



**Environmental Performance
Public Statement for 2015 Operations**

June 2016

E.On Exploration and Production UK Ltd

TABLE OF CONTENTS

1.	INTRODUCTION.....	1
2.	E.ON E&P UK BACKGROUND	1
3.	THE HEALTH SAFETY ENVIRONMENT AND QUALITY (HSEQ) MANAGEMENT SYSTEM (MS)	1
4.	2015 UKCS OFFSHORE ACTIVITIES	4
5	2015 SUMMARY OF ENVIRONMENTAL PERFORMANCE.....	6
5.1	CHEMICAL USE AND DISCHARGE INTO THE MARINE ENVIRONMENT	6
5.2	SOLID WASTE GENERATION AND DISPOSAL METHODS	9
5.3	ATMOSPHERIC EMISSIONS	10
5.4	ACCIDENTAL RELEASES	11
5.5	OIL DISCHARGED IN PRODUCED WATER	11
5.6	NON-CONFORMANCES	11
6	2015 HSE TARGETS.....	12
7	HSEQ PLAN 2016 (OBJECTIVES AND TARGETS).....	12

1. INTRODUCTION

Under the OSPAR Recommendation 2003/5 the Department of Energy and Climate Change (DECC) require that all existing UK Continental Shelf (UKCS) oil and gas operators undertaking offshore operations during 2015 must prepare an annual statement of their environmental performance, covering that calendar year, and make that statement available to the public. This document represents the E.On Exploration and Production UK Ltd (hereafter referred to as E.On E&P UK) annual public statement for 2015 exploration and production operations.

2. E.ON E&P UK BACKGROUND

E.On E&P UK is a 100% owned subsidiary of the E.On E&P Gesellschaft mit beschränkter Haftung (GmbH), a subsidiary of E.On Societas Europea (E.On SE), headquartered in Essen, Germany. E.On E&P UK has a primary focus on North Sea oil and gas in the central and southern North Sea, however holds a number of exploration licences within the West of Shetland area.

Central North Sea (CNS)

In 2015, E.On E&P UK held production interests in four third party operated assets in the UK CNS. These comprise: Elgin-Franklin (Elgin, Franklin and West Franklin fields), Glenelg, Scoter and Merganser. E.On E&P UK also operates the Huntington field which is tied back to the *Voyageur Spirit* Floating Production Storage and Offloading (FPSO) vessel and has been producing since April 2013.

Southern North Sea (SNS)

In the SNS, E.On E&P UK operates the Babbage, Johnston, Hunter and Rita producing fields, and holds interests in the third party operated Caister, Minke, Orca and Ravenspurn North fields, as well as the Caister Murdoch Pipeline System. E.On E&P UK holds an interest in eleven exploration licences in the region. E.On E&P also holds a 50% share (operator) in the Tolmount gas field discovery licence with Dana Petroleum (E&P) Limited holding the other 50%.

3. THE HEALTH SAFETY ENVIRONMENT AND QUALITY (HSEQ) MANAGEMENT SYSTEM (MS)

The E.ON E&P UK HSEQ MS applies to all activities carried out or managed by E.On E&P UK. The HSEQ MS is used to deliver the E.On E&P UK HSEQ Policy (Figure 3.1).

All E.ON E&P UK Management Units implement and maintain an external certified HSEQ Management System according to the international standards of OHSAS 18001 (Health & Safety) and ISO 14001 or EMAS (Environmental Protection). These robust HSEQ Management Systems drive continual improvement and, as a minimum, ensure compliance with all HSE legislation, regulations and other applicable national and local requirements. E.On E&P UK maintains a HSEQ MS to ensure that all of its activities are managed in a safe, environmentally sensitive and effective manner. The HSEQ MS:

- Enables HSEQ risks to be reduced to a level that is 'As Low as Reasonably Practicable' – ALARP,
- Is used to manage compliance with legal and other requirements,
- Facilitates personnel fulfilling their responsibilities effectively,
- Provides assurance to stakeholders such as regulators, partners, licensing authorities and insurers that E.ON E&P UK is managing compliance and HSEQ risks.

Interfaces

E.On E&P UK is a wholly owned subsidiary of the parent company, E.On SE. Parent company health, safety and environmental standards and requirements are integrated into the E.On E&P UK HSEQ MS.

The E.On E&P UK HSEQ MS has been developed in line with the requirements of the internationally recognised standards: ISO 9001, ISO 14001 and OHSAS 18001.

The HSEQ MS has been designed to interface with other Management Systems within E.On E&P UK, including the Integrity Operations Management System (IOMS) and the Well Design and Operations Management Process (WDOM). An integrated Business Management System (BMS) which incorporates HSEQ aspects and functional processes including Development and Production was developed and rolled-out during 2014. Various company processes were fully integrated and standardised across the company e.g. Risk as part of the BMS development. Phase 3 of the BMS project was completed during 2015 which made significant design and functionality improvements and included development of roles and responsibilities to provide a robust management system.

The E.On E&P UK HSEQ MS also interfaces with external Management Systems such as those of contractors, suppliers and business partners. These interfaces are managed using various bridging documents.

Figure 3.1: E.ON E&P UK HSEQ Policy



E.ON E&P UK Policy Statement for Health, Safety, Environment and Quality (HSEQ) Management

E.ON Exploration & Production UK (E.ON E&P UK) is responsible for the EON's exploration and production business in the UK. The HSEQ Vision for the E&P UK business is:

"E.ON E&P UK aims for Zero Harm to people and the environment
whilst ensuring operational excellence."

We work towards this by implementing our leadership principles which include:

- We are all personally responsible for working safely and safeguarding others,
- We minimise our environmental footprint,
- HSEQ is a line management responsibility,
- We ensure the integrity of our assets and systems.

Everyone engaged in our business is vital to the success of this policy. All personnel work towards Zero Harm by complying with all applicable regulatory requirements and company procedures, acting responsibly to prevent injury and ill health, protecting the environment and promoting the quality of our work. Everyone working for E.ON E&P UK has the right to stop work if they believe the job is unsafe.

Our commitment to Zero Harm and continual improvement are realised through:

People and Culture - Continually developing competence and desirable behaviours,

Enhancing our HSEQ Processes and Systems - Ensuring consistent implementation of this policy throughout the business,

Improving Quality - Ensuring fit-for-purpose facilities, organisational capability, business assurance and continual improvement to deliver exceptional business performance.

The management at E.ON E&P UK is fully committed to this policy and accepts line management responsibility for its implementation.

The Managing Director (MD) UK has ultimate responsibility for the implementation and regular update of this HSEQ Policy Statement. The MD ensures the ongoing suitability and effectiveness of the policy, communication of the policy to all personnel and its availability to stakeholders.

Approved by:

A handwritten signature in blue ink, appearing to read 'Felix Lerch', is written over a horizontal line.

Felix Lerch
MD E.ON E&P UK

Date:

7.12.15

4. 2015 UKCS OFFSHORE ACTIVITIES

The HSEQ MS is integrated fully into E.On E&P UK business processes. On an annual basis, the company produces a plan detailing the extent of its intended activities for the current year. E.On E&P UK operations undertaken during 2015 are listed in Table 4.1 and location maps of E.On E&P UK's operations are presented in Figure 4.1 and Figure 4.2.

Table 4.1 2015 Summary of Operations

Field / /Block	Permit	DECC Permit Reference	
Huntington Field Blocks 22/14a and 22/14b	PETS Production MAT & SAT	PRA122	From CP/3/11 until CP/3/17
	PETS Pipeline Operation MAT & SAT*	PLA/283 SA/492	DEP/676/0 GS/385/0
	PETS Marine Survey MAT & SAT *	SA/469	GS/358/0
Babbage Field Block 48/02a	PETS Production MAT & SAT	PRA112	CP/299/4
Hunter Field * Block 44/23	PETS Marine Survey MAT & SAT	SA/474	GS/363/0
Tolmount Field * Block 42/28d	Marine Licence for removal of a marker Buoy	SA/393	ML/91/0

**There was no chemical usage or discharge in these operations.*

Figure 4.1. Location map of E.ON E&P UK activities in the SNS

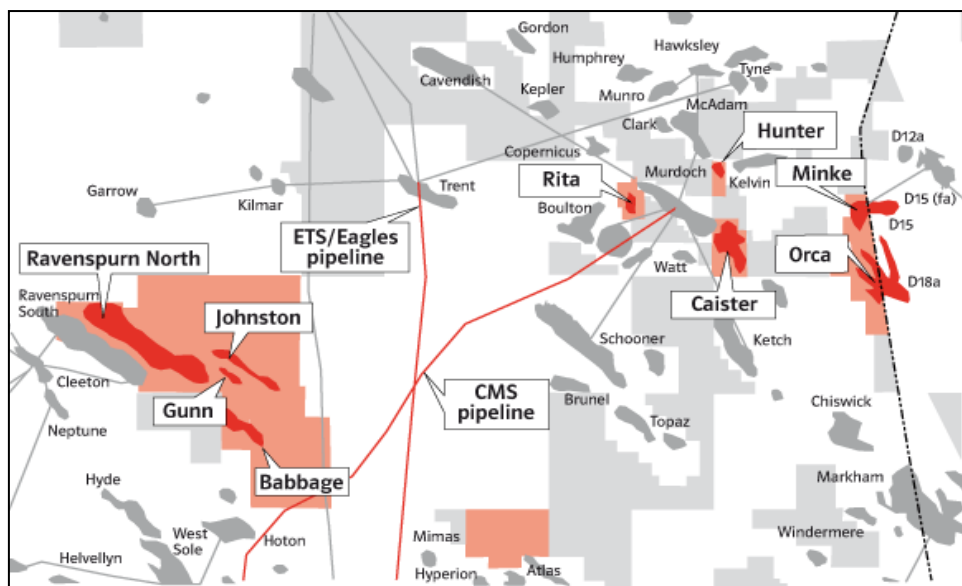
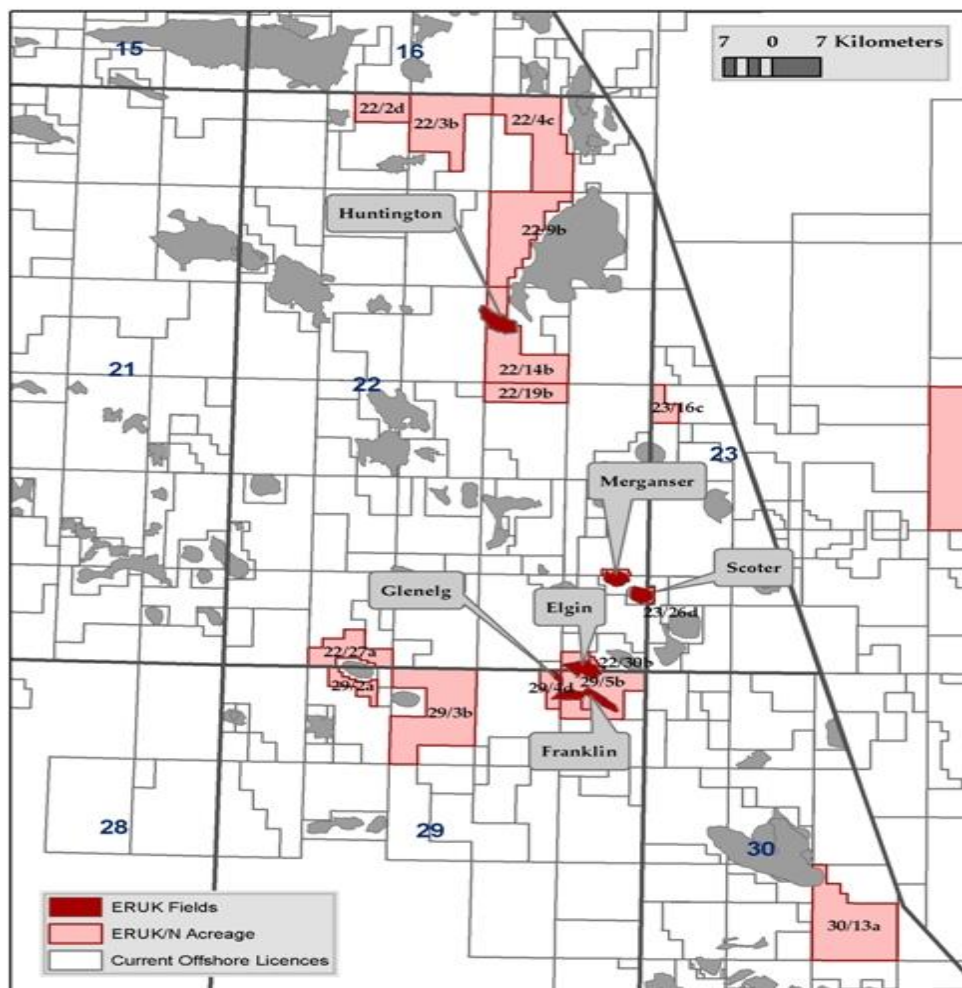


Figure 4.2. Location map of E.ON E&P UK activities in the CNS



5 2015 SUMMARY OF ENVIRONMENTAL PERFORMANCE

The environmental performance relating to operations carried out during 2015 is summarised in the following sections.

5.1 Chemical Use and Discharge into the Marine Environment

The use and discharge of chemicals within the UKCS oil and gas industry are controlled by the Offshore Chemicals Regulations (OCR) 2002, as amended. This means that all operators planning to use and/or discharge chemicals to the marine environment must obtain a chemical permit from the Department of Energy and Climate Change (DECC) before operations begin. Chemicals that have been used and discharged during 2015 operations are categorised in Table 5.1 and Table 5.2.

Table 5.1. Chemical consumption Babbage Platform 2015 Production

Environmental Indicator	Babbage Platform Production Permit – PRA/112							
	Babbage Platform							
	CP/299/4/2 – Q1		CP/299/4/2 – Q2		CP/299/4/2 – Q3		CP/299/4/2 – Q4	
Chemical HQ or OCNS Category	Used (kg)	Discharged (kg)	Used (kg)	Discharged (kg)	Used (kg)	Discharged (kg)	Used (kg)	Discharged (kg)
Gold	250	250	2	2	26.25	26.25	147.75	131.25
Silver	0	0	3659.88	0	4785.59	0	5758.20	0
White	0	0	0	0	0	0	0	0
SUB Warning	6299.50	0	4701.68	0	0	0	0	0
A	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0
E	7948	2370	7063.92	7063.92	13287.73	13237.73	8842.70	8767.70

Nb. Data as reported in the Environmental Emissions Monitoring System (EEMS)

Table 5.2. Chemical consumption – *Voyageur Spirit FPSO* - Huntington Field 2015 Production

Environmental Indicator	Voyageur Spirit FPSO - Huntington Field Production Permit – PRA 122							
	CP/3/11– Q1		CP/3/13– Q2		CP/3/15– Q3		CP/3/17– Q4	
Chemical HQ or OCNS Category	Used (kg)	Discharged (kg)	Used (kg)	Discharged (kg)	Used (kg)	Discharged (kg)	Used (kg)	Discharged (kg)
Gold	33761.45	16353.05	41293.08	37671.08	32120	29833.42	24853.3	20889.3
Silver	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0
SUB Warning	955.35	955.35	0	0	0	0	49.50	49.50
A	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0
D	3239.96	3239.96	3433.40	3402.60	2287.66	2287.66	1981.41	1950.61
E	6903.11	6027.07	5549.42	5232.17	16003.61	15023.61	9564.56	8802.61

Nb. Data as reported in the Environmental Emissions Monitoring System (EEMS)

5.2 Solid Waste Generation and Disposal Methods

Waste on board both *FPSO Voyager Spirit* (Huntington Field) and the Babbage installation is closely controlled to ensure legal compliance and waste minimisation. Segregation takes place on site before being transferred onshore to disposal or recycling facilities. Waste generated offshore falls into three categories: general industrial waste, special waste and 'other' waste. Waste products generated in 2015 are summarised in Table 5.3.

Table 5.3. Waste products generated in 2015

Installation	Category	Reuse (tonnes)	Recycling (tonnes)	Waste to Energy (tonnes)	Incineration (tonnes)	Landfill (tonnes)	Further Treatment (tonnes)
Babbage Platform	Special (Group I)	0.000	0.712	19.440	0	0.700	0
	General (Group II)	0.000	4.053	0	0	8.920	0
	Other (Group III)	0.000	0	0	0	0	0
<i>FPSO Voyager Spirit</i> (Huntington Field)	Special (Group I)	0.000	20.2	1.4	0.03	0.4	11.430
	General (Group II)	0.000	24.89	0	0	27.630	52.520
	Other (Group III)	0.000	0	0	0.143	0	0

Nb. Data as reported in the Environmental Emissions Monitoring System (EEMS)

5.3 Atmospheric Emissions

Atmospheric emissions generated during oil and gas extraction and processing are regulated by the Offshore Combustion Installations (Pollution Prevention and Control) Regulations 2013. E.On E&P UK participates in the European Union Emissions Trading Scheme (EU ETS) for the Huntington Field, *Voyageur Spirit FPSO*. Atmospheric emissions generated during production on Babbage and Huntington are presented in Table 5.4.

Table 5.4. Atmospheric Emissions from the Babbage and *Voyageur Spirit FPSO (Huntington Field) Production (2015 only)*

Environmental Indicator	Babbage Platform				<i>FPSO Voyageur Spirit (Huntington Field)</i>			
	Fuel Consumption	Flaring	Venting	Total	Fuel Consumption	Flaring	Venting	Total
Quantity of Gas (tonnes)								
CO ₂	610.50	0	0.084	610.58	40,913.59	67,882.37	0	108,795.96
NO _x	11.33	0	0	11.33	68.43	29.48	0	96.69
N ₂ O	0.04	0	0	0.04	3.24	1.99	0	5.23
SO ₂	0.28	0	0	0.28	1.28	0.42	0	1.70
CO	3.00	0	0	3.00	42.91	164.59	0	207.50
CH ₄	0.03	0	2.99	3.02	13.01	316.41	0	329.42
VOC	0.38	0	0.28	0.66	0.69	160.10	0	160.79

Nb. A total of 0.76 tonnes of CO₂ was generated by Fugitive emissions from the *Voyageur Spirit FPSO*

5.4 Accidental Releases

Under the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Conventions) Regulations 1998, all offshore installations must have an approved oil pollution emergency plan (OPEP) in place setting out procedures for responding to oil spills that cause or may cause pollution to the marine environment. The OPEP also sets out prevention and reduction methods that E.On can use to minimise the likelihood and potential impact. In the event of an accidental oil or chemical spill a PON1 must be submitted to DECC. During 2015 no PON 1 submissions were made.

5.5 Oil Discharged in Produced Water

Oil in Produced Water (OIW) discharges are regulated in line with the OSPAR Recommendation 2001/1 through the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (as amended). The Recommendation expects individual installations to meet monthly average oil in water concentrations of 30 mg/l or less for produced water discharged overboard. Oil in water concentrations are regulated through the permitting process governed by DECC.

E.On E&P UK began discharging produced water overboard from the Babbage platform in October 2013. The total volume of produced water discharged overboard in 2015 was 1,610.29m³. The associated weight of oil discharged amounted to 0.012 tonnes, with a yearly average OIW content of 6.86 mg/l.

The Huntington field began producing water in September 2014. The aim on board the *Voyageur Spirit* FPSO was to re-inject all produced water, with an expected minimum Produced Water Re-Injection (PWRI) uptime of 95%, however, re-injection has not been possible due to potential scaling issues with comingling of fluids, identified during laboratory tests. In 2015 E.On discharged 100% of its produced water overboard; a total of 69,156m³. The associated weight of the oil amounted to 0.718 tonnes, with an average OIW content of 10.64 mg/l.

5.6 Non-conformances

One non-conformance was submitted to DECC in December 2015. This was against the Babbage platform for a chemical discharge whereby the annual discharge of Oceanic HW540E exceeded the amount on the annual chemical permit. Oceanic HW540E is used as the hydraulic control fluid to operate the hydraulic power unit (HPU) on the Babbage platform. The product is used in the HPU which needs to be topped up occasionally. The amount used is minimal during normal operations as it is a sealed unit. Due to a small topsides leak identified, additional Oceanic HW540E was required to top up the HPU. The amount used to top up the HPU (50kg) exceeded the amount on the annual permit (106kg) to a total 2015 usage of 125kg.

6 2015 HSE TARGETS

E.On E&P UK sets out annual HSE objectives and targets for completion throughout the year. HSE Key Performance Indicators (KPIs) are set to monitor progress. The number of offshore environmental incidents i.e. PON1 submissions, was zero during 2015, meeting the KPI target of less than four. KPI descriptions and associated targets for 2015 are listed in Table 6.1.

Table 6.1. HSE Targets 2015

KPI Descriptions	Target	Stretch
12 month average Lost Time Incident Frequency Rate	<0	-
12 month Total Recordable Incident Frequency Rate Corporate Target	<1	-
Number of Environmental Incidents	<4	0
Number of Line Management HSE visits	85%	100%
Non Conformance Report actions close out percentage by target date	75%	100%

7 HSEQ PLAN 2016 (OBJECTIVES AND TARGETS)

Table 7.1. Environmental Plan 2016 (adapted from E.On E&P UK HSEQ Plan 2016)

Objective	Task
HSEQ Leadership development and awareness	Under the corporate initiative programme there is a requirement to support the newly developed HSE Leadership Training and commit to an attendance target over a certain period.
	There is a corporate requirement to share a best practice example of environmental performance with Group Management to be used in the 2015 Sustainability Report.
Continued development of the Business and HSEQ Management Systems	Fulfilment of the BMS maturation plan
	Development of the BMS/HSEQ framework/interface document
	Development of HSEQ procedures as required
HSEQ Decommissioning process development	Prepare and Issue HSEQ Strategy for Decommissioning
	Prepare and issue decommissioning HSEQ Management plans for each asset to be decommissioned
Completion of the HSEQ work programme	Complete HSEQ work programme as per the schedule. Review and update the work programme on a monthly basis