0	0	0	0	0	
Total		**0**	**1.132**	**3.808**	**0**	**0**	**0**	**4.94**	