Eni UK Limited - OSPAR Public Statement

2020 Environmental Performance

Hewett Field and Liverpool Bay Areas

1. Introduction

This is the 2020 Environmental Statement for Eni UK Ltd, for the period 1st January to 31st December 2020, hereafter called the reporting period. This statement reports the environmental performance of offshore operations to our stakeholders, and to the public, in accordance with the 'Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) Guidance and Reporting Requirements', in relation to OSPAR Recommendation 2003/5. This statement covers all 2020 Eni UK offshore operational oil and gas activities which are essentially decommissioning and production operations in the Hewett Field and Liverpool Bay areas.

2. HSE Management System

Eni UK Ltd maintains a HSE policy (below), the commitments within which are implemented through management systems and operational controls across all Eni UK operations. Appropriate interface arrangements are in place between Eni UK management systems and those of third-party service companies such as Petrofac, the Hewett Installation operator, and Valaris, the drilling contractor. Eni UK is committed to minimising environmental impact via an environmental management system (EMS) which is certified to ISO 14001:2015 by Lloyds Register Quality Assurance (LRQA), certificate provided below. This certification involves biannual surveillance audits.

Policy
Health, safety and the environment

The safety and health of Eni's people, of the community and of its partners, and the protection of the environment are top priorities for Eni in all its activities.

Eni UK conducts its activities in accordance with all compliance obligations and with all other applicable requirements and standards concerning the safeguarding of the health and safety of workers and of the environment.

Eni UK is committed to eliminating hazards and reducing HSE risks in an integrated and systematic manner, in accordance with the principles of precaution, prevention, protection and continual improvement.

Eni UK maintains and implements its HSE Management System, assigning clear responsibilities to all levels of personnel in the company and ensuring that required competencies and resources are available.

In consultation with its workforce, Eni UK's top management performs an active role in setting direction and improvement objectives, fostering trust and promoting a positive HSE culture. Workers' representatives are elected to facilitate active participation of the entire workforce.

Eni UK adopts good practices in relation to HSE matters and supports active engagement with relevant industry associations, with the aim of developing and improving standards of HSE management and performance.

Eni UK considers the protection of health a fundamental requisite and promotes the psychological and physical well-being of its people.

Eni UK designs, develops, manages and decommissions its tangible assets ensuring the safeguarding of workforce health and safety, the minimisation of environmental impacts, the prevention of pollution and the optimisation of natural resources and energy use.

Eni UK selects and manages its contractors to ensure that they have the necessary capability and competence to meet its expectations in relation to HSE management.

Eni UK communicates to its stakeholders, in a transparent manner, the objectives and results that have been achieved in relation to HSE management and promotes long term cooperation, with the aim of achieving mutual sustainable development.

Eni UK is committed to progressively reducing carbon intensity through challenging operational efficiency targets, and to playing an active role in promoting the energy transition.

Nicolò Aggogeri
Managing Director Eni UK

April 2021

Eni UK HSE Policy

Lloyd's Register

Certificate of Approval

This is to certify that the Management System of:

Eni UK Ltd

Ebury Bridge Road, London, SW1W 8PZ, United Kingdom

has been approved by Lloyd's Register to the following standards:

ISO 14001:2015, ISO 45001:2018

Approval number(s): ISO 14001 – 0002135, ISO 45001 – 0016161

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.

The scope of this approval is applicable to:

The exploration and development of oil and gas reserves and the management of non-operated oil and gas production in the UK and North East Atlantic. Oil and gas production and decommissioning activities managed by Eni UK Limited (London) and operations at the following Liverpool Bay offshore facilities: Douglas, Oil Storage Installation (OSI), Lennox, Hamilton, Hamilton North and Hamilton East. The processing of raw gas at the Point of Ayr Gas Terminal and associated support services at Llaneurgain House.

This certificate is a continuation of a previous approval from another certification body as follows:

Previous original ISO 45001 approval on 27-JAN-2016, ERMCVS certificate number 177

David Derrick
Area Operations Manager UK & Ireland
Issued by: Lloyd's Register Quality Assurance Limited

LRQA ISO 14001 Certificate

3. HSE Improvement Objectives

Eni UK maintains environmental improvement objectives, progress against which is monitored by the Health, Safety and Environment Team. These objectives are linked to the significant environmental aspects. 2020 focus areas were:

- Maintenance of ISO 14001 EMS certification.
- Regulatory compliance.
- Completion of all planned audits, inspections and emergency response exercises.
- Ongoing cessation of production and decommissioning of the Hewett Field.
- Chemical substitution to OSPAR schedule.
- Work with industry groups on greenhouse gas reduction opportunities.

4. Hewett Field Area

Eni Hewett Ltd is a wholly owned subsidiary of Eni UK Ltd. On 1st January 2018, the responsibility for management of the Hewett Field Installations, including related environmental management and regulatory requirements, was transferred to Petrofac Facilities Management Ltd. (Petrofac) through their appointment as the Hewett Field Installation Operator. Eni Hewett Ltd continues to be the Hewett Field Well Operator.

This statement therefore covers the environmental performance of Hewett Field wells only. Petrofac Facilities Management Ltd is responsible for reporting the environmental performance of the Hewett Field installations and their associated production operations.

A documented HSE Management System Interface Plan is in place between Eni UK and Petrofac Facilities Management Ltd, to manage the implementation of Eni requirements.

The Hewett Gas Field is located in the Southern North Sea, approx. 22km from the Norfolk coast, and 85km west of the UK/Netherlands median line, in Blocks 48/29, 48/30, 52/05, in a water depth between 20-40 meters.

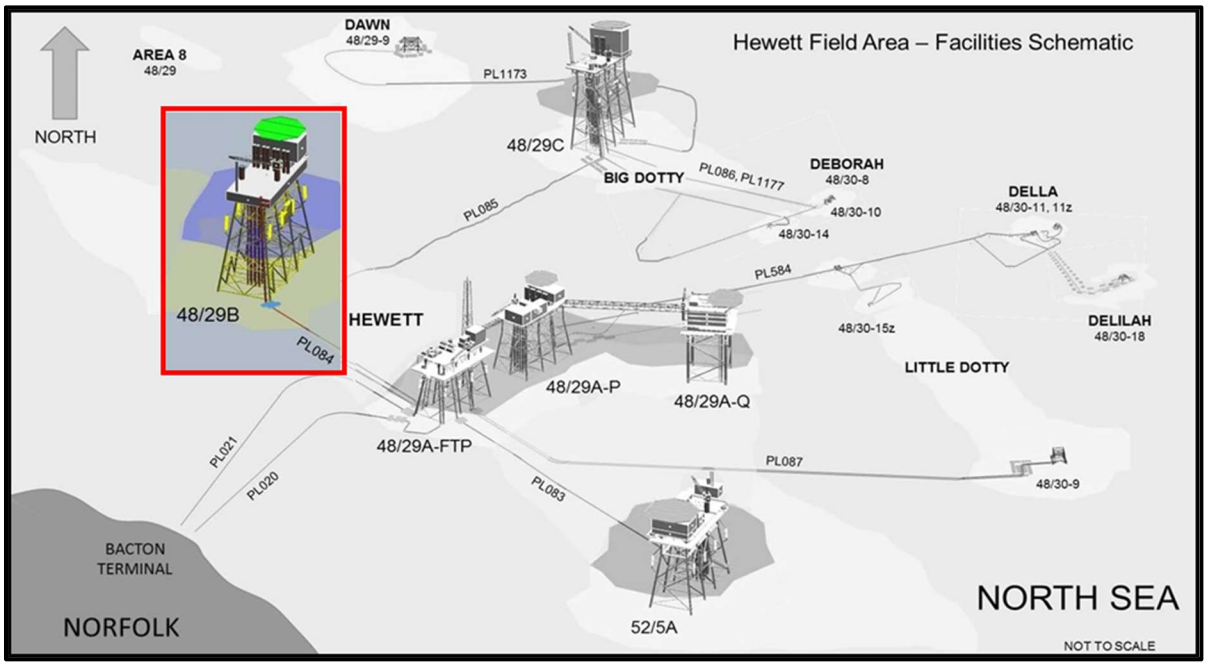
The Hewett Gas Field is coming to the end of its productive life and therefore plans are being executed to suspend and abandon all the wells, as part of the decommissioning process. Cessation of Production for 48/29 Bravo Platform commenced on 1st March 2019 and all wells have been permanently abandoned by placing verified barriers to isolate rock formations that have flow potential from the surface, to meet OGA and HSE requirements. Eni UK has agreed a contract with Valaris for its jackup rig, the Valaris 72, to carry out well plug-and-abandonment work at the Hewett Field.

In accordance with the Petroleum Act 1998, as amended, Eni UK as operator of the Hewett Wells is liaising with the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) to obtain approval for our decommissioning programmes.

The reuse of an installation or its constituent parts is the preferred decommissioning option. The reuse of the Hewett Field platforms and infrastructure, including pipelines, has been considered for carbon

capture and storage (CCS) and the cement used for wells decommissioning is CO_2 resistant, facilitating the reservoir's use as part of a potential CCS project in the future.

The majority of the materials and components that make up the Hewett Field infrastructure and topsides will be recycled. The small proportion of materials remaining after reuse and recycling will be disposed of appropriately in accordance with Eni UK policies and the relevant regulatory requirements, including waste management, environmental and health and safety expectations. There are no drill cuttings in the scope of these decommissioning programmes.



Hewett Field Facilities Schematic showing 48/29 Bravo Platform in colour

Picture of Valaris 72 Jackup alongside 48/29 Bravo Platform

4.1. Hewett Field Environmental Performance

The Hewett field infrastructure comprises six platforms, 32 platform wells, and a further eight subsea wells tied back to the platforms. During the year 2020 wells decommissioning work was performed at the 48/29 Bravo platform and a number of chemicals were used.

The use and discharge of chemicals is subject to rigorous control under 'The Offshore Chemicals Regulations 2002 (as amended)'. This requires regulatory approval following an assessment of the predicted environmental impacts of any proposed chemical discharges. In addition, only chemicals that have been registered by the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) may be used.

During the 2020 Hewett Decommissioning Well Abandonment campaign, the vast majority of the chemicals used were PLONOR (pose little or no risk to the environment). The quantity of substitution warning chemicals used was approximately 29 tonnes, of which only 0.1 tonne was discharged to sea. Figure 1 shows the split use and discharge of well abandonment chemicals for 48/29 Bravo decommissioning operations. Eni UK make best endeavours to limit fluid discharge by reinjection of fluids back to the reservoir as much as possible. Furthermore, chemicals used in well operations are subject to continual review and Eni UK will continue to pursue suitable alternatives, where appropriate.

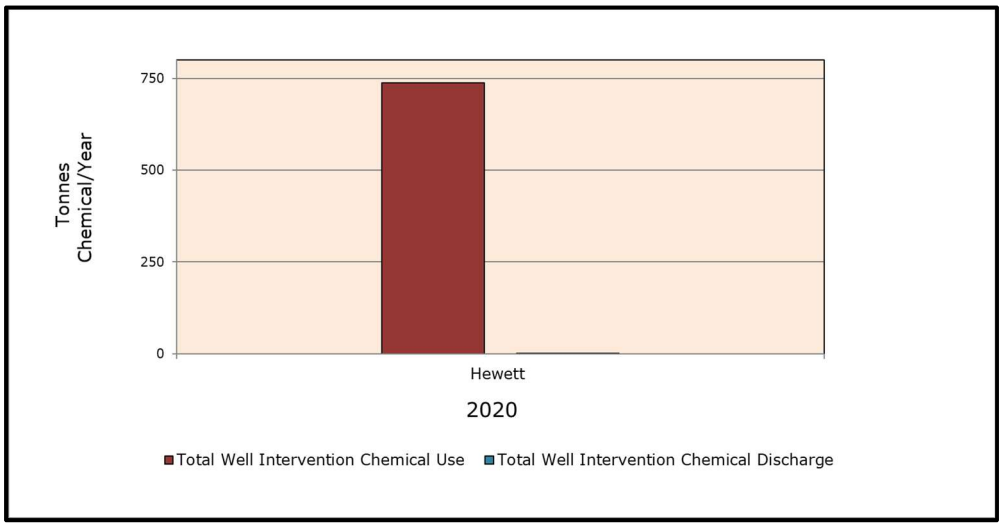


Figure 1 – Well Abandonment Operations Chemicals Use and Discharge

Chemical use and discharge used in Hewett production operations is reported within the scope of the Petrofac Facilities Management Ltd OSPAR Statement for the Hewett field installations.

There were no direct water discharges to sea associated with Hewett well operations during 2020. Management of liquids associated with Hewett production operations (including produced and process water), and any related discharges, are reported within the scope of the Petrofac Facilities Management Ltd OSPAR Statement for the Hewett Field Installations.

During the 48/29 Bravo well abandonment operations a spill to sea (PON 1) was reported to OPRED when approximately 330kg of cement slurry in the surge tank vent line became blocked. This was also

reported as a chemical permit non-compliance. Regulatory non-compliances reported in relation to the installations are described as part of the Petrofac Facilities Management Ltd statement.

All wastes generated from the operation and maintenance of Hewett installations are reported within the scope of the Petrofac Facilities Management Ltd statement for the Hewett installations, including general wastes such as consumables, welfare and accommodation, installation utilities and ancillary equipment. The waste generated as part of the Hewett Decommissioning Well abandonment campaign is showed in Figure 2, split by waste type. During the months of June and July work on the Valaris 72 was greatly reduced (due to the COVID 19 pandemic) and no waste has been reported in the period. Eni UK continues to work with waste service companies to maximise recycling and minimise waste sent to landfill.

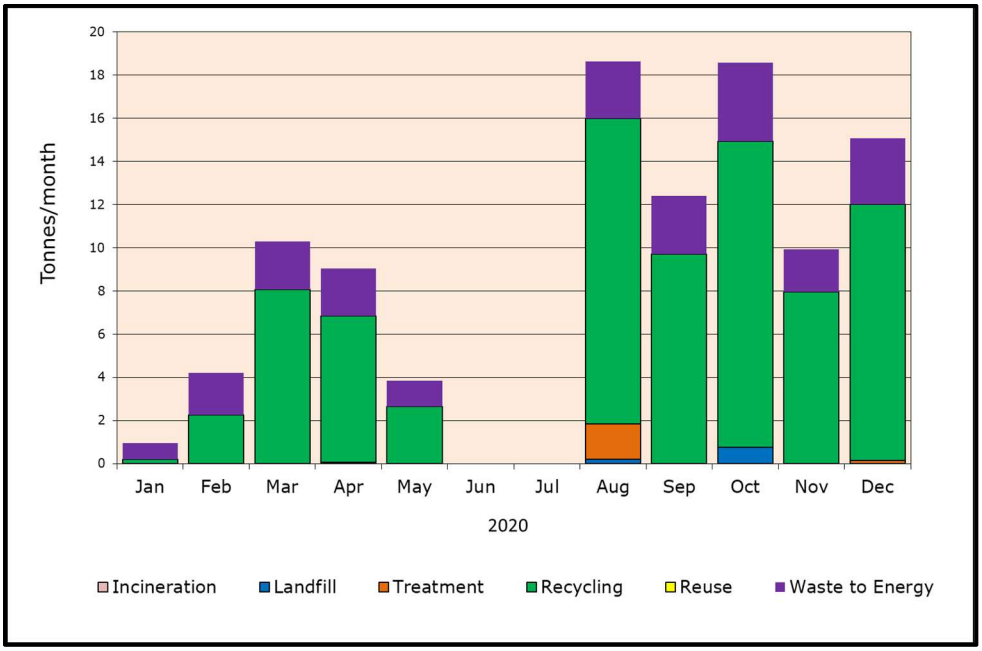


Figure 2 – Well Abandonment Operations Waste Management

During 2020, direct emissions associated with Hewett Field well operations were limited to vented gas only. These emissions are included in Hewett Field emissions reports into the Environmental Emissions Monitoring System (EEMS) through the Department of Business Energy and Industrial Strategy [BEIS] UK Oil Portal.

Table 1 -Hewett Well Operations - Atmospheric Emissions

Emission	Total (tonnes)
Well Operations - Hydrocarbon Gas Venting	214

Information on atmospheric emissions associated with Hewett Field installations production and maintenance operations is included within the scope of the Petrofac Facilities Management Ltd OSPAR Statement for the Hewett Field installations. Approximately 1,550 tonnes of diesel were used throughout the well abandonment operations, combustion of which released a negligible amount of CO_2 to the atmosphere.

5. Liverpool Bay Area

Eni UK Ltd is both the installation and well operator for the Liverpool Bay Field, which produces oil and gas.

5.1. Liverpool Bay Operations – Oil and Gas Production

Process plant on the offshore platforms separates oil, gas and water produced from the oil and gas reservoirs. Once the oil has been separated from the water, it is pumped to the Oil Storage Installation (OSI) via pipeline. Oil is periodically transferred from the OSI to export tankers, for shipment to customers. Oil from Tailwind Mistral's Conwy field also flows to Eni UK's offshore facilities for processing.

Produced gas is treated onshore at the Point of Ayr (POA) Gas Terminal, where it is dried and sweetened. A small portion of the gas produced is used to generate power, some of which is then exported to the national grid. The remaining gas processed is exported via onshore pipeline to Connah's Quay Power Station.

5.2. Offshore Facilities – Douglas, Lennox, Hamilton Fields and Oil Storage Installation

The Douglas field contains low sulphur, 44° American Petroleum Institute (API) black oil. The oil has a low gas to oil ratio. The Douglas Complex is located approximately 23km off the North Wales and English coastlines. It consists of an accommodation unit, a processing platform and a wellhead tower, all bridge linked.

The layout of the Douglas Complex is designed with the objective of separating the potentially hazardous production plant and well facilities from the living quarters and control centre. The three platforms are orientated to provide the smallest target to passing ship movements. Water depth at the location is 29 metres.

Lennox is a satellite platform; the Lennox Field consists of a thin layer of oil underlying a normally pressured gas cap. Lennox produces both gas and condensate, together with formation water. These reservoir fluids are routed to the Douglas Complex for separation. Lennox lies approximately 8 km off the Sefton coast. The Lennox Platform is a two level, 12 well slot structure with an underdeck. Water depth at the location is 7m.

There are two (almost identical) producing Hamilton gas platforms, Hamilton and Hamilton North. The connected Hamilton East subsea gas well is no longer in production. These platforms are two-level, normally unmanned structures with an underdeck. Produced gas, together with condensate and formation water, is transported via subsea pipeline to Douglas for further processing.

The stabilised export crude oil from the Douglas Complex is piped 17km north to the Oil Storage Installation (OSI). The OSI is a purpose-built barge that is permanently moored. Its location was chosen to avoid shipping lanes. The OSI is 207 metres long, 44.5 metres wide and has three deck levels and a helipad. The vessel has 10 oil compartments (plus two slop tanks) surrounded by 4.8 metre wide

seawater ballast tanks. The cargo tanks have a total storage capacity of 146,290m^3 (approximately 860,000 bbls usable volume).

Douglas (left) and Lennox (right)

Hamilton (left) and Oil Storage Installation (right)

5.3. Liverpool Bay Assets – Environmental Performance

Permitted discharges of produced water containing low concentrations of oil and chemicals occur from offshore installations. These have the potential to negatively impact the marine environment.

Figure 3 shows the amount of oil entrained in produced water discharged from Douglas and OSI during the reporting period.

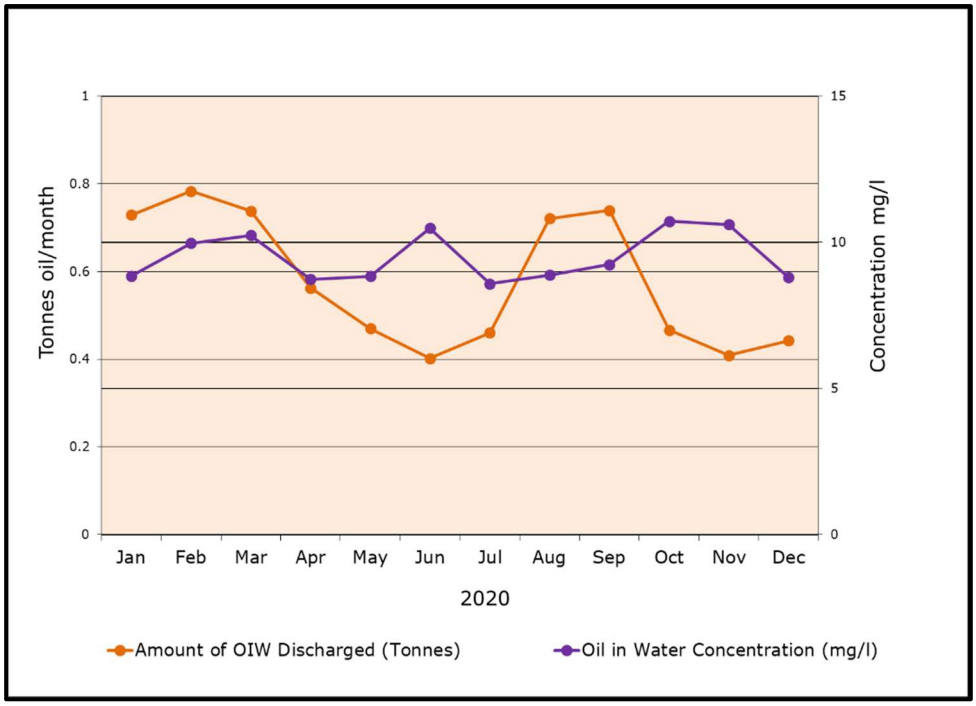


Figure 3 – Oil in Produced Water

Atmospheric emissions arise from power generation and flaring, demand for which is governed by production levels. Figure 4 shows Carbon Dioxide (CO_2) emissions arising from offshore power generation and flaring during the reporting period of 2020.

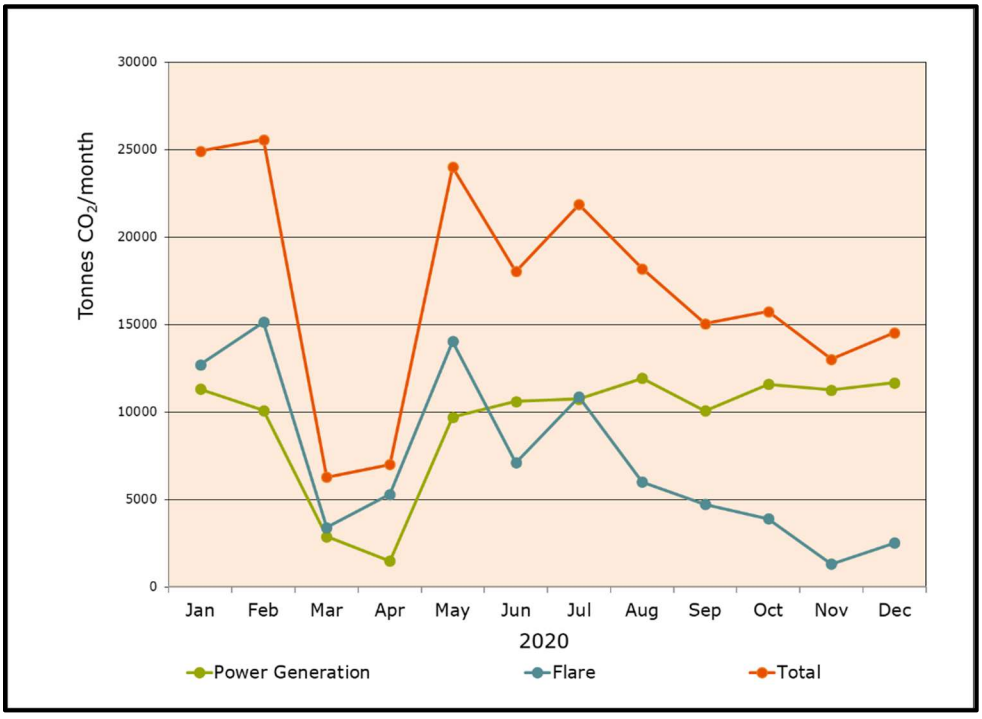


Figure 4 – Offshore CO2 Emissions

Chemicals are used in production and well workover operations, therefore chemical permits for the offshore use/discharge of process chemicals are in place. Offshore production chemical consumption and discharge for Douglas, Satellites and OSI for the reporting period are presented in Figure 5.

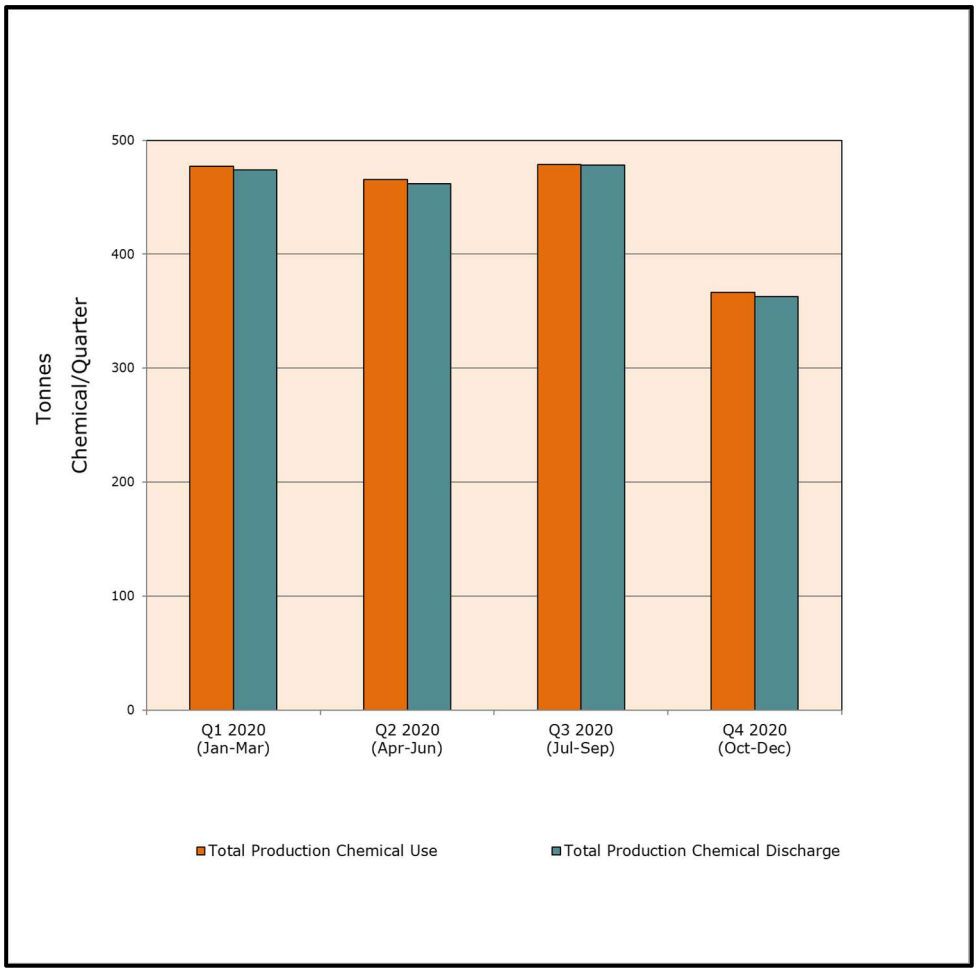


Figure 5 – Offshore Chemicals Use and Discharge

During the 2020 Douglas Well Intervention campaign only glycol for pressure testing was used and discharged to the marine environment. The pressure test medium used during these operations was a mixture of water and glycol. However, monoethylene glycol is a PLONOR (pose little or no risk to the environment) chemical. Hence an impact from the discharge was insignificant and not expected to pose any risk to the receiving environment. Figure 6 shows the use and discharge of well Intervention chemicals for Douglas well operations.

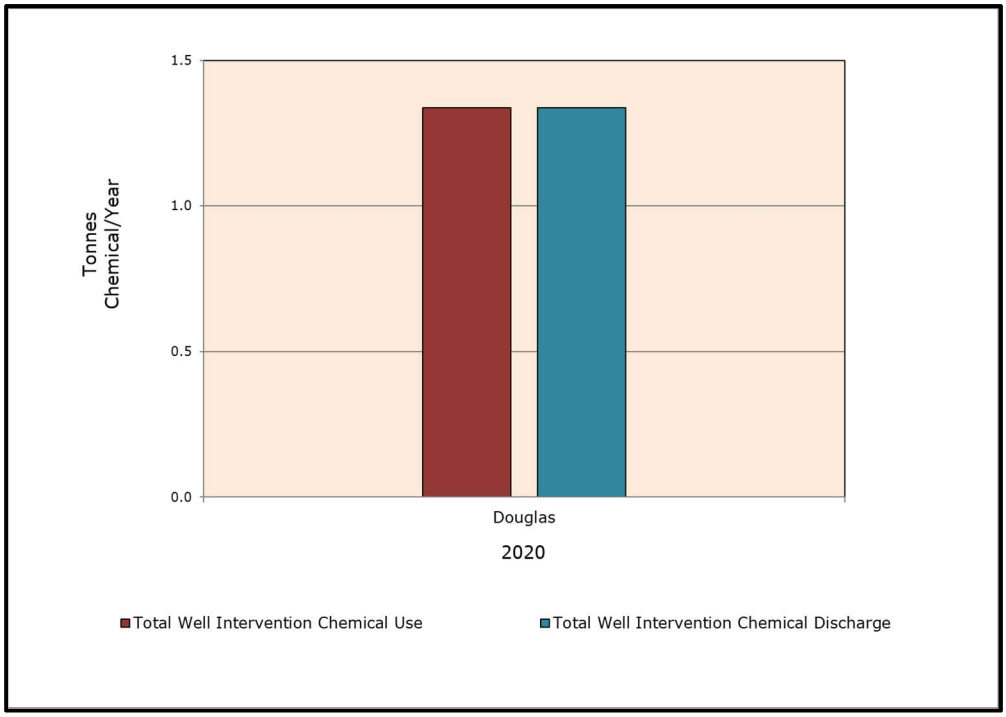


Figure 6 – Douglas Well Operations Chemicals Use and Discharge

There were a total of four chemical/oil releases offshore in 2020 (three from Douglas and one from the Irish Sea Pioneer jack-up vessel whilst located at Douglas), the eventual fate of which were discharges to sea (via platform processes). There was one oil release (totalling 1Kg) and three chemical releases (totalling 510kg). These losses were reported to OPRED via the PON1 system, all were assessed to be minor with negligible environmental impact, see Figure 7.

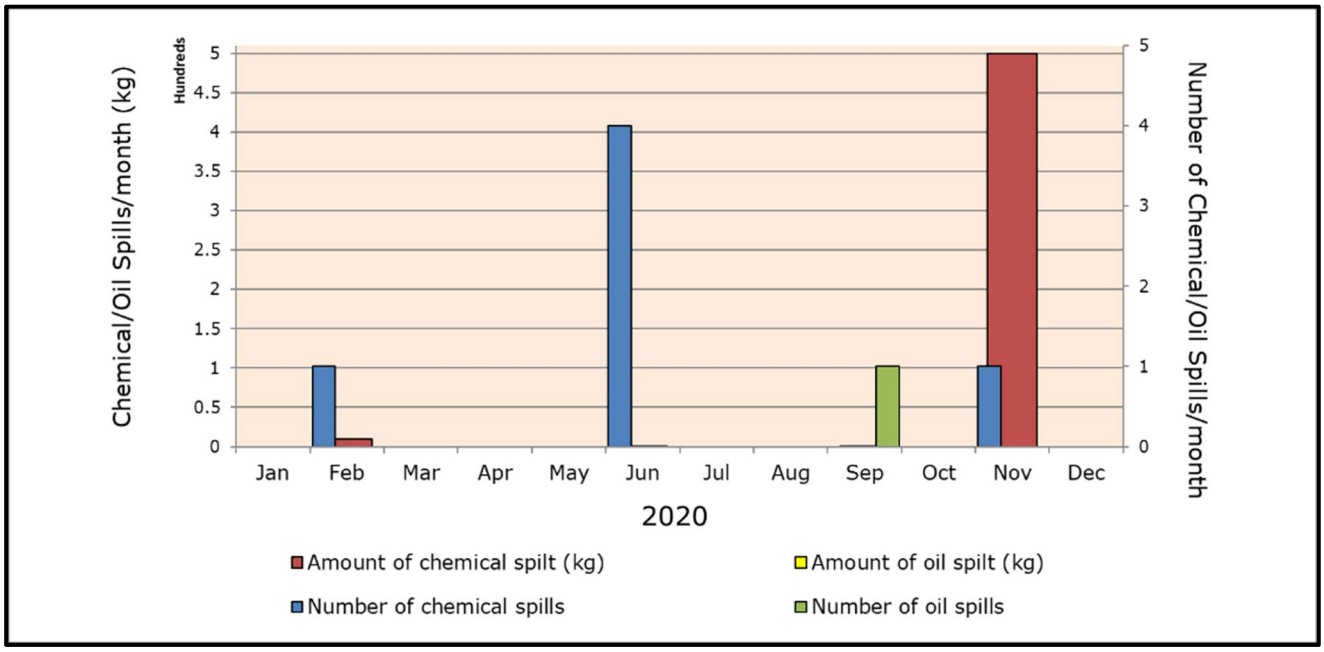


Figure 7 – Spills to Sea (PON 1 Reports)

Waste generated offshore fluctuates depending on the activities ongoing at sites. Figure 8 shows offshore waste generated in 2020 for Liverpool Bay as well as the fate of each waste group.

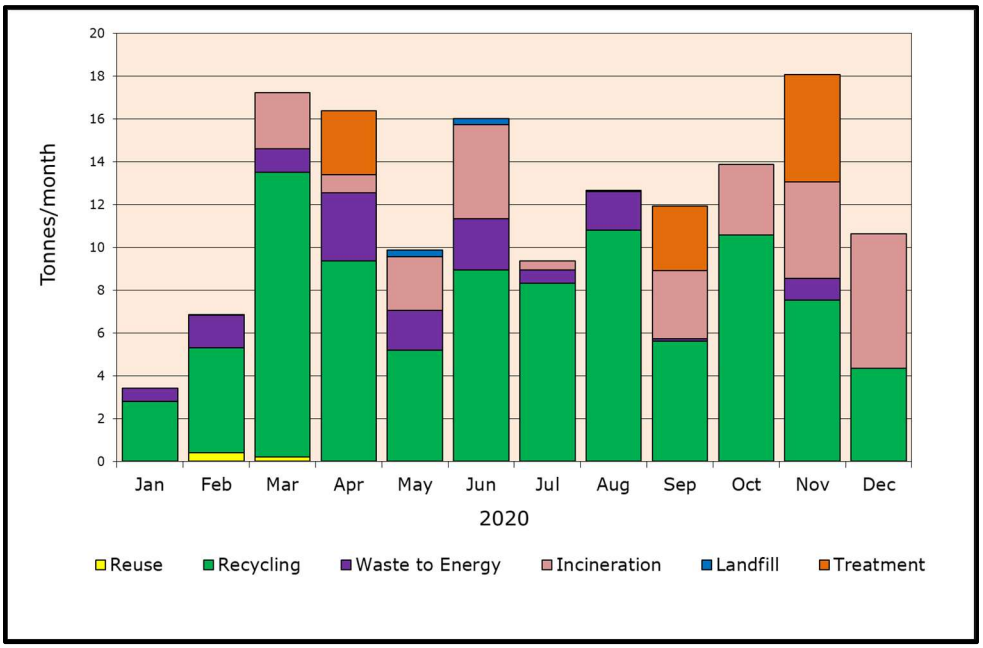


Figure 8 – Liverpool Bay Offshore Waste Management

If further information is required please contact:

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