

OSPAR Public Statement - 2014

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TABLE OF CONTENTS

1	Introduction	1
2	Alpha Petroleum Resources Limited	1
3	The Environmental Management System	3
4	2014 Environmental Performance	6
4.1	Overview of 2014 Activities	6
4.2	2014 Environmental Aspects Register	6
4.3	2014 Environmental Objectives & Targets	7
4.4	2014 Environmental Performance	8
5	2015 Environmental Objectives & Targets	9

22/05/2015 Page ii



1 INTRODUCTION

Under OSPAR Recommendation 2003/5 to Promote the Use and Implementation of Environmental Management Systems by the Offshore Industry, the Department of Energy & Climate Change (DECC) requires all operators of offshore installations to produce a Public Statement to report their environmental performance. These Statements must be prepared on an annual basis (covering offshore installation activities carried out during the previous calendar year), made available to the public and copied to DECC by 1st June of each year.

In accordance with this requirement, this document reports on the environmental performance of Alpha Petroleum Resources Limited's (hereafter referred to as Alpha Petroleum) UK Continental Shelf (UKCS) operated activities during 2014. It is focused on environmental issues associated with operations which were directly under Alpha Petroleum control and direct discharges from Alpha Petroleum assets. It does not include discharges at host facilities, which are included within the relevant company's public statement.

2 ALPHA PETROLEUM RESOURCES LIMITED

Alpha Petroleum is a privately owned UK company, headquartered in Guildford and focussed on the United Kingdom offshore basins. Further information on the company is available from: http://www.alphapetroleum.com.

Alpha Petroleum is Licensee and field developer of a number of small southern North Sea gas basin developments (Figure 2.1). To date, these include one single well subsea completion (Helvellyn) and three small Normally Unmanned Installations (NUIs – Kilmar, Garrow and Wenlock), all of which are tied back to platforms operated by Perenco UK Ltd (Perenco).

Alpha Petroleum is also Licensee of the Blocks that contain the Cheviot and Skipper reservoirs in the northern North Sea and the Blythe reservoir in the southern North Sea.

Table 2.1 shows the Alpha Petroleum licenses that were held in the UKCS during 2014.

Table 2.1: The Alpha Petroleum Licenses held in the UKCS during 2014

Block	Interest	Licence	UKCS Region
47/10a	50%	P001	Southern North Sea
43/22a	17%	P683	Southern North Sea
42/25a, 43/21a	17%	P1034	Southern North Sea
49/12aN, 49/12b	20%	P033	Southern North Sea
48/22b, 48/23a	50%	P1736	Southern North Sea
2/10b, 2/15a, 3/11b	100%	P1070	Northern North Sea
9/21a	50%	P1609	Northern North Sea



Cheviot Skipper Kilmar Garrow Helvellyn Blythe Wenlock

Figure 2.1: Location of Alpha Petroleum Assets (2014)



3 THE ENVIRONMENTAL MANAGEMENT SYSTEM

Alpha Petroleum operates under an integrated Safety and Environmental Management System (SEMS) to enable the goals and aims of the Company's Safety, Health and Environmental (SH&E) Policy (Figure 3.1) to be achieved. It reflects the principles embodied in existing international and national models for safety and environmental management (e.g. ISO14001, OHSAS 18001, HSG (65)).

Alpha Petroleum Senior Management is committed to incorporating the goals of the SH&E Policy into all Company activities: no accidents, no harm to people and no damage to the environment.

The SEMS is designed to identify, control and manage safety and environmental risks arising from business activities and workplaces so that risks to the health and safety of personnel and to the environment are reduced to a level deemed to be as low as reasonably practicable (ALARP). It covers:

- Permanent offshore oil and gas production installations;
- > Temporary offshore operations and projects; and.
- > The Guildford office.

The SEMS provides a flexible management framework through which the Company can systematically identify and manage its safety and environmental risks and opportunities, accommodating individual operational complexities, changing legal and business requirements and the Company's commitment to continual improvement.

The key requirements of the SEMS are summarised in Table 3.1 and key documents include:

- ➤ The SH&E Policy:
- > The SEMS Framework document, which outlines SEMS elements and associated systems and documents;
- > SEMS Guidance documents, which describe how SEMS elements are applied;
- ➤ Emergency Response Plans, which detail the Company's response to and management of incidents;
- ➤ Oil Pollution Emergency Plans, which detail the Company response to pollution incidents; and,
- > SEMS Implementation and Supporting Documents, which comprise documents such as annual plans, studies, evaluations and audits.



Table 3.1: Alpha Petroleum SH&E Policy 2014



SAFETY, HEALTH AND ENVIRONMENTAL POLICY

Alpha Petroleum Resources Limited will conduct its business with a commitment to the safety and health of people and to the protection of the environment. Our Goals are – No Accidents, No Harm to People and No Damage to the Environment.

To accomplish this we will:

- Recognise the importance of safety, health and environmental factors as an integral part of our business.
- Design and manage all activities to avoid safety and health hazards associated with work places, to prevent pollution and to minimise environmental impacts.
- Comply with laws and regulations governing safety and environmental protection and the standards set by industry organisations to which we subscribe.
- Ensure that all personnel are aware of the Company's safety and environmental
 goals and expectations and hold them accountable for their performance.
- Provide leadership, professional personnel and training to support this Policy.
- Monitor, evaluate and report safety and environmental performance.
- Participate in programmes designed to improve technology, laws and regulations.
- Seek continual improvement in safety and environmental performance by setting appropriate objectives and targets consistent with the aims of this Policy.

Graham Walters Managing Director

Alpha Petroleum Resources Limited

Date

24 June 2014



Table 3.1: SEMS Framework

SEMS Elements and SEMS Process Main Process Activities Key S&E Documents Develop and Review SH&E Policy - Safety, Health and Environmental Policy **Policy** • Establish SEMS accountabilities & - GU1: Personnel Safety and Environmental responsibilities Competence • Manage Personnel S&E competence and - GU2: Assuring Contractor Safety and training **Organise** Environmental Performance • Manage contractor S&E performance - Document Control and Data Management · Manage S&E documents and data System • Ensure effective communication - GU3: Safety and Environmental Regulatory Feedback Compliance • Identify legal and other S&E requirements - GU4: Safety and Environmental Plans • Establish S&E objectives and targets - Emergency Response Plans Prepare Safety, Environmental and Plan Emergency Plans - Oil Pollution Emergency Plans - Well Examination Scheme - Disaster Recovery Plan Manage S&E risks - GU5: Risk Management Manage S&E impacts of changes **Implement** - GU6: Management of Change • Take corrective, preventative and - GU7: Incident Notification and Investigation improvement action • Monitor performance - GU8: Safety and Environmental Performance Assure Conduct audits Assurance Review SEMS



4 2014 ENVIRONMENTAL PERFORMANCE

4.1 OVERVIEW OF 2014 ACTIVITIES

Alpha Petroleum produced a Safety and Environmental Plan detailing the extent of its intended activity for 2014. This plan was reviewed and updated on a quarterly basis.

Alpha Petroleum offshore operations undertaken during 2014 are listed below.

Helvellyn

Ongoing gas production operations (through Amethyst: operated by Perenco)

Kilmar

- Ongoing gas production operations (through Trent: operated by Perenco)
- Replacement of batteries (emergency power generation)
- Replacement of flow meter on water separation facilities

Garrow

- Ongoing gas production operations (through Trent: operated by Perenco)
- Replacement of batteries (emergency power generation)

Wenlock

- Ongoing gas production operations (through Inde 49/23A-AC: operated by Perenco)
- Replacement of batteries (emergency power generation)
- Production logging and water wash operations on well W1

4.2 2014 ENVIRONMENTAL ASPECTS REGISTER

Once Alpha Petroleum operations are identified, key environmental risks are identified, assessed and documented in an annual Environmental Aspects Register.

The activities associated with continued production, facilities modifications, production logging and water wash were risk assessed under seven environmental elements based on the main types of potential environmental impact for oil and gas activities. These are:

- 1. Physical Presence;
- 2. Seabed Disturbance;
- 3. Noise and Visual Impacts.
- 4. Atmospheric Emissions;
- 5. Marine Discharges;
- 6. Solid Wastes:
- 7. Resource Usage.

In addition, Contractor Management is seen as the key project management risk which has the potential to impact on the above environmental elements.

A total of 33 environmental aspects were identified and assessed for Alpha Petroleum's 2014 activities. Of these 14 were assessed as Not Significant; 19 as Significant and 2 as Highly Significant.

Both of the highly significant aspects, requiring some mandatory mitigation to be put in place, refer to the use of contractors. Operations on the existing installations are undertaken under the Safety and Environmental Management Systems of the Duty Holder, Well Operator and Pipeline Operator. These responsibilities are held by Perenco for all Alpha Petroleum operating assets. Perenco's Management Systems have been reviewed by Alpha



Petroleum and approved by the HSE and DECC as a competent Duty Holder and Operator respectively. Controls for risks which were put in place to mitigate significant and highly significant environmental risks included:

- Review of Management Systems of Contractors and vessels;
- Compliance with all environmental permits and consents;
- Monitoring and sampling of produced pater discharges at Kilmar;
- Assessment of and coordination with designated Perenco;
- Contractor Bridging documents or POSA agreements in place to ensure responsibilities and communications are clearly identified;
- Installation specific emergency response plans in place (Perenco);
- Oil Pollution Emergency Plans in place (Perenco);
- Safety Exclusion zone in place around existing NUIs;
- Continued appropriate maintenance of all facilities.

With these controls in place the Highly Significant risks were reduced to the level of Significant and other legislatively controlled aspects were appropriately monitored.

4.3 2014 ENVIRONMENTAL OBJECTIVES & TARGETS

Given that Alpha Petroleum's operations are largely consent driven, good environmental compliance and performance is largely a factor of ensuring that the Company obtains and maintains all of its permits and consents. A series of environmental objectives and targets are set and included in the annual Safety and Environmental Plan. These are set within the context of:

- Past performance;
- Assessment of risks associated with planned activities, as summarised in the Environmental Aspects Register;
- Compliance with existing and future legislation, permits and consents;
- Meeting the commitments made in the Alpha Petroleum SH&E Policy.

For 2014 the following environmental objectives were set:

- Ensure full legislative and regulatory compliance including revisions associated with Company name change;
- Ensure the monthly average concentration of oil discharged in produced water at the Kilmar installation does not exceed 30 mg/l with a target set of less than 10 mg/l;
- Undertake a Management Review and revision of the Safety and Environmental Management Systems (SEMS);
- Undertake OSPAR 2003/5 re-verification of Alpha Petroleum Environmental Management System;
- Reduce the use and/or discharge of production chemicals where practicable;
- Minimise the use and/or discharge of water wash chemicals during water wash operations;
- Ensure appropriate consultations held with regulators and key environmental stakeholders;
- Ensure risk assessments completed for all major activities;
- Ensure all environmental incidents are investigated and followed through to closure.



All environmental objectives were met, with the revision of the SEMS continuing into 2015 to ensure significant modifications to the environmental regulations governing the oil and gas industry are fully incorporated.

4.4 2014 ENVIRONMENTAL PERFORMANCE

Table 4.1 summarises the environmental performance data for the Alpha Petroleum assets.

Table 4.1: Environmental Performance Data

Installation	Environmental indicator	Unit	Volume				
Discharge of Oil regulated under OPPC Regulations							
Kilmar	Produced Water Discharged	m³	22,191				
Kilmar ¹	Hydrocarbons Discharged	Kilograms	57				
Chemical Consumption ²							
Kilmar ³	Gold (use / discharge)	Tonnes	0.69 / 0				
Wenlock ³	Gold (use / discharge)	Tonnes	2.875 / 0				
Wenlock ⁴	Gold (use / discharge)	Tonnes	2.875 / 0				
Wenlock ⁴	Silver (use / discharge)	Tonnes	0.054 / 0				
Wenlock ⁴	E (use / discharge)	Tonnes	0.881 / 0				
Atmospheric Emissions ⁵							
Kilmar	Total Vented Gas	Tonnes	11.6				
Garrow	Total Vented Gas	Tonnes	0.4				
Wenlock	Total Vented Gas	Tonnes	0.4				
Waste Generated ⁶							
AII	Special (Group I)	Tonnes	2.35				
All	Special (Group II)	Tonnes	3.575				
Environmental Incidents							
AII	Chemical Release	No Incidents	0				
AII	Hydrocarbon release	No Incidents	0				

- Annual average concentration of oil in water of 2.57 mg/l
- 2 No SUB warnings on any chemicals
- Corrosion Inhibitor injected into the pipelines at the NUIs to protect the integrity of the export pipelines
- 4 Chemicals associated with the water wash operations on the Wenlock W1 well
- 5 Includes gas vented during operations and shutdowns on the NUIs
- 6 All waste transported to shore for recycling or use in waste to energy programmes

The discharge of oil in produced water is subject to control under the Oil Pollution Prevention and Control Regulations which require that the monthly average concentration of aliphatic hydrocarbons in any discharge is less than 30 mg/l. Since November 2012, produced water associated with the K3 well has been treated and discharged from the Kilmar NUI rather than the Trent host platform. In 2014, Alpha Petroleum set itself a target of a monthly average oil in produced water (OIPW) concentration of less than 10 mg/l; concentration levels have been consistently lower than 5 mg/l. These low OIPW concentrations result from both the nature of the gas (a dry gas with low condensate levels) and the success of the water separation and clean-up technologies installed on the NUI.



Other key points of Alpha Petroleum's 2014 Environmental Performance are:

- Continued consultation with the DECC and statutory and non-statutory stakeholders;
- All environmental permits and consents obtained and statutory reporting completed;
- No non-compliance issues with permits and consents associated with environmental discharges or emissions.

5 2015 ENVIRONMENTAL OBJECTIVES & TARGETS

Environmental objectives and targets have been set by Alpha Petroleum for 2015 and include:

- Continued revision of the Safety and Environmental Management Systems to fully incorporate changes in associated regulations;
- Ensure appropriate consultations held with regulators and environmental stake holders for both 2015 offshore operations and concept selection for the field development of the Cheviot and Blythe fields;
- Ensure full legislative and regulatory compliance;
- Ensure the monthly average concentration of oil discharged in produced water at the Kilmar installation does not exceed 30 mg/l with a target set of less than 10 mg/l;
- Review and, where practicable, reduce the use of production chemicals;
- Review and enhance OPEP communication paths between Alpha petroleum and Perenco;
- Ensure risk assessments completed for all major activities;
- Ensure all environmental incidents are investigated and followed through to closure.