

**UKCS
ENVIRONMENTAL
PERFORMANCE
2014**



**HEALTH, SAFETY
& ENVIRONMENT.
WE'RE ALL RESPONSIBLE.**

NO SHORT CUTS. NO EXCEPTIONS. NO INCIDENTS.



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ABBREVIATIONS



CEFAS	Centre for Environment, Fisheries and Aquaculture Science	OCR	Offshore Chemicals Regulations
CHARM	Chemical Hazard and Risk Management	OPPC	Oil Pollution Prevention and Control
CH₄	Methane	OIW	Oil in Water
CO	Carbon Monoxide	PDN	Permitted Discharge Notification
CO₂	Carbon Dioxide	PLO	Poses Little or No Risk
DECC	Department of Energy & Climate Change	PON	Petroleum Operations Notice
DSV	Diving Support Vessel	PPC	Pollution, Prevention and Control
EU ETS	European Union Emissions Trading Scheme	RQ	Risk Quotient
FPV	Floating Production Vessel	SO_x	Sulphur Dioxide
HSES	Health, Safety, Environment and Security	SUB	Chemicals Rated for Substitution
ISO	International Standards Organisation	UKCS	United Kingdom Continental Shelf
IOGP	International Association of Oil and Gas Producers	VOCs	Volatile Organic Compounds
mg/l	Milligrams per Litre		
NAP	National Allocation Plan		
NCN	Non Conformance Notice		
NO_x	Nitrogen Oxides		
OCNS	Offshore Chemical Notification Scheme		

1.0 INTRODUCTION

PREMIER OIL UK LIMITED (PREMIER) IS A SUBSIDIARY OF THE PUBLICLY LISTED OIL AND GAS COMPANY PREMIER OIL PLC. PREMIER OIL PLC IS AN INDEPENDENT EXPLORATION AND PRODUCTION COMPANY WITH INTERESTS IN THE NORTH SEA, SOUTH EAST ASIA, PAKISTAN AND THE FALKLAND ISLANDS, AS WELL AS EXPLORATION INTERESTS IN BRAZIL, IRAQ AND KENYA. PRODUCING ASSETS IN THE NORTH SEA WERE ATTAINED IN MAY 2009 THROUGH THE ACQUISITION OF OILEXCO NORTH SEA LIMITED.

Under OSPAR Recommendation 2003/5, the regulator Department of Energy & Climate Change (DECC) requires that all companies operating in the United Kingdom Continental Shelf (UKCS) during 2014 must have systems and procedures in place to identify, monitor and control the environmental aspects associated with offshore activities.

This report is available at;
<http://www.premier-oil.com/premieroil/corporate-responsibility/environment-new>

The Premier operated Balmoral Floating Production Vessel (FPV) and worldwide drilling operations along with the Aberdeen office and onshore supporting services are certified to the international environmental management system standard, International Standards Organisation (ISO) 14001.

Recertification of ISO 14001 was granted in 2014. This report provides information on Premier's UK offshore operations in 2014, and the environmental performance of these operations.

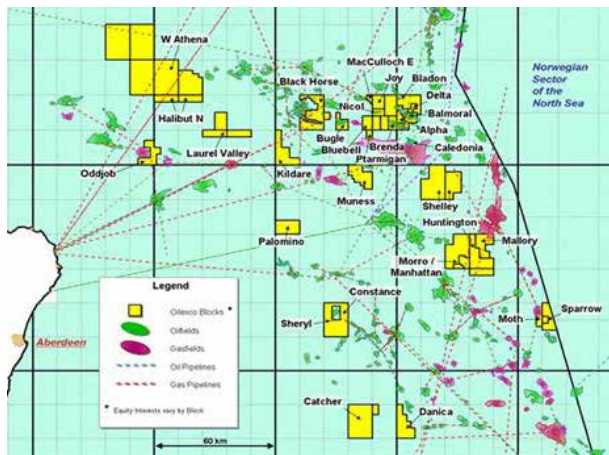
2.0 OVERVIEW OF OPERATIONS

2.1 Production Operations

Premier operates the Balmoral FPV, located in block 16/21 in the Central North Sea, approximately 125 miles north-east of the Scottish Coastline and 20 miles west of the UK/Norway trans-boundary line.

First oil was produced from Balmoral in 1986 and Premier acquired operatorship of the installation as part of the acquisition of Oilexco North Sea Limited.

Figure 2.1 – Balmoral FPV Location



Balmoral processes fluids from the Balmoral, Stirling, Brenda, Nicol, Burghley and Beauley fields, with the crude oil transported to shore via the Forties pipeline.

Produced gas is used for power generation and gas lift on board, with excess gas flared from the installation. The water phase is treated to meet the regulatory standard for oil in water (OIW) and is then discharged overboard under a permit issued by DECC.



Figure 2.2 – Balmoral FPV

2.0 OVERVIEW OF OPERATIONS

2.2 Projects

(a) Solan

The Solan platform is located in block 205/26a of the UKCS, West of Shetland in an area of approximate water depth of 137m (Figure 2.3), 60 miles from the Scottish coast and 35 miles from the UK/Faroes median line. This field is expected to produce, as a plateau rate, 20-25,000 STbpd oil. The platform is currently in the hook up and commissioning phase.

Figure 2.3 Solan Location



Figure 2.4 Solan Schematic

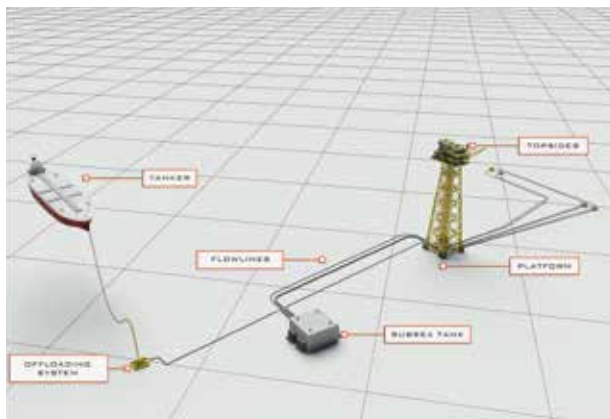


Figure 2.5 Solan Jacket Being Installed



Figure 2.6 Solan Subsea Storage Tank



Figure 2.7 Solan Topsides in Place



2.0 OVERVIEW OF OPERATIONS

2.2 Projects (b) Catcher

During 2014, Premier received DECC approval for the Environmental Statement prepared in support of the Catcher Area Development Project. The Catcher Area Development Project is focused on three fields (Catcher, Burgman and Varadero) located in blocks 28/9 and 28/10c of the UK North Sea, which are collectively referred to as the Catcher Area Fields. Figure 2.8 illustrates the location of the Catcher Area fields approximately 125 miles south east of Aberdeen and in a water depth of approximately 90m.

Figure 2.8 Catcher Field Location

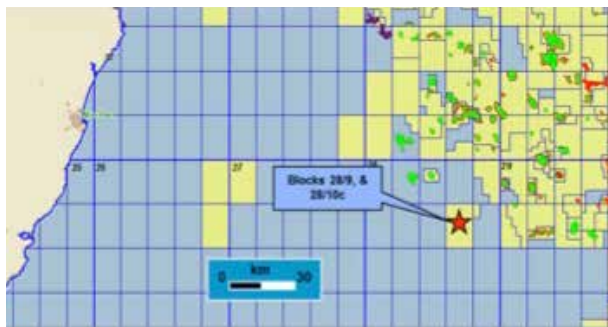
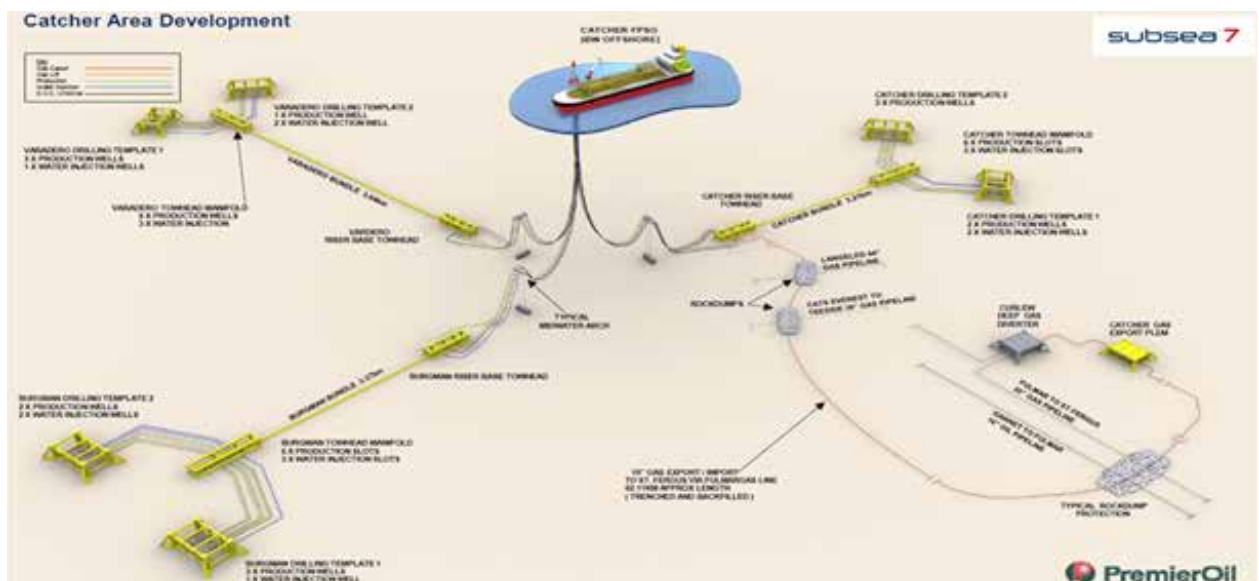


Table 2.1 Calculated figures for Catcher FPSO

FPSO System	Capacity / Route
Oil processing	60,000 bbls/day
Total Liquids	125,000 bbls/day
Produced Water	125,000 bbls/day
Gas Compression	60 mmscf/day
Gas export / import	To / from Shell Fulmar Gas Line
Oil export	Via shuttle tanker

Figure 2.9 Catcher Development Schematic



The three Catcher Project reservoirs (Catcher, Varadero and Burgman) will each be tied back to a single centrally located FPSO processing and export facility. First oil is expected in 2017.

2.0 OVERVIEW OF OPERATIONS

2.3 Drilling Operations

Three wells (P1, W1 and W2) were drilled by Premier in the UKCS in 2014. All drilling operations were carried out by the WilPhoenix semi-submersible drilling rig, in the Solan Field, in accordance with term-based environmental permits granted by DECC.

Figure 2.11 WilPhoenix Drilling Rig



The location of the drilling activities during 2014 is shown in figure 2.11

Figure 2.11 2014 Drilling Activities

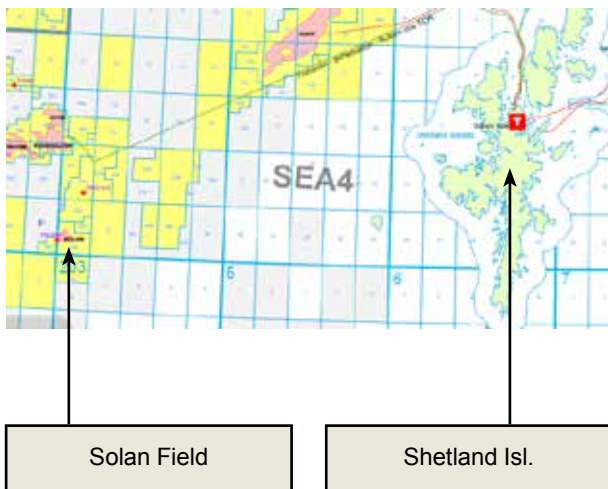
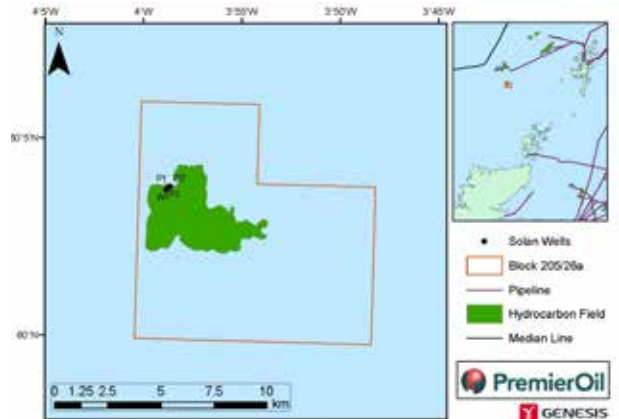


Figure 2.12 The wells drilled for the Solan project



3.0 HSES-MS

‘Premier is focused on protecting the environment in line with our stated commitment to reduce our impact to a level that is as low as reasonably practicable. This involves ongoing assessment, monitoring and reporting on environmental impacts at all our operations.’

(<http://www.premier-oil.com/premieroil/corporate-responsibility/environment-new>)




The Premier Health, Safety, Environment and Security Management System (HSES-MS) exists to provide a systematic approach to the management of HSES issues in order to protect people and the environment and comply with UK legislation.

Premier considers that health, safety and environment have equal status with other primary business objectives and are of strategic importance to Premier. Safe working practices and due consideration of environmental impact are vital to the overall efficiency and continued success of the business. The HSE policy forms the basis for the HSES-MS and is presented in figure 3.1.

3.0 HSES-MS

Figure 3.1 – Premier HSES-MS Policy




HEALTH, SAFETY, ENVIRONMENT & SECURITY POLICY

Premier Oil is committed to operating responsibly and will never knowingly compromise our health, safety, environmental or security standards to meet our operational objectives. Our goals are to ensure the safety of everyone involved with our operations and to protect the environment.

To achieve this we will:

- *Encourage open and honest communication*
- *Seek ways to continually improve our performance*
- *Assess and manage risks*
- *Provide appropriate resources*
- *Maintain clean, safe and healthy workplaces*
- *Investigate and learn from any incidents*
- *Plan and prepare for potential emergencies*
- *Maintain high quality documented systems and processes*
- *Seek external certification of key management systems*
- *Meet or surpass statutory requirements*

It is the responsibility of everybody involved in Premier to comply with our Policies and to assist the Company in their implementation.



Tony Durrant
Chief Executive Officer
Premier Oil plc

July 2014

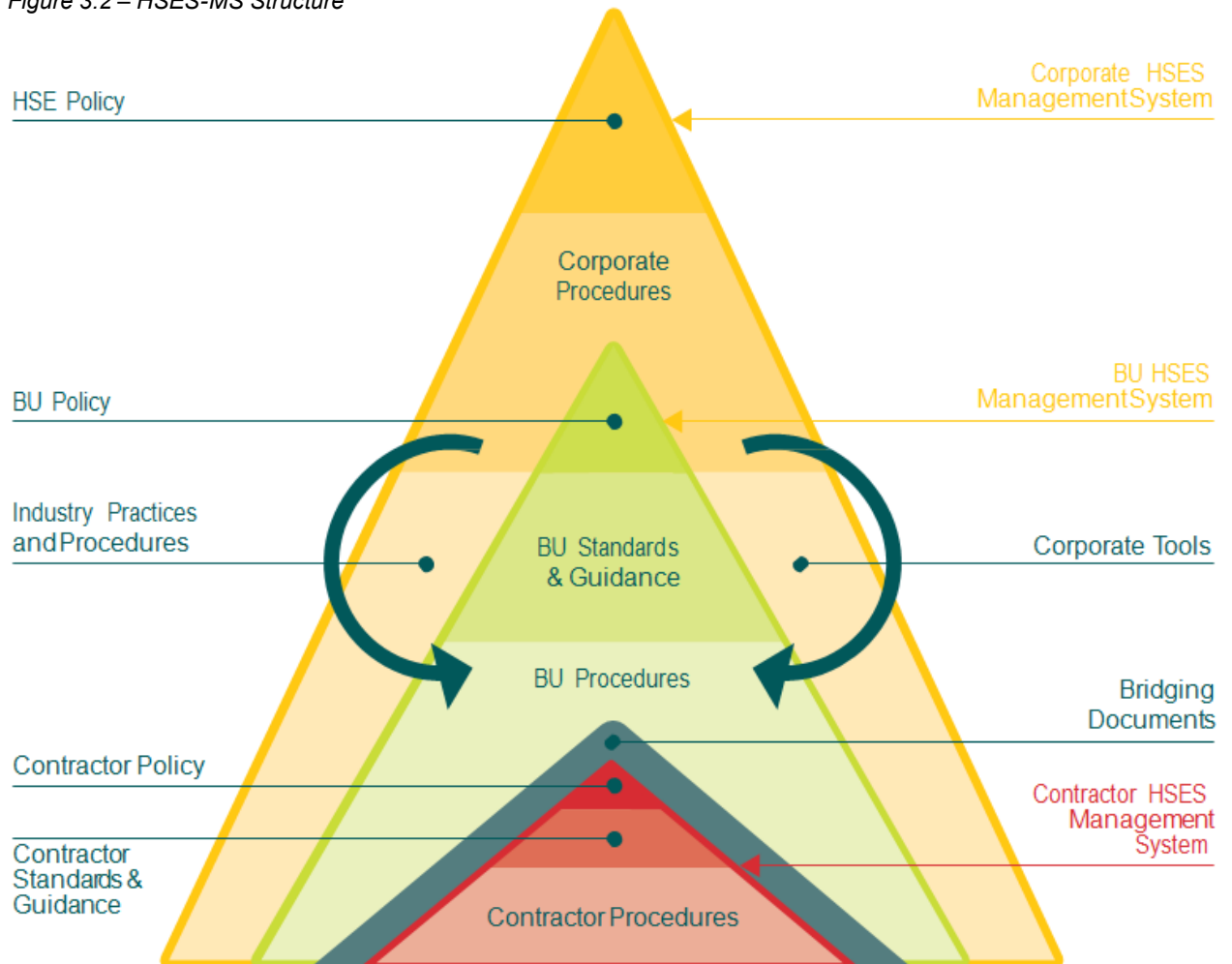
3.0 HSES-MS

The HSES-MS has a hierarchical document structure as illustrated in figure 3.2. It is based on the industry model prepared by the International Association of Oil and Gas Producers (IOGP) and embraces the principles of quality management as found in the ISO 14001 and OHSAS 18001 international standards.

Figure 3.2 shows the structure of the HSES-MS, which is comprised of;

- Premier's HSES Policy;
- The Premier Corporate Expectations. These are owned by the CEO and issued by the corporate HSE manager. The corporate expectations apply to all Premier Business Units;
- The tools to allow for implementation of the Corporate Expectations i.e. Business Unit and Asset Specific procedures, contractor procedures and bridging documents.

Figure 3.2 – HSES-MS Structure



3.0 HSES-MS

Figure 3.3 below shows the 10 elements that make up the Premier HSES Management System

Figure 3.3 - HSES-MS Framework



The Premier HSES Management System has 10 individual elements. Each element contains a set of concise expectations that are mandatory for implementation and maintenance within the Group. They define what is expected by the Group in order to manage HSES risk during execution of work activities.

4.0 ENVIRONMENTAL PERFORMANCE

4.1 Oil in Produced Water

During normal production, water is produced when extracting hydrocarbons from the reservoir. On the Balmoral FPV, bulk separation of produced water is achieved in the 1st Stage Separator, 2nd Stage Separator and Test Separator vessels. The separated produced water is routed to the hydro-cyclones and the tilted plate separator for further removal of entrained oil. The treated produced water is then discharged to sea via a dedicated caisson.

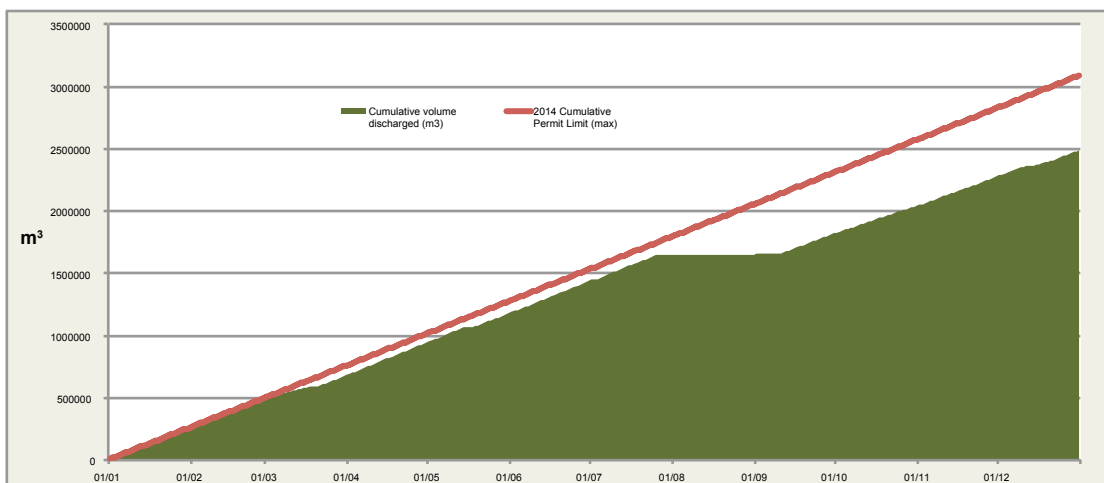
The 2014 permit held by Premier for Balmoral permits the installation to discharge produced water, provided the hydrocarbon concentration is within the limit set out in the permit (a monthly average of 30 mg/l per litre). Premier has a UKCS internal target to discharge produced water with a hydrocarbon concentration of less than 15 mg/l per litre (monthly average).

Despite treatment, produced water still contains traces of oil, and as such, produced water discharge is controlled via a permitting system managed by the UK regulatory authority, DECC.

(a) Total Volume of Produced Water

Figure 4.1 shows the cumulative produced water discharges from Balmoral FPV during 2014. The total volume of produced water discharged to sea from the Balmoral FPV in 2014 was 2,489,361m³. This is an increase in the total amount discharged compared with 2013 (2,057,492m³). When a comparison is made between daily average produced water values between 2013 and 2014, there has been an increase from 6,083m³ per day to 6,820m³ per day in 2014. This is partly attributable to an increase in % water cut from the wells as they mature.

Figure 4.1 – Total Produced Water Discharged - Balmoral FPV, 2014



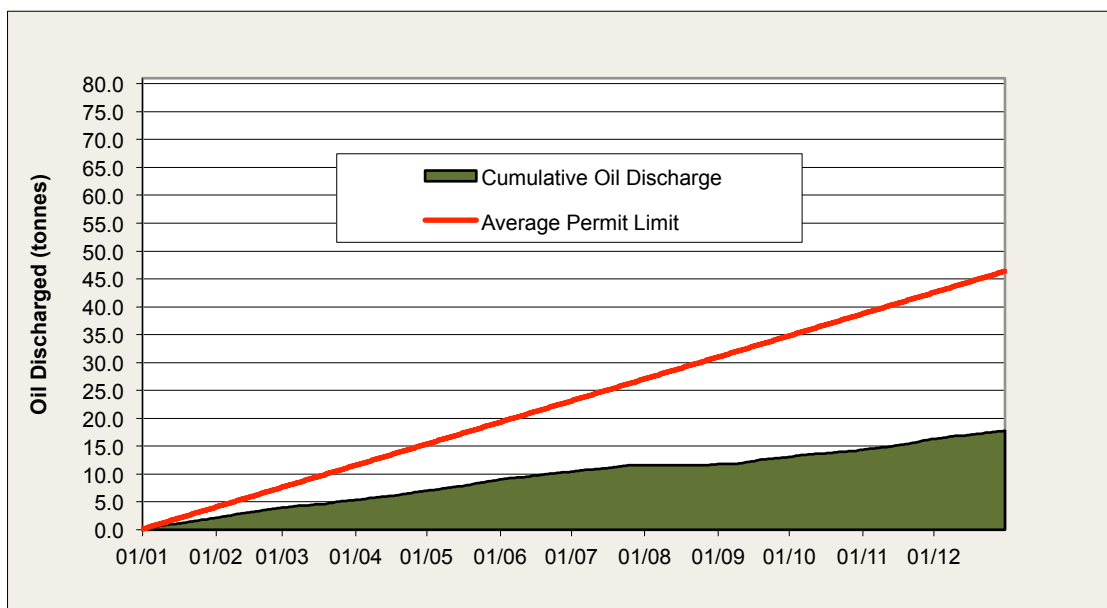
4.0 ENVIRONMENTAL PERFORMANCE

(b) Total Volume of Oil Discharged to Sea



Figure 4.2 shows the total volume of oil discharged to sea in 2014 from the Balmoral FPV was 17.74 tonnes as compared to 24 tonnes discharged in 2014. This is significantly below the permitted volume of 46 tonnes for 2014.

Figure 4.2 – Total Oil Discharged in Produced Water - Balmoral FPV, 2014



4.0 ENVIRONMENTAL PERFORMANCE

(c) Average Oil in Produced Water Concentration

The yearly average concentration of oil discharged in produced water for Balmoral in 2014 was 7.12 mg/l. This compares favourably with the regulatory permitted maximum of 30 mg/l and Premier’s internal target of 15 mg/l.

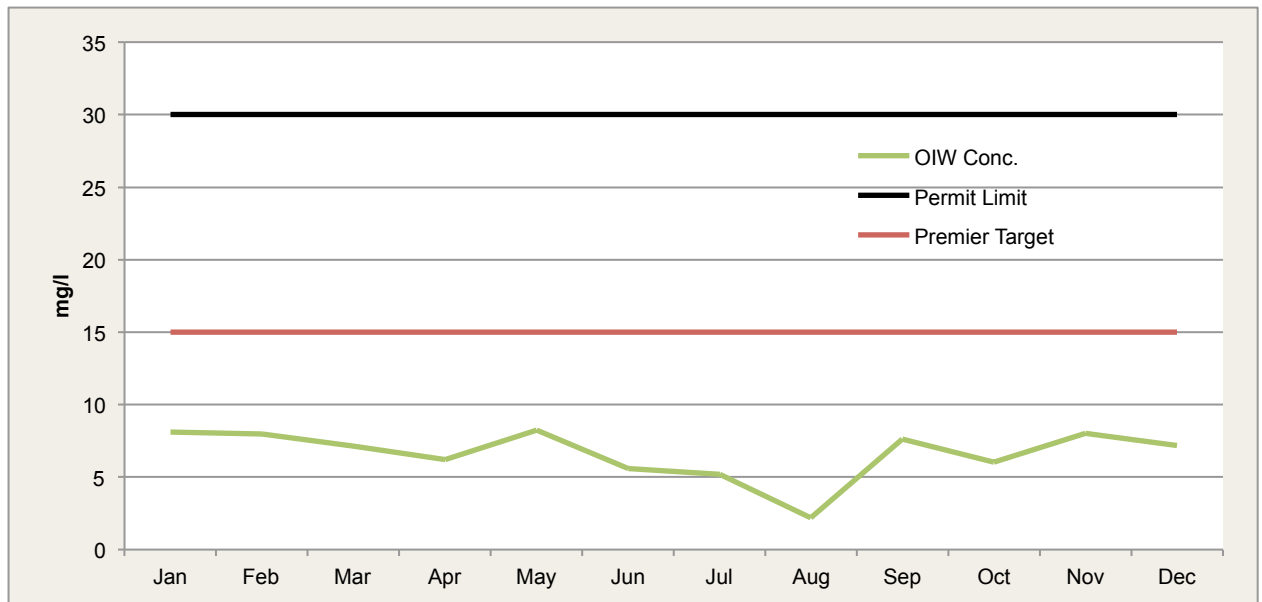
Techniques used on Balmoral towards both lowering the concentration of oil in produced water and reducing the amount of oil passed to sea have been particularly effective.

The 2014 average compares with a 2013 average of 11.9 mg/l. With the exception of a couple of days where measured levels were, when compared to the annual mean, particularly high, the Oil in Water Concentration for 2014 was retained at a very low level.

Figure 4.3 presents the rolling monthly average oil in water concentration for Balmoral in 2014.

Performance improvements can be attributed to a number of ongoing improvements made to the treatment process. These include optimised performance of the produced water treatment equipment and high efficiency chemicals used to remove oil from the produced water before discharge.

Figure 4.3 – Monthly Average Oil in Water Concentration – Balmoral FPV, 2014



4.2 Chemical Use and Discharge

Various chemicals are used offshore in drilling and production operations. In drilling operations these chemicals include fluids known as 'drilling muds', which lubricate and cool the drilling bit, maintain downhole pressure and bring the drill cuttings to the surface.

During production operations chemicals such as scale solvers, corrosion inhibitors, demulsifiers and biocides are used to assist with the separation of oil and water, prevent damage to infrastructure such as pipelines, and prevent 'souring' of the reservoir.

Any chemical used offshore must, in line with the Offshore Chemicals Regulations (OCR) 2002, first be approved by the Centre for Environment, Fisheries and Aquaculture Science (CEFAS). The chemicals are subject to an environmental risk assessment and once approved their use is controlled and monitored through a permit granted by DECC.

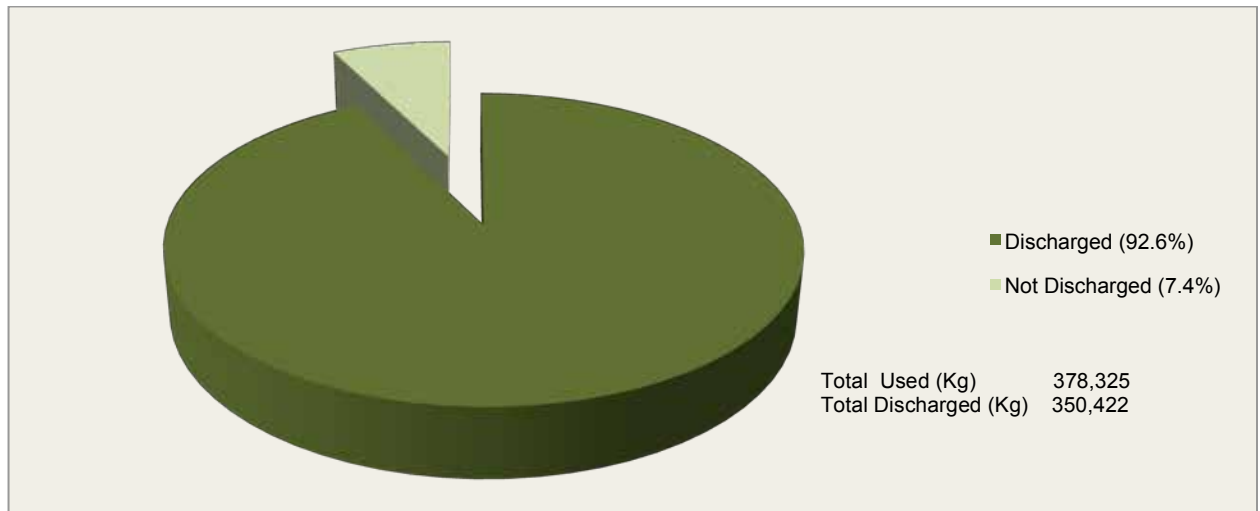
Under the Offshore Chemical Notification Scheme (OCNS), chemicals are ranked according to the assessed hazard to the environment and are given a lettered heading (from lowest to highest hazard) E,D,C,B or A.

Using the Chemical Hazard and Risk Management (CHARM) model, a coloured band is used to show which chemical poses the highest hazard, which are (from lowest to highest) Gold, Silver, White, Blue, Orange or Purple.

Any chemicals which have been identified as posing certain potential environmental risks (such as bioaccumulation or slow biodegradation) are subject to controls under which their use must first be approved by DECC, backed up by a detailed justification for use of the chemical. Such chemicals carry a substitution warning (SUB) which aims to encourage the phasing out of the use of these chemicals.

(a) Balmoral FPV Total Use and Discharge

Figure 4.4 – Chemical Use and Discharge During Operations – Balmoral FPV, 2014



4.2 Chemical Use and Discharge

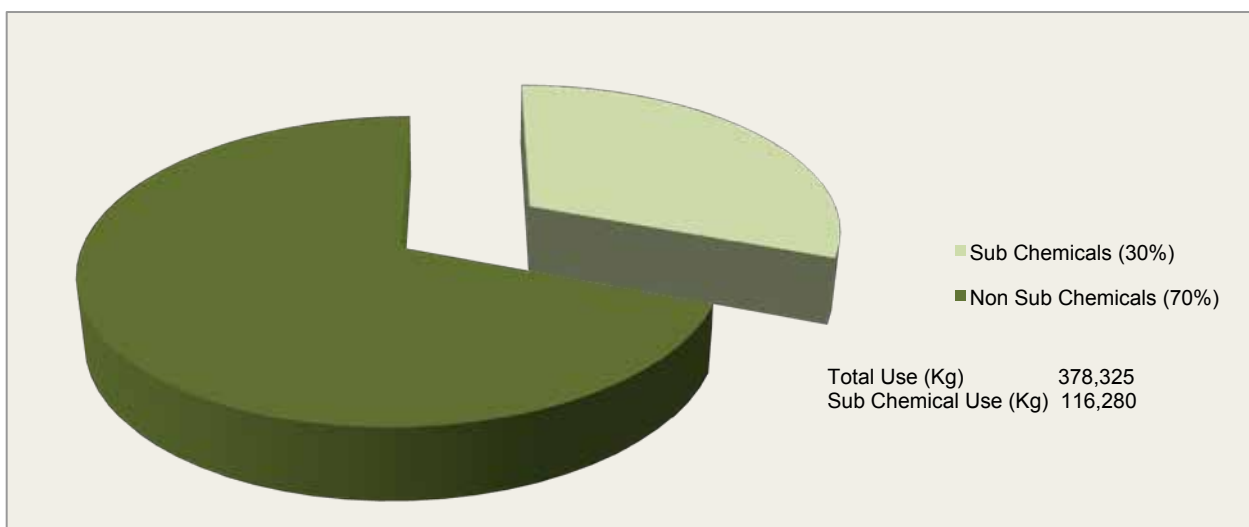
Chemicals Used and Discharged by Category on Balmoral FPV

A total of 5 chemicals with substitution warnings (SUB) were permitted for use on Balmoral in 2014. Premier is actively working to find alternatives to these products. SUB chemical use on Balmoral increased in 2014 compared to 2013, rising from 69,198 kg to 116,280 kg.

Table 4.1 – SUB Chemical Use – Balmoral FPV Operations 2014

Chemical & OCNS Category	Summary & OCNS Category
EC1231A, Nalco Ltd, Corrosion Inhibitor, Gold, 2014	The chemical supplier and Premier are working to develop a SUB free alternative to this chemical.
EC6152A, Nalco Ltd, Scale Inhibitor, Gold, 2014	This chemical is currently the only qualified, suitable product for use as a scale squeeze chemical for Balmoral.
EC6199A, Nalco Ltd, Biocide, Gold, 2014	This chemical was used to treat the sludge/bilge tanks. This product was changed out to a biocide without a SUB warning in 2014.
FX2134, Nalco Ltd, Demulsifier, Gold, 2014	Demulsifier breaks down the oil in water emulsions within produced fluids and helps to provide efficient separation to ensure that minimal oil is discharged into the marine environment. A replacement is being developed by the manufacturer.
SCW85649 Baker Hughes Ltd, Scale Inhibitor, Gold, 2014	This chemical is a scale inhibitor that will be continuously injected downhole at the Burghley well. No return is expected and a worst case discharge of 1% has been assumed. These dosages generated Risk Quotients (RQs) <1, indicating that the discharge of this chemical is not expected to pose a significant risk to the surrounding marine environment.

Figure 4.5 – Chemical Use By Substitution Category – Balmoral Operations, 2014

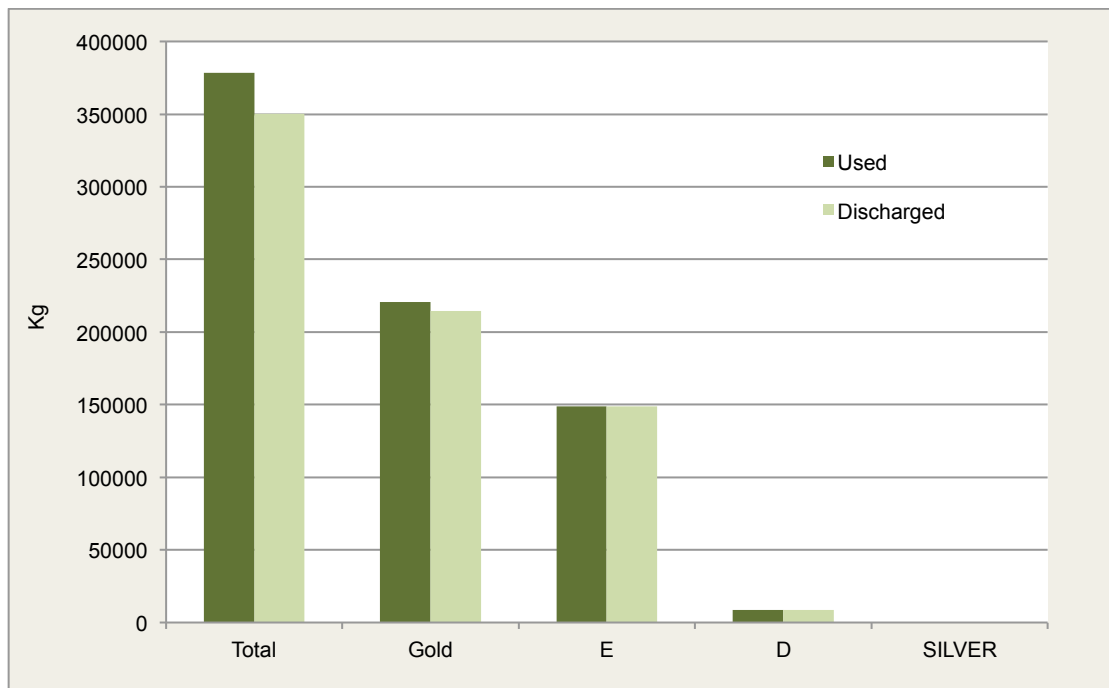


4.2 Chemical Use and Discharge



In figure 4.6. the chemicals used on Balmoral FPV have been grouped by their OCNS category (Gold, Silver, E and D). This figure shows that 97% of the chemicals used fall into the least hazardous categories of 'GOLD' or 'E'.

Figure 4.6 – Chemical Use by OCNS Category - Balmoral FPV, 2014



4.2 Chemical Use and Discharge

(b) Drilling Operations Total Use and Discharge

Chemicals Used and Discharged by Category – Drilling Operations

~3% of the chemicals used during drilling operations were discharged. (See figure 4.7)

A total of 24 chemicals with substitution warnings were permitted for use during drilling operations in 2014.

SUB rated chemicals make up 0.56% of the total chemical use and no SUB chemicals were discharged.

The chemical discharge total for drilling activities in 2014 is significantly lower than the figure for 2013, falling from >3,000 to ~116 tonnes.

A full justification for the use of each chemical was presented to and accepted by DECC. Premier is working with chemical suppliers to reduce the use of SUB rated chemicals and to develop alternative products. In figure 4.8 the chemicals used have been grouped in to those which have a substitution warning and those which do not.

Figure 4.7 Drilling Chemical Use in 2014

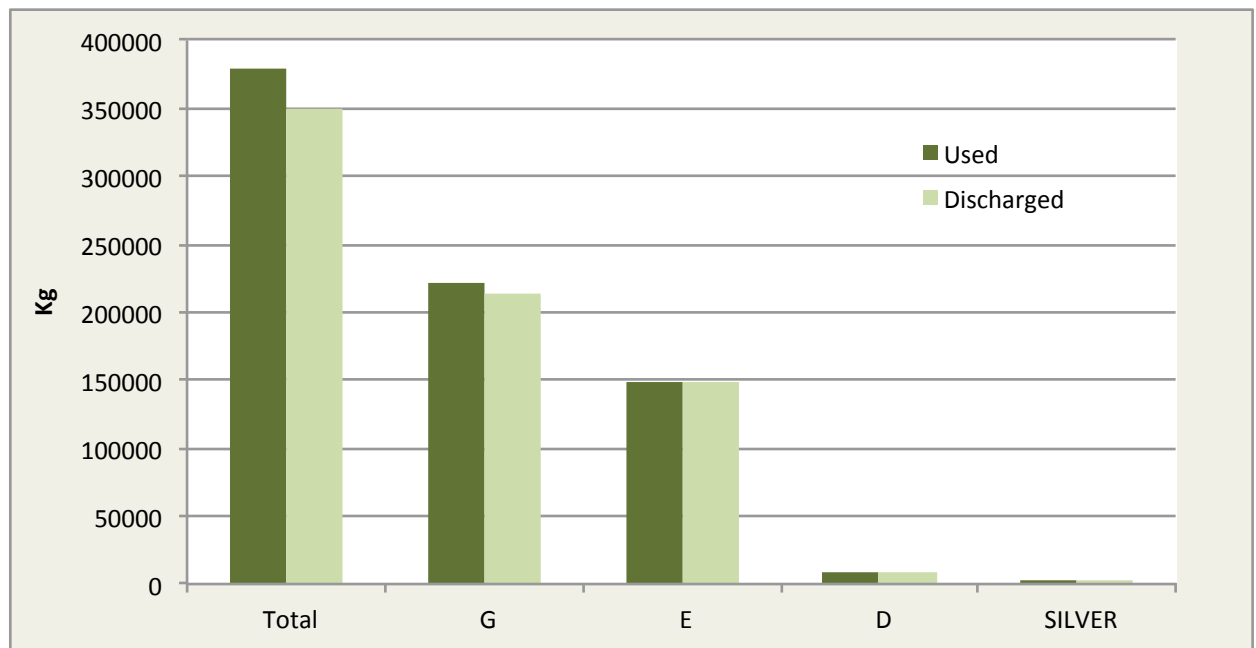
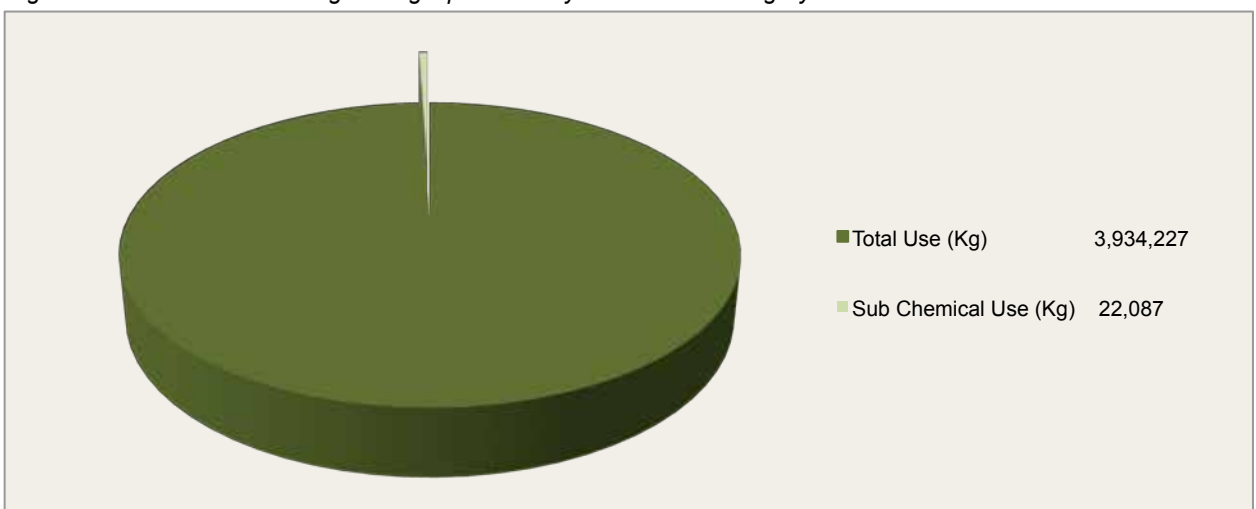


Figure 4.8 Chemical use During Drilling Operations by Substitution Category in 2014

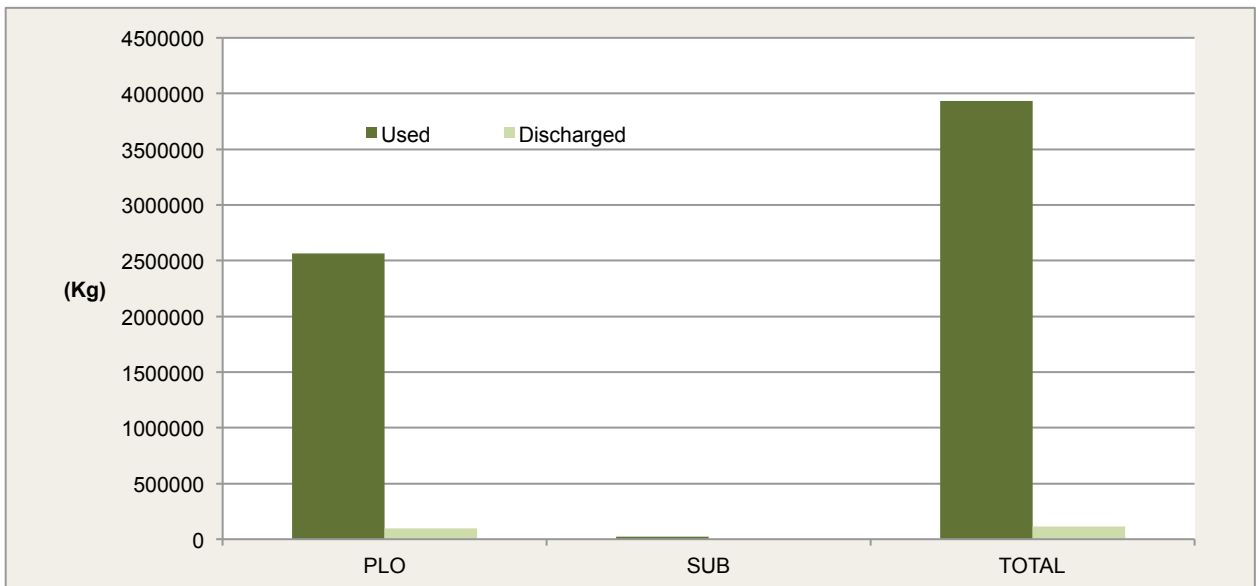


4.2 Chemical Use and Discharge



In figure 4.9 the chemicals used during drilling operations have been grouped by category. PLO refers to chemicals that are deemed to pose little or no risk to the environment. This figure shows that 65% of all the chemicals used and 81% of those discharged are rated PLO.

Figure 4.9 Drilling Chemical Use and Discharge by OCNS Rating 2014



4.3 Waste

Waste is generated from offshore operations and is transported onshore for reuse, recycling, treatment or disposal. On the Balmoral FPV waste is segregated offshore into categories before back-loading. As much waste as possible is sent for recycling including wood, scrap metals, paper/cardboard, glass and plastics.

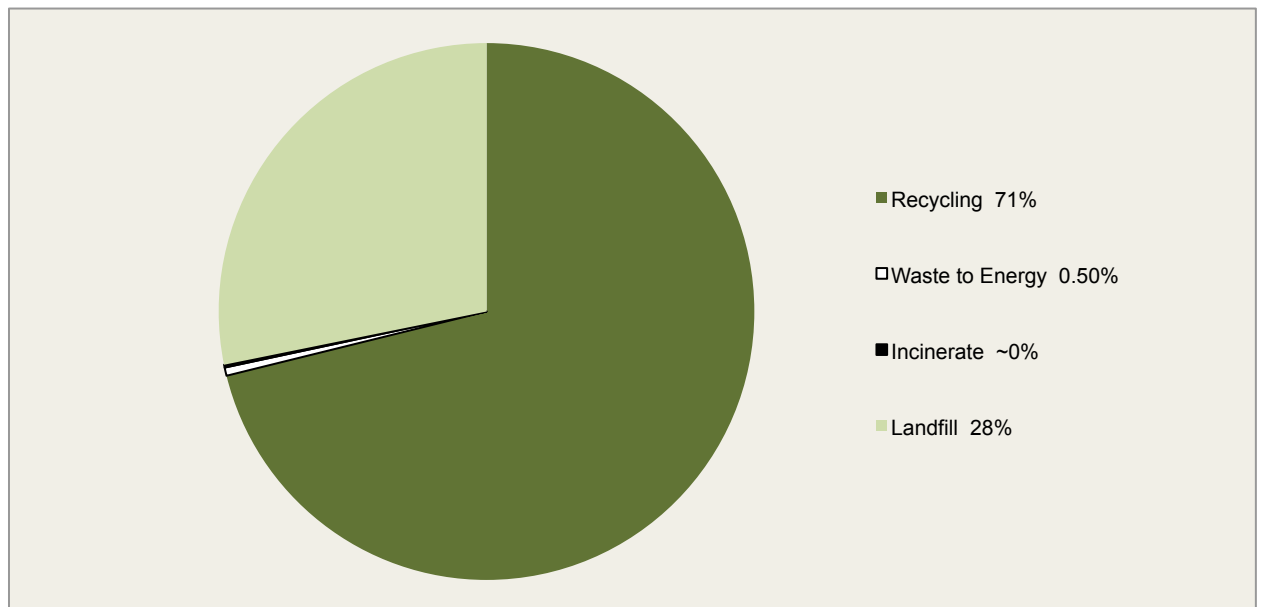
Waste that cannot be recycled is sent to landfill. Certain types of waste that are harmful to the environment (Special Waste) is sent ashore to be processed and disposed of by licensed handlers in accordance with the relevant legislation.

(a) Balmoral FPV

A total of 306 tonnes of waste was disposed of from the Balmoral FPV in 2014. Balmoral recycled 71% of its waste in 2014, inside the company target of 70%. The majority of non-recycled waste was sent to landfill. Figure 4.10 shows the fate of waste produced from the Balmoral FPV.

Premier continues to target areas where the amount of waste generated can be further reduced. Initiatives such as reducing the use of disposable equipment (boot covers and ear plugs) along with continual staff awareness programmes and the changing out of plastic to compostable cups have all proven to be successful in reducing the amount of waste sent to landfill.

Figure 4.10 – Waste Disposal Routes - Balmoral FPV, 2014



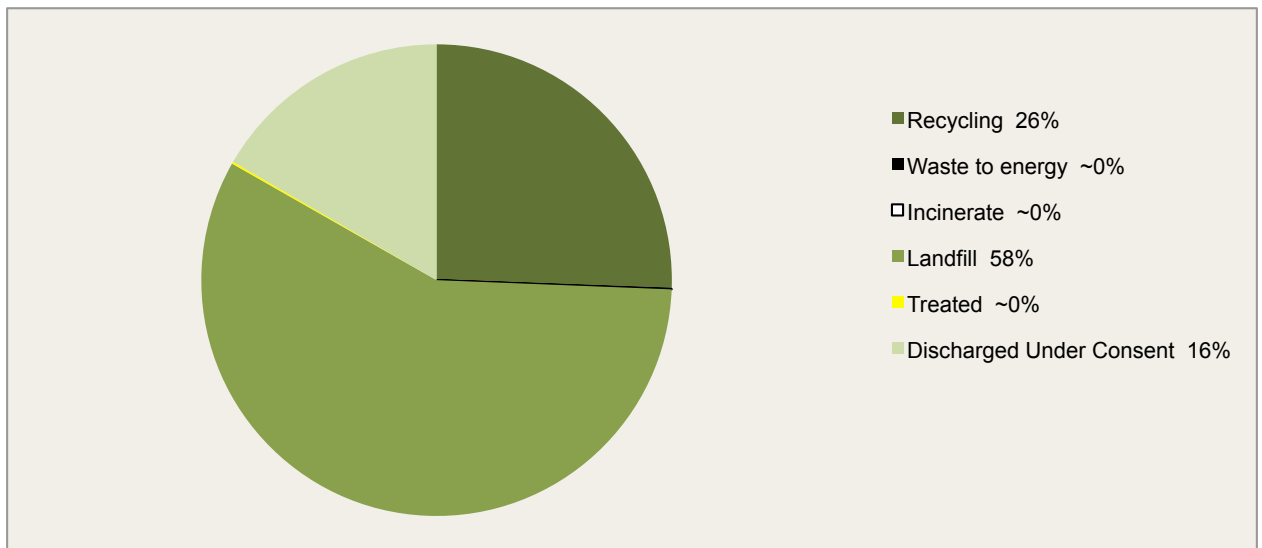
4.3 Waste

(b) Drilling Operations

A total of 684 tonnes of waste was disposed of from drilling operations in 2014. 26% of drilling waste was recycled, 58% of non-recycled waste was sent to landfill. Figure 4.11 shows the fate of waste produced from drilling in 2014.

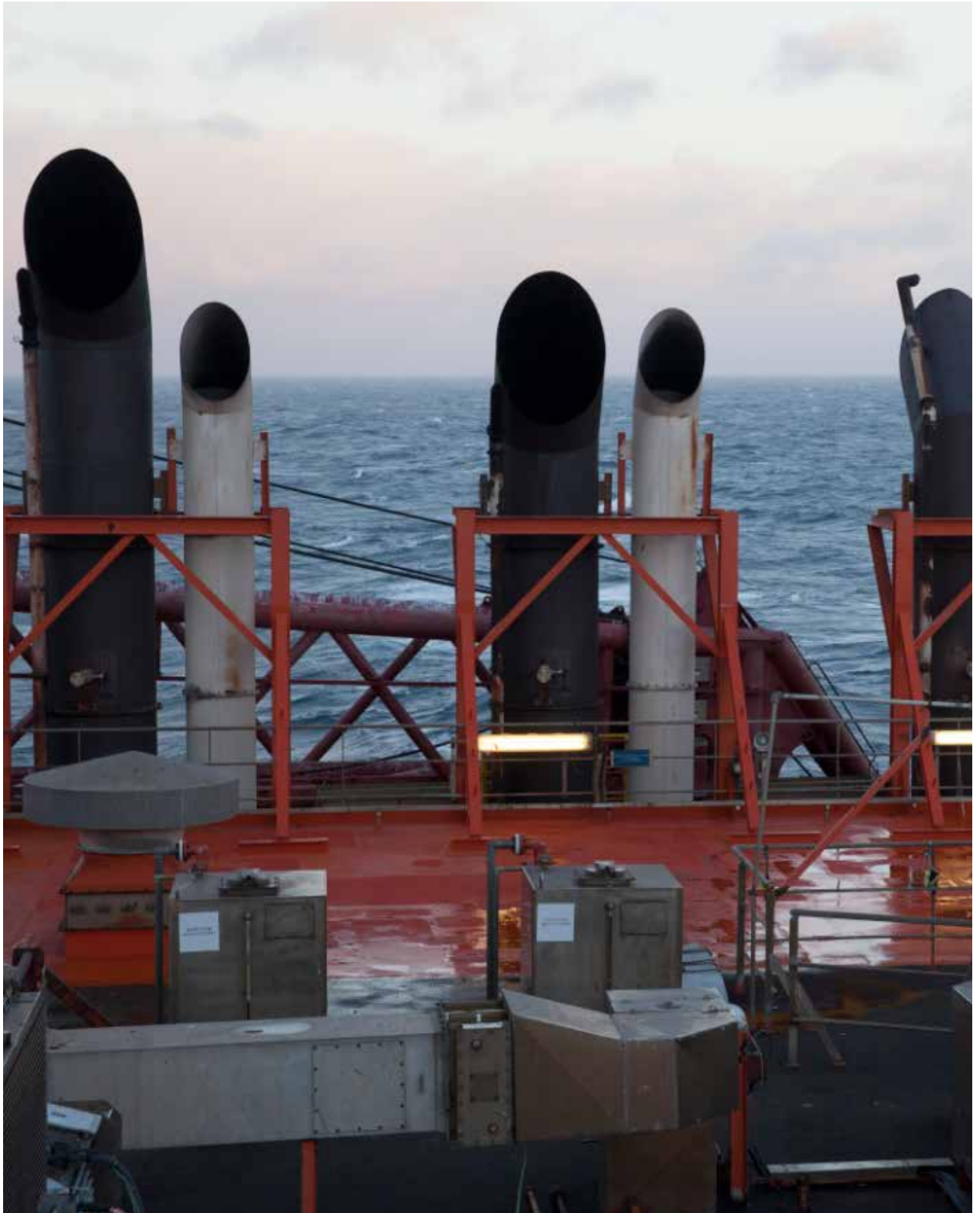
Due to the type of waste produced during drilling, and the short term nature of drilling campaigns in comparison to on-going production operations, it is more difficult to achieve higher recycling rates. However, Premier is working with the drilling contractors to improve recycling rates and reduce the amount of waste sent to landfill.

Figure 4.11 – Waste Disposal Routes - Drilling Operations, 2014



4.4 Atmospheric Emissions

Atmospheric emissions arise during offshore drilling and production operations predominantly as a result of fuel combustion for power generation and gas flaring activities.

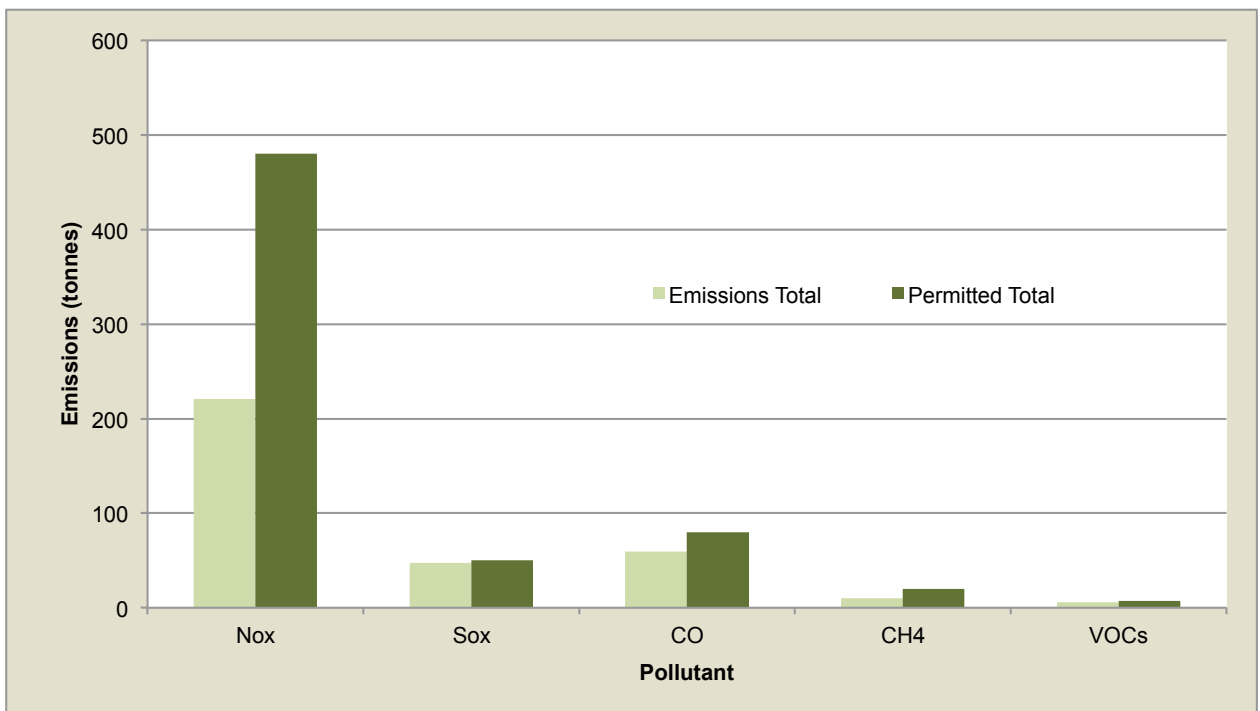


4.4 Atmospheric Emissions

(a) Balmoral FPV

The Balmoral FPV is regulated under the Pollution, Prevention and Control (PPC) Regulations as a large combustion installation. As such, the installation has set limits on atmospheric emissions of nitrogen oxides (NO_x), sulphur dioxides (SO_x), carbon monoxide (CO), methane (CH₄) and volatile organic compounds (VOCs).

Figure 4.12 – Combustion Emissions - Balmoral, 2014

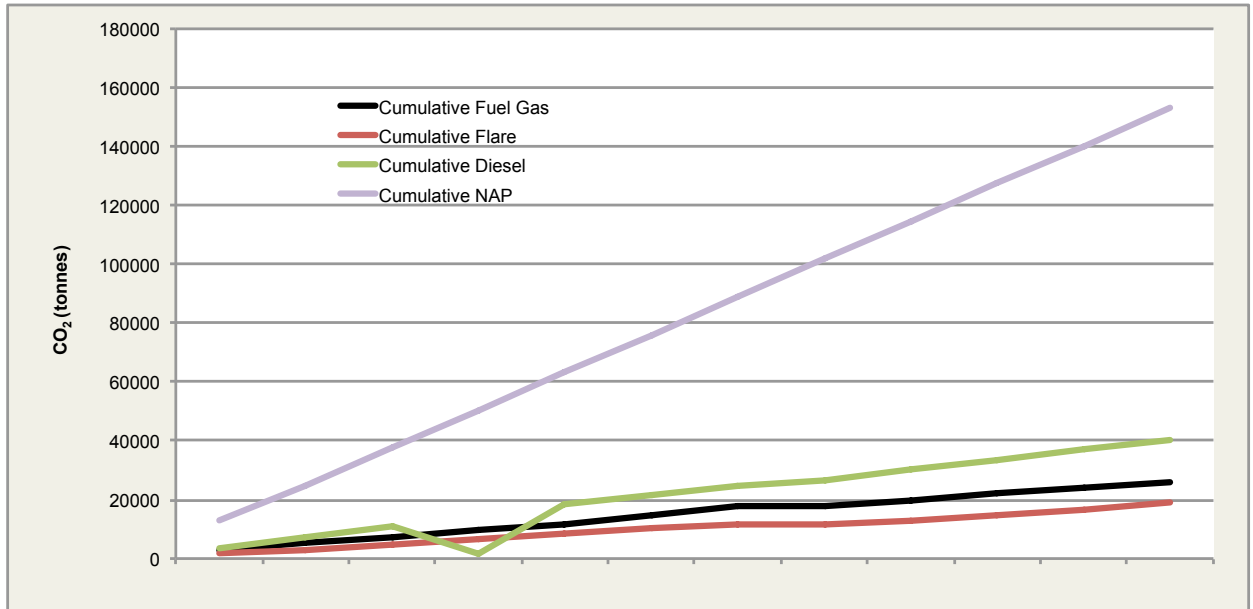


Combustion emissions on Balmoral during 2014 dropped when compared to 2013 levels. Emissions of NO_x dropped from 292 to 221 tonnes. Total emissions levels for 2014 were around 8% lower than the previous year. The lower overall levels were as a result of less diesel used for power generation and an increased use of fuel gas as a power source, as opposed to flaring. All emissions were within limits set by DECC in the Balmoral PPC Permit.

Balmoral is also regulated under the European Union Emissions Trading Scheme (EU ETS) Regulations, which regulates Carbon Dioxide (CO₂) emissions for combustion plant and flaring. Balmoral has no gas export route and as a result, produced gas is used as fuel gas or is flared from the installation. CO₂ emissions as a result of combustion plant and flaring activities are presented in figure 4.13 on the next page.

4.4 Atmospheric Emissions

Figure 4.13 CO₂ Emissions: Flaring and Combustion - Balmoral, 2014



During 2014, 85,209 tonnes of CO₂ were emitted from combustion and flaring on Balmoral. Of these emissions, 79% were as a result of combustion processes for power generation and the remainder (21%) were as a result of the flaring of excess gas from the installation.

CO₂ emissions decreased by 14,099 tonnes in 2014 compared to 2013 levels. This was largely due to an operational change with regards to the running of the turbines for power generation. The installation ran, when possible, with one turbine on diesel as opposed to two, with a larger percentage of fuel gas used for power generation.

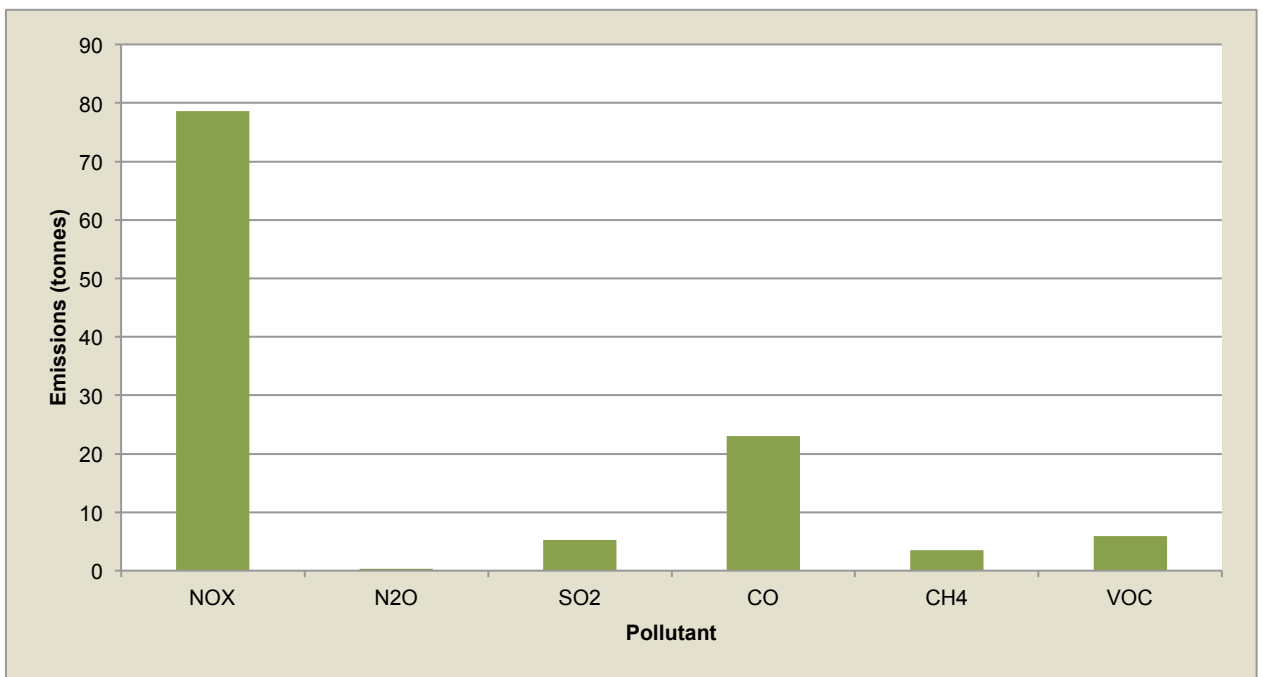


4.4 Atmospheric Emissions

(b) Drilling Operations

Combustion emissions from drilling operations are shown in figure 4.14. In addition, 4,624.64 tonnes of CO₂ were released from drilling operations during 2014.

Figure 4.14 Combustion Emissions from Drilling Operations, 2014



4.5 Releases and Discharges

(a) Balmoral FPV

During 2014 there were nine unplanned releases of hydrocarbons or chemicals from the Balmoral FPV, compared to five in 2013. All releases to sea are reported to DECC and other statutory agencies via the Petroleum Operations Notice* form.

PON1 – Oil Release

There were four PON1s submitted due to oil releases in 2014, compared to one in 2013.

Table 4.2 Oil Releases from Balmoral during 2014

Activity	Total Released
Hydraulic hose from crane failed during operation and released to sea.	0.0001 tonnes
Pin hole leak on the trip tank released liquid to sea.	0.02 tonnes
Subsea valve leak.	0.017515 tonnes
Unspecified subsea leak.	0.069 tonnes

(All leak sources were isolated until situation remedied)

PON1 – Chemical Release

There were five PON1s submitted due to chemical releases in 2014, compared to three in 2013.

Table 4.3 Chemical Releases from Balmoral during 2014

Activity	Total Released
Leak was from subsea hydraulic hose.	0.215 tonnes
Subsea leak of high pressure hydraulic fluid.	0.3852 tonnes
Subsea hose failure	0.059 tonnes
Leak from Balmoral subsea hydraulic control system	0.9915 tonnes
Unspecified subsea leak	0.05071 tonnes

(All leak sources were isolated until situation remedied)

*PON1 – Reporting oil and chemical releases and Permitted Discharge Notifications from offshore installations and pipelines

PON2 – Loss or dumping of materials at sea from offshore oil and gas installations

4.5 Releases and Discharges

PON1 – PDN

There were no PDNs submitted in 2014 compared to three in 2013.

PON2

During Diving Support Vessel (DSV) operations the guide/down line from the Balmoral FPV moon-pool area to the FPV template, used in transferring/locating materials to the sea bed was noted to have parted.

The wire remaining on the sea bed is approximately 150m long and is located in and around the template area. It poses no threat to the Balmoral FPV or any other activities in the area. It is planned to be recovered during a DSV campaign in 2015.

Non Compliance

There were four environmental permit non compliances during 2014 compared to six in 2013.

Table 4.4 List of non compliances during 2014 Balmoral operations

Activity
Use of a chemical where the name of the chemical supplier was different to that listed on the permit.
A fault was identified with a transmitter attached to an emissions meter.
An incorrect practice in recording and reporting a sample towards EU-ETS.
One of the meters used to measure emissions was found not to be working to its highest efficiency.

(All issues were addressed and DECC provided approval for all corrective actions taken)

Production Summary

The number of reported oil releases increased in 2014 when compared to 2013, but the quantity of oil spilled to sea is still low at 0.1 tonnes. The subsea discharges, through valve movement and unspecified leaks, account for 86% of this total.

The number of chemical releases remain the same in 2014 when compared to 2013. The volume of chemicals released is however, higher than 2013, but the chemicals released were of the lowest measurable hazard to the environment, namely OCNS category E (Pelagic 100, Methanol and ECI544A Corrosion Inhibitor).

4.5 Releases and Discharges

(b) Solan

PON1

No PON1s were submitted for the Solan project in 2014.

PON2

One PON2 was submitted in 2014.

Table 4.5 Details of PON2 submitted in 2014 for Solan

Activity
During a period of storm force conditions one of the life-rafts was freed from its moorings and jettisoned to sea.

OCR NCR

One OCR NCR was submitted in 2014.

Table 4.6 Details of OCR Non Conformance during 2014 Solan operations

Activity
During update of the Solan chemical tracking system, PonTRAX, it was identified that chemicals had been applied to the below well tie ins in a different way than was permitted.

(The permits have been varied to cover the remaining flange connections still to be made)



4.5 Releases and Discharges

(c) Drilling Operations

PON1 – Oil Release

There was one PON1 submitted due to an oil release in 2014.

Table 4.7 Oil Releases From Drilling Operations During 2014

Activity	Total Released
Suspected fall out from Flaring operations.	0.000044 tonnes

(All leak sources were isolated until situation remedied)

PON1 – Chemical Release

There was one PON1 submitted due to a chemical release in 2014.

Table 4.8 Chemical Release From Drilling Operations During 2014

Activity	Total Released
Washing down on the drill floor unaware a seal had been broken.	0.003 tonnes

(All leak sources were isolated until situation remedied)

PON1 PDN

No PDNs were submitted for drilling in 2014.

PON2

No PON2s were submitted from drilling operations in 2014.

Non Compliance

No permit non compliances were recorded from drilling operations in 2014.

4.5 Releases and Discharges

Drilling Summary

The single release of oil during drilling operations was through a fall out from flaring operations. The total released was >1 kg.

Drilling activities during 2014 saw an improvement over 2013 with regards chemical releases to sea, with a single incident involving the release of ~3 kg of product.



5.0 ENVIRONMENTAL PERFORMANCE AGAINST TARGETS

During 2014, a number of targets were set to guide improvements in environmental performance. The high level targets set for Premier and the performance against these is detailed in table 5.1 below.

Table 5.1 Premier Performance Against Targets – Balmoral FPV

SUBJECT	TARGET	PERFORMANCE
Oil discharged in produced water	<15 mg/l	Achieved – 7.12 mg/l
Oil discharged in produced water	<46 tonnes	Achieved – 17 tonnes
Use of hazardous (sub) chemicals	<176 tonnes	Achieved – 116 tonnes
% of waste disposed to landfill	<35%	Achieved – 28.1%
Kg of waste generated per man day	<5.5 kg	Achieved – 5.5 kg
Total CO ₂ emissions	<110,000 tonnes	Achieved – 85,209 tonnes
Average flaring per day	<40 tonnes	Achieved – 13.26 tonnes
Oil releases	Zero releases	Not achieved – 4
Chemical releases	Zero releases	Not achieved – 5
Permitted discharge notifications (PDN)	Zero PDNs	Achieved
OPPC NCR	Zero OPPC NCRs	Achieved
PPC NCR	Zero non compliances	Achieved
EU ETS NCR	Zero non compliances	Not achieved – 3
OCR Non compliances	Zero non compliances	Not achieved – 1
RSA Non compliances	Zero non compliances	Achieved
Waste NCR	Zero non compliances	Achieved

5.0 ENVIRONMENTAL PERFORMANCE AGAINST TARGETS

Table 5.2 includes information on performance against targets for drilling operations during 2014.

Table 5.2 Premier Performance Against Targets – Drilling Operations

SUBJECT	TARGET	PERFORMANCE
Oil releases	Zero releases	Not achieved - 1
Chemical releases	Zero releases	Not achieved - 1
Permitted discharge notifications (PDN)	Zero PDNs	Achieved
OCR non compliances	Zero non compliances	Achieved
OPPC non compliances	Zero non compliances	Achieved
Waste NCR	Zero non compliances	Achieved

