Environmental Performance Report 2020

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TEEKAY ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) ANNUAL PUBLIC STATEMENT

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Abbreviations

BEIS	Business Energy and Industrial Strategy
CEFAS	Centre for Environment, Fisheries and Aquaculture Science
CH_4	Methane
CNS	Central North Sea
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CoP	Cessation of Production
EEMS	Environmental Emissions Monitoring System
EMS	Environmental Management System
FPSO	Floating Production Storage and Offloading
FSU	Floating Storage Unit
HQ	Hazard Quotient
HSE	Health Safety & Environmental
HSSE	Health, Safety, Security and Environmental
KPI	Key Performance Indicators
mg/l	Milligrams per Litre
NOx	Nitrous Oxides
OCR	Offshore Chemical Regulations
ODP	Oil Discharge Permit
OGA	Oil & Gas Authority
OIW	Oil in Water
OPEP	Oil Pollution Emergency Plans
OPPC	Oil Pollution Prevention and Control
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning
OSPAR	Oslo Paris Convention for the Protection of the Marine Environment of the North-East Atlantic
PLANC	Permits, Licences, Authorisation and Consent
PLO	Poses Little or No Risk
PON	Petroleum Operations Notice
SOx	Sulphur Oxides
SUB	Chemicals Rated for Substitution
UK	United Kingdom
UKCS	United Kingdom Continental Shelf
VOCs	Volatile Organic Compounds

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1 INTRODUCTION

This report is the 2020 Annual Public Statement for environmental management covering the United Kingdom Continental Shelf (UKCS) operations of Altera Infrastructure.

This document is prepared in line with the reporting requirements of the United Kingdom (UK) Department for Business, Energy and Industrial Strategy (BEIS) and meets the requirements of the Oslo Paris (OSPAR) Convention recommendations 2003/5. This report outlines Altera Infrastructure Offshore Environmental Management System (EMS) and details the 2020 environmental performance.

2 OVERVIEW OF NORTH SEA ASSETS

Petrojarl Banff

Petrojarl Banff employs a unique wedge shape design. The vessel was producing in 2020 under contract to CNR International in the Banff and Kyle Fields, while cessation of production (CoP) occurred on 31st of May 2020.

Figure 2-1 Petrojarl Banff

The Banff and Kyle fields were tied back to the Banff Floating, Production, Storage and Offloading vessel (FPSO) where processing was carried out. Oil was exported, via a pipeline, to the Apollo Spirit from where shuttle tankers offloaded the crude oil. Gas was primarily used as fuel gas, but excess gas could be exported into the BP Central Area Transmission System (CATS) via pipeline.

The Banff field was discovered in October 1991 and production began in 1996. The Banff development comprised of four producing wells, and one gas injector. The Kyle field was discovered in August 1993 and began production in 1999. The Kyle field comprised of four producing wells, Kyle North (K13 and K14) and Kyle South (K12z and K15).

The Banff field straddles the boundary between Blocks 29/02 and 22/27a, the Banff FPSO is moored in Block 22/27a, of the central North Sea (CNS), 192 km from the nearest Scottish coastline and 66 km from the UK/Norway transboundary line and in water depths of approximately 95 m. The Kyle field is located to the south of the Banff field in Block 29/02c in similar water depths.

Apollo Spirit

The Apollo Spirit Floating, Storage Unit (FSU) was moored in Block 22/27a, of the CNS, 192 km from the nearest Scottish coastline and 66 km from the UK/Norway transboundary line and in water depths of approximately 95 m.

Apollo Spirit is not a producing installation and was only used for the storage of fluids from the Petrojarl Banff FPSO, from where shuttle tankers offload the crude oil. The Apollo Spirit FSU was located approximately 2.4 km north east of the Petrojarl Banff FPSO.

Figure 2-2 Apollo Spirit FSU

Petrojarl Foinaven

The Petrojarl Foinaven FPSO is the host installation of the Foinaven Field producing for BP. The Petrojarl Foinaven FPSO is located on the UKCS 190 km west of the Shetland Islands predominantly in Blocks 204/24a and 204/19 in a water depth of 480 m.

Figure 2-3 Petrojarl Foinaven FPSO

Sevan Hummingbird

The Sevan Hummingbird is a SEVAN 300 unit located in the Chestnut field in the United Kingdom producing for Spirit Energy.

Figure 2-4 Sevan Hummingbird FPSO

Discovered in 1986, the Chestnut oilfield is one of the oldest standalone oilfield developments in the North Sea. Production came online in September 2008, and in the first quarter of 2009, the Chestnut satellite field was tied into the newly installed Hummingbird FPSO. The Hummingbird is a cylindrical geo-stationary FPSO, the first of its kind to be utilised in the North Sea, designed around a hexagonal shaft with a cargo storage capacity of 300,000 barrels. The FPSO's topside provides accommodation for 47 crew members. Tanks for diesel and fresh water and utility equipment are situated beneath the accommodation. Seawater is injected to maintain reservoir pressure, and produced fluids are received from two risers before fluids are separated and produced water treated and discharged directly into the sea. Oil is routed to Cargo tanks and periodically offloaded via shuttle tanker.

Voyageur Spirit

The Voyageur Spirit was a Cylindrical SEVAN 300 unit located in the Huntington field in the United Kingdom, producing for Premier Oil.

The Voyageur Spirit Floating, Production, Storage and Offloading vessel (FPSO) was the host installation for the Huntington Field. The Voyageur Spirit FPSO was in UKCS Block 22/14 of the CNS, approximately 204 km from the Scottish coast and 27 km from the UK/Norwegian median line, and in approximately 89 m of water.

Figure 2-5 Voyageur Spirit FPSO

3 ENVIRONMENTAL MANAGEMENT SYSTEM

3.1 HSSE Policy

Altera Infrastructure's commitment to the environment, as well as health, safety and security, are detailed within its policy statement, shown in Figure 3.1. The Health, Safety, Security and Environmental (HSSE) policy is a public commitment to conducting business in a manner that protects the health and safety of people and preserves the integrity of the environment.

The main commitments of the policy are:

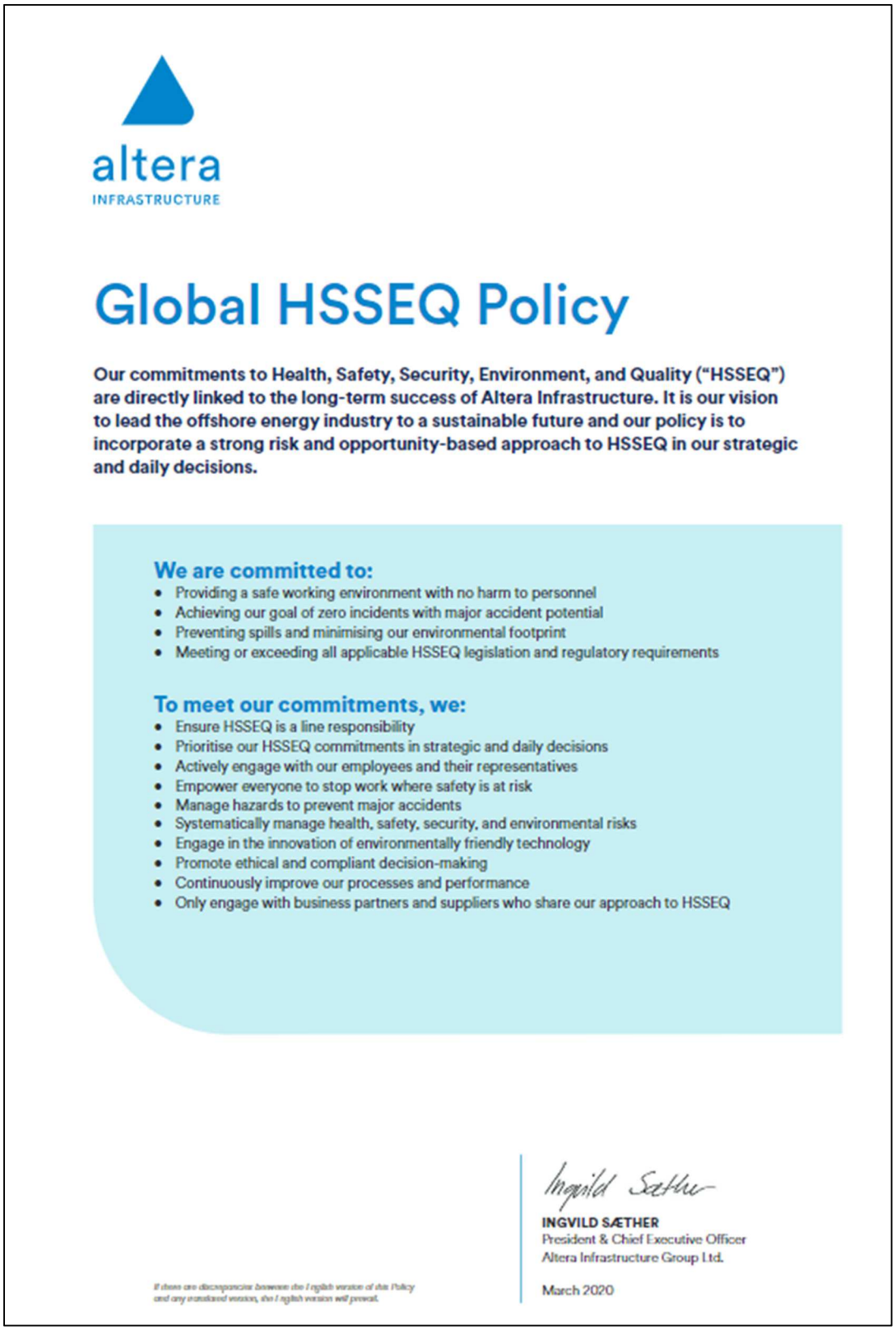
- Providing a safe working environment with no harm to personnel;
- Achieving our goal of zero incidents with major accident potential;
- Preventing spills and minimising our environmental footprint; and
- Meeting or exceeding all applicable HSSEQ legislation and regulatory requirements.

3.2 EMS

Altera Infrastructure's commitment to the highest levels of HSSE is achieved through the HSSE Management System, which contains an Environmental Management System (EMS) utilised to identify, assess and mitigate environmental risks and mange environmental performance of all its operations.

The EMS is an integral element of the HSSE Management System and is based on the principle, "plan, do, check and act". The EMS is designed to achieve the environmental goals of the prevention and elimination of pollution from offshore sources, the protection and conservation of the maritime area against other adverse effects of offshore activities and the continual improvement in environmental performance. Altera Infrastructure produces an annual Sustainability Report which includes the status of its environmental performance.

The EMS is verified against the International Organization for Standardization (ISO) 14001 Standard for EMS and includes all their North Sea assets. Altera Infrastructure ensures maintenance and compliance with ISO 14001 (Figure 3.2). Environmental compliance is also managed through the development of an asset specific Permits, Licences, Authorisation and Consent (PLANC) Register and an Environmental Compliance Plan.



altera
INFRASTRUCTURE

Global HSSEQ Policy

Our commitments to Health, Safety, Security, Environment, and Quality ("HSSEQ") are directly linked to the long-term success of Altera Infrastructure. It is our vision to lead the offshore energy industry to a sustainable future and our policy is to incorporate a strong risk and opportunity-based approach to HSSEQ in our strategic and daily decisions.

We are committed to:

- Providing a safe working environment with no harm to personnel
- Achieving our goal of zero incidents with major accident potential
- Preventing spills and minimising our environmental footprint
- Meeting or exceeding all applicable HSSEQ legislation and regulatory requirements

To meet our commitments, we:

- Ensure HSSEQ is a line responsibility
- Prioritise our HSSEQ commitments in strategic and daily decisions
- Actively engage with our employees and their representatives
- Empower everyone to stop work where safety is at risk
- Manage hazards to prevent major accidents
- Systematically manage health, safety, security, and environmental risks
- Engage in the innovation of environmentally friendly technology
- Promote ethical and compliant decision-making
- Continuously improve our processes and performance
- Only engage with business partners and suppliers who share our approach to HSSEQ

If there are discrepancies between the English version of this Policy and any translated version, the English version will prevail.

Ingvild Sæther

INGVILD SÆTHER
President & Chief Executive Officer
Altera Infrastructure Group Ltd.

March 2020

Figure 3-1 Altera Infrastructure HSSE Policy

DNV

MANAGEMENT SYSTEM CERTIFICATE

Certificate no.:
174287-2015-AE-NOR-NA

Initial certification date:
28 December 2004

Valid:
14 March 2021 – 13 March 2024

This is to certify that the management system of

Altera Infrastructure Production AS

Brattørkaia 17A, 7010 Trondheim, Norway

and the sites and vessels as mentioned in the appendix accompanying this certificate

has been found to conform to the Environmental Management System standard:

ISO 14001:2015

This certificate is valid for the following scope:

Activities on- and offshore, to operate FPSO's.

Place and date:
Høvik, 10 March 2021

NORWEGIAN ACCREDITATION
MSYS 002

For the issuing office:
DNV - Business Assurance
Veritasveien 1, 1363 Høvik, Norway

Jøran Laukholm
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV Business Assurance Norway AS, Veritasveien 1, 1363 Høvik, Norway - TEL: +47 67 57 99 00. www.dnvgl.com/assurance

Figure 3-2 Altera Infrastructure ISO14001 certificate

4 ENVIRONMENTAL PERFORMANCE

Altera Infrastructure has identified the following significant environmental aspects of its operations:

- Atmospheric emissions;
- Oil and sand discharges to sea in produced water;
- Chemical use and discharge to sea;
- Solid waste generation and disposal; and
- Oil and chemical spills.

Altera Infrastructure routinely monitors and reports its performance in terms of environmental emissions and discharges as required by UK legislation and the internal HSSE Management System. This information is reported via the Environmental and Emissions Monitoring System (EEMS), which is a database of environmental information that is accessible to oil and gas operators and to the regulator, BEIS.

4.1 Petrojarl Banff

Environmental data for the Petrojarl Banff FPSO is presented for the full calendar year of 2020, though it should be noted that CoP was the 31st of May 2020. Hence, the environmental performance presented in the following subsections relates to the applicable period during 2020. The removal of the Petrojarl Banff FPSO is part of the wider decommissioning operations of the Banff field. This will be carried out in three distinct phases executed over a five-year period:

- Phase 1 – Disconnect and float-off of the FPSO and FSO vessels from the fields;
- Phase 2 - Decommissioning of subsea installations and pipelines; and
- Phase 3 - Well plug and abandonment.

4.1.1 Water and Oil in Water Discharges

Water discharges are monitored and reported in accordance with the Oil Pollution, Prevention and Control (OPPC) Permit.

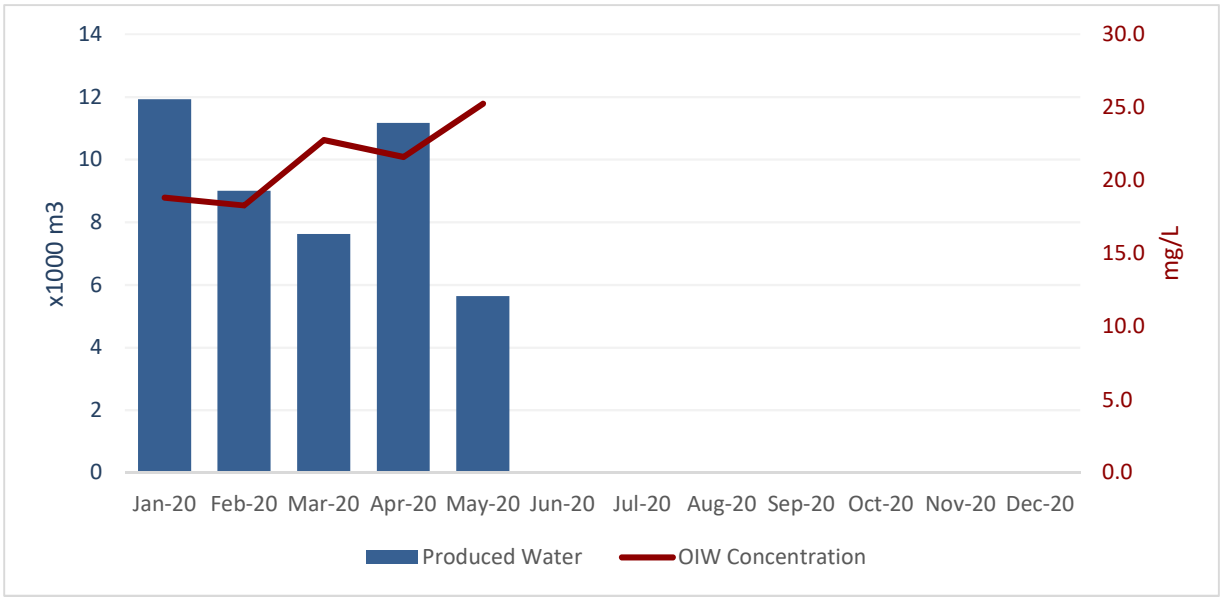


Figure 4-1 Petrojarl Banff Water Discharge Performance

The average Oil in Water (OIW) concentration for the relevant period was 20.9 mg/l, below the permitted 30 mg/l limit. A produced water volume of 45,351 m^3 and 947 kg of oil was discharged to sea during the period.

4.1.2 Chemical Use and Discharge

All chemical use and discharge allowances were approved by the regulator through chemical permits. The data shows that production chemical use in 2020 was 232 tonnes and the percentage of these chemicals that may have been discharged to sea was 94%. All individual chemical usages/discharges were within approved limits.

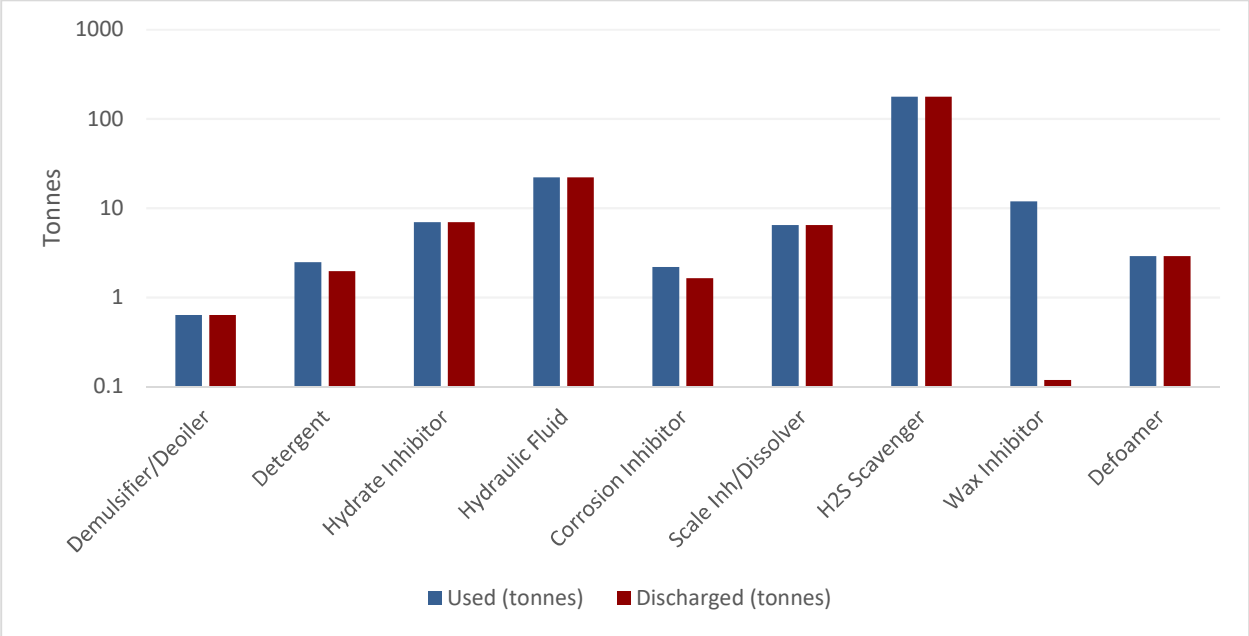


Figure 4-2 Petrojarl Banff Chemical Use and Discharge

Chemical management aimed to minimise the impact of chemicals on the environment. Certain chemicals had been highlighted to be phased out by means of substitution warnings (known as 'sub warning chemicals'). Reducing the use of these chemicals presented challenges, especially for those that have been engineered for specific fields or applications. Altera Infrastructure aimed to phase in alternative chemicals to replace sub warning chemicals as they became available on the market. The majority of chemicals use on the Banff FPSO in 2020 did not carry a substitution warning.

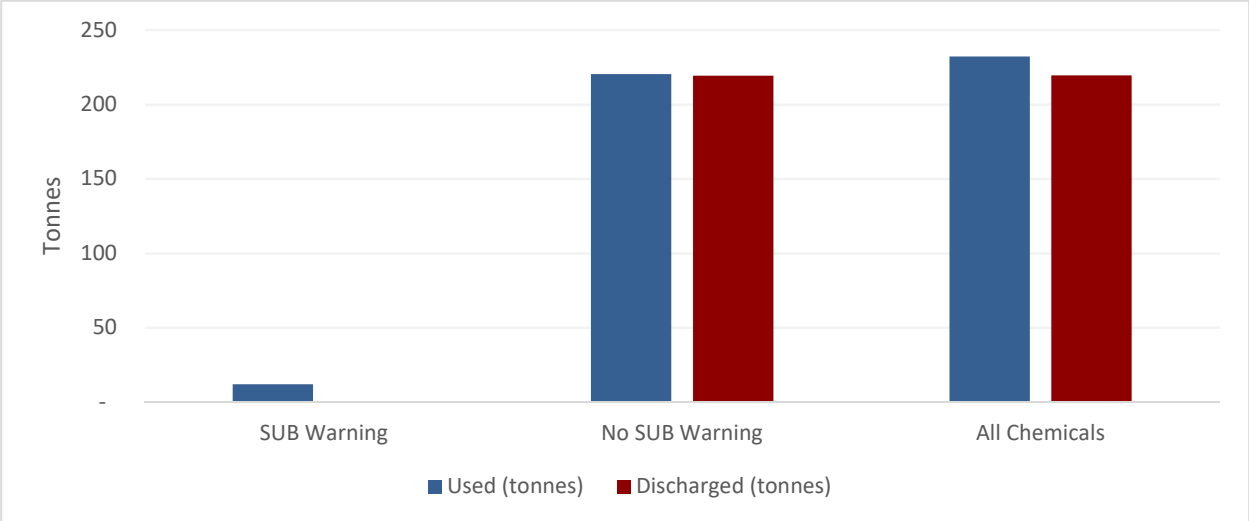


Figure 4-3 Petrojarl Banff Chemical Use and Discharge - Chemicals with Substitution Warning Label

4.1.3 Atmospheric Emissions

The primary source of CO_2 emissions from the Petrojarl Banff FPSO is fuel gas which supplied the gas turbines (power generation), followed by flaring and diesel use. CNR owned the EU ETS permit and Flare Consent for the Banff field.

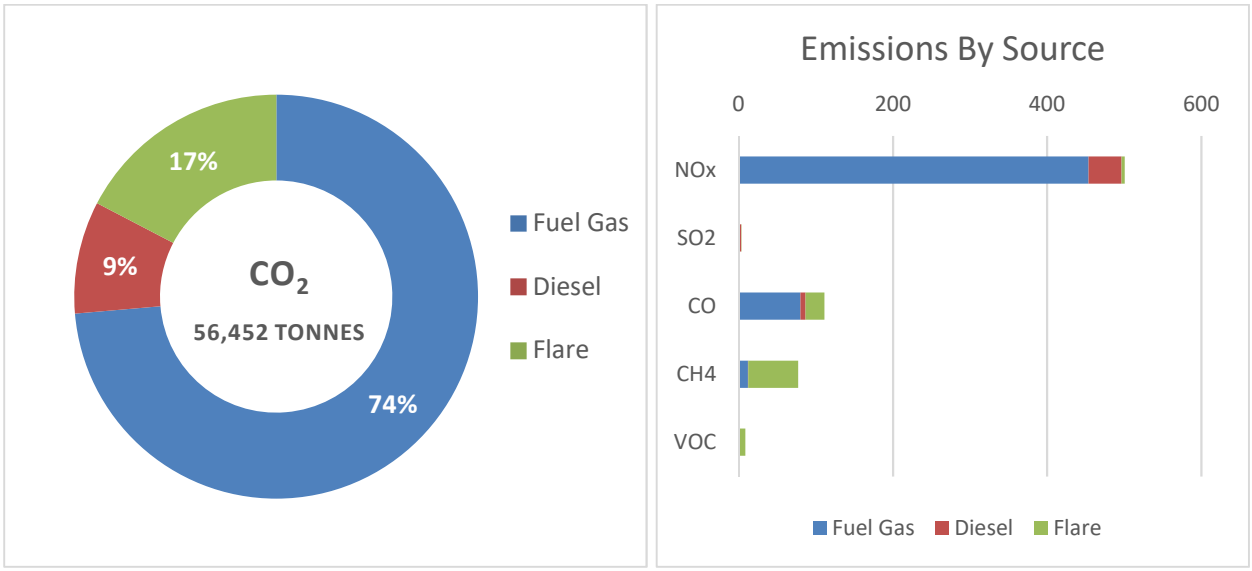


Figure 4-4 Petrojarl Banff Emissions

4.1.4 Waste Management

Within 2020 the Petrojarl Banff FPSO generated 3,420 tonnes of operational and decommissioning waste which was segregated into the following disposal routes.

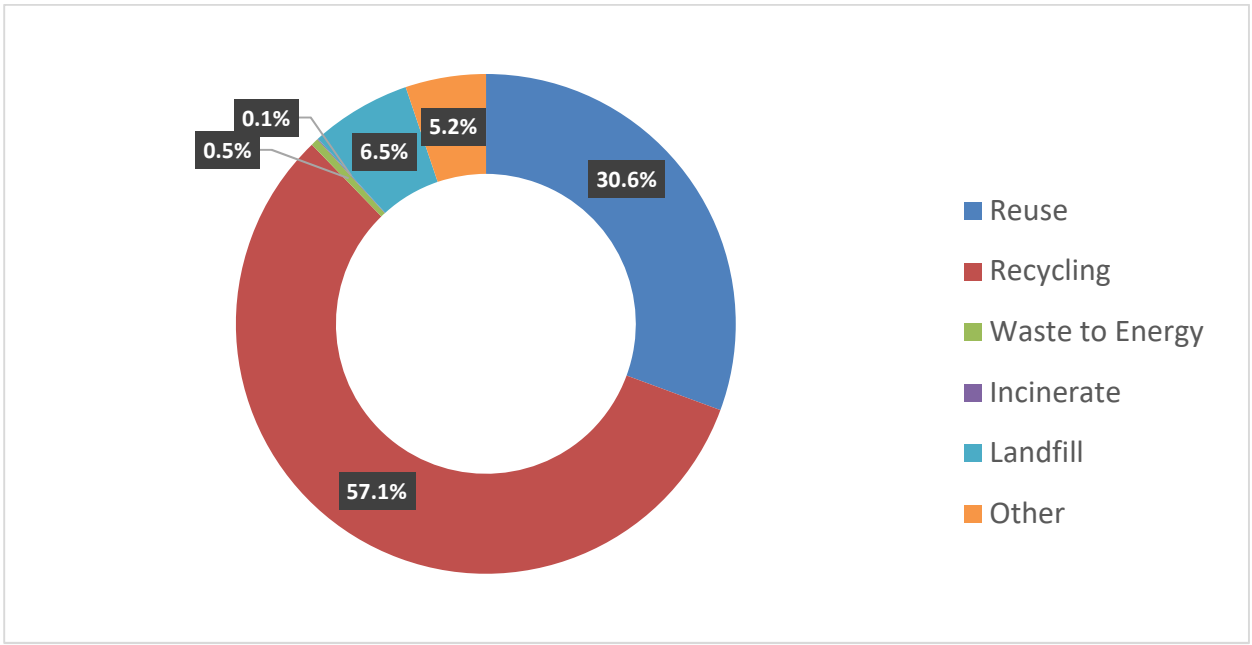


Figure 4-5 Petrojarl Banff Waste Disposal Route Breakdown

Operational waste for the year were approximetly 28.5 tonnes, while decommissioning waste for the year were 3,391.5 tonnes.

4.2 Apollo Spirit

Environmental data for the Apollo Spirit is presented for the full calendar year of 2020. The vessel left its station in Q4 2020.

4.2.1 Water and Oil in Water Discharges

The Apollo Spirit operated as a storage vessel, receiving oil from the Petrojarl Banff FPSO. There were no processing units on board and therefore no continuous water discharge. Water dropout occurred within the cargo tanks and was discharged to sea on a batch basis. Discharges were monitored and reported in accordance with the OPPC Permit.

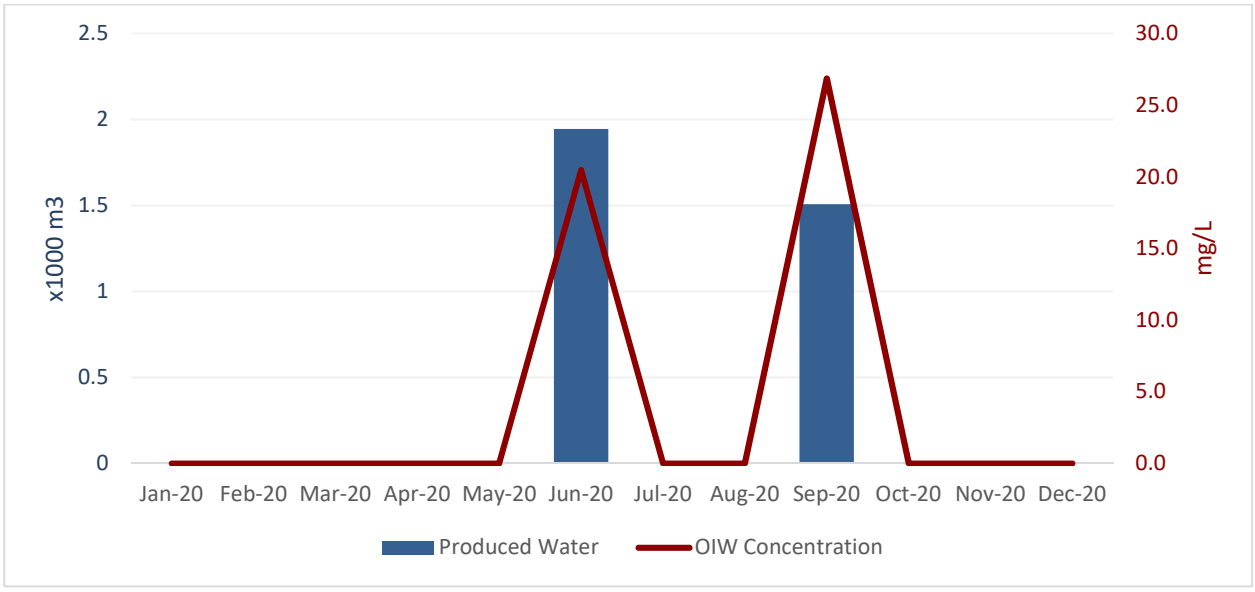


Figure 4-6 Apollo Spirit Water Discharge Performance

Discharges to sea occurred during two months of the year, with the average OIW concentration for those months being 23.2 mg/l, below the permitted 30 mg/l limit. A produced water volume of 3,451 m^3 and 80 kg of oil was discharged during the period.

4.2.2 Chemical Use and Discharge

The data shows that chemical use in 2020 was 0.595 tonnes and the percentage of these chemicals that may have been discharged was 100%. As there are no process systems on the Apollo spirit, chemicals were limited to biocide, demulsifiers and cleaning fluids.

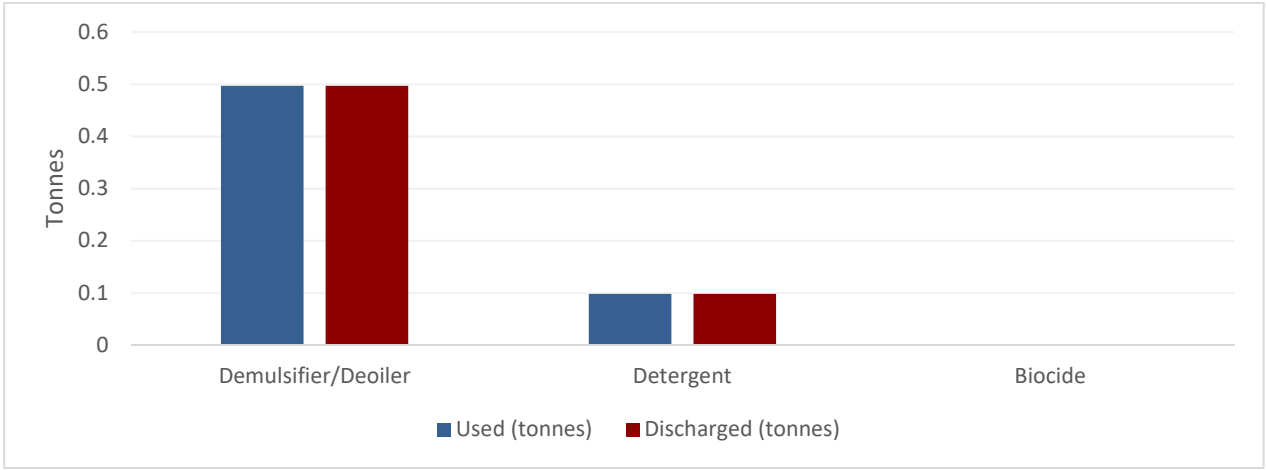


Figure 4-7 Apollo Spirit Chemical Use & Discharge

All individual chemical usages/discharges were within approved limits. Elevated usage, when compared to the previous year, can be attributed to the use of Deoiler chemicals required for the water treatment package.

Only one of the chemicals in use on the Apollo Spirit carried a substitution warning.

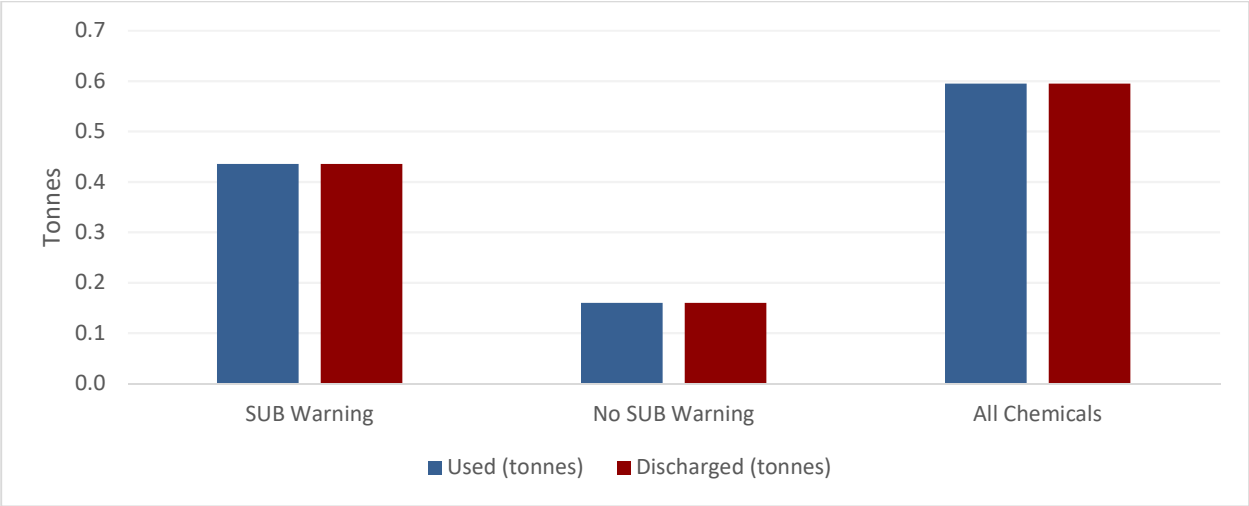


Figure 4-8 Apollo Spirit Chemical Use and Discharge - Chemicals with Substitution Warning Label

4.2.3 Atmospheric Emissions

Combustion plant on the Apollo Spirit falls below the reporting thresholds and therefore no PPC permit is required and hence, data is not presented here.

4.2.4 Waste Management

The Apollo Spirit generated 1,527 tonnes of operational and decommissioning waste which was segregated into the following disposal routes.

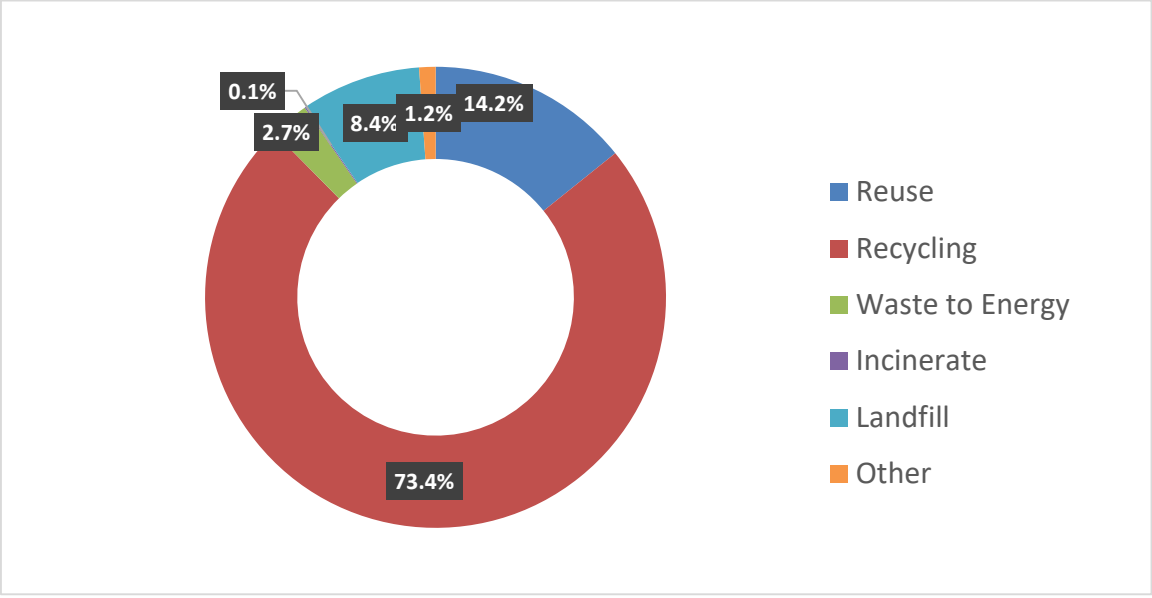


Figure 4-9 Apollo Spirit Waste Disposal Route Breakdown

Operational waste for the year were approximetly 11 tonnes, while decommissioning waste for the year were 1,516 tonnes.

4.3 Petrojarl Foinaven

Environmental data for the Petrojarl Foinaven FPSO is presented for the period January 2020 to December 2020.

4.3.1 Water and Oil in Water Discharges

Water discharges are monitored and reported in accordance with the OPPC Permit.

The average OIW concentration for the main discharge route (Produced Water Flash Drum) was 49.7 mg/l, above the permitted 30 mg/l limit. A produced water volume of 276,620 m^3 and 13,761 kg of oil was discharged during the year.

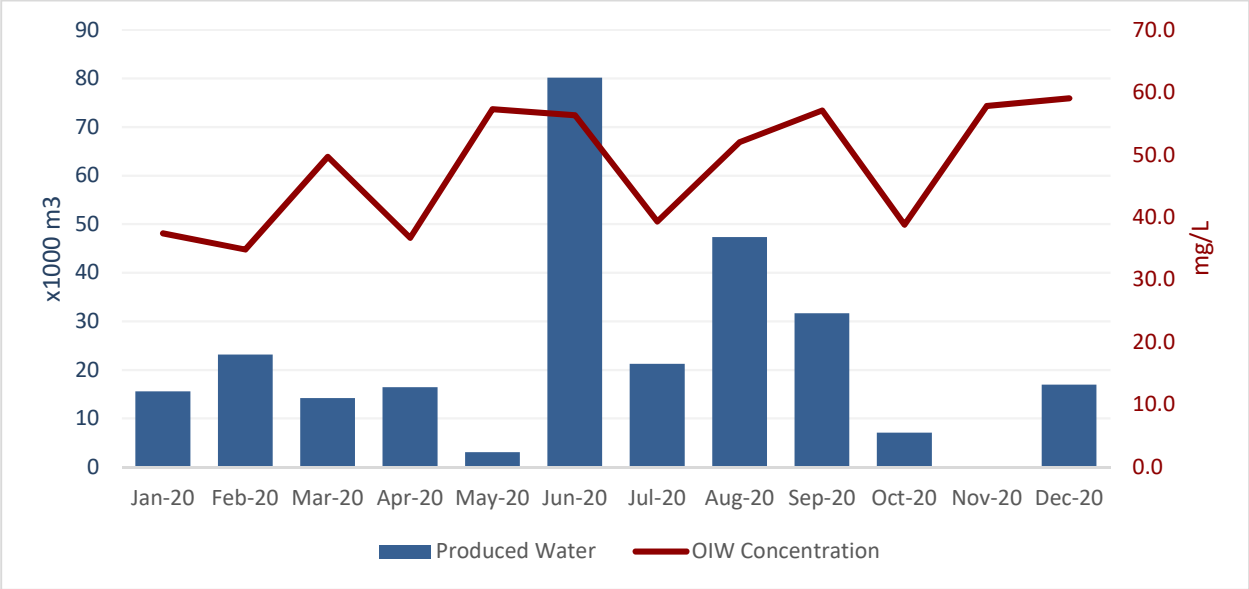


Figure 4-10 Petrojarl Foinaven Water Discharge Performance

To be noted that Petrojarl Foinaven makes use of a secondary discharge point (Standby WI Pump Min Flow Valve), though discharge from this location is limited. In 2020, a total of 181 kg of oil, within a water volume of 3,498 m^3, were discharged during the month of July.

4.3.2 Chemical Use and Discharge

The data shows that chemical use in 2020 was 2,152 tonnes and the percentage of these chemicals that may have been discharged was 17%. All individual chemical usages/discharges were within approved limits.

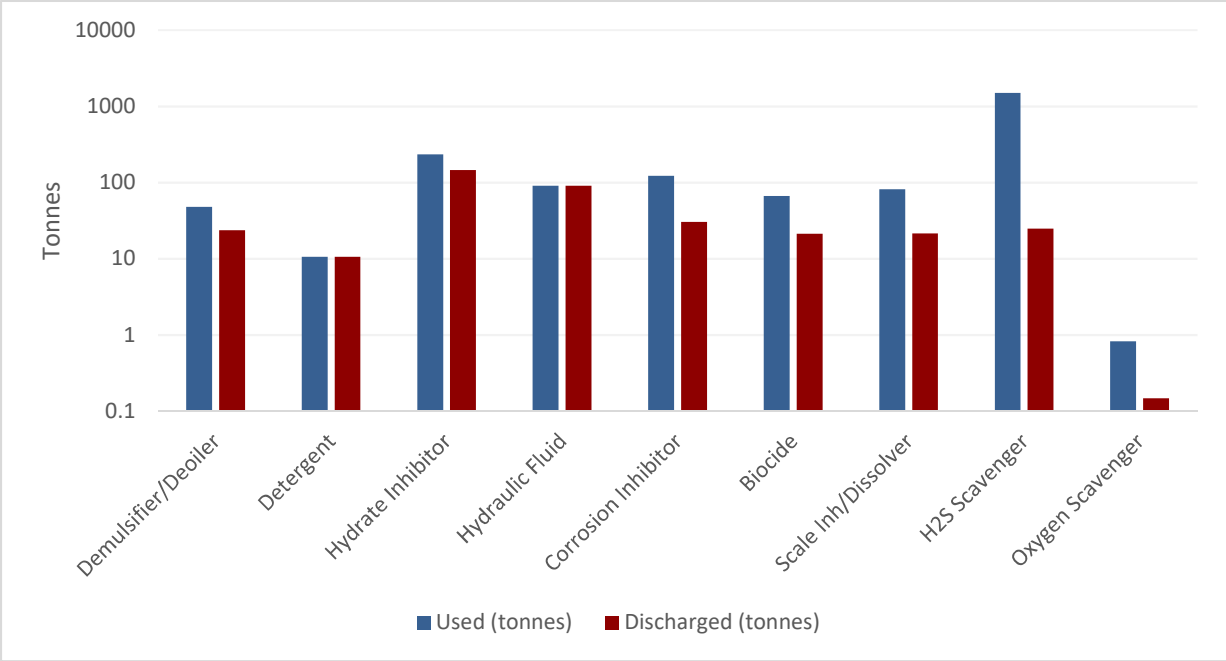


Figure 4-11 Petrojarl Foinaven Chemical Use and Discharge

The majority of chemicals in use on the Petrojarl Foinaven FPSO do not have a substitution warning. Ongoing chemical management aimed to continue to minimise the impact of chemicals on the environment.

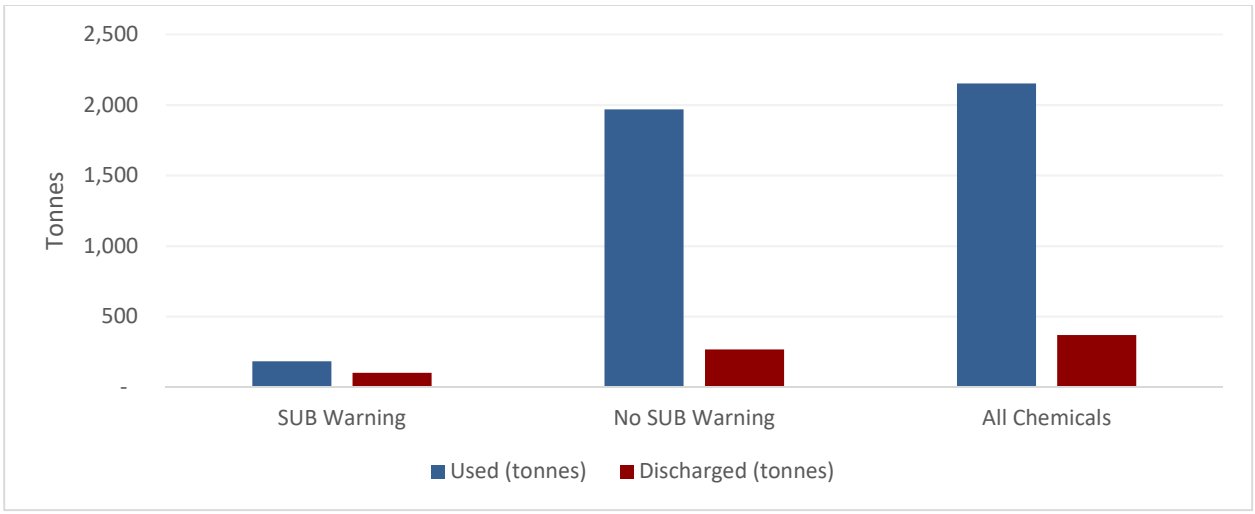


Figure 4-12 Petrojarl Foinaven Chemical Use and Discharge - Chemicals with Substitution Warning Label

4.3.3 Atmospheric Emissions

The primary source of CO_2 emissions from Petrojarl Foinaven FPSO is diesel which supplies power generation. Note the field operator, BP, is responsible for managing the flare consent and EU ETS permit associated with the Foinaven fields.

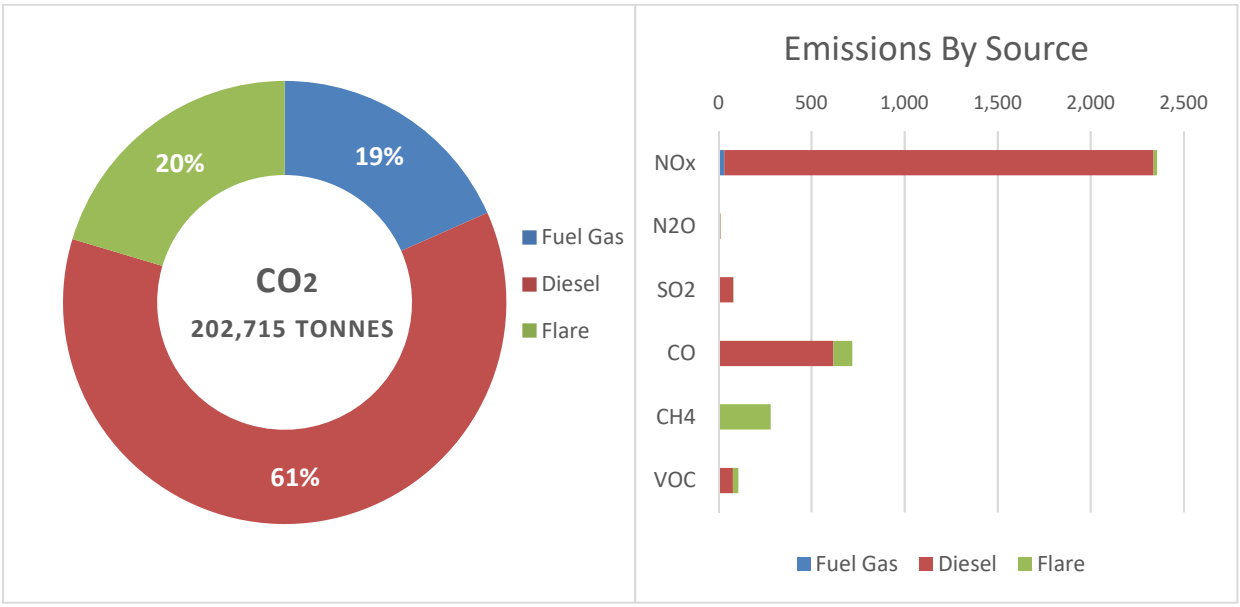


Figure 4-13 Petrojarl Foinaven Emissions

4.3.4 Waste Management

The Petrojarl Foinaven FPSO generated 458 tonnes of waste which was segregated into the following disposal routes.

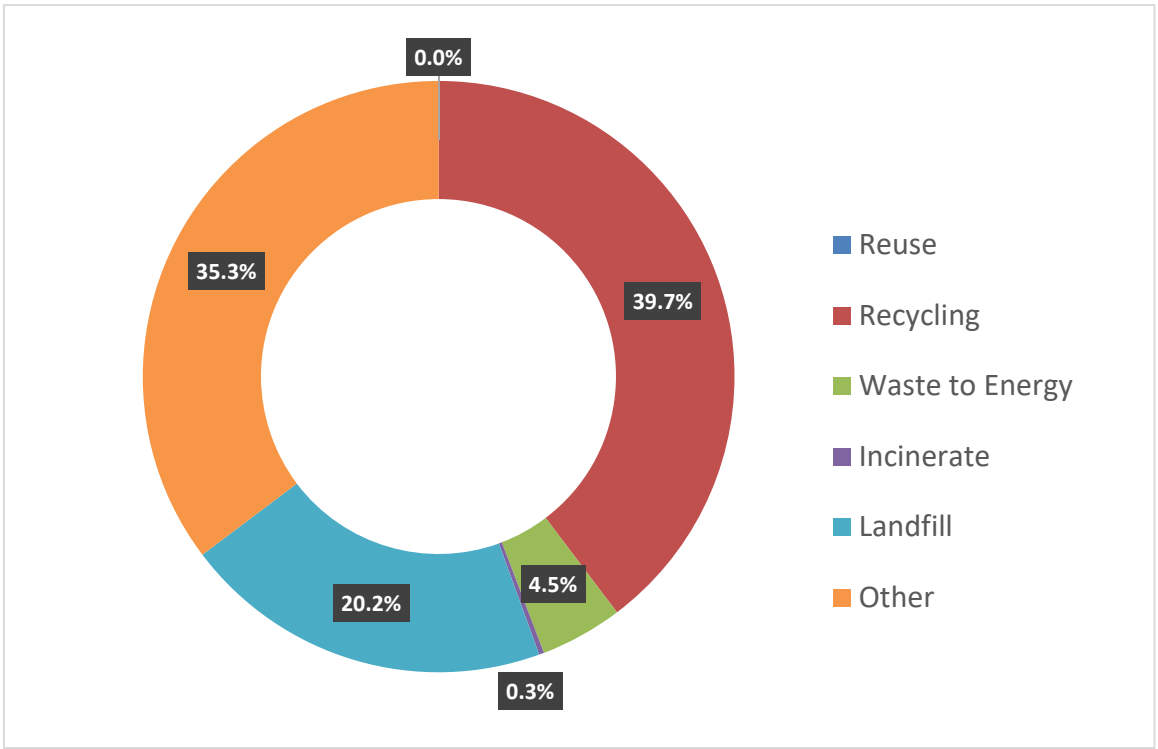


Figure 4-14 Petrojarl Foinaven Waste Disposal Route Breakdown

4.4 Voyageur Spirit

Environmental data for the Voyageur Spirit is presented for the full calendar year of 2020, though it should be noted that CoP was the 05th of April 2020.

Various alternative production strategies to further extend the life of the Huntington field were investigated, but no viable alternative to decommissioning was identified. A CoP application for the Huntington field has been discussed with and submitted to the Oil & Gas Authority (OGA) and was approved on the 26th of November 2019. The Huntington field decommissioning, which is split up into three phases, is proposed to be executed over a seven-year period. The FPSO removal in Phase 1 was approved by the Department in April 2020.

4.4.1 Water and Oil in Water Discharges

Water discharges are monitored and reported in accordance with the OPPC Permit.

The average OIW concentration for the period was 14.2 mg/l, below the permitted 30 mg/l limit. A produced water volume of 78,013 m^3 and 1,106 kg of oil was discharged during the year.

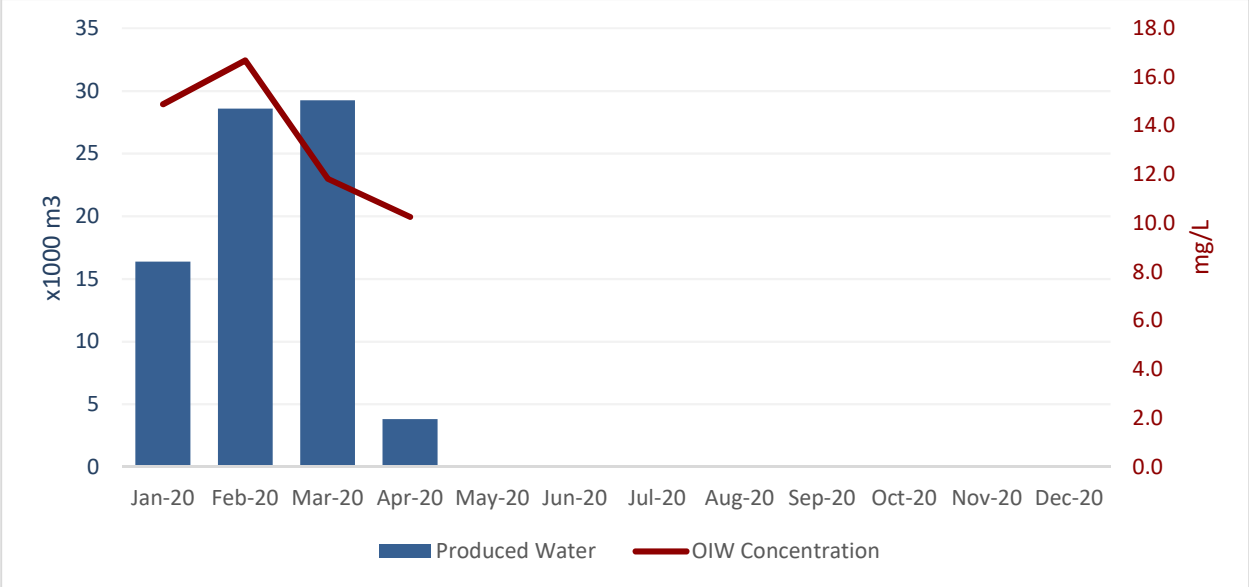


Figure 4-15 Voyageur Spirit Water Discharge Performance

4.4.2 Chemical Use and Discharge

The data shows that chemical use in 2020 was 37 tonnes and the percentage of these chemicals that may have been discharged was 100%. None of the chemicals in use on the Voyageur Spirit FPSO carried a substitution warning in 2020. All individual chemical usages/discharges were within approved limits.

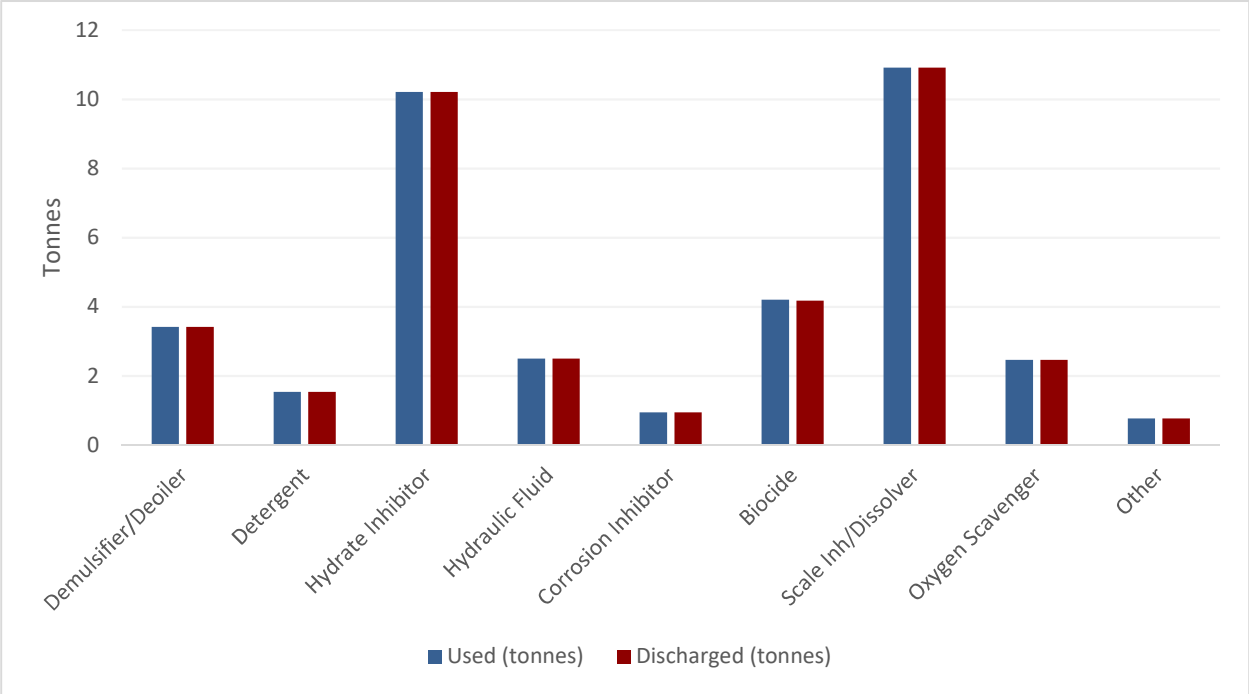


Figure 4-16 Voyageur Spirit Chemical Use and Discharge

4.4.3 Atmospheric Emissions

The primary source of CO_2 emissions from the Voyageur Spirit FPSO was fuel gas which supplied the gas turbines (power generation). Note the field operator, Premier Oil, was responsible for managing the flare consent and EU ETS associated with the Voyageur fields.

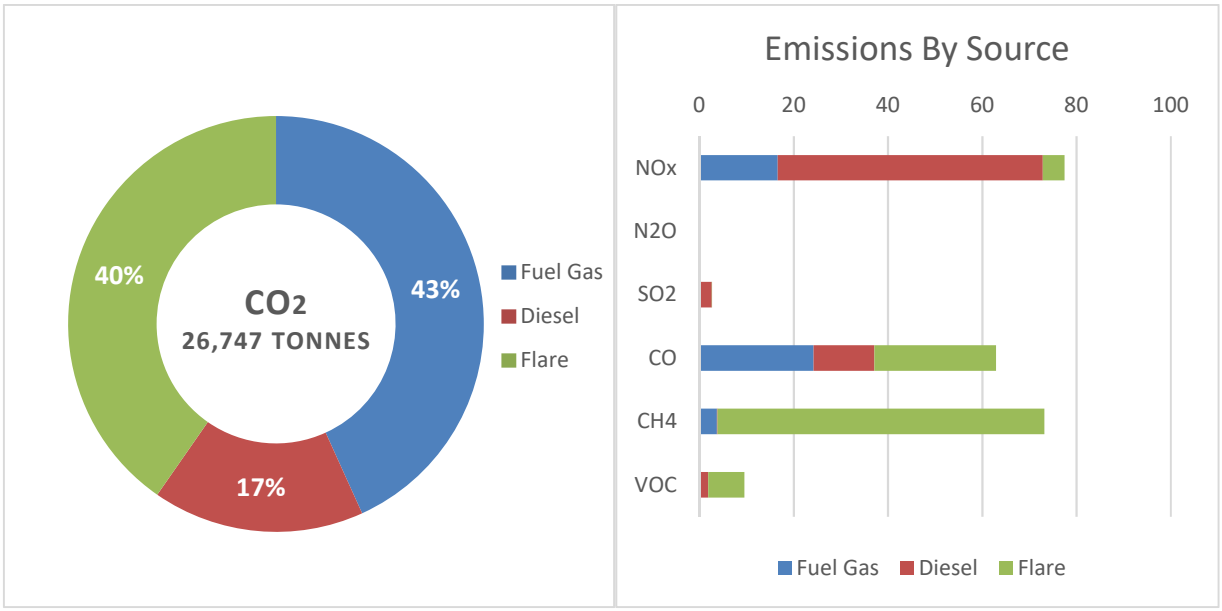


Figure 4-17 Voyageur Spirit Emissions

4.4.4 Waste Management

The Voyageur Spirit FPSO generated 742 tonnes of operational and decommissioning waste which was segregated into the following disposal routes.

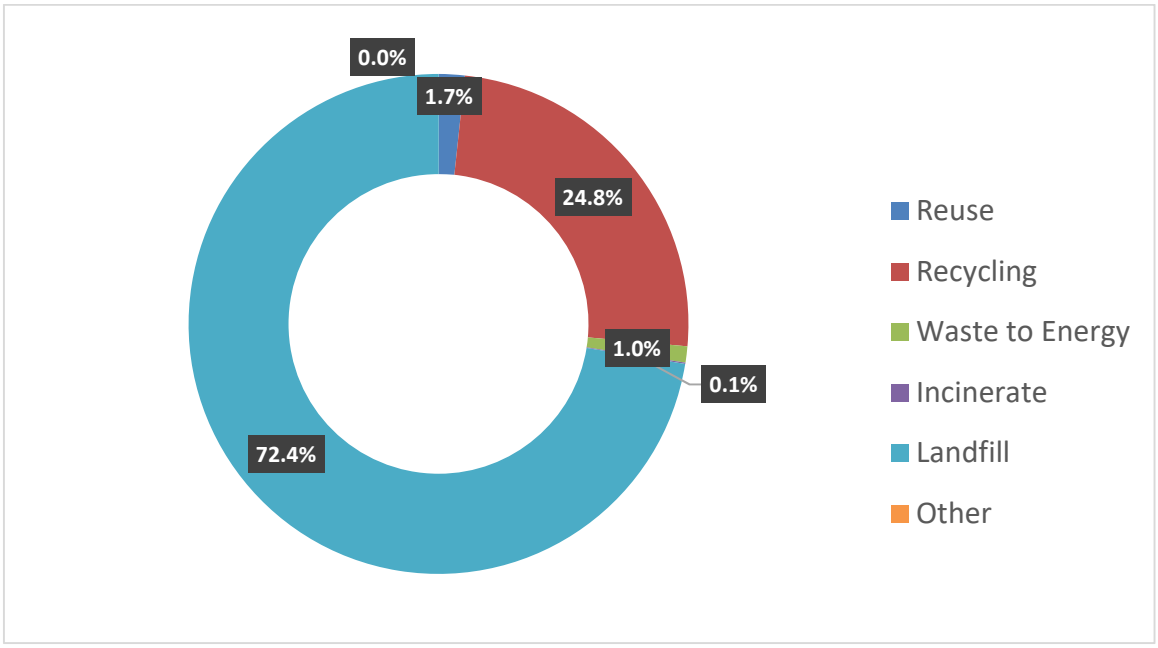


Figure 4-18 Voyageur Spirit Waste Disposal Route Breakdown

Operational waste for the year were approximetly 64 tonnes, while decommissioning waste for the year were 678 tonnes, the latter contibuting significanly to the high stated percentage of landfill waste.

4.5 Sevan Hummingbird

Environmental data for Sevan Hummingbird is presented for the period January 2020 to December 2020.

4.5.1 Water and Oil in Water Discharges

Water discharges are monitored and reported in accordance with the OPPC Permit.

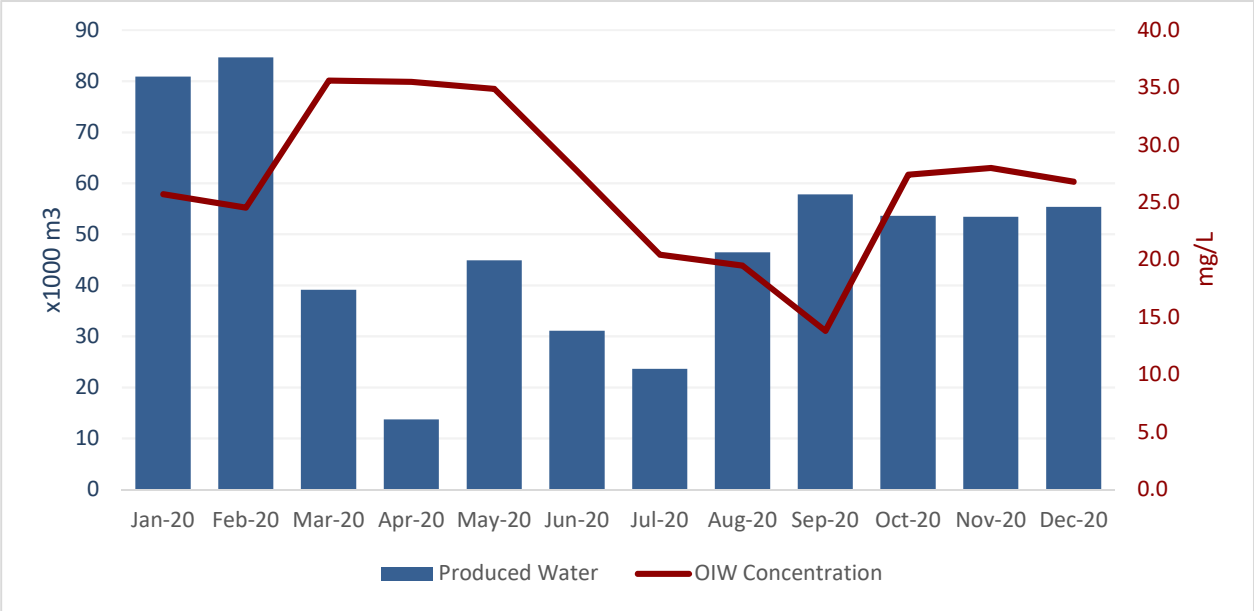


Figure 4-19 Sevan Hummingbird Water Discharge Performance

The average OIW concentration for the period was 25.8 mg/l, below the permitted 30 mg/l limit. A produced water volume of 584,595 m^3 and 15,106 kg of oil was discharged during the year.

4.5.2 Chemical Use and Discharge

The data shows that chemical use in 2020 was 225 tonnes and the percentage of these chemicals that may have been discharged was 87 %. All individual chemical usages/discharges were within approved limits.

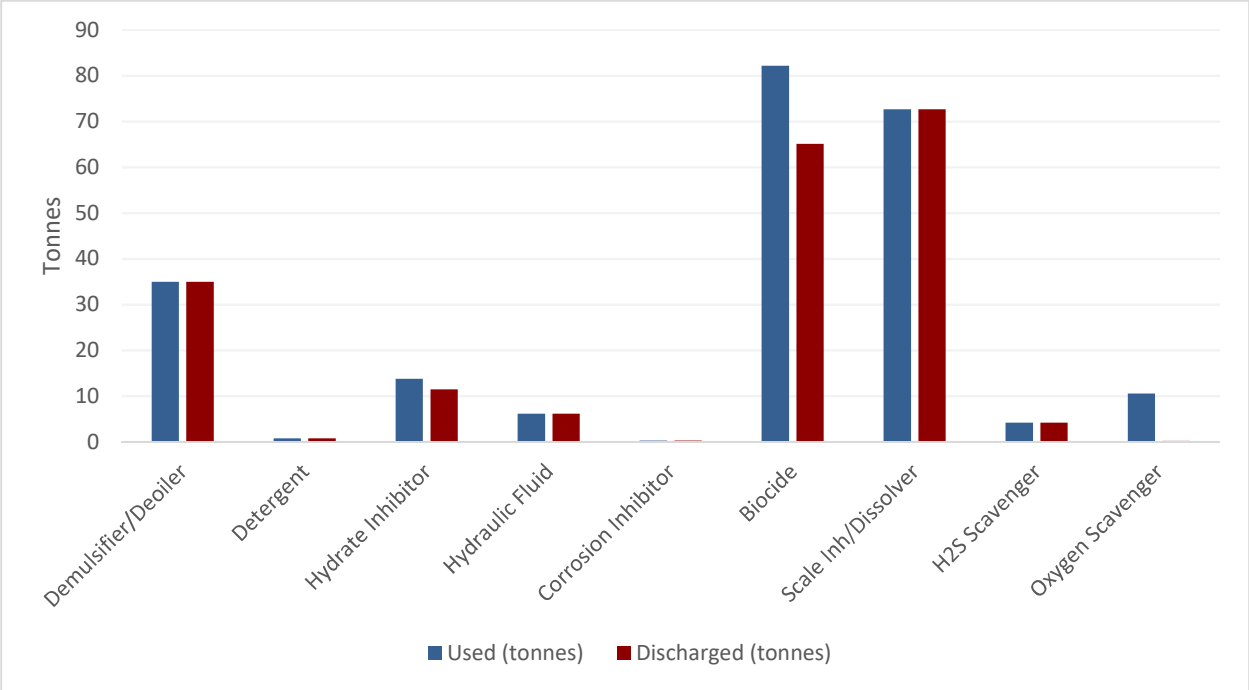


Figure 4-20 Sevan Hummingbird Chemical Use and Discharge

The majority of chemicals in use on the Sevan Hummingbird FPSO do not have a substitution warning. Ongoing chemical management aims to continue to minimise the impact of chemicals on the environment.

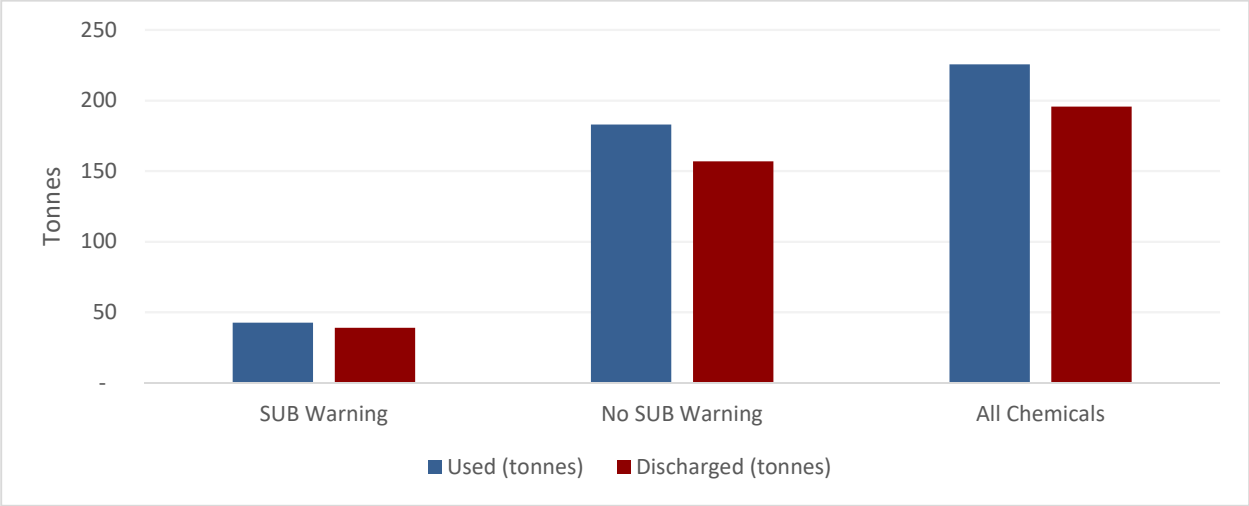


Figure 4-21 Sevan Hummingbird Chemical Use and Discharge - Chemicals with Substitution Warning Label

4.5.3 Atmospheric Emissions

The primary source of CO_2 emissions from the Sevan Hummingbird FPSO is flaring for which Spirit Energy hold the Flare Consent. This is followed by fuel gas and diesel use. Combustion plant on the Sevan Hummingbird FPSO falls below the regulatory reporting thresholds and therefore there is no PPC permit.

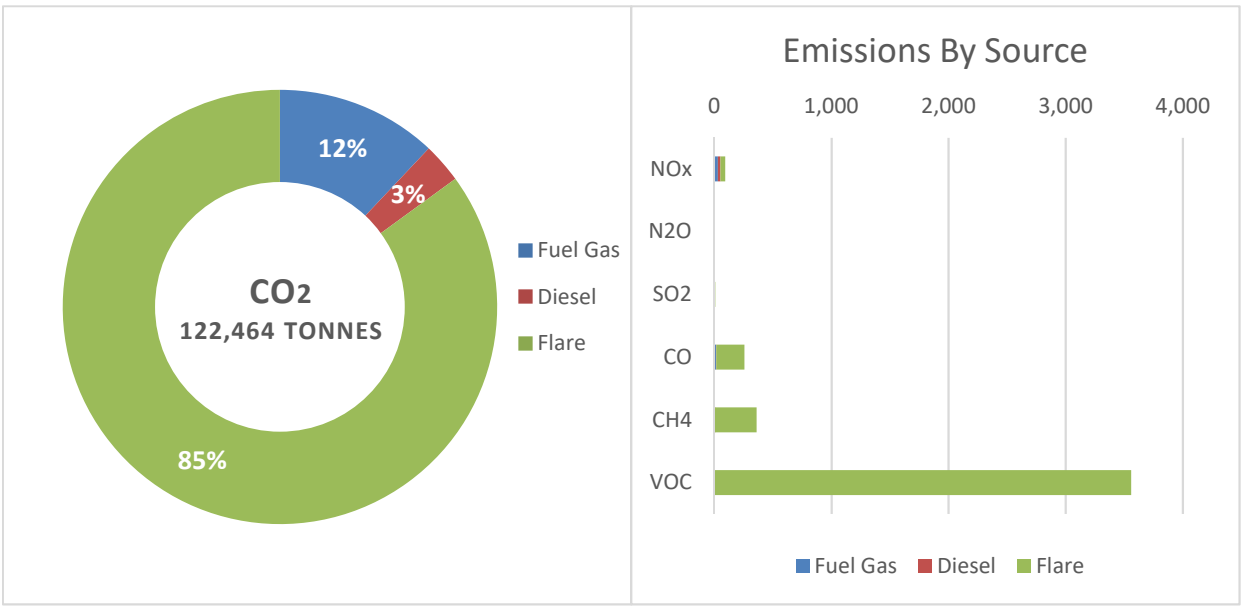


Figure 4-22 Sevan Hummingbird Emissions

4.5.4 Waste Management

The Sevan Hummingbird FPSO generated 59.6 tonnes of waste which was segregated into the following disposal routes.

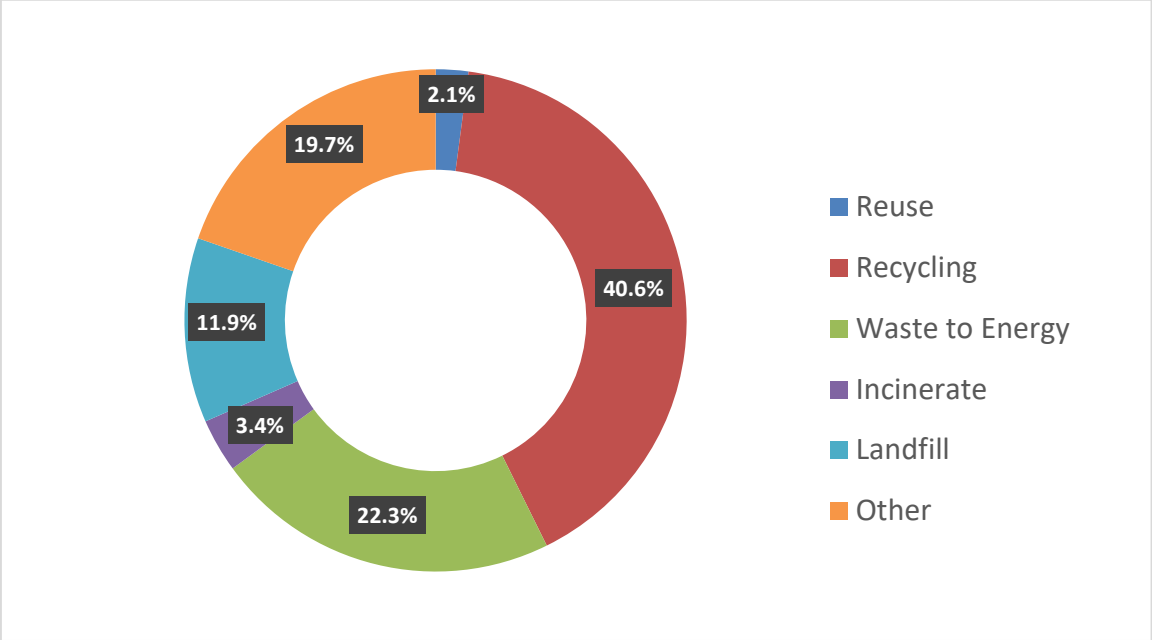


Figure 4-23 Sevan Hummingbird Waste Disposal Route Breakdown

5 INCIDENTS

The table below shows the reportable incidents that occurred during 2020. Most non-conformances are associated with breaching monthly or daily OIW limits on the Petrojarl Foinaven and Sevan Hummingbird assets. There is on-going work to improve this on the Sevan Hummingbird, mainly involving improved chemical management such as replacing current chemicals with alternate ones which impact less on the discharged water quality.

Table 5-1 2020 Reportable Incidents

Date of Report	Asset	Non-Conformance Type	Description
26/02/2020	Foinaven	OPPC Non-Conformance	January Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
10/03/2020	Foinaven	OPPC Non-Conformance	February Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
28/03/2020	Hummingbird	OPPC Non-Conformance	Late submission of EEMS.
29/04/2020	Hummingbird	OPPC Non-Conformance	Meter 0449 not working in April.
04/05/2020	Hummingbird	OPPC Non-Conformance	April Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.

Date of Report	Asset	Non-Conformance Type	Description
20/05/2020	Foinaven	OPPC Non-Conformance	March Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
20/05/2020	Foinaven	OPPC Non-Conformance	April Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
02/06/2020	Foinaven	OPPC Non-Conformance	May Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
02/06/2020	Hummingbird	OPPC Non-Conformance	Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
05/06/2020	Hummingbird	OPPC Non-Conformance	Spike in mg/l (234.6) due to SICI and subsea event.
08/06/2020	Banff	OPPC Non-Conformance	Not taking and submitting H1 2020 bi-annual sample.
29/06/2020	Hummingbird	OPPC Non-Conformance	Spike in mg/L (142.8) due to SICI.
30/06/2020	Foinaven	PON1	A modification required us to inject biocide into the risers. After we started this, we found we had to top up the system. The conclusion was that the biocide was going to sea from a subsea location.
03/07/2020	Foinaven	OPPC Non-Conformance	June Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
09/07/2020	Foinaven	OPPC Non-Conformance	Main WI pump min flow valve FV-1801 is passing and unable to close so, there is a continued discharge of PW which was first reported at 0800 hrs on the 8th July 2020.
19/07/2020	Foinaven	PON2	1Ltr tin of Hyperbond washed overboard during heavy weather while Olympic Zeus was lying stern to sea performing heading control duties for the Foinaven FPSO.
03/08/2020	Foinaven	OPPC Non-Conformance	July Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
05/08/2020	Hummingbird	OPPC Non-Conformance	Spike in mg/L (126.9) due to SICI.
05/08/2020	Hummingbird	OPPC Non-Conformance	Spike in mg/L (108.2) due to SICI.
25/08/2020	Foinaven	OPPC Non-Conformance	July Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l for WI SB Pump min flow valve discharge point.

Date of Report	Asset	Non-Conformance Type	Description
26/08/2020	Foinaven	PON1	Several passing valves allowing cross contamination from water return pump to fire water system drain.
29/08/2020	Foinaven	PON1	Tool tray hose underneath H26 was found to be damaged, this is the root cause of the release to sea.
30/08/2020	Banff	PON2	One Half of a flotation device previously fitted to one of Banff's Risers. The other half was recovered in 5 pieces damaged during unmooring of FPSO Petrojarl Banff.
03/09/2020	Foinaven	OPPC Non-Conformance	August Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
02/10/2020	Foinaven	OPPC Non-Conformance	September Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
03/11/2020	Foinaven	OPPC Non-Conformance	October Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
04/09/2020	Hummingbird	OPPC Non-Conformance	Spike in mg/L (133.5 due to flowback from scale squeeze).
31/10/2020	Hummingbird	OPPC Non-Conformance	Spike in mg/L (397.6 due to weather and residual solids in plant).
09/11/2020	Hummingbird	OCR Non-Conformance	Wrong Chemical used to dose slops tank.
12/11/2020	Hummingbird	OCR Non-Conformance	Wrong chemical dosage used for SICI 10000A (125ppmvs150ppm).
26/11/2020	Foinaven	PON1	Leak at CSA2/1 FTP jumper plate.
01/12/2020	Foinaven	OPPC Non-Conformance	November Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
13/12/2020	Hummingbird	OPPC Non-Conformance	Due to weather, there was a spike of 152mg/L.
04/01/2021	Foinaven	OPPC Non-Conformance	December Monthly average concentration of dispersed oil produced water discharged above permitted concentration of 30 mg/l.
04/01/2021	Hummingbird	OPPC Non-Conformance	OPPC non-conformance due to failure of produced water flow meter 944-FIT-0449 and the requirement to estimate the PW discharge volume DEC 2020.

6 CONCLUSIONS

Altera Infrastructure is committed to minimising impacts to the environment from offshore operations. Through the regular review of environmental performance, and the setting and delivery of environmental objectives that are appropriate to environmental risks, Altera Infrastructure shall continue to improve environmental performance.

Altera Infrastructure plans to deliver the following key environmental objectives in 2021:

- Raise environmental awareness on all the assets;
- Reduce the likelihood of accidental discharges to the sea and
- Ensure compliance with environmental regulations.