

**OSPAR Public Statement 2024**  
**Environmental Performance**



**Issue Date: 29/05/2025**

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## 1. INTRODUCTION

Under Recommendation 2003/5 of the Oslo Paris Convention for the Protection of the Marine Environment of the North-East Atlantic [OSPAR], the Offshore Petroleum Regulator for Environment and Decommissioning [OPRED] requires that all companies operating in the United Kingdom Continental Shelf [UKCS] have systems and procedures in place to identify, monitor and control the environmental aspects associated with offshore activities.

This document details the 2024 OSPAR Public Statement for Bluewater Energy Services B.V. (hereinafter referred to as Bluewater) and reports the environmental performance of a) the Pierce Field operations and activities during 2024, and b) the Lancaster Field operations and activities during 2024, in line with the requirements of OSPAR Recommendation 2003/5. The scope focuses on the two offshore assets, the Hæwene Brim Floating Production Storage and Offloading (FPSO) and the Aoka Mizu FPSO for the period 1<sup>st</sup> January to the 31<sup>st</sup> December 2024.

## 2. OVERVIEW OF OPERATIONS

### Pierce Field Offshore Activities

The Pierce development is located in Blocks 23/22a and 23/27a of the Central North Sea (CNS). The development is served by a FPSO facility, the Hæwene Brim (Figure 2-1). The Hæwene Brim FPSO is located at 57° 09' 38.834" N, 02° 17' 35.130" E which is 247.5 km from the United Kingdom (UK) coastline, 2.6 km from the UK/Norwegian median line and in a water depth of approximately 85 m. On behalf of Shell UK Ltd, Enterprise Oil plc is the field operator in conjunction with joint venture partner Ithaca Energy UK Limited. Pierce Production Company Limited (PPCL) serve as the operator of the Hæwene Brim FPSO.



Figure 2-1 The Hæwene Brim FPSO

The Hæwene Brim FPSO's main functions are:

- Receipt of fluids from subsea wells;
- Control of the subsea wells;
- Processing of the incoming fluids for separation into crude, water and gas;
- Storage of the stabilised crude oil and maintaining it at the required temperature;
- Treatment of effluent for discharge of water to the sea;
- Chemical injection;
- Produced gas export;
- Offloading of crude into tandem moored shuttle tankers;
- Power generation for process, gas compression, offloading, utilities and ship systems; and
- Provide accommodation for operating and maintenance personnel.

Operational activities during 2024 included normal production operations, maintenance and well optimisation work.

### Lancaster Field Offshore Activities

The Lancaster field is located in Blocks 205/21a of the CNS to the west of the Shetland Islands. The development is served by the Aoka Mizu FPSO (Figure 2-2).

The Aoka Mizu FPSO is located at 60° 10' 49.82" N, 03° 52' 5.16" W which is 98 km from the UK coastline, 54 km from the UK/Faroes median line and in a water depth of approximately 158 m. Prax Upstream Limited (hereinafter referred to as Prax) is the licence operator for the Lancaster field. Bluewater Lancaster Production (UK) Ltd are the formally approved Installation Operator of the Aoka Mizu FPSO.



Figure 2-2 The Aoka Mizu FPSO

The Aoka Mizu FPSO's main functions are:

- Receipt of fluids from subsea wells;
- Control of the subsea wells;
- Processing of the incoming fluids for separation into crude, water and gas;
- Storage of the stabilised crude oil and maintaining it at the required temperature;
- Treatment of effluent for discharge of water to the sea;
- Chemical injection;
- Offloading of crude into tandem moored shuttle tankers;
- Power generation for process, gas compression, offloading, utilities and ship systems; and
- Provide accommodation for operating and maintenance personnel.

Operational activities during 2024 included normal production operations, maintenance and well optimisation work.


### 3. SAFETY AND ENVIRONMENTAL (SEMS) MANAGEMENT SYSTEM

#### Bluewater Health, Safety, Environmental and Quality (HSEQ) Policy

Bluewater Services (UK) Limited adopts the Bluewater HSEQ policy, which sets out the principles to which all the affiliates and the Hæwene Brim and Aoka Mizu FPSO activities comply with. These include:

- ✓ Promoting Health, Safety and Environmental (HSE) Protection;
- ✓ Seeking and achieving continual improvement;
- ✓ Working towards Net-Zero by 2050; and
- ✓ Compliance with all regulatory requirements.

The requirements of the policy are implemented through management systems, interface arrangements and operational management controls. The Bluewater policy is provided in Figure 3-1.

Document title	Bluewater HSEQ Policy	
Document number	BW1-Q-100-PH-0001-001	
Accountable person	President and CEO	
Date published	28/12/2022	

#### HSEQ Policy

Bluewater is committed to delivering quality and continuous improvement throughout all its activities, while satisfying all applicable requirements.

To this end company goals are formulated by top management, taking into account our compliance obligations and other requirements from interested parties.

At Bluewater a pro-active and responsible approach to safety and environmental care is an essential part of doing our work. We require the participation of all our staff and contractors to implement this approach.

We aim to:

- actively minimise and control any occupational health and safety risks,
- prevent any loss of primary containment as per our Corporate Major Accident Prevention Policy and integrated process and functional safety management framework,
- prevent or minimise the adverse impacts of our activities on the environment,
- achieve net zero emissions by 2050 for emissions within our organisational boundary,
- develop solutions for renewable energy as well as energy efficient and emission-less production and transfer of energy offshore,
- actively present emission reduction solutions to our Clients to support them in achieving their obligations under net zero targets,
- maintain a granular set of (quality) assurance activities to demonstrate that expectations related to HSEQ are being met and
- continuously improve our work processes as part of our Corporate Management System.

As such, we will drive the development and implementation of industry best practices.

With all our personnel collectively and individually taking responsibility and accepting accountability for Bluewater's HSEQ performance, we create and maintain a healthy, safe and environmentally friendly place to work.



Hugo J. Heerema  
President & CEO  
December 2022

Figure 3-1 Bluewater HSEQ Policy



## Environmental Management

Bluewater is certified to ISO 14001:2015 standard (a copy of the certificate is presented below). Bluewater's Environmental Management System (EMS) sets out guiding principles and mechanisms for managing HSE risk, impact and compliance in accordance with the Bluewater HSEQ Policy.

<b>LRQA</b>	Current issue date: Expiry date: Certificate identity number:	7 November 2023 6 November 2026 10556899	Original approval(s): ISO 14001 - 7 November 2008	LRQA
				LRQA
				LRQA
<h2>Certificate of Approval</h2>				LRQA
This is to certify that the Management System of:				LRQA
<h3>Bluewater Energy Services B.V.</h3>				LRQA
Taurusavenue 46, 2132 LS Hoofddorp, The Netherlands				LRQA
has been approved by LRQA to the following standards:				LRQA
<b>ISO 14001:2015</b>				LRQA
Approval number(s): ISO 14001 – 0024489				LRQA
This certificate is valid only in association with the certificate schedule bearing the same number on which the locations applicable to this approval are listed.				LRQA
The scope of this approval is applicable to: Design, engineering, procurement, management of subcontracted fabrication, installation, commissioning and after-sales of Single Point Mooring systems (SPM), offshore renewable energy systems and Floating Production Storage Offloading (FPSO) systems. Operation and management of FPSOs.				LRQA
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Area Operations Manager, Europe

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Figure 3-2 Copy of ISO14001:2015 Certificate

The Corporate Management System (CMS) describes how HSE performance is managed, taking into account all relevant elements, such as: legal requirements, stakeholders, risks / opportunities and company goals. The CMS is applicable to all employees and activities on all locations (onshore and installation and operational sites - offshore) and is based on the requirements of ISO 9001:2015 and ISO 14001:2015. Within the overall CMS, the Safety and Environmental Management System (SEMS) is the framework of policies, processes standards and procedures that ensures that the health, safety and environmental objectives can be achieved. The SEMS acts as the link between the policies and standards and local processes and procedures. The high-level structure of the CMS is shown in Figure 3-3.

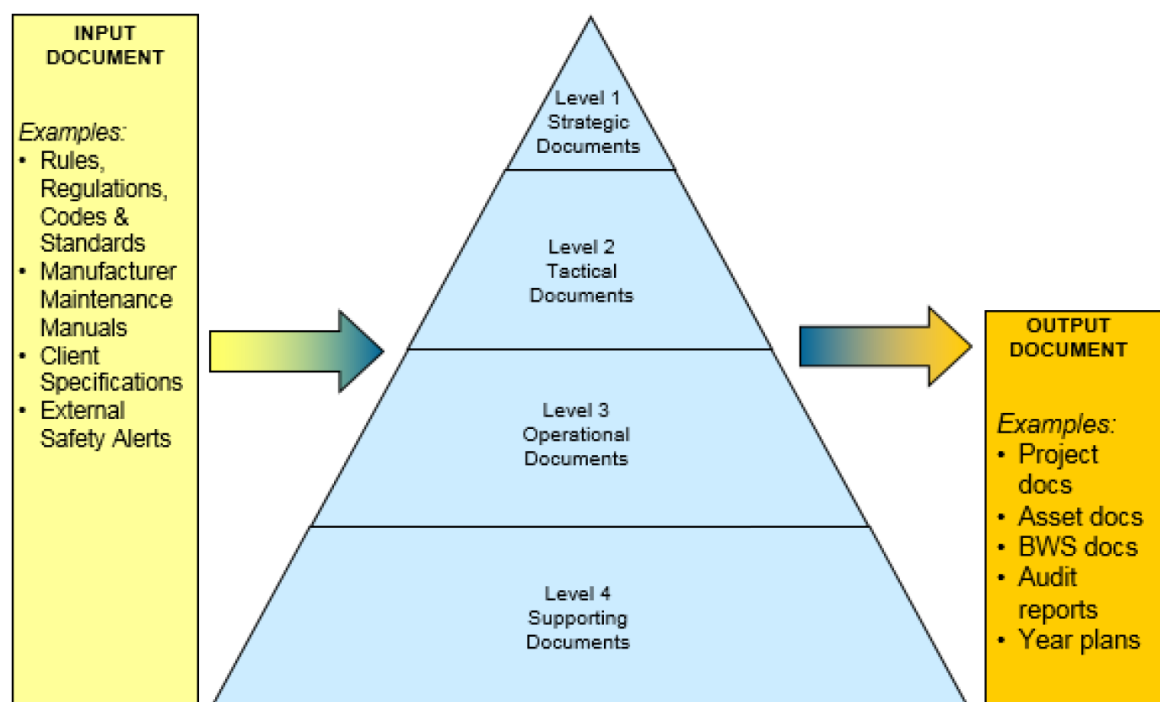


Figure 3-3 High Level Structure of the CMS

### Key Environmental Management Activities in 2024

Bluewater's key environment related objectives and activities for 2024 were to ensure compliance with all environmental permits and relevant regulations and to progress a number of programmes to support continued improvement in performance, including:

- Offshore Environmental Compliance and Permit audits and inspections;
- Onshore Emergency Response exercises and Offshore Drills;
- Monitoring of asset performance and Environmental Key Performance Indicators [KPI] covering resource use and emissions to the environment;
- Maintenance of the assets' Environmental Aspects Registers.



## 4. ENVIRONMENTAL PERFORMANCE

### Hæwene Brim FPSO Environmental Performance

#### Atmospheric Emissions

Atmospheric emissions arise from power generation, flaring and fugitive emissions. The Hæwene Brim FPSO holds an Offshore Combustion Installation (PPC) Permit under the Offshore Combustion Installations (Pollution Prevention and Control) Regulations 2023 (as amended) for the combustion equipment onboard. Shell UK Ltd is the holder of the greenhouse gas emissions trading scheme (EUETS) permit, therefore certain emissions may be duplicated within their 2024 annual environmental statement.

Table 4.1 provides the Production related fuel combustion and flaring emissions as reported into the Environmental Emissions Monitoring System (EEMS) through the UK Energy Portal. This covers the period from the 1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024.

*Table 4.1 Hæwene Brim Atmospheric Emissions (1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024)*

Atmospheric Emissions	Unit	Fuel Gas	Diesel	Flaring	Totals
Fuel Use	Tonnes	11,742.00	10,112.88	3,050.61	<b>N/A</b>
CO <sub>2</sub>	Tonnes	32,054.00	31,155.04	8,319.73	<b>71,528.77</b>
NO <sub>x</sub>	Tonnes	71.36	421.85	3.66	<b>497.14</b>
SO <sub>2</sub>	Tonnes	0.15	40.45	0.04	<b>40.64</b>
CO	Tonnes	35.23	111.40	20.44	<b>167.07</b>
CH <sub>4</sub>	Tonnes	10.80	1.27	54.91	<b>66.98</b>
VOC	Tonnes	0.42	14.00	6.10	<b>20.52</b>

### Water and Oil in Water Discharges

Liquid associated with the oil produced by the Pierce Field (oil and produced water) is processed through oil and water separation systems offshore with the cleaned produced water being discharged to sea. The Hæwene Brim FPSO holds a permit for produced water discharge under the Petroleum Operations (Oil Pollution Prevention and Control (OPPC)) Regulations. The Hæwene Brim FPSO has two discharge routes for produced water and the installations drainage systems, as follows:

- The primary route is via the produced water treatment system. All produced water from the separators is routed to designated hydrocyclones before being directly discharged to sea.
- The secondary route is from the FPSO slops tanks. Liquids are processed through a centrifuge system before being discharged to sea.

Table 4.2 provides the details for the produced water discharges as reported into the EEMS through the UK Energy Portal (only months with reported discharges are shown). This covers the period from the 1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024.

Table 4.2 Haewene Brim Produced Water Discharge Data (1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024)

Month	Sample Point (Source)	Produced Water Volume (m3)	Monthly Average Oil in Water (mg/l)	Calculated Weight of Oil (tonnes)
January	Hydrocyclones	-	-	-
	Slops Tanks	-	-	-
February	Hydrocyclones	-	-	-
	Slops Tanks	-	-	-
March	Hydrocyclones	-	-	-
	Slops Tanks	-	-	-
April	Hydrocyclones	734.14	16.87	0.01239
	Slops Tanks	1273.00	10.48	0.01334
May	Hydrocyclones	1397.30	10.85	0.01516
	Slops Tanks	2451.90	20.36	0.04992
June	Hydrocyclones	5470.89	16.13	0.08823
	Slops Tanks	2412.76	18.08	0.04361
July	Hydrocyclones	3233.56	6.34	0.02050
	Slops Tanks	1888.42	9.79	0.01849
August	Hydrocyclones	1957.13	5.10	0.00998
	Slops Tanks	2248.92	19.94	0.04484
September	Hydrocyclones	2736.05	5.06	0.01385
	Slops Tanks	1158.09	16.77	0.01942
October	Hydrocyclones	5687.55	20.25	0.11515
	Slops Tanks	885.24	19.66	0.01741
November	Hydrocyclones	408.71	9.45	0.00386
	Slops Tanks	260.50	19.14	0.00498
December	Hydrocyclones	182.83	11.71	0.00214
	Slops Tanks	-	-	-
Totals	All sources	34,386.99	14.34	0.49328

The total mass of oil discharged with the produced water during 2024 was ~ 0.49 tonnes.

Figure 4-1 presents the oil in water average concentration from the primary and secondary route. No breaches of the 30 mg/l monthly permit limit were observed for the period.

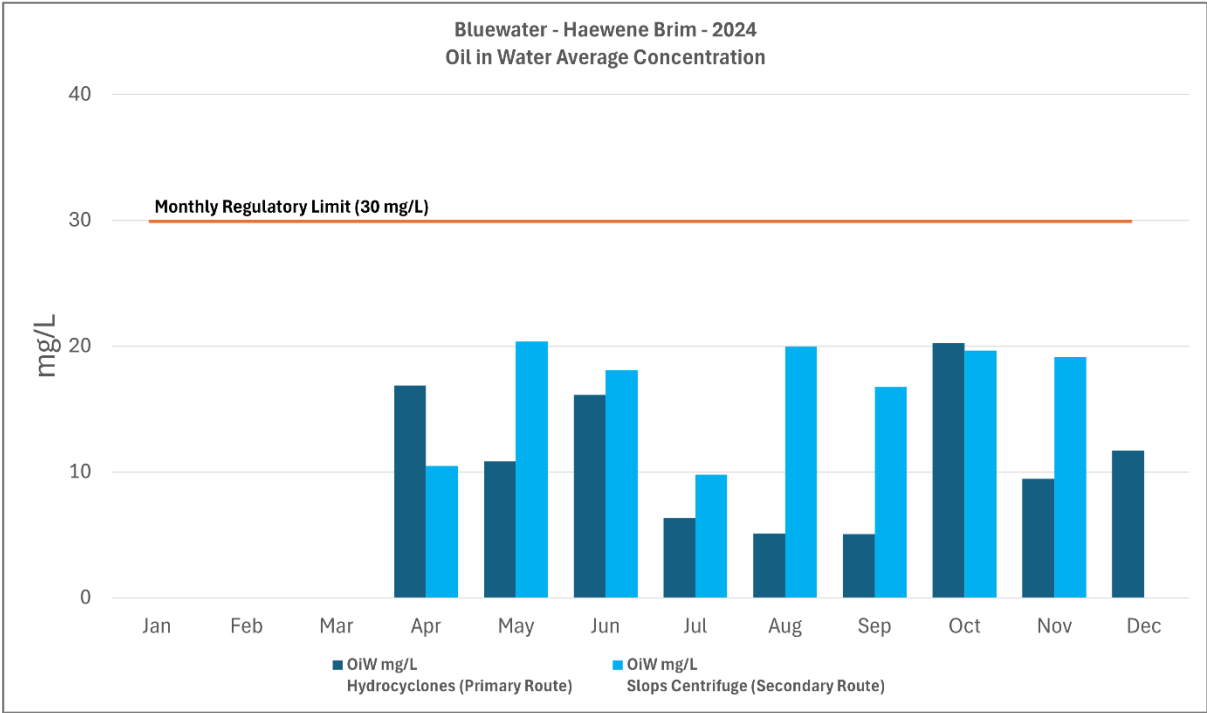


Figure 4-1 Hydrocyclones & Slops Tanks: Oil in Water Average Concentration

### Chemical Use and Discharge

Under the Offshore Chemical Regulations (OCR) 2002 (as amended), the Hæwene Brim FPSO holds a permit for the use and discharge of chemicals. During 2024, a total of 383.3 tonnes of production chemicals were used, and 372.7 tonnes were discharged to sea.

The Regulator has highlighted certain chemicals to be phased out by mean of substitution warning (SUB chemical warning). Five SUB chemicals were used during 2024, Castrol Transaqua HT2 – Hydraulic Fluid, EMBR13442C – Demulsifier, EMBR43442A – Demulsifier, HSCV17370A – Hydrogen Sulphide Scavenger and PARA12200A – a wax inhibitor. In 2024, the use of these SUB chemicals equated to 11.21, 1.52, 2.59, 0.49 and 4.39 tonnes respectively. A detailed breakdown of each chemical's tracked usage and discharge against the permitted quantities is presented in Figure 4-2 and Figure 4-3 respectively.

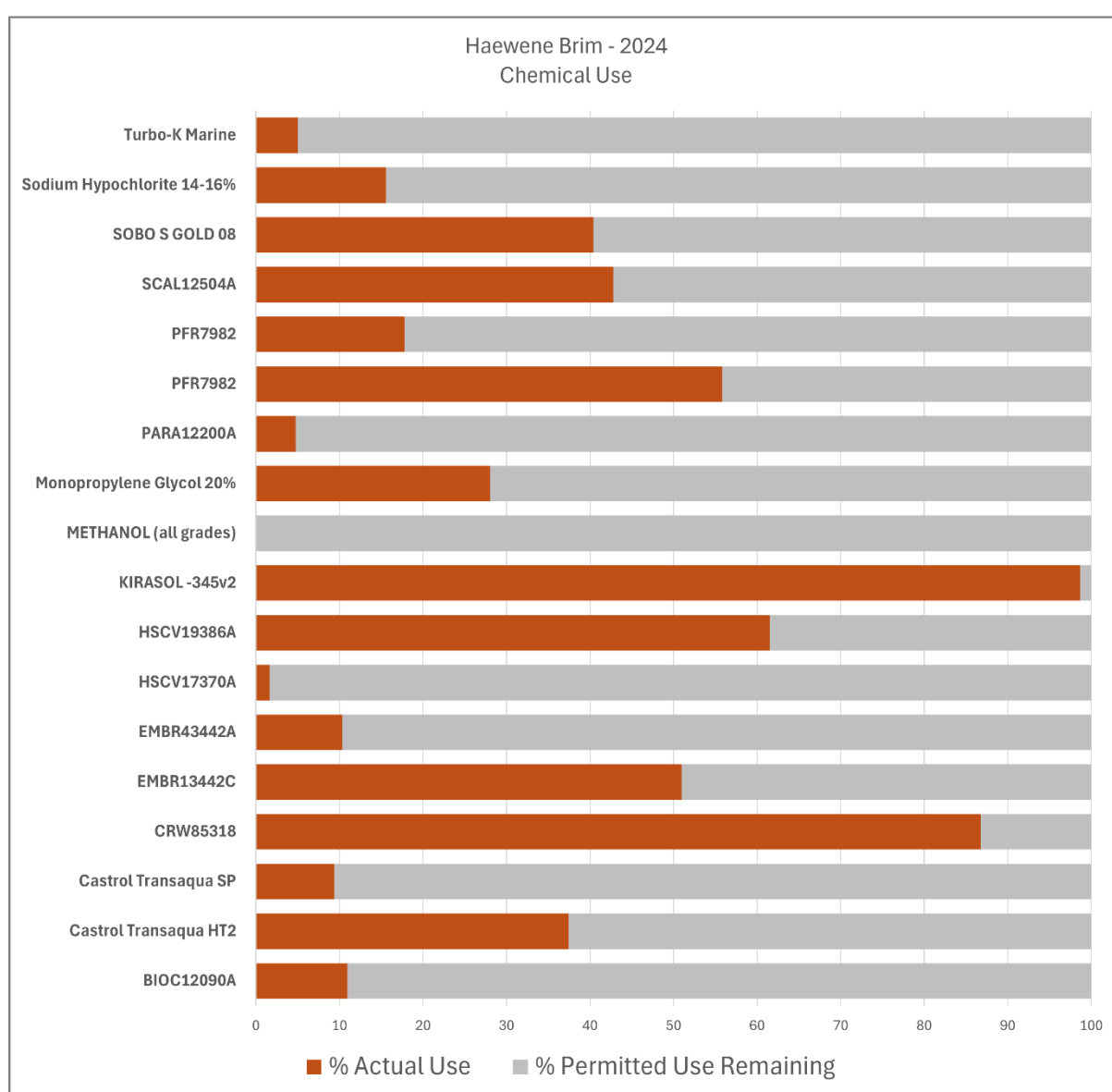


Figure 4-2 Hæwene Brim 2024 Chemical Use vs Permitted Quantities

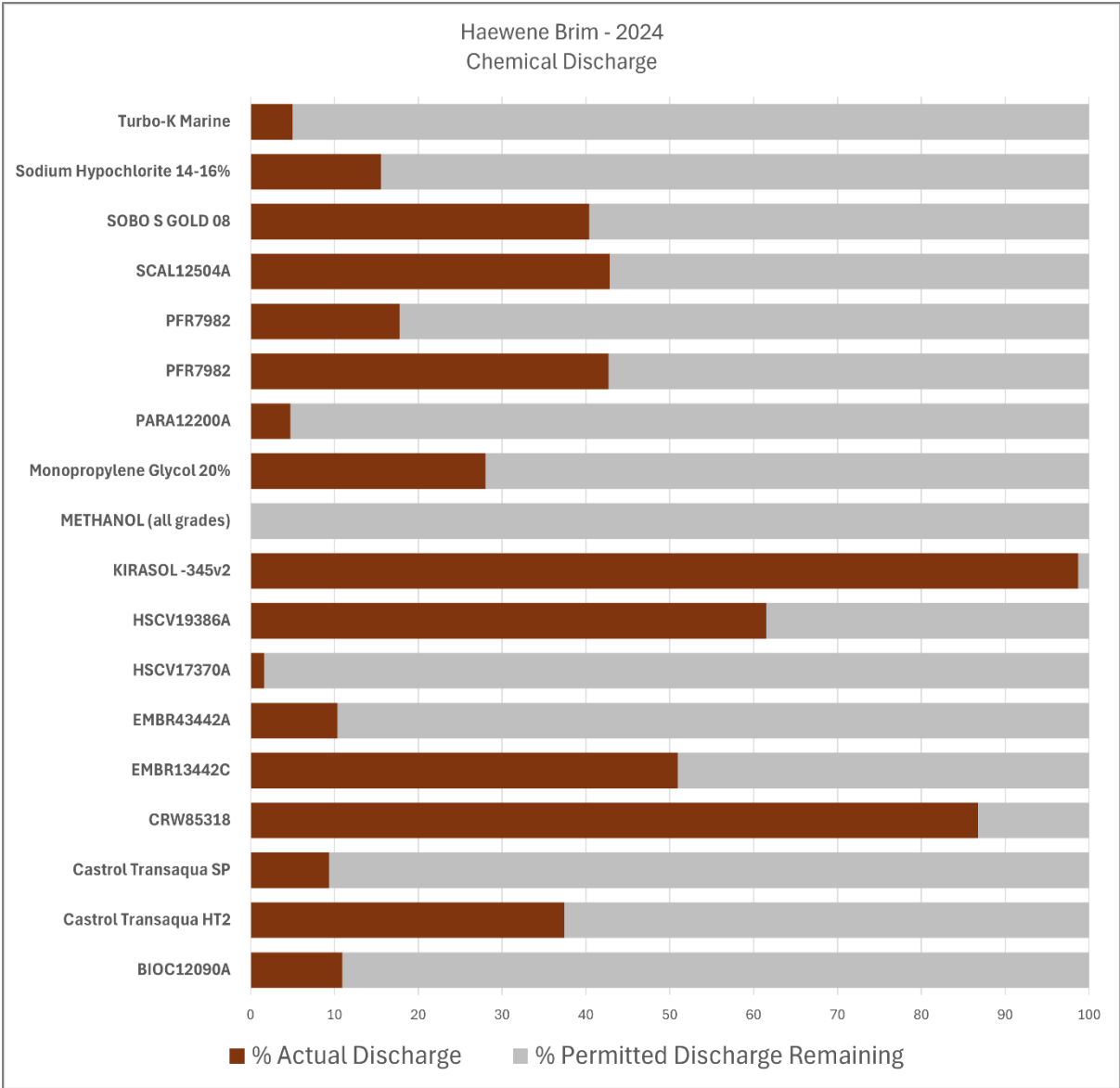


Figure 4-3 Hæwene Brim 2024 Chemical Discharge vs Permitted Quantities

The chemicals used, comprised water based hydraulic fluids, biocides, wax inhibitors, corrosion inhibitors, gas hydrate inhibitors, scale inhibitors, demulsifiers and pipeline chemicals. The majority of these chemicals were Hazard Quotient (HQ) Gold or Category ‘E’ or ‘D’ chemicals (the ratio of Predicted Effect Concentration against No Effect Concentration), thus have the least potential impact on the marine environment.

Chemicals are subject to continual review and Bluewater will continue to seek suitable alternatives, where appropriate to minimise impact on the marine environment.

## Waste Management

Management and segregation of waste takes place on the installation prior to transfer to onshore facilities for recycling or disposal. Total waste arising during 2024 from the Hæwene Brim FPSO and the disposal routes is provided in Table 4.3.

Table 4.3 Hæwene Brim Waste Arising and Disposal Routes during 2024

Category	Reuse	Re-cycling	Waste to Energy	Incinerate	Landfill	Other	Total
	(t)	(t)	(t)	(t)	(t)	(t)	(t)
<b>Group I – Special</b>							
Chemicals/ Paints	-	-	0.466	5.091	-	4.765	10.322
Drums/ Containers	1.28	2.472	-	-	-	-	3.752
Oils	-	0.09	-	-	-	-	0.09
Miscellaneous Special Waste	-	3.261	3.28	-	0.23	0.76	7.531
Sludge's / Liquids / Washings	-	-	-	-	-	3.1	3.1
<b>Sub-Total</b>	<b>1.28</b>	<b>5.823</b>	<b>3.746</b>	<b>5.091</b>	<b>0.23</b>	<b>8.625</b>	<b>24.795</b>
<b>Group II - General</b>							
Chemicals/ Paints	-	-	-	0.015	-	0.406	0.421
Drums/ Containers	-	-	-	-	-	-	-
Scrap metal	-	18.34	-	-	-	-	18.34
Segregated Recyclables	-	25.755	-	-	-	-	25.755
General Waste	-	-	43.01	-	0.08	-	43.09
Sludge's / Liquids / Washings	-	-	-	-	-	-	-
<b>Sub-Total</b>	<b>-</b>	<b>44.095</b>	<b>43.01</b>	<b>0.015</b>	<b>0.08</b>	<b>0.406</b>	<b>87.606</b>
<b>Group III - Other</b>							
Asbestos	-	-	-	-	-	-	-
Radioactive Materials (exc NORM)	-	-	-	-	-	-	-
Clinical	-	-	-	0.049	-	-	0.049
Explosives	-	-	-	-	-	-	-
<b>Sub-Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.049</b>	<b>-</b>	<b>-</b>	<b>0.049</b>
<b>Grand Total</b>							
<b>Grand Total</b>	<b>1.28</b>	<b>49.918</b>	<b>46.756</b>	<b>5.155</b>	<b>0.31</b>	<b>9.031</b>	<b>112.45</b>



Figure 4-4 overleaf shows that the Hæwene Brim FPSO recycled ~44% of the total waste produced. Waste disposed to landfill amounted ~ 0% of the total waste produced. Most general waste from the Hæwene Brim, that is not recycled, is utilised for waste to energy, with minimal waste sent to landfill. In 2024, 42% of total waste was utilised as waste to energy. There was also ~9 tonnes of “other” waste, mostly chemicals / paints, equating to 8% of total waste.

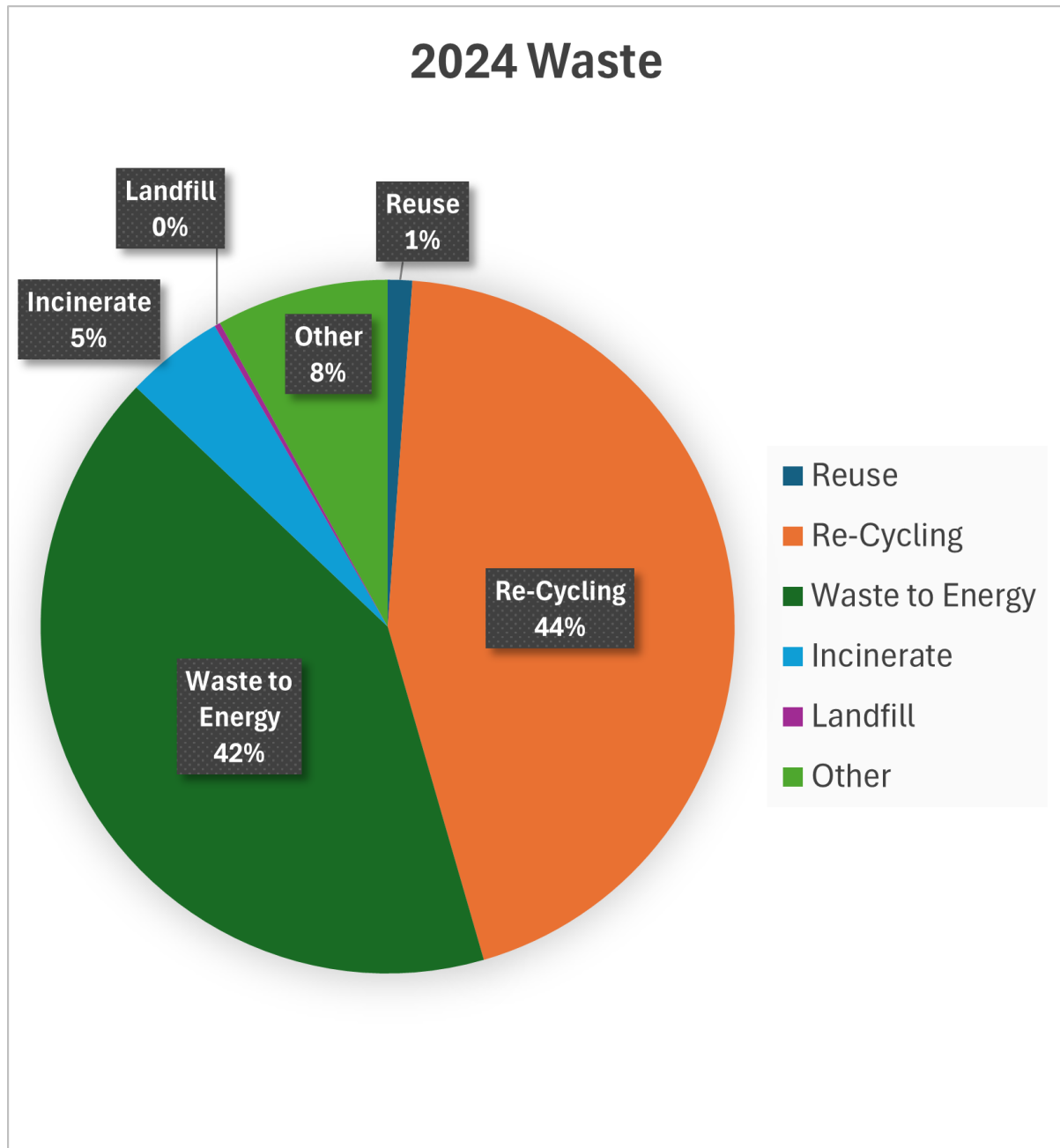


Figure 4-4 Hæwene Brim 2024 breakdown of generated waste

## 2025 Key Activities

The main offshore aims and objectives for the Hæwene Brim FPSO during 2025 are:

- ✓ Ongoing maintenance and implementation of the EMS, including
  - Maintenance of 14001:2015 Standard;
  - Environmental data monitoring & reporting schedules;
  - Environmental KPIs;
  - Environmental Aspects Registers and Controls;
  - HSE Management System Interface documentation.
- ✓ Audit and review of Permits and Consents management and compliance associated with Environmental Management Systems and Processes;
- ✓ Continued management of asset integrity and process safety to minimise the risk of spills.

## Aoka Mizu FPSO Environmental Performance

### Atmospheric Emissions

Atmospheric emissions arise from power generation, flaring and fugitive emissions. The Aoka Mizu FPSO holds a PPC Permit under the Offshore Combustion Installations (PPC) Regulations 2023 (as amended) for the combustion equipment onboard. Prax holds the EU ETS GHG permit although Prax does not prepare an ES under OSPAR 2003/5.

Table 4.4 provides the Production related fuel combustion and flaring emissions as reported into EEMS through the UK Energy Portal. This covers the period from the 1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024.

*Table 4.4 Aoka Mizu Atmospheric Emissions (1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024)*

Atmospheric Emissions	Unit	Fuel Gas	Diesel	Flaring	Totals
Fuel Use	Tonnes	9.137.21	2,183.23	14,870.03	<b>N/A</b>
CO <sub>2</sub>	Tonnes	24,822.95	6,964.48	40,612.23	<b>72,399.66</b>
NO <sub>x</sub>	Tonnes	92.23	90.83	1.78	<b>184.84</b>
SO <sub>2</sub>	Tonnes	0.12	4.36	0.19	<b>4.67</b>
CO	Tonnes	54.82	23.45	99.63	<b>177.90</b>
CH <sub>4</sub>	Tonnes	8.41	0.26	267.66	<b>276.33</b>
VOC	Tonnes	0.33	2.98	29.74	<b>33.05</b>

### Water and Oil in Water Discharges

Liquid associated with the oil produced by the Lancaster Field (oil and produced water) is processed through oil and water separation systems offshore with the cleaned produced water being discharged to sea. The Aoka Mizu FPSO holds a permit for produced water discharge under the OPPC Regulations.

All produced water from the installation was discharged overboard. This amounted to approximately 561,094 cubic metres for 2024. The Aoka Mizu FPSO has two discharge routes for produced water and the installations drainage systems, as follows:

- The FPSO's hydrocyclone units; and
- The FPSO's slops tanks.

Table 4.5 provides the details for the produced water discharges as reported into the EEMS through the UK Energy Portal (only months with reported discharges are shown). This covers the period from the 1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024.

*Table 4.5 Aoka Mizu Produced Water Discharge Data (1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024)*

Month	Sample Point (Source)	Produced Water Volume (m3)	Monthly Average Oil in Water (mg/l)	Calculated Weight of Oil (tonnes)
January	Hydrocyclones	37399.25	1.23	0.04581
	Slops Tanks	765.00	18.92	0.01447
February	Hydrocyclones	40767.19	1.71	0.06951
	Slops Tanks	2141.00	19.11	0.04091
March	Hydrocyclones	41676.47	4.46	0.18584
	Slops Tanks	5763.00	15.04	0.08669
April	Hydrocyclones	46547.42	2.67	0.12424
	Slops Tanks	598.00	15.74	0.00941
May	Hydrocyclones	40735.97	3.55	0.14465
	Slops Tanks	7540.00	13.07	0.09855
June	Hydrocyclones	45656.10	2.62	0.11944
	Slops Tanks	3575.00	9.97	0.03563
July	Hydrocyclones	40354.69	2.93	0.11836
	Slops Tanks	755.00	8.36	0.00631
August	Hydrocyclones	48498.60	3.02	0.14666
	Slops Tanks	3804.00	7.48	0.02845
September	Hydrocyclones	46383.20	3.89	0.18038
	Slops Tanks	579.00	8.20	0.00475
October	Hydrocyclones	49733.97	3.41	0.16969
	Slops Tanks	791.00	7.04	0.00557
November	Hydrocyclones	48686.43	3.26	0.15857
	Slops Tanks	-	-	-
December	Hydrocyclones	48343.26	2.40	0.11583
	Slops Tanks	-	-	-
Totals	All sources	561,093.55	3.40	1.90974

The total mass of oil discharged with the produced water during 2024 was ~1.91 tonnes.

Figure 4-5 present the oil in water average concentration from the primary and secondary route, respectively. No breaches of the 30 mg/l monthly regulatory limit were observed for the period for the primary or secondary disposal route (Figure 4-5).

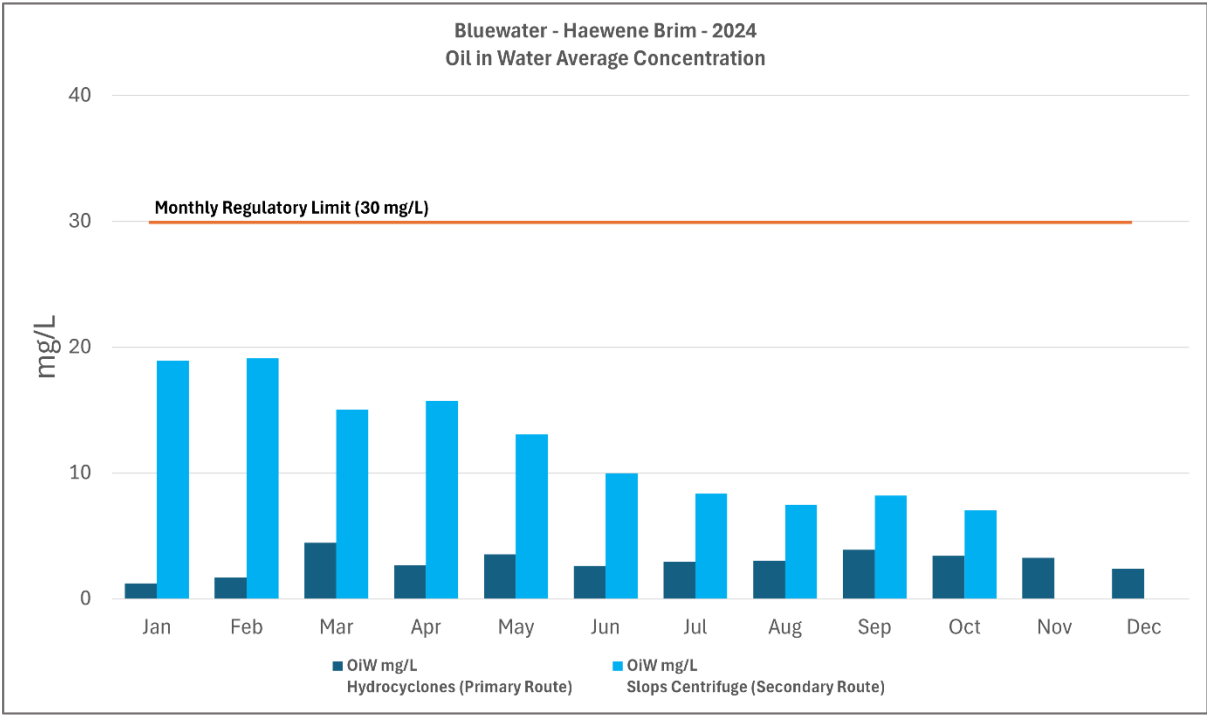


Figure 4-5 Hydrocyclones and Slops: Oil in Water Average Concentration

Chemical Use and Discharge

Under the OCR 2002 (as amended), the Aoka Mizu FPSO holds a permit for the use and discharge of chemicals. During 2024 a total of ~56.9 tonnes of production chemicals were used. In total approximately 86% (49.2 tonnes) of the chemicals used were discharged to sea.

The Regulator has highlighted certain chemicals to be phased out by mean of substitution warning (SUB chemical warning). Three SUB chemicals EMBR48636A - Demulsifier, Oceanic HW443 R – Hydraulic Fluid and RX 7025 – Wax Inhibitor were used during 2024 with a total use of 7.20, 0.64 and 0.05 tonnes respectively.

A detailed breakdown of each chemical’s tracked usage and discharge against the permitted quantities is presented in **Error! Reference source not found.** and **Error! Reference source not found.**. Chemicals permitted, but not used are not included in the **Error! Reference source not found.** and **Error! Reference source not found.**.

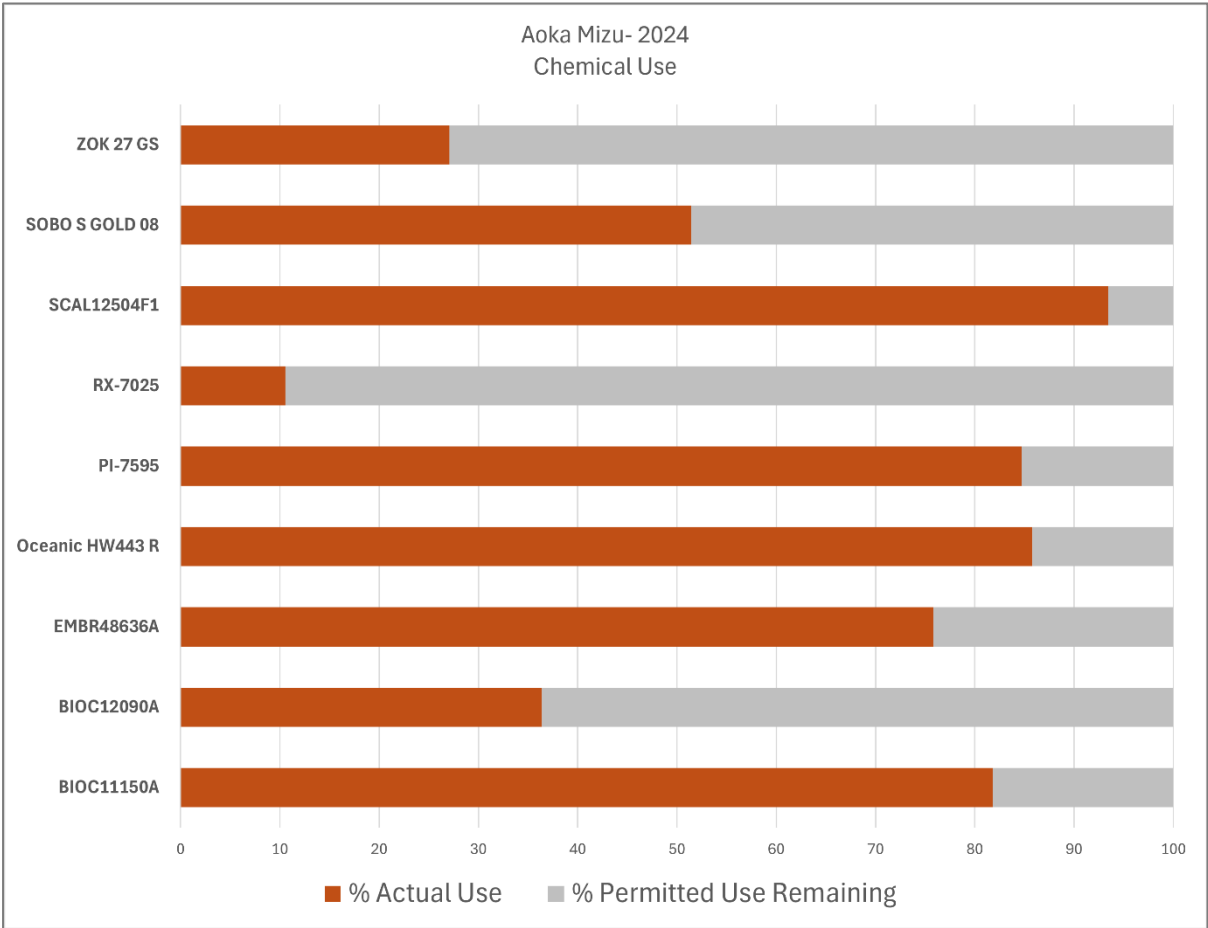


Figure 4-6 Aoka Mizu 2024 Chemical Use vs Permitted Quantities



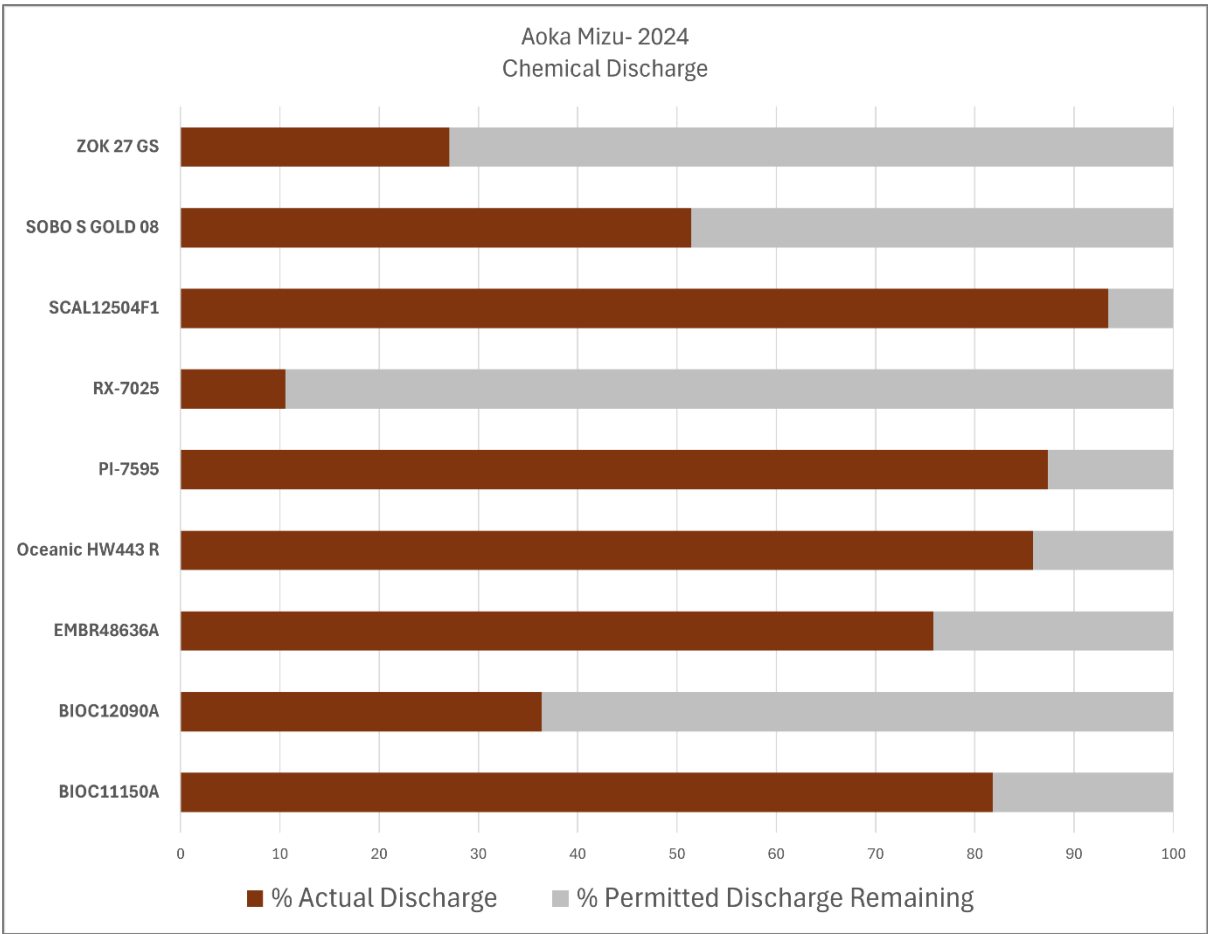


Figure 4-7 Aoka Mizu 2024 Chemical Discharge vs Permitted Quantities

Note that Methanol is PLONOR (Poses Little Or NO Risk) chemicals, therefore there are no permit limits for use

The chemicals used, comprised biocides, demulsifiers, water based hydraulic fluids, asphaltene inhibitors, wax inhibitors, corrosion inhibitors, scale inhibitors, hydrogen sulphide scavengers, hydrate inhibitors and cleaning fluids utilised during routine production operations. The majority of these chemicals were Hazard Quotient [HQ] Gold or Category ‘E’ or ‘D’ chemicals (the ratio of Predicted Effect Concentration against No Effect Concentration), thus have the least potential impact on the marine environment.

Chemicals are subject to continual review and Bluewater will continue to seek suitable alternatives, where appropriate to minimise impact on the marine environment.

## Waste Management

Management and segregation of wastes takes place on the installation prior to transfer to onshore facilities for recycling or disposal. Total waste arising during 2024 from the Aoka Mizu FPSO and the disposal routes are provided in Table 4.6.

Table 4.6 Aoka Mizu Waste Arising and Disposal Routes during 2024

Category	Reuse	Re-cycling	Waste to Energy	Incinerate	Landfill	Other	Total
	(t)	(t)	(t)	(t)	(t)	(t)	(t)
<b>Group I – Special</b>							
Chemicals/ Paints	-	2.99	-	-	-	5.39	8.38
Drums/ Containers	-	1.227	-	-	-	0	1.227
Oils	-	2.255	-	-	-	-	2.255
Miscellaneous Special Waste	-	13.931	4.8	-	0.87	-	19.601
Sludge's / Liquids / Washings	-	-	-	-	-	9.5	9.5
<b>Sub-Total</b>	-	<b>20.403</b>	<b>4.8</b>	-	<b>0.87</b>	<b>14.89</b>	<b>40.963</b>
<b>Group II - General</b>							
Chemicals/ Paints	-	-	-	-	-	-	-
Drums/ Containers	-	-	-	-	-	-	-
Scrap metal	-	-	-	-	-	-	-
Segregated Recyclables	-	49.458	21.91	-	-	-	71.368
General Waste	-	4.396	28.79	-	8.214	-	41.4
Sludge's / Liquids / Washings	-	-	-	-	-	-	-
<b>Sub-Total</b>	-	<b>53.854</b>	<b>50.7</b>	-	<b>8.214</b>	-	<b>112.768</b>
<b>Group III - Other</b>							
Asbestos	-	-	-	-	-	-	-
Radioactive Materials (exc NORM)	-	-	-	-	-	-	-
Clinical	-	-	-	0.3	-	-	0.3
Explosives	-	-	0.002	-	-	-	0.002
<b>Sub-Total</b>	-	-	<b>0.002</b>	<b>0.3</b>	-	-	<b>0.302</b>
<b>Grand Total</b>							
	-	<b>74.257</b>	<b>55.502</b>	<b>0.3</b>	<b>9.084</b>	<b>14.89</b>	<b>154.033</b>

**Error! Reference source not found.** overleaf shows that the Offshore Installation recycled 48% of the total waste produced. Waste disposed to landfill and Waste to Energy amounted to 6% and 36% respectively. There was also approximately 15 tonnes of “Other” waste, mostly comprising of sludges, liquids, paints and chemicals equating to 10% of total waste (Table 4.6). Approximately 0.3 tonnes of Group III (Other Wastes) were generated, mainly comprising of clinical waste. No Group IV (Back-loaded Cuttings) wastes were produced in 2024.

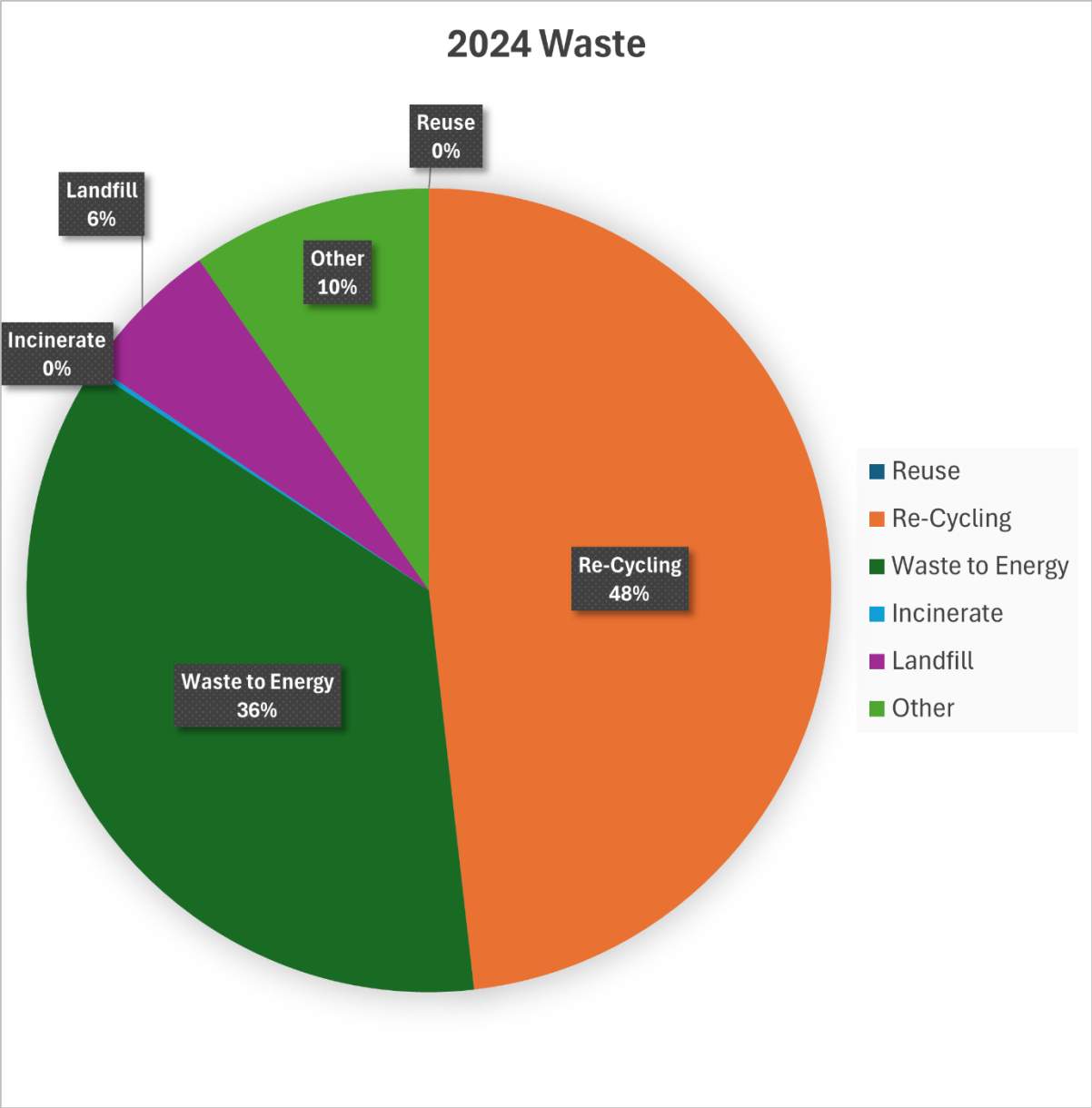


Figure 4-8 Aoka Mizu 2024 breakdown of generated waste

## 2025 Key Activities

The main offshore aims and objectives for the Aoka Mizu FPSO during 2025 are:

- ✓ Ongoing maintenance and implementation of the EMS, including
  - Maintenance of 14001:2015 Standard;
  - Environmental data monitoring & reporting schedules;
  - Environmental KPIs;
  - Environmental Aspects Registers and Controls; and
  - HSE Management System Interface documentation.
- ✓ Audit and review of Permits and Consents management and compliance associated with Environmental Management Systems and Processes;
- ✓ Maintaining normal and steady production.
- ✓ Continued management of asset integrity and process safety to minimise the risk of spills; and
- ✓ Duty of Care audit of waste management processes and contractor.

## 5. INCIDENTS

Under UK legislation any unplanned / unpermitted releases of oil and chemicals discharged to the marine environment are required to be reported to OPRED via the Petroleum Operations Notice No.1 (PON 1) reporting system. These, as well as other reportable incidents / operations notices that occurred during 2024 for the assets are detailed in Table 5.1 (6 in total).

*Table 5.1 2024 reportable incidents*

Date	Asset	Non-Conformance Type	Description
8 <sup>th</sup> May 2024	Haewene Brim	PON1	Pinhole leak in hydraulic hose led to approximately 0.1 kg of hydraulic oil being released to the environment during torquing operations on one of the mooring lines.
3 <sup>rd</sup> July 2024	Aoka Mizu	OCR	Dose rate of PI-7595 Asphaltene Inhibitor chemical injection was found to be exceeding 25ppm as specified on permit.
12 <sup>th</sup> February 2024	Aoka Mizu	OCR	3 instances of exceeding permitted dosage for wax inhibitor RX-7025 in 2023 and 2 instances of exceeding permitted dosage for wax inhibitor RX-7025 in 2024 were identified during OPRED inspection that took place in February 2024.
12 <sup>th</sup> February 2024	Aoka Mizu	OCR	During the OPRED inspection it was identified that biociding of slops was not performed in line of the details presented in the chemical permit description.
14 <sup>th</sup> July 2024	Aoka Mizu	OPPC	Produced water flowmeter inaccuracy was identified with the route cause being oxygen ingress in the system

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## Abbreviations

<b>CH<sub>4</sub></b>	Methane
<b>CMS</b>	Corporate Management System
<b>CNS</b>	Central North Sea
<b>CO</b>	Carbon Monoxide
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>EEMS</b>	Environmental Emissions Monitoring System
<b>EMS</b>	Environmental Management System
<b>FPSO</b>	Floating Production Storage and Offloading
<b>HQ</b>	Hazard Quotient
<b>HSE</b>	Health Safety & Environmental
<b>HSEQ</b>	Health, Safety, Environmental and Quality
<b>KPI</b>	Key Performance Indicators
<b>mg/l</b>	Milligrams per Litre
<b>NO<sub>x</sub></b>	Nitrous Oxides
<b>OCR</b>	Offshore Chemical Regulations
<b>OIW</b>	Oil in Water
<b>OPPC</b>	Oil Pollution Prevention and Control
<b>OPRED</b>	Offshore Petroleum Regulator for Environment and Decommissioning
<b>OSPAR</b>	Oslo Paris Convention for the Protection of the Marine Environment of the North-East Atlantic
<b>PPC</b>	Production Prevention and Control
<b>PPCL</b>	Pierce Production Company Limited
<b>SEMS</b>	Safety and Environmental Management System
<b>SO<sub>x</sub></b>	Sulphur Oxides
<b>SUB</b>	Chemicals Rated for Substitution
<b>UK</b>	United Kingdom
<b>UKCS</b>	United Kingdom Continental Shelf
<b>VOCs</b>	Volatile Organic Compounds