ANNUAL PUBLIC STATEMENT ENVIRONMENTAL MANAGEMENT SYSTEM 2016

Petrofac Facilities Management Limited

Petrofac

WORKING RESPONSIBLY

Welcome to our 2016 annual public statement which outlines the environmental management and performance of Petrofac Facilities Management Limited's UK operations.

Prepared in line with the reporting requirements outlined by the UK's Department for Business, Energy and Industrial Strategy, this statement outlines our Environmental Management System (EMS).

Developed alongside our Group HSSE framework and ISO 14001 standard, our EMS enables us to effectively manage any environmental impact arising from our activities. It is based on the internationally approved 'Plan-Do-Check-Act' process, ensuring we have the philosophy, procedures and method statements in place to manage significant environmental risks throughout the project life cycle – from conceptualisation to decommissioning.

As an outsourced provider of managed solutions to our clients in the UKCS we fulfil the role of 'Operator' on behalf of the asset owner. As a result, our EMS has been designed to support our operating responsibilities:

- The objectives of the Oil Spill Prevention Administration and Response Offshore Strategy
- The environmental goals for the prevention and elimination of pollution from offshore sources and the protection and conservation of the maritime area against other adverse effects of offshore activities
- Continuous improvement in environmental performance

CONTENTS

HORIZONZERO

Our vision is to reach Horizon Zero; a future with no incidents which could harm people or the environment.

THINKING DIFFERENTLY ABOUT DELIVERY

A leading service provider to the oil and gas production and processing industry, Petrofac designs, builds, operates and maintains oil and gas facilities.

We think differently about delivery. By providing standalone or integrated services we align our approach to meet our clients' operating strategies and project objectives, unlocking significant value.

One example of this is our innovative Operator models, which have evolved from the outsourced Duty Holder model we first pioneered in 1997.

OUR OPERATOR MODELS

New UK regulations introduced by the Offshore Safety Directive Regulator in 2015 created an opportunity for us to widen the scope of service we could offer our clients by taking on more responsibility for their asset operations.

Within these regulations, the new role of Installation Operator was introduced, allowing us to retain existing responsibilities for health and safety as Duty Holder but also manage all the environmental aspects of an installation. We can also now manage the integrity, safety and environmental aspects for wells and pipelines as the appointed Well or Pipeline Operator.

In 2016 we combined these responsibilities within one outsourced model called Service Operator.

SERVICE OPERATOR

ANASURIA OPERATING COMPANY, ANASURIA CLUSTER AND FPSO, UKCS

As Service Operator for AOC, we have responsibility for managing the Anasuria FPSO, its wells and associated pipelines to provide an integrated, aligned approach to the operation and development of the cluster.

To date, we have focused on providing an aligned and integrated approach to support our client in its objective to extend the life of the field.

WELL OPERATOR

HURRICANE ENERGY, WEST OF SHETLAND, UKCS

In 2016 Petrofac became the first outsourced Well Operator to manage a drilling campaign in the UKCS. Our well engineering team provides all well engineering and project management support services for the Hurricane Energy's drilling activities, having been awarded a three-year contract.

We have worked with Hurricane Energy since 2013, building confidence in Petrofac's ability to deliver and manage wells in line with safety and environmental policies.

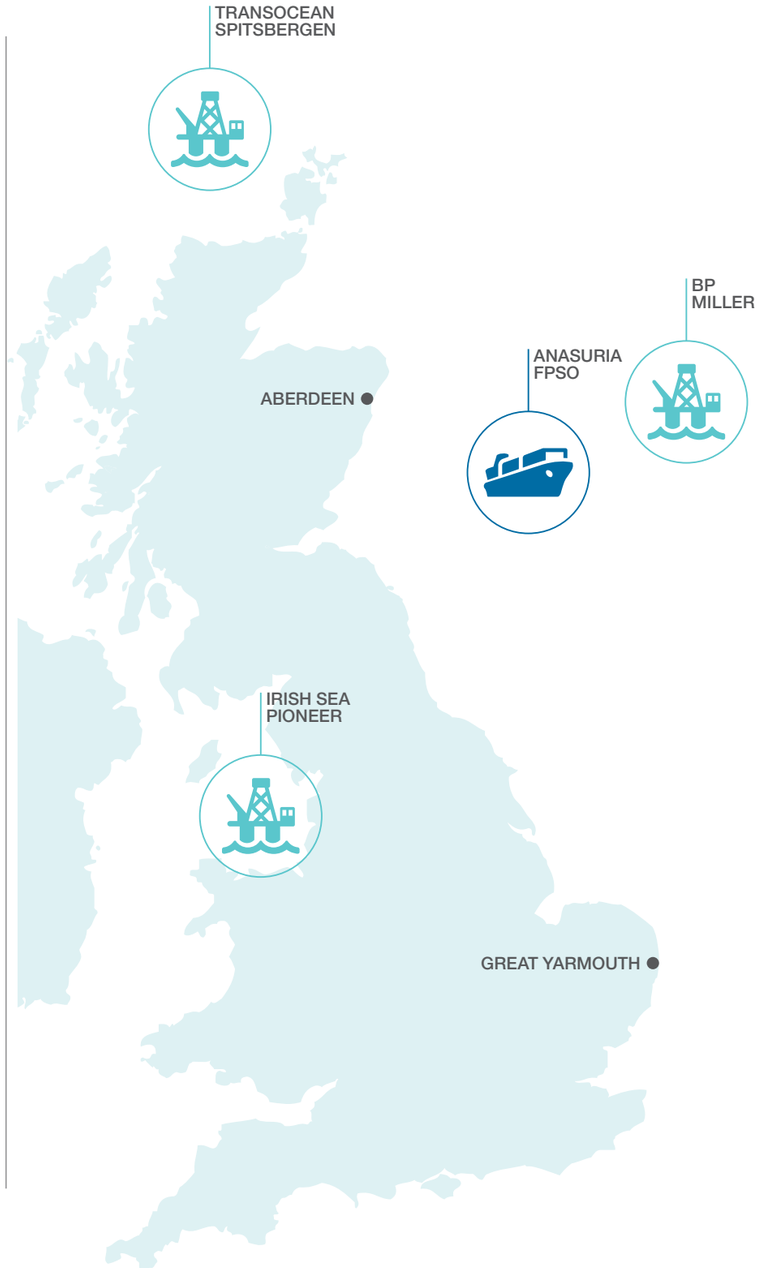
OUR OFFSHORE OPERATIONS

On behalf of their owners we currently operate a range of platforms and undertake offshore oil and gas production actives including:

- Non-producing intervention vessel operation
- Oil and gas production platform operation
- Late-life/decommissioning platform operations
- Drilling activities with third-party rig provision

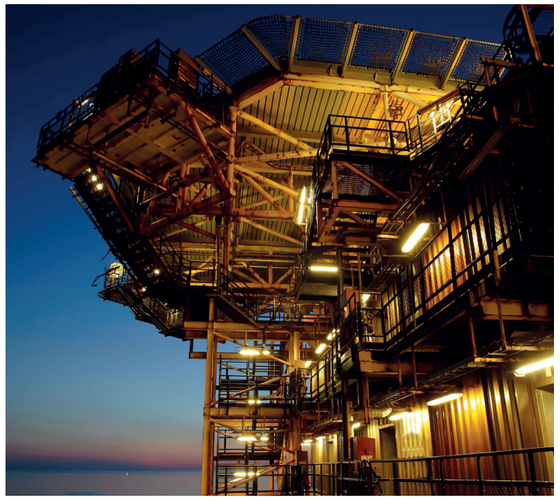
Under the requirements of this disclosure, the UKCS Operator responsibilities and UKCS assets highlighted within this statement include:

- **Service Operator (including Installation Operator) – The Anasuria FPSO, Irish Sea Pioneer, BP Miller**
- **Well Operator – Transocean Spitsbergen**



Anasuria FPSO

The Anasuria FPSO was purchased from Shell by the Anasuria Operating Company (AOC) in March 2016, a joint venture formed between Hibiscus Petroleum Berhad (Hibiscus) and Ping Petroleum Limited (Ping). It is located 175km east of Aberdeen. Petrofac is Service Operator for the FPSO and associated cluster incorporating responsibilities for the installation, wells and pipelines.



BP Miller

Petrofac became Installation Operator for the Miller Platform, a non-producing asset in the Central North Sea, in August 2016. The last day of production on Miller took place in July 2007. Since then BP has undertaken well abandonment and topsides clean up on the asset and anticipates that the topsides will be removed during 2017/18.

Transocean Spitsbergen

Petrofac's Well Operator contract with Hurricane Energy plc commenced in July 2016. Petrofac currently provides all well engineering and project management support services as Well Operator for Hurricane Energy plc's well activities.

The Transocean Spitsbergen, a semi-submersible drilling rig, was contracted to drill the Greater Lancaster Area (GLA) development, a large granite basement oil producing reservoir located west of the Shetland Islands.

Irish Sea Pioneer

Petrofac has been Installation Operator of the Irish Sea Pioneer since 2015, prior to which Petrofac had been Duty Holder of the asset since 2006. The non-producing mobile platform is owned by ENI, Liverpool Bay and provides intervention services to the ENI operations in the Liverpool Bay area of operations.

Petrofac

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ENVIRONMENTAL POLICY

Vision

Petrofac will be recognised as a company that maximizes energy efficiency and conducts business in an environmentally responsible manner.

Commitment

The Petrofac Board of Directors has ultimate responsibility for environmental performance and is committed to the achievement of environmental excellence. Petrofac and its business units are therefore committed to:

- Conducting its business in an environmentally responsible manner, consistent with its 'Horizon Zero' initiative which aims to eliminate all incidents within the company
- Promoting a strong culture of leadership in environmental matters
- Encouraging all employees to share our environmental commitments and take personal responsibility for protecting the environment
- Complying with all applicable environmental laws, regulations, relevant standards, and compliance obligations
- Minimising our impact on the environment through pollution prevention, minimising waste and emissions and the efficient use of energy and other resources
- Transparency in the reporting of the Company's environmental performance and sharing of knowledge
- Setting objectives and targets for continual improvement with auditing and monitoring of performance

Objectives

To meet this commitment at Group level Petrofac will:

- Develop and maintain Petrofac minimum standards and expectations
- Publish regular performance reports and openly discuss our environmental performance with internal and external stakeholders
- Periodically review the suitability and effectiveness of this policy, our management systems, targets and objectives

Each Petrofac business unit will:

- Provide suitable resources for the protection of the environment
- Develop and maintain environmental management systems that comply with ISO 14001, the International Standard for Environmental Management Systems
- Provide appropriate training to all employees to enable them to carry out their work with due respect and care for the environment
- Engage with clients, contractors and suppliers to deliver a high standard of environmental performance

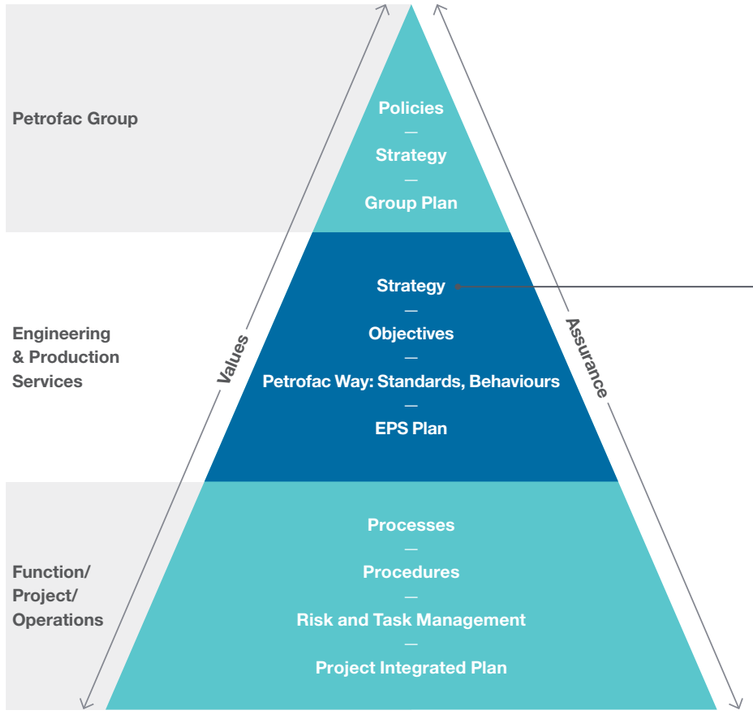
Responsibility and implementation

Environmental protection is a line responsibility that starts with the Group Chief Executive and flows down through the line management structure to front line employees performing work. Every leader at Petrofac is responsible for proactively leading the management of risks to the environment with their teams. Every Petrofac employee is responsible for making themselves aware of the risks to the environment in their work area and to proactively play their part in reducing these risks. All employees are empowered to speak up if they have any environmental concerns.

Ayman Asfari, Group Chief Executive **March 2017**

ENVIRONMENTAL MANAGEMENT SYSTEM

HSE MANAGEMENT STRATEGY



As part of our Business Management System (BMS), our EMS is certified to the ISO 14001:2004 International Standard. It is governed by the Petrofac Group Health Safety and Environment Management Strategy.

HSE MANAGEMENT STRATEGY ELEMENTS

1. Leadership and accountability
2. People and competence
3. Subcontractors, suppliers and partners
4. Customers, products and services
5. Community and stakeholders
6. Risk assessment and management
7. Design and construction
8. Operations and maintenance
9. Management of change
10. Information and documentation
11. Incident investigation and analysis
12. Crisis and emergency management
13. Assessing and improving effectiveness

Our EMS is flexible enough to maintain continuity with existing practices during the transfer of platforms to the Petrofac system, whilst taking on board best practice where identified which is then shared across other assets.

MANAGING OUR IMPACT ON THE ENVIRONMENT

Specific areas of our offshore operations require daily focus to ensure their impact on the environment is managed effectively. These include:

DISCHARGES TO SEA

OIL IN WATER

Water is extracted from the wells, along with oil and gas. The water is then separated from the oil and treated. Although treatment removes most of the oil from the water, residual traces are still discharged. These traces are regulated and released under permitted conditions.

DRILL CUTTINGS DISCHARGE

Drill cuttings and fluids discharged from drilling operations can also contain residual oil associated with the formation.

CHEMICAL DISCHARGES

Prior to approval and discharge for use offshore, chemicals are subjected to a risk assessment. The potential impact from chemical discharges is graded using the ranking system below:

COLOUR BANDING	
GOLD	Lowest hazard
SILVER	
WHITE	
BLUE	
ORANGE	
PURPLE	Highest hazard

INITIAL OFFSHORE CHEMICAL NOTIFICATION SCHEME (OCNS) GROUPING
Initial grouping
A
B
C
D
E

ATMOSPHERIC EMISSIONS

The combustion of diesel and gas to generate power and the burning of flare gas creates atmospheric emissions of Carbon Dioxide (CO_2) and other combustion products including:

- Nitrous oxides
- Sulphurous oxides
- Carbon Monoxide (CO)
- Methane (CH_4)
- Other Volatile Organic Compounds (VOCs)

During activities on the FPSO, refrigerants are often used to maintain living conditions. This activity is regulated and reported on annually.

WASTE MANAGEMENT

Waste generated offshore is managed to allow maximum reuse or recycling of materials before being treated, incinerated or disposed to landfill. Petrofac follows the waste management hierarchy below:

ELIMINATE	**Source reduction/ elimination:** the generation of less waste through more efficient practices such as:	• Material elimination • Inventory control and management • Material substitution • Process modification • Improved housekeeping
REDUCE		
REUSE	**Reuse:** The use of materials or products that are reusable in their form, such as chemical containers. Waste may also be transferred to another interested party who can reuse it.	
RECYCLE	**Recycling/recovery:** The conversion of wastes into usable materials and/ or extraction of energy or materials from wastes.	Examples include: • Recycling scrap metal • Recycling drilling muds
RECOVER	**Recover:** The recovery of energy from waste, for example:	• The incineration of waste and recovery of heat • Burning waste oil for energy
DISPOSAL	**Responsible disposal/ treatment of waste:** Depositing wastes on land or in water using methods appropriate for a given situation.	Disposal methods include: • Landfilling • Surface discharge

PETROLEUM OPERATIONS NOTICE AND NON-COMPLIANCE REPORTING

All notices and non-compliance are recorded within Petrofac's incident management system, detailing the circumstances, investigation, outcomes and actions. The system is also used for lesson sharing and incident trending to assist with continuous improvement.

PETROLEUM OPERATIONS NOTICE

Any spill to sea of oil or chemical is reported to the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) using the Petroleum Operations Notice (PON 1).

The loss of any objects to sea which may have an impact on the environment or sea users are reported to OPRED using a PON 2 Notice.

NON-COMPLIANCE

A non-compliance against any of the permit conditions is reported using the appropriate format to OPRED.

ENVIRONMENTAL OBJECTIVES AND TARGETS

2016 OBJECTIVES	ACHIEVEMENTS
Transition of asset permits to Petrofac from previous operator under OSDR:2015 regulations	Environmental permits for the Anasuria FPSO and BP Miller were transferred to Petrofac for management of environmental aspects; and Well Operatorship for the Teal and Guillemot wells
Maintain consistency of environmental performance following transition of assets from previous Operator	The asset crew worked closely with Petrofac's onshore teams to ensure the change in Operator did not impact on performance
Implementation of the Petrofac EMS on new operated assets	The Petrofac EMS was successfully implemented on the transferred assets
Identify areas for improvement or good practice on new assets	A risks and opportunities register was prepared for continuous improvement tracking purposes

CONTINUOUS IMPROVEMENT

During 2016, the Petrofac EMS was implemented on the assets under our control. In 2017, the EMS will be transitioned to the new ISO 14001:15 standard. Implementing this standard and having it independently verified will ensure high standards of environmental management whilst helping drive forward continuous improvement.

2017 OBJECTIVES	
Continue transition of permits for operated installations and wells as OSDR transition dates are rolled out	Certification of operations to ISO 14001:2015 standard
Implement new standardised chemical management process across Operated assets	Maintain and share improvement registers and share across the business

ENVIRONMENTAL PERFORMANCE

Anasuria FPSO

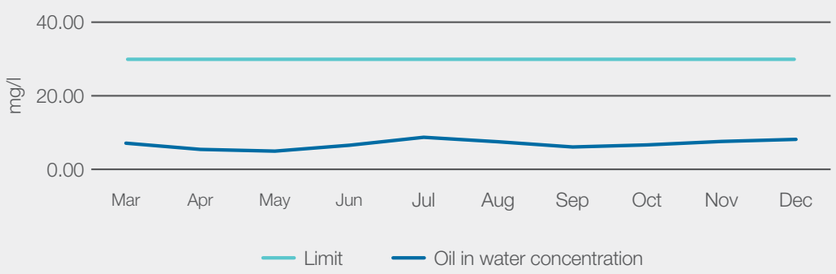
The environmental permits in place for the Anasuria FPSO are associated with oily water discharges to sea, offshore chemical use and discharge and atmospheric emissions from power generation and flaring.

DISCHARGES TO SEA

OIL IN PRODUCED WATER

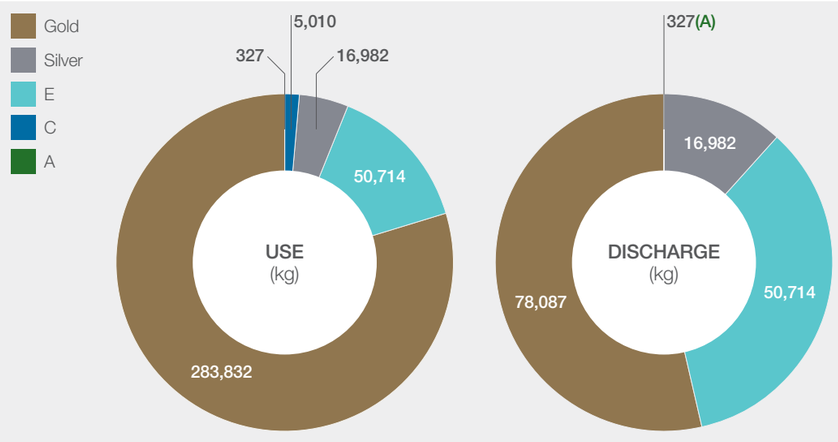
Water discharges are monitored and reported in accordance with the Oil Pollution, Prevention and Control Permit. The average oil in water concentrations over both discharges for the period was 6.82 mg/l.

The total volume of water and mass of oil discharged over the period of operation was 1335469m³ and 9109 kg of oil.



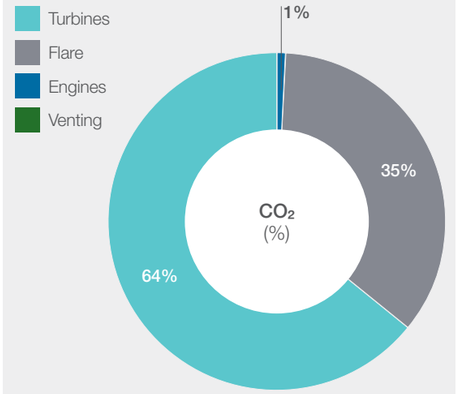
CHEMICAL USE AND DISCHARGE

The majority of chemicals in use on the Anasuria FPSO are in the least harmful Gold and E categories. Ongoing chemical management aims to continue to minimise the impact of chemicals on the environment.

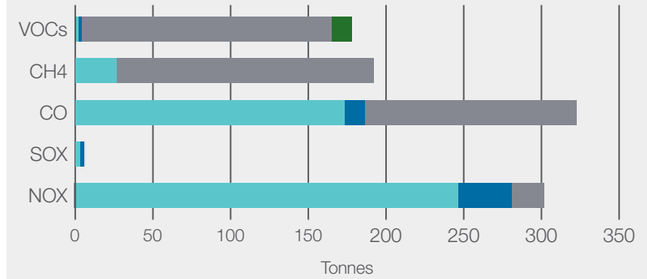


DISCHARGES TO ATMOSPHERE

Power generation is the main source of atmospheric emissions. Other sources are flaring and venting gas. 131,007 tonnes of CO_2 emissions were verified for greenhouse gas reporting purposes. Other emissions were reported through the Environmental Emissions Monitoring System.



EMISSIONS BY SOURCE



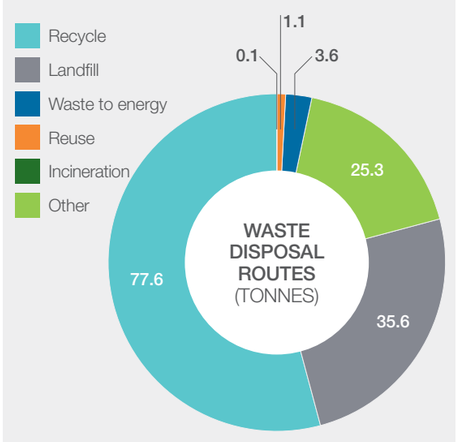
	NOX	SOX	CO	CH4	VOCs
Turbines	247.52	3.59	173.71	26.46	1.53
Flare	21.18	0.21	110.77	165.33	165.33
Engines	32.61	1.04	8.59	0.10	1.09
Venting	0	0	0	0	9.38

There are three hydrochlorofluorocarbon (HCFC) refrigerant compounds in use on the Anasuria FPSO. The inventory and emission details are monitored and reported below:

Compound	On Facility (kg)	Emitted (kg)	CO_2 Equivalent Factor (kg/kg)	CO_2 Equivalent(t)
HFC-134A	2.12	0	1430	0
HFC-404A	37.87	20	3922	78.44
HFC-417A	30.4	0	2346	0
TOTAL	70.39	20		78.44

WASTE MANAGEMENT

143.3 tonnes of waste was managed onshore. The disposal routes are charted below:



REPORTS AND NOTIFICATION

During 2016 there were no releases of hydrocarbon reported. There was one unpermitted discharge of chemical reported and closed out through the PON 1 reporting system:

PON 1 Notification details

Activity	Chemical type	Discharge(Te)
ROV operations, ruptured hydraulic seal	Hydraulic fluid	0.00019

A total of four non-compliances with permit conditions were submitted to OPRED during 2016:

Activity	No.
Produced water meter failure	2
Bi-annual sampling schedule	2

ENVIRONMENTAL PERFORMANCE

Transocean Spitsbergen

The Transocean Spitsbergen was contracted as part of a three well campaign in the Greater Lancaster Area location commencing in July 2016.

DISCHARGES TO SEA

OIL IN PRODUCED WATER

Water discharges are monitored and reported in accordance with the Oil Pollution Prevention Permit and Conditions. The average oil in water discharge was 6.98 mg/l.

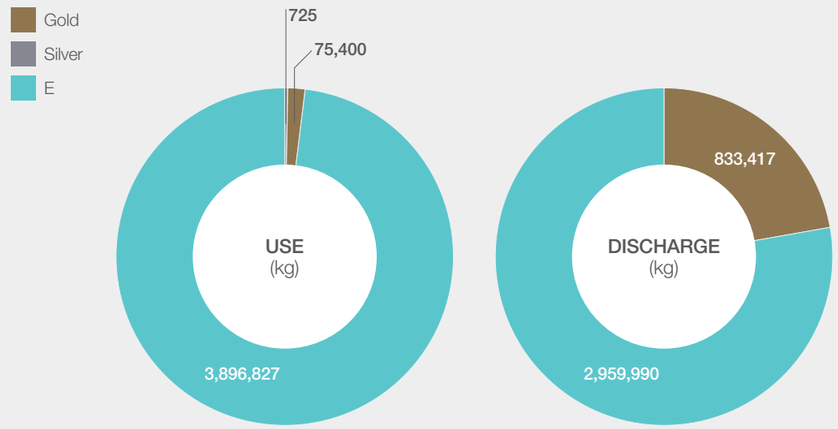
Produced Water m³	373
OIW mg/l	6.98
Oil discharged tonnes	0.0026

DRILL CUTTINGS DISCHARGE

A total of **838 tonnes** of water based drill cuttings were discharged to sea during drilling activities. The total oil discharged associated with cuttings was **0.0026 tonnes**.

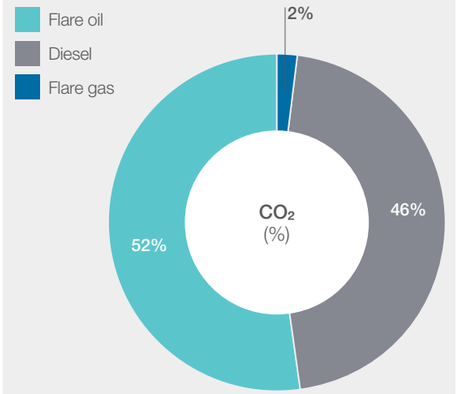
CHEMICAL USE AND DISCHARGE

The majority of chemicals in use on the Transocean Spitsbergen are in the least harmful Gold and E categories. Ongoing chemical management aims to continue to minimise the impact of chemicals on the environment.

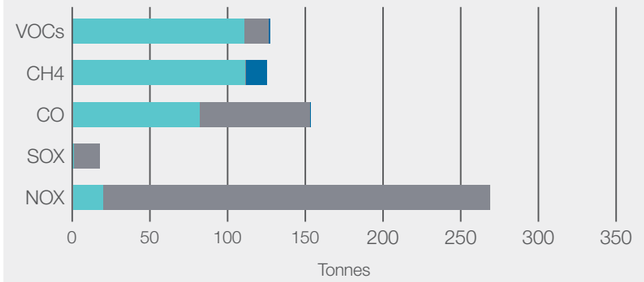


DISCHARGES TO ATMOSPHERE

Emissions to atmosphere generated from drilling activities are associated with power generations using diesel fuelled engines and flaring gas and oil during drilling operations. The main combustion product is Carbon Dioxide (CO_2). A total of 29,059 tonnes of CO_2 were emitted from the three sources described below:



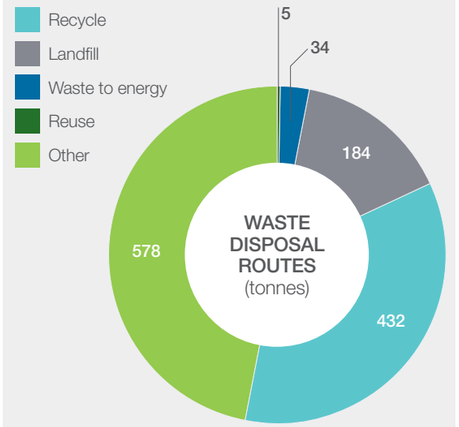
EMISSIONS BY SOURCE



	NOX	SOX	CO	CH4	VOCs
Flare oil	17.87	0.06	85.08	118.17	118.17
Diesel	250.61	16.82	66.02	0.76	8.41
Flare gas	0.21	0.00	1.14	7.67	0.85

WASTE MANAGEMENT

A total of 1233 tonnes of waste was brought onshore for disposal from the Transocean Spitsbergen during its activities. A large proportion of this waste was tank washings (578 tonnes) which include special wastes and require further treatment prior to disposal under licence.



REPORTS AND NOTIFICATION

During its activities for Petrofac, five PON 1 Notifications were submitted by the Transocean Spitsbergen drilling rig. The total discharge was less than one tonne of fluid – the details of which are indicated below:

PON 1 notification details

Activity	Fluid type	No.	Total (Te)
Well Test Flare Drop out	Crude	3	0.0027533
ROV activities	Hydraulic fluid	1	0.001
Subsea Pod Failure	Glycol	1	0.89

One chemical non-compliance was also submitted during the drilling activities, as indicated below:

Activity	No.
Cement Discharge (Emergency)	1

ENVIRONMENTAL PERFORMANCE

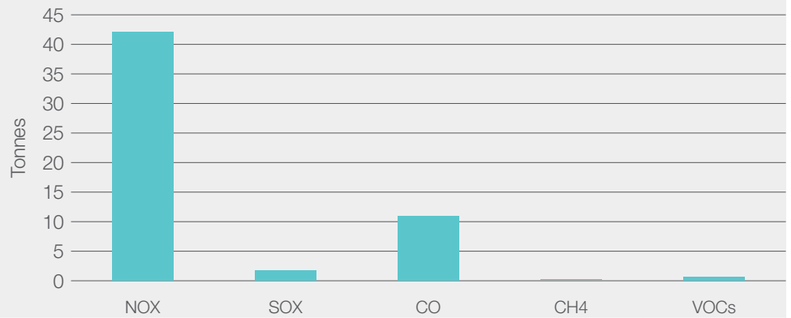
BP Miller

The BP Miller platform ceased operation in 2007 and, therefore, environmental risks in 2016 were greatly reduced compared to the risks whilst producing. It should be noted that in 2016 the only environmental approval in place was the installation's Consent to Locate.

DISCHARGES TO ATMOSPHERE

All discharges to atmosphere were associated with powering the accommodation and work sites. Power generation was achieved by diesel generators only. The production turbines have ceased operation.

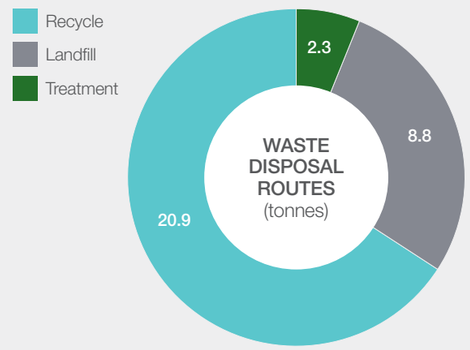
The CO_2 produced by the power generation was 811m³ and the associated combustion emissions are shown on the right.



Diesel	43	2.9	11	0.13	1.4

WASTE MANAGEMENT

Waste generation in 2016 was associated with the accommodation of the persons on board and maintenance of the platform structure. The total waste generated during the period of Petrofac operation was 32 tonnes.



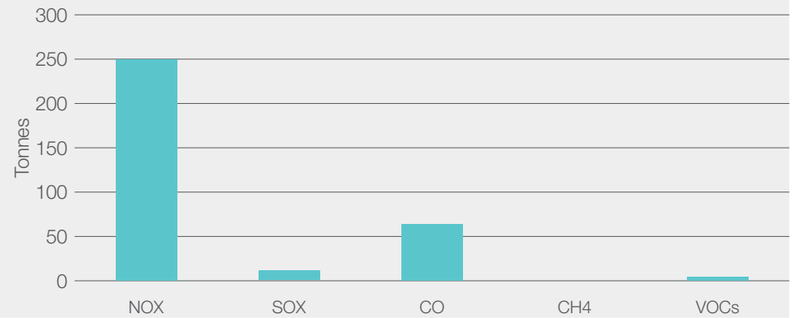
During 2016, following the Petrofac transition to Installation Operator, there were no planned or accidental aqueous discharges to the marine environment that required permitting or reporting.

Irish Sea Pioneer

The Irish Sea Pioneer has had no production discharges of water and chemicals are permitted through the production assets it services. There were no reported accidental discharges associated with this asset during 2016.

DISCHARGES TO ATMOSPHERE

Discharges to atmosphere associated with powering the accommodation and work sites. Power generation diesel consumption was 716 tonnes and CO_2 emissions were 2292 tonnes. Other associated emission are tabled below:



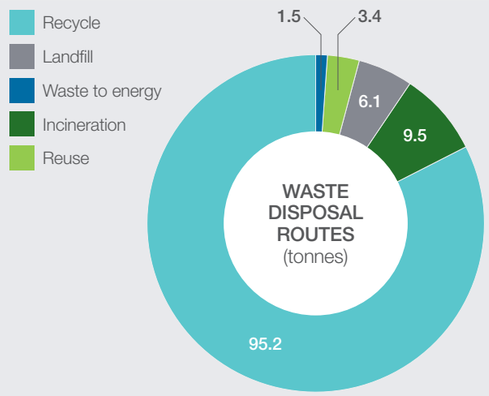
Diesel	249.78	16.02	66.02	0.76	8.41

There are three HCFC refrigerant compounds in use; the inventory and emission details are monitored and reported on the right.

Compound	On Facility (kg)	Emitted (kg)	CO_2 Equivalent Factor (kg/kg)	CO_2 Equivalent(t)
HFC-134A	1	0	1430	0
HFC-404A	36	7	3922	27.45
HFC-417D	39	82	2729	221.41
TOTAL	76	89		249.86

WASTE MANAGEMENT

115.7 tonnes of waste was managed onshore. The disposal routes are charted on the right.



Petrofac

CONTACT

Petrofac
Engineering & Production Services
Bridge View, 1 North Esplanade West,
Aberdeen, AB11 5QF, UK

T: +44 1224 247 109
E: petrofac.environment@petrofac.com

www.petrofac.com