

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Onshore Oilfield Services Limited

Farley's Wood Well Site
Junction of Main Street and Leys Lane
West Markham
Newark
Nottinghamshire
NG22 0PN

#### Variation application number

EPR/EP3934UH/V002

#### Permit number

EPR/EP3934UH

## Farley's Wood Well Site Permit number EPR/EP3934UH

#### Introductory note

#### This introductory note does not form a part of the permit

Under the Environmental Permitting (England & Wales) Regulations 2016 (Schedule 5, Part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made.

All the conditions of the permit have been varied and are subject to the right of appeal.

This variation is to update or change:

- 1.) Update an existing Installations Activity; Oil storage and handling has been updated to a schedule 1.2 A(1)(e)(i) activity under the Industrial Emissions Directive and updated Environmental Permitting (England and Wales) Regulations 2016, as a result of renumbering of schedule 1 activities in the updated regulations. This activity was previously permitted as 1.2A (1) (h) (i) in the existing permit (issued 09/09/2009). The existing oil storage activities on site at Farley's Wood have not changed from those currently permitted.
- 2.) Add a Mining Waste Operation, as defined by the Mining Waste Directive and Schedule 20 of the Environmental Permitting (England and Wales) Regulations 2016 as amended, relating to the management of extractive waste not involving a Mining Waste Facility. The permit is being varied to include activities specified in the approved Waste Management Plan and these include management of extractive mining wastes from near well-bore treatments involving hot water washing, leak-off testing and well work-over operations.
- 3.) Update an existing Water Discharge Activity (WDA), as defined by Schedule 21 of the Environmental Permitting (England and Wales) Regulations 2016, as amended, for the discharge of site drainage from non-process areas to an unnamed tributary of the River Maun.

The activities on site have not changed significantly from those currently permitted. This permit variation and consolidation is part of an onshore oil and gas sector wide review. There are no other changes to the permit as a result of this variation.

The installation comprises of oil production activities at a single site known as Farley's Wood well site, located 3.5 km west of Tuxford, between the villages of Milton and Walesby in Nottinghamshire. The site is approximately 0.79 hectares in area and comprises two actively producing oil extraction wells (FW5 and FW6) and two produced fluid storage tanks. Oil extracted from the reservoir (Longshaw Grit and Crawshaw Sandstone formations) is pumped directly to the bunded oil storage tanks. The oil is 'dry' as no admixed water is produced. The storage tanks are periodically emptied by road tanker, with the production fluid (oil) transferred by road tanker for treatment at South Killingholme. The oil storage tanks each have a vent stack which allow gas entrained within the production fluids to escape to atmosphere. The site's total storage capacity is 754 bbls (barrels) or 260 tonnes or 120 cubic metres (m³).

The oil extraction wells operate on a variable timer system, with short periods of production interspersed with off periods to allow for well recharge. Current oil production from the site is 14 bbls or 2.2 m³ per day, which is exported via road tanker once a suitable volume (between 28 to 30 m³) is available within the storage tanks.

The principal releases into the environment from the site comprise:

- (a) Emissions to air of gaseous hydrocarbons from separation of volatiles in storage.
- (b) Emissions of gaseous hydrocarbons from the road tanker by displacement on loading.
- (c) Rainwater from hard surfaced, non-process well-site areas discharges to an unnamed tributary of River Maun via site drains. This activity was previously regulated via a separate environmental permit (T/70/10992/T), which is now superseded by this varied permit.
- (d) Contaminated rainwater from well cellars and containment systems/bunds is removed by tanker for off-side treatment.
- (e) Engineering waste resulting from maintenance work is removed for disposal at a licensed waste disposal facility.

There is one site of special scientific interest (SSSI) within 2.0 km of this installation; Bevercoates Park SSSI is located 810 metres to the south-west of the site. There is one European designated habitats site, a Special Area of Conservation (SAC) within 10.0 km of the site; Birklands and Bilhaugh SAC is located 6.58 km to the south-west of the site.

There are no other changes to the permit.

The schedules specify the changes made to the permit.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit					
Description	Date	Comments			
Application EPR/EP3934UH/V0021	Duly made 14/10/2008				
Permit determined EPR/EP3934UH	09/09/2009	Permit issued to Onshore Oilfield Services Limited.			
Application EPR/EP3934UH/V002 (variation and consolidation)	Duly made 18/07/2017	Permit variation application to add a mining waste operation and update the permit to modern conditions.			
Additional information received	03/05/2018 and 21/05/2018	Responses to Schedule 5 information notice.			
Variation determined EPR/EP3934UH/V002 [Billing references: NP3530YG & EAWML 403994]	07/01/2019	Varied and consolidated permit issued in modern condition format.			

Superseded or Partially Superseded Licenses/Authorisations/Consents relating to this installation							
Operator Permit number Date of issue Fully or Partially Superseded							
Onshore Oil Field Services Limited	T/70/10992/T	11/02/1988	Fully superseded				

End of introductory note.

#### Notice of variation and consolidation

#### The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates

#### Permit number

EPR/EP3934UH

#### Issued to

Onshore Oilfield Services Limited ("the operator"),

whose registered office is

**Fieldside** 

**Swinthorpe Road** 

**Snelland** 

Lincoln

Lincolnshire

LN3 5AR

company registration number 03192463

to operate an installation, a mining waste operation and a water discharge activity at

Farley's Wood Well Site West Markham Newark Nottinghamshire NG22 0PN

to the extent set out in the schedules.

The notice shall take effect from 07/01/2019

Name	Date
Principal Permitting Team Leader	07/01/2019

Authorised on behalf of the Environment Agency.

#### Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation, and as a result of the application made by the operator.

#### Schedule 2 - consolidated permit

Consolidated permit issued as a separate document

#### **Permit**

#### The Environmental Permitting (England and Wales) Regulations 2016

#### Permit number

#### EPR/EP3934UH

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/EP3934UH/V002 authorising,

Onshore Oilfield Services Limited ("the operator"),

whose registered office is

**Fieldside** 

**Swinthorpe Road** 

**Snelland** 

Lincoln

Lincolnshire

LN3 5AR

company registration number 03192463

to operate an installation, a mining waste operation and a water discharge activity at

Farley's Wood Well Site West Markham Newark Nottinghamshire

**NG22 0PN** 

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Principal Permitting Team Leader	07/01/2019

Authorised on behalf of the Environment Agency

#### **Conditions**

#### 1 Management

#### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - (a) in accordance with a written management system that identifies and minimises risks of pollution, so far as is practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of the permit.

#### 1.2 Energy efficiency

- 1.2.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A2) The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

#### 1.3 Efficient use of raw materials

- 1.3.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A2) The operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

## 1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities;
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

#### 2 Operations

#### 2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

#### 2.2 The site

- 2.2.1 The activities (A1 and A2) shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.
- 2.2.2 The water discharge activity (A4) shall take place at the discharge point marked on the site plan at schedule 7 to this permit, and as listed in table S3.3.

#### 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 The operator shall:
  - (a) review the waste management plan at least every five years from the date of initial approval and submit any written revisions to the Environment Agency for approval.
  - (b) implement the approved waste management plan from the date of approval, unless otherwise agreed in writing by the Environment Agency
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
  - (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

#### 2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

#### 3 Emissions and monitoring

#### 3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 table S3.1 and S3.2 shall not be exceeded.
- 3.1.3 Subject to any other condition of this permit, periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

#### 3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

#### 3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1, S3.2, and S3.4;
  - (b) surface water or groundwater specified in table S3.5;
  - (c) process monitoring specified in table S3.6.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 The operator shall carry out:
  - regular calibration, at an appropriate frequency, of systems and equipment provided for carrying out any monitoring and measurements necessary to determine compliance with this permit; and
  - (b) regular checking, at an appropriate frequency, that such systems and equipment are serviceable and correctly used.
- 3.5.5 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.4 unless otherwise agreed in writing by the Environment Agency.
- 3.5.6 If required by the Environment Agency, the operator shall:
  - take such samples and conduct such measurements, tests, surveys, analyses and calculations, including environmental measurements and assessments, at such times and using such methods and equipment as the Environment Agency may specify; and
  - (b) keep samples, provide samples, or dispatch samples for tests at a laboratory, as the Environment Agency specifies, and ensure that the samples or residues thereof are collected from the laboratory within three months of receiving written notification that testing and repackaging in accordance with the relevant legislation are complete.

#### 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by schedules 3, 4 and 5 to this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.

#### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 For the following activities referenced in schedule 1, table S1.1 (A1 to A2) a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
  - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production /treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

#### 4.3 Notifications

#### 4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
  - (i) inform the Environment Agency,
  - take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 The information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be supported by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual):
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

- 4.3.5 For the following activities referenced in table S1.1 (A1 and A3), where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator proposes to make an amendment to the approved waste management plan, which is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) the Environment Agency shall be notified at least 14 days before implementing the amended waste management plan in place of the original; and
  - (b) the notification shall contain a description of the proposed amendment.
- 4.3.8 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
  - (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

#### 4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

## Schedule 1 – Operations

Table S1.1	activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types	
A1	S1.2 A (1) (e) (i): The loading, unloading, handling or storage of, or the physical, chemical or thermal treatment of crude oil.	Production of fluids extracted from the resource formation by beam pump, phase separation and storage of products (crude oil) and waste prior to onward transport.	From receipt of production fluids at the wellhead to the despatch of products (crude oil) and waste.  Oil shall be stored in vessels which are of sufficient strength and structural integrity to ensure that it is unlikely to burst or leak in its ordinary use.  Any road tanker loading systems must be fully contained and the delivery system shall be fitted with dry break couplings.  Provisions shall be made to minimise the emissions of non-methane volatile organic compounds (NMVOC) and methane from the oil storage tank vents.  During loading of road tankers, the road tanker shall be back vented to the bulk storage tank, or routed to a suitable vent treatment system.  Any water, contaminated with crude oil, which is drained off from the storage vessel and is not being recycled must be collected for treatment before disposal.	
Activity Reference	Directly Associated Activity			
A2	Storage of additional raw materials	Raw materials directly associated with the production of crude oil	From receipt of raw materials to the despatch for use	
Activity reference	Description of activities for waste operations	Limits of activities		
A3	The management of extractive waste from production activities, not involving a waste facility.  The management of extractive waste generated by well work-over.	Permitted waste types shall conform to the description in the approve waste management plan.  The activities shall be limited to those described in the approved Was Management Plan (OOSL-EPRA-FW-WMP-005 rev 1 and dated 03/05/2018) referenced in Table S1.2 below  The storage of extractive waste is limited to temporary storage in secure containment as part of the collection and transportation of waste from the site.  Well stimulation by hydraulic fracturing is not permitted.		
Activity reference	Description of water discharge activity	Limits of specified	activity	
A4	Discharge of trade effluent: rainfall dependent site surface water drainage at outlet W1 to an unnamed tributary of the River Maun	The effluent shall be composed of rainfall dependent site surface water drainage from non-process areas of the site only.		

Table S1.2 Operating techniques						
Description	Parts	Date Received				
Application	The response to section 2.1, excluding 2.1.3 and 2.1.5, and 2.2 in the Application	26/03/2008				
Application and responses to Schedule 5 notice	Application documents provided in response to sections 5a, 5c and 6 of Part C2 of the application form.	28/02/2017 and 03/05/2018				
Application	Types and amounts of raw materials specified in Table 5 of Part C3 of the application form.	28/02/2017				
Application	Technical standards specified in Table 3 of Part C3 of the application	28/02/2017				
Gap analysis tool	Completed gap analysis tool response, version 2 July 2017 Final	29/06/2017				
Application and response to Schedule 5 notice	Approved Waste Management Plan as amended in response to Schedule 5 notice (as Appendix 4). Document reference 'OOSL-EPRA-FW-WMP-005 rev 1' dated 03/05/2018	03/05/2018				
Application and response to Schedule 5 notice	De-minimis justification and supplementary information in response to Schedule 5 notice (as Appendix 5) for hot washing and leak off testing.	03/05/2018				
Response to Schedule 5 notice	Appendix 3 – Pollution Accident Management Plan	03/05/2018				
Secondary and tertiary containment plan as approved under IC1 specified in table S1.3	All of document	Date of approval of IC1				
Leak detection and repair plan as approved under IC2 specified in table S1.3	All of document	Date of approval of IC2				
Environment Management System as approved under IC3 specified in table S1.3	All of document	Date of approval of IC3				
Gas management system improvement plan as approved under IC4 specified in table S1.3	All of document	Date of approval of IC4				
Vapour recovery plan as approved under IC6 specified in table S1.3	All of document	Date of approval of IC6				
Site surface water management plan as approved under IC7 specified in table S1.3	All of document	Date of approval of IC7				

Reference	Requirement	Date
IC1 Containment	The operator shall submit a written 'secondary and tertiary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, in accordance with the methodology detailed within CIRIA C736 (2014), of the condition and extent of secondary and tertiary containment systems where all polluting liquids and solids are being stored, treated, and/or handled. This review should consider, but is not limited to, the storage vessels, separators, bath heaters, bunds, loading and unloading areas, transfer pipework/pumps, temporary storage areas, and liners underlying the site. The plan must contain dates for the implementation of individual improvement measures necessary for the secondary and tertiary containment systems to adhere to the standards detailed/referenced within CIRIA C736 (2014), or equivalent.  The plan shall be implemented in accordance with the Environment Agency's written approval.	07/10/2019
IC2 Leak detection	The operator shall submit a written 'leak detection and repair plan', and associated procedures and shall obtain the Environment Agency's written approval to it. The plan will consider all activities listed in table S1.1. The plan will identify, measure and reduce emissions of volatile organic compounds and other substances to air, appropriate to their operations and in accordance with European standard EN15446 or an equivalent standard.  The plan shall be implemented in accordance with the Environment Agency's written approval.	07/07/2019
IC3 Management system	<ul> <li>The operator shall review and update the written management system (referred to in condition 1.1.1) to ensure the procedures are in place to meet the requirements resulting from the variation of this permit. In particular the review should ensure that the following point(s) is / are included in the management system: <ol> <li>a) Details of the training given to staff on use of spill kits; ensure training records updated accordingly.</li> <li>b) The procedure for determining the consignments of wastes for disposal off-site to be sampled and the procedure for retaining those samples.</li> <li>c) The procedure for identifying vessel fill limits, e.g. fitting level detection, overfill protection system etc.</li> <li>d) The procedure for identifying bund fill levels, e.g. high level alarm on unmanned sites</li> <li>e) The procedures for testing the impermeable membrane and subsequent remediation measures if required.</li> <li>f) The procedure for notifying the Environment Agency on each occasion where natural gas is vented un-combusted to atmosphere for safety purposes. Notification to include, but not limited to: reasons for, duration of and quantity of gas vented.</li> </ol> </li></ul>	07/04/2019
IC4 Gas Management	The operator shall submit a written gas management improvement plan and shall obtain the Environment Agency's written approval for it.  The plan must contain detailed consideration of all available options for the beneficial utilisation of all of the available gas from your activities, including gas that is not already utilised, gas vented from storage vessels and gas vented during the loading and unloading of road vehicles where relevant.  Where such utilisation is not feasible, your plan must consider in detail all available options, both combustion and non-combustion based (including but not necessarily limited to flaring, vapour recovery, scrubbing and adsorption), for the disposal or abatement / mitigation of your waste gas so as to minimise its environmental impacts as far as available techniques allow.  The gas management improvement plan shall also refer to the review of emissions undertaken as a result of IC5. If emission limits were not being met, the plan shall including actions that will be taken to ensure that emission limits are met.  The plan must contain dates for the implementation of the identified improvement measures.  The plan shall be implemented in accordance with the Environment Agency's written approval.	07/07/2020

Table S1.3 Improvement programme requirements					
Reference	Requirement	Date			
IC5 Air	The operator shall monitor point source emissions to air in accordance with table S3.1. The operator shall submit a review of emissions compared to the emission limits in table S3.1 to the Environment Agency and obtain the Environment Agency's written approval of the report.	07/07/2019			
IC6 Vapour recovery	The operator shall submit a written plan for vapour capture and recovery from loading and unloading activities and shall obtain the Environment Agency's written approval to it.  The plan must detail the installation of a vapour capture / recovery system during the loading and unloading of road vehicles. The plan must contain dates for the implementation of the identified improvement measures.  The plan shall be implemented in accordance with the Environment Agency's written approval.	07/07/2019			
IC7 Surface water	The operator shall submit a written 'site surface water management plan' and shall obtain the Environment Agency's written approval to it. The plan will be based on the understanding from the conceptual site model and environmental risk assessment where the risks to the water environment are clearly detailed. The plan shall include details of how rainwater is managed, collected, stored and treated where necessary prior to discharge or disposal. The plan shall contain dates for the implementation of any improvement measures necessary to ensure that there are no uncontrolled contaminated water discharges to the environment from the site.  The plan shall be implemented in accordance with the Environment Agency's written approval.	07/10/2019			
IC8 Site Condition Report	The operator shall undertake a review of the Site Condition Report to ensure Article 22 of the Industrial Emissions Directive is complied with. The review shall include at least the following:  a) consideration of oil storage areas including oil storage vessels, bunds, loading and unloading areas and other potential sources of contamination as shown in the site location plan b) reference to any historical spillages, the chemicals involved and locations c) baseline soil sample results and groundwater data	07/01/2020			

## Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	

Non-extractive wastes are not accepted as part of the permitted activities and there are no restrictions on raw materials or fuels under this schedule.

## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [point A1 on site plan in Schedule 7]	Crude oil storage	Gas vented	-	Month	Monthly	Calculation to determine the quantity of gas vented over the reference
T	tank vent	Hydrogen sulphide	5.7 mg/m <sup>3</sup>	-	Monthly	As approved in writing with the Environment Agency
A2 [point A2 on site plan in Schedule 7]	Crude oil storage	Gas vented	-	Month	Monthly	Calculation to determine the quantity of gas vented over the reference
	tank vent	Hydrogen sulphide	5.7 mg/m <sup>3</sup>	-	Monthly	As approved in writing with the Environment Agency

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Effluent(s) and discharge point(s)	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
Trade effluent consisting of	Chloride	150 mg/l (see note 1)	Instantaneous (spot sample)	N/A	Monthly	Maximum (at W1)
rainfall dependent site drainage via Outlet W1	рН	6 to 9	Instantaneous (spot sample)	N/A	Monthly	Minimum and maximum (at W1)
	Sodium	200 mg/l (see note 1)	Instantaneous (spot sample)	N/A	Monthly	Maximum (at W1)
	Total Petroleum Hydrocarbons	2.0 mg/l (see note 1)	Instantaneous (spot sample)	N/A	Monthly	Maximum (at W1)
Note 1: Interim li	mit based on met	hod of treatment a	nd Drinking Water	Standard where	relevant.	ı

Table S3.3 Discharge points					
Effluent name	Discharge Point	Discharge point NGR	Receiving water / environment		
Discharge of trade effluent consisting of rainfall dependent site drainage via Outlet W1	W1	SK 70471 71957	Unnamed tributary of the River Maun		

Table S3.4 Monitoring points					
Effluent(s) and discharge point(s)	Monitoring type	Monitoring point NGR	Monitoring point reference		
Trade effluent consisting of site drainage via Outlet W1	Effluent sampling	SK 70471 71957	W1		

Table S3.5 Surface water or groundwater monitoring requirements							
Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications			
Surface water monitoring locations as specified in Table S1.2 following approval of IC7 in Table S1.3	As specified in site surface water monitoring plan in Table S1.2 following approval of IC7 in Table S1.3	As specified in site surface water monitoring plan in Table S1.2 following approval of IC7 in Table S1.3	As specified in condition 3.5.3	In accordance with site surface water monitoring plan in Table S1.2			

Table S3.6 Process monitoring requirements						
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications		
Gas to oil ratio of production from the installation	Gas to oil ratio	Monthly	As agreed in writing with the Environment Agency	-		

## Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data					
Parameter	Emission or monitoring point/reference	Reporting period	Period begins		
Emissions to air Parameters as required by condition 3.5.1.	A1 and A2 (vent stacks from two storage tanks)	Every 6 months	1 January and 1 July		
Effluent parameters as listed in table S3.2	W1	Every 6 months	1 January and 1 July		
Surface water monitoring Parameters as required by condition 3.5.1	Description as indicated in table S3.5	Every 6 months	1 January and 1 July		
Process monitoring Parameters as required by condition 3.5.1	Description as indicated in table S3.6	Every 6 months	1 January and 1 July		

Table S4.2: Annual production/treatment				
Parameter	Units			
Crude oil production	Tonnes			
Average water cut	% of production			
Average gas to oil ratio (GOR)	Standard cubic feet (scf) gas/bbls oil			

Table S4.3 Performance parameters				
Parameter	Frequency of assessment	Units		
Energy usage	Annually	MWh		
Water usage	Annually	Tonnes or m <sup>3</sup>		

Table S4.4 Reporting forms						
Media/parameter	Reporting format	Date of form				
Air	Form air 1 or other form as agreed in writing by the Environment Agency	07/01/2019				
Parameters as listed in table S3.2	Form as agreed in writing with the Environment Agency	07/01/2019				
Surface water	Form water1 or other form as agreed in writing by the Environment Agency	07/01/2019				
Annual Production	Form production1 or other form as agreed in writing by the Environment Agency	07/01/2019				
Energy usage	Form energy1 or other form as agreed in writing by the Environment Agency	07/01/2019				
Water usage	Form water usage1 or other form as agreed in writing by the Environment Agency	07/01/2019				
Other performance indicators	Form performance1 or other form as agreed in writing by the Environment Agency	07/01/2019				

#### Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

#### Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	
	any malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is pollution
To be notified within 24 hours of	detection
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	
(b) Notification requirements for t	he breach of a limit
To be notified within 24 hours of	detection unless otherwise specified below
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

(b) Notification requirements for	the preach of a li	<u>mit</u>	
To be notified within 24 hours of	detection unless	otherwise specified belo	ow
Measures taken, or intended to be taken, to stop the emission			
Time periods for notification follo	wing detection of	of a breach of a limit	
Parameter			Notification period
(c) Notification requirements for	the detection of a	any significant adverse e	nvironmental effect
To be notified within 24 hours of	detection		
Description of where the effect on the environment was detected			
Substances(s) detected			
Concentrations of substances detected			
Date of monitoring/sampling			
Part B – to be submit		n as practicable	•
notification under Part A.			
Measures taken, or intended to be to a recurrence of the incident	aken, to prevent		
Measures taken, or intended to be to limit or prevent any pollution of the which has been or may be caused be	environment		
The dates of any unauthorised emis facility in the preceding 24 months.	ssions from the		
Name*			
Post			
Signature			
Date			
* authorised to sign on behalf of the	operator		

#### Schedule 6 – Interpretation

"accident" means an accident that may result in pollution.

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"approved waste management plan" means a plan of the type described in Article 5(1) of Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC, approved as part of the grant or variation of an environmental permit and as revised from time to time.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"Competent Authority" means, in relation to -

- (a) London, the London Fire and Emergency Planning Authority;
- (b) an area where there is a fire and civil defence authority, that authority;
- (c) the Isles of Scilly, the Council of the Isles of Scilly;
- (d) an area in the rest of England, the county council for that area, or where there is no county council for that area, the district council for that area;

"disposal". Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

"extractive waste" means waste resulting from the prospecting, extraction, treatment and storage of mineral resources and the working of quarries, excluding waste which does not directly result from these operations.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Hazardous property" has the meaning in Annex III of the Waste Framework Directive.

"Hazardous waste" has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

"Industrial Emissions Directive" means Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions

"List of Wastes" means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"mining waste facility" means a waste facility as defined in Article 3(15) of Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from extractive industries and amending Directive 2004/35/EC, where a mining waste operation is carried out.

"recovery" means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

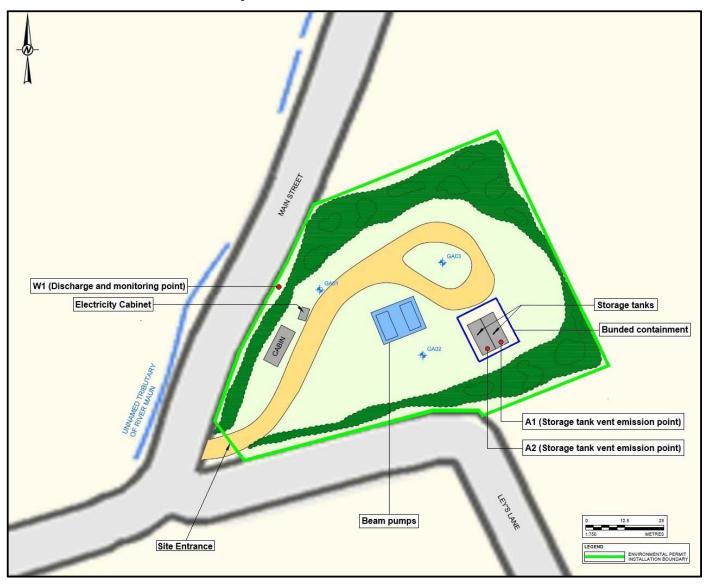
"year" means calendar year ending 31 December.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 KPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

## Schedule 7 – Site plan



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**END OF PERMIT** 

Permit Number: EPR/EP3934UH Facility: Farley's Wood well site

**Operator: Onshore Oilfield Services Limited** 

Form Number: Air1 07/01/2019

#### Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]

- 1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum maximum' measured values.
- 2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- 3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- 4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed	Date
(Authorised to sign as representative of Operator	

Permit Number: EPR/EP3934UH

Facility: Farley's Wood well site

Operator: Onshore Oilfield Services Limite

Form Number: Water1 07/01/2019

#### Reporting of emissions to water (other than to sewer) for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]

- 1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum maximum' measured values.
- 2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- 3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- 4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed	Date
(Authorised to sign as representative of Operator	

Permit Number: EPR/EP3934UH
Facility: Farley's Wood well site Porm Number: Performance 1 07/01/2019

Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Parameter Units

Operator's comments:

Date.....

Signed .....

(Authorised to sign as representative of Operator

Permit Number: EPR/EP3934UH Operator: Onshore Oilfield Services Limited Facility: Form Number: Energy1 07/01/2019

#### Reporting of Energy Usage for the year YYYY

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh		
Natural Gas	MWh		
Gas Oil	tonnes		
Recovered Fuel Oil	tonnes		
TOTAL	-		

<sup>\*</sup>Conversion factor for delivered electricity to primary energy = 2.4

	Operator's comments:	
;	Signed Date	

(Authorised to sign as representative of Operator

Reporting of Water Usage for the year YYYY  Water Source Usage (m³/year) Specific Usage (m³/unit out  Mains water  Site borehole  River abstraction	
Mains water Site borehole	
Site borehole	put)
River abstraction	
TOTAL WATER USAGE	
Operator's comments:	

Date.....

Signed .....

(Authorised to sign as representative of Operator