

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Egdon Resources U.K. Limited

Fiskerton Airfield Wellsite

Fiskerton Oilfield

Lincoln

Lincolnshire

LN3 4HZ

Variation application number

EPR/SP3537JF/V002

Permit number

EPR/SP3537JF

Fiskerton Airfield Wellsite

Permit number EPR/SP3537JF

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:

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 Fiskerton have not changed from those currently permitted.
2. Update an existing 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 groundwater activity, as defined by the Groundwater Directive and Schedule 22 of the Environmental Permitting (England and Wales) Regulations 2016 as amended, for the re-injection of produced water for production support back to the producing formation (Basal Westphalian Sandstone formation).

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 (approximately 1.22 hectares in area) at which crude oil is abstracted from a natural underground reservoir. It is located in the Parish of Fiskerton, approximately 5.0 km east of the City of Lincoln.

The site is currently producing oil from two existing wells (FA-1 and FA-3), with two additional production wells (FA-4 and FA-5) that are yet to become operational (as they have not yet been drilled/constructed). Crude oil, produced water (water naturally present in the crude oil) and associated gas are drawn to the surface by beam pumps, where equipment (including four small line heaters) separates the oil and water, which is stored in oil and produced water storage tanks. The oil storage tanks (eight in total) allow gas entrained within the oil to vent to atmosphere via a single vent line emission point and scrubber system. The produced water is re-injected back to the producing formation (Basal Westphalian Sandstone formation) via an existing re-injection well (FA-2). Currently, only produced water from wells FA-1 and FA-3 is re-injected via FA-2 (as FA-4 and FA-5 are not yet constructed and operational). The crude oil is exported from site to a nearby oil refinery via road tankers, where further processing of the crude oil into fuel and other products takes place. The site is powered by a mains electricity supply and there is no permanent water supply.

Production from the site is estimated at between 100 to 600 bbls per day (15.9 to 95.4 cubic metres (m³) per day).

Current production from the site's two existing wells (FA-1 and FA-3) is approximately 550 bbls of fluid, of which 90% (500 bbls) is produced water. The total oil storage capacity via the site's eight storage tanks (F1 to F8) is 2,842 bbls, or 451.8 m³

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 during loading.
- c) Produced water from the producing reservoir which is contained and injected back into the producing reservoir.
- 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
- f) waste disposal facility.
- g) Noise from electrical machinery and pumps.

The operator may chemically treat production fluids with corrosion, wax and scale inhibitors to prevent pipework, tank or well damage. These fluids may be treated with biocides to prevent reservoir souring prior to re-injection. There is insufficient gas produced with the current wells to make recovery and beneficial use economic.

There are no sites of special scientific interest (SSSI) or European designated sites within proximity of this existing site.

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/SP3527JF/V002 | Duly made 29/03/12 | |
| Permit EPR/HP3830CT determined | 21/06/12 | Permit issued to Cirque Energy (UK) Limited |
| Variation application | Duly made 14/12/12 | Application to vary permit |
| Variation determined EPR/HP3830CT/V002 | 22/01/13 | Varied permit issued |
| Variation application EPR/HP3830CT/V003 | Duly made 16/03/15 | Application to vary permit to add additional wells (FA-4 and FA-5). |
| Additional information | 31/07/15; 19/02/16; 23/04/16; 01/06/16; 19/07/16 | Partial Schedule 5 response; Partial Schedule 5 response; Partial Schedule 5 response; Groundwater activity application; Updated WMP provided |
| Change to application EPR/HP3830CT/V003 | 07/03/16 | Request to withdraw flare part of variation application |
| Variation determined EPR/HP3830CT/V003 [PAS billing ref: NP3933AY] | 07/10/16 | Varied permit issued |
| Variation application EPR/HP3830CT/V004 | Duly made 13/07/17 | Application to vary permit to update existing activities with modern conditions. |

| Status log of the permit | | |
|---------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------|
| Description | Date | Comments |
| Application EPR/SP3537JF/T001 (Full transfer of permit EPR/HP3830CT) | Duly made 19/02/18 | Application to transfer the existing permit in full from Cirque Energy (UK) Limited to Egdon Resources U.K. Limited |
| Transfer determined EPR/SP3537JF | 17/04/18 | Full transfer of permit complete (EPR/HP3830CT superseded by EPR/SP3537JF). |
| Additional information received | 15/05/18 and 23/05/18 | Responses to Schedule 5 information notice |
| Variation determined EPR/SP3537JF/V002 [PAS Billing references: VP3133QU / EAWML 402186] | 28/02/19 | Varied and consolidated permit issued in modern condition format. |

| Other permits relating to this installation | | |
|----------------------------------------------------|-------------------------------------------------------------------------|----------------------|
| Operator | Permit number | Date of issue |
| Egdon Resources U.K. Limited | EPR/JB3295DC environmental permit for radioactive substances activities | 06/10/2016 |

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/SP3537JF

Issued to

Egdon Resources U.K. Limited (“the operator”),

whose registered office is

The Wheat House

98 High Street

Odiham

Hook

Hampshire

RG29 1LP

company registration number **03424561**

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

Fiskerton Airfield Wellsite

Fiskerton Oilfield

Lincoln

Lincolnshire

LN3 4HZ

to the extent set out in the schedules.

The notice shall take effect from 28/02/2019

| Name | Date |
|----------------------------------|------------|
| Principal Permitting Team Leader | 28/02/2019 |

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/SP3537JF

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/SP3537JF/V002 authorising,

Egdon Resources U.K. Limited (“the operator”),

whose registered office is

The Wheat House

98 High Street

Odiham

Hook

Hampshire

RG29 1LP

company registration number **03424561**

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

Fiskerton Airfield Wellsite

Fiskerton Oilfield

Lincoln

Lincolnshire

LN3 4HZ

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

| Name | Date |
|-----------------------------------------|-------------------|
| Principal Permitting Team Leader | 28/02/2019 |

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 A6), 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 A6), 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 to A6) 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 groundwater activity (A7) referenced in schedule 1 table S1.1, shall take place at the discharge points marked on the site plan(s) at schedule 7 to this permit.
- 2.2.3 The discharge (A7) shall be made from the wellbore within the Basal Westphalian Sandstone Formation as listed in tables S1.1 and S3.3; and, the operating techniques that are the subject of conditions prefixed by condition 2.3 shall be applied at the locations, or otherwise described, in schedule 7.

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 re-injection borehole system shall comply with the following:
- (a) no re-injection borehole shall extend below the depth specified in table S1.1;
 - (b) the re-injection borehole shall comply with the minimum depth below ground level for un-perforated linings specified in table S1.1;
 - (c) the outlet of the re-injection borehole, including any associated diffusers, shall be within the saturation zone at all times;
 - (d) no part of the re-injection borehole system shall be situated within 10 metres of any watercourse (including any ditch that runs dry for part of the year), or any other surface water;
 - (e) no part of the re-injection borehole system shall be situated within a SPZ 1 or 50 metres of a well or borehole used for any purpose, other than abstraction from that well or borehole for the sole purpose of supplying water to the activity specified in table S1.1 and wells or boreholes used solely for purpose of extracting hydrocarbons
- 2.3.4 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

2.3.5 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.

2.3.6 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.

2.5 Pre-operational conditions

2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

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 tables 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.

3.2.4 The Operator shall take appropriate measures:

- (a) to prevent the input of hazardous substances to groundwater; and
- (b) where a non-hazardous pollutant is not controlled by an emission limit, to limit the input of such non-hazardous pollutants to groundwater so as to ensure that such inputs do not cause pollution of groundwater.

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:
- (a) 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:
- (a) 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.
- 3.5.7 The groundwater monitoring plan and environmental management and monitoring plan specified in Table S1.2, Schedule 1 shall be implemented unless otherwise agreed in writing with the Environment Agency.
- 3.5.8 Any revised groundwater monitoring plan or revised environmental management and monitoring plan should be implemented in place of the original in accordance with the Environment Agency's written approval unless otherwise agreed in writing

3.6 Installation of monitoring boreholes

- 3.6.1 The Operator shall submit for approval to the Environment Agency details of the groundwater monitoring plan within 6 months of permit issue.
- 3.6.2 The monitoring boreholes shall be installed to depths, by methods and according to a design agreed in advance and in writing by the Environment Agency.
- 3.6.3 The following details regarding the monitoring boreholes shall be provided to the Environment Agency within 1 month of installation:
- (a) casings/linings (length, diameter, material, type of grout or filter media and whether slotted or plain);
 - (b) depths and diameters of unlined sections;
 - (c) standing groundwater levels;
 - (d) details of strata encountered during drilling;
 - (e) reference levels in metres above ordnance datum;
 - (f) a location plan at a suitable scale showing the boreholes in relation to the point of discharge;

- (g) national grid references of the borehole(s) in the form AB 12345 67890;
- (h) any other information obtained from the borehole(s) relevant to the interpretation of water sample analysis.

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 A6) 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,
 - (ii) 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
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 to A5, and A7), 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. | <p>From receipt of production fluids at the wellhead to the despatch of products (crude oil) and waste.</p> <p>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.</p> <p>Any road tanker loading systems must be fully contained and the delivery system shall be fitted with dry break couplings.</p> <p>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.</p> <p>Provisions shall be made to minimise the emissions of non methane volatile organic compounds (NMVOC) and methane from the oil storage tank vent.</p> <p>Any water, contaminated with crude oil, which is drained off from the storage vessel and is not being recycled for reinjection must be collected for treatment before disposal.</p> |
| Activity reference | Directly Associated Activity | | |
| A2 | Raw materials. | Storage of raw materials including corrosion inhibitor, wax inhibitor, scale inhibitor and biocide. | Raw materials directly associated with the production of crude oil. All stored chemicals shall have secondary containment. |
| A3 | Reciprocating positive displacement pumps | Pumping well fluids to the surface | The oil well to the inlet of the surface flow lines, including the pump's well cellar |
| A4 | Use of SCUD separator (if production is sufficient) | Separates well fluids into oil and water. | From inlet to the separator to the outlet |
| A5 | Tank heaters | A maximum of four electrical heaters with a combined total thermal input of less than 500 kW to assist with fluid separation | |

| 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 |
| Activity reference | Description of activities for waste operations | Limits of activities | |
| A6 | <p>The management of extractive waste from production activities, not involving a waste facility.</p> <p>The management of extractive waste generated by well work over.</p> <p>The management of extractive waste generated by well decommissioning.</p> | <p>Permitted waste types shall conform to the description in the approved waste management plan.</p> <p>The activities shall be limited to those described in the approved Waste Management Plan referenced in table S1.2.</p> <p>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.</p> <p>Drilling additives shall be approved in writing by the Environment Agency prior to use.</p> <p>Well stimulation by hydraulic fracturing is not permitted.</p> <p>An impermeable membrane shall be installed across the site before the start of any drilling operations (for production wells FA-4 and FA-5) using appropriate levels of construction quality assurance. Attention shall be paid to ensure the continued integrity of seals in all areas, particularly areas that are trafficked, used for the storage of wastes or where structures are built. All areas for the storage of wastes shall be constructed in accordance with CIRIA R164 and C736.</p> <p>Waste shall be stored for no more than three months in secure storage containers on site.</p> | |
| Activity reference | Description of activity for Groundwater | Limits of specified activity | |
| A7 | Re-injection of produced water to ground via borehole FA-2 for operations for extraction of hydrocarbons. | <p>Discharge of produced water from extraction of hydrocarbons (via Wells FA-1, FA-3, FA-4 and FA-5) into existing into existing borehole FA-2 at NGR TF 05829 73102 at Fiskerton (as specified in table S3.3).</p> <ul style="list-style-type: none"> The re-injection borehole FA-2 shall not extend deeper than 1,685 metres below ground level (m bgl). Un-perforated lining shall extend to a minimum depth of 1,634 m bgl in FA-2. The target formation for the re-injection is the Basal Westphalian Sandstone formation. The rate of injection shall not exceed the fracture pressure of the receiving formation (Basal Westphalian Sandstone Formation) The monitoring boreholes shall be constructed and tested in accordance with PO 1 in table S1.4. The activity will be carried out in accordance with the documents specified in Tables S1.2, S1.3 and S1.4 | |

| Table S1.2 Operating techniques | | |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Description | Parts | Date Received |
| Application | Sections 1.2, 1.4, 1.6 and 1.8 of the application document in response to section 5a – technical standards, Part B of the application form and Fiskerton_EP_B2_Attachments, Fiskerton_EP_Addendum_Mar_2012 | 22/02/12 and 29/03/12 |
| Variation application EPR/HP3830CT/V003 | Application forms; part C4 sections 3a and 3b. Application supporting information. | 16/03/15 |
| Schedule 5 response | Groundwater activity application forms and supporting information | 01/06/16 |
| Application | Types and amounts of raw materials specified in Table 5 of Part C3 of the application form. | 28/02/17 |

| Table S1.2 Operating techniques | | |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Description | Parts | Date Received |
| Application | Technical standards specified in Table 3 of Part C3 of the application | 28/02/17 |
| Application | Environmental Risk Assessment | 28/02/17 |
| Gap analysis tool | Technical standards indicated in the response to the completed gap analysis tool response (version 2 July 2017 Final) | 29/06/17 |
| Application and response to Schedule 5 notice (dated 06/03/18) | Application documents provided in response to sections 5a, 5c and 6 of Part C2 of the application form. | 28/02/17 and 15/05/18 |
| Application and response to Schedule 5 notice (dated 06/03/18) | Approved Waste Management Plan, as amended in response to Schedule 5 notice (as Appendix 3). Document reference 'Issue 2 May 2018' | 28/02/17 and 15/05/18 |
| Application and response to Schedule 5 notice (dated 06/03/18) | De-minimus justification and supplementary information in response to Schedule 5 notice (as Appendix 5) for hot washing and leak off testing | 28/02/17 and 15/05/18 |
| Schedule 5 notice (dated 06/03/18) | Hydrogeological risk assessment (HRA) of Re-injection practices, dated February 2016 (47074737-801-r1) provided in response to Schedule 5 notice (as Appendix 7) | 15/05/18 |
| Schedule 5 notice (dated 06/03/18) | Updated H1 environmental risk assessment in response to Schedule 5 notice (as Appendix 4) | 23/05/18 |
| Secondary and tertiary containment plan as approved under IC 9 specified in Table S1.3 | All of document | Date of approval of IC 9 |
| Leak detection and repair plan as approved under IC 10 specified in Table S1.3 | All of document | Date of approval of IC 10 |
| Groundwater Monitoring Plan approved in accordance with IC 11 specified in Table S1.3 | All of document | Date of approval of IC 11 |
| Environment Management System as approved under IC 12 specified in Table S1.3 | All of document | Date of approval of IC 12 |
| Gas management system improvement plan as approved under IC 13 specified in Table S1.3 | All of document | Date of approval of IC 13 |
| Vapour recovery plan as approved under IC 15 specified in table S1.3 | All of document | Date of approval of IC 15 |
| Groundwater Monitoring Plan approved in accordance with PO 1 specified in Table S1.4 | All of document | Date of approval of PO 1 |

| Table S1.3 Improvement programme requirements | | |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Reference | Requirement | Date |
| IC1 | The Operator shall develop a written accident management plan having regard to the requirements set out in the relevant Environment Agency technical guidance notes, and shall submit the plan in writing to the Environment Agency. | Completed |

| Table S1.3 Improvement programme requirements | | |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Reference | Requirement | Date |
| IC2 | The Operator shall implement a system for the monthly assessment and recording of the crude oil production. The Gas to Oil ratio on the site shall be measured at least quarterly and shall be reported in writing to the Environment Agency. | Completed |
| IC3 | The Operator shall implement a management system to undertake a regular site survey and inspection of all pipework, plant and storage vessels to identify actual and potential leak sources with particular attention to joints. The Operator shall provide the Environment Agency with a written report, for approval, detailing the findings of the first survey. The report shall also contain a timetable for rectifying any identified leaks and implementing measures to reduce the risk of leakage from other potential sources. | Completed |
| IC4 | The Operator shall carry out a detailed review of the Site Safety and Security, with specific emphasis on containment and protection during out of hours operation when the site is unmanned. The Operator shall improve site security through the installation of appropriate chain-link fencing, a lockable entrance gate and an emergency gate. This review shall be reported to the Environment Agency. | Completed |
| IC5 | The Operator shall review the H1 assessment when the site is in operation taking into account emissions from the crude oil storage vent and shall provide a written report to the Environment Agency for approval. | Completed |
| IC6 | The Operator shall ensure that all tanks are fitted with operational level gauges and local alarms, and shall submit a written report to the Environment Agency to confirm completion. | Completed |
| IC7 | The Operator shall implement measures to improve the storage and bunding of the oil storage such that any spillage is contained and may be fully recovered. The Operator shall inform the Environment Agency in writing of the measures undertaken. | Completed |
| IC8 | The Operator shall produce a written Site Closure Plan which includes a programme for the testing of the ground beneath the installation to determine the degree of contamination existing on site closure, The Operator shall submit the Site Closure Plan to the Environment Agency for approval. | Completed |
| IC9 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. | 28/11/2019 |
| IC10 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. | 28/08/2019 |

| Table S1.3 Improvement programme requirements | | |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Reference | Requirement | Date |
| IC11 Groundwater activities | <p>The operator shall submit a written plan for groundwater monitoring during the operational and post decommissioning phases of the groundwater activity (A7, with produced water from production wells FA-1 and FA-3 only) and shall obtain the Environment Agency's written approval to it. The plan will be based on the hydrogeological risk assessment and conceptual site model including, but not limited to:</p> <ul style="list-style-type: none"> a) details of the proposed location; depth; and construction method of the groundwater monitoring boreholes b) number of groundwater monitoring boreholes to be installed c) details of the geological formation that monitoring boreholes in (i) are monitoring d) groundwater sample collection procedures e) details of the proposed monitoring parameters and frequency f) details of how the data collected will be reviewed and interpreted including setting and reviewing trigger levels g) details for further investigation if erroneous results are observed <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p> | 28/08/2019 |
| IC12 Management system | <p>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:</p> <ul style="list-style-type: none"> a) Details of the training given to staff on use of spill kits; ensure training records updated accordingly. b) The procedure to be followed for monitoring the quantity and composition of flowback water and / or produced water and keeping records of the results. c) The procedure for determining the consignments of wastes for disposal off-site to be sampled and the procedure for retaining those samples. d) The procedure for identifying vessel fill limits, e.g. fitting level detection, overflow protection system e) The procedure for identifying bund fill levels, e.g. high level alarm on unmanned sites f) The procedures for testing the impermeable membrane and subsequent remediation measures if required. g) The monitoring procedures and testing in place to confirm the integrity of the re-injection well(s) for the lifetime of those wells, monitoring frequency, remediation measures (and reporting procedures) should the integrity monitoring results indicate that a well integrity failure has potentially occurred. h) The procedure for notifying the Environment Agency on each occasion where natural gas is vented uncombusted to atmosphere for safety purposes. Notification to include, but not limited to: reasons for, duration of and quantity of gas vented. | 28/05/2019 |

| Table S1.3 Improvement programme requirements | | |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Reference | Requirement | Date |
| IC13 Gas management | <p>The operator shall submit a written gas management improvement plan and shall obtain the Environment Agency's written approval for it.</p> <p>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.</p> <p>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.</p> <p>The gas management improvement plan shall also refer to the review of emissions undertaken as a result of IC14. If emission limits were not being met, the plan shall include actions that will be taken to ensure that emission limits are met.</p> <p>The plan must contain dates for the implementation of the identified improvement measures.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p> | 28/08/2020 |
| IC14 Air monitoring | <p>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.</p> | 28/08/2019 |
| IC15 Vapour recovery | <p>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.</p> <p>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.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p> | 28/08/2019 |
| IC16 Site condition report | <p>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:</p> <ul style="list-style-type: none"> 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 baseline soil sample results and groundwater data | 28/02/2020 |

| Table S1.4 Pre-operational measures for future development | | |
|-------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reference | Operation | Pre-operational measures |
| PO 1 | Activity A7 | <p>Prior to the operation of the discharge (activity A7) with produced water from production wells FA-4 and FA-5, the operator shall submit for approval a written plan for groundwater monitoring during pre-operation, operational and post decommissioning phases of the groundwater activity (A7) following the introduction of produced water from production wells FA-4 and FA-5 and shall obtain the Environment Agency's written approval to it. The plan will be based on the hydrogeological risk assessment and conceptual site model including, but not limited to:</p> <ul style="list-style-type: none"> a) details of the proposed location; depth; and construction method of the groundwater monitoring boreholes b) number of groundwater monitoring boreholes to be installed c) details of the geological formation that monitoring boreholes in (i) are monitoring d) groundwater sample collection procedures e) details of the proposed monitoring parameters and frequency f) details of how the data collected will be reviewed and interpreted including setting and reviewing trigger levels g) details for further investigation if erroneous results are observed <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p> |

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

| 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] | Vent stack serving eight storage tanks (F1 to F8) | Gas vented | - | Month | Monthly | Calculation to determine the quantity of gas vented over the reference |
| | | Hydrogen sulphide | 5.7 mg/m ³ | - | Monthly | As approved in writing with the Environment Agency |

| Discharge source and discharge point ref. & location | Parameter | Limit (including unit) | Reference Period | Limit of effective range | Monitoring frequency | Compliance Statistic |
|------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------|-----------------------------|--------------------------|----------------------|----------------------|
| Discharge of produced water from oil and or gas extraction to re-injection borehole FA-2 | Maximum daily discharge volume | 82.1 m ³ /day | Total daily volume | N/A | Continuous | Maximum |
| | Maximum rate of discharge | 0.95 litres per second | Instantaneous (spot sample) | N/A | N/A | Maximum |
| | 15-minute instantaneous or averaged flow | No limit set. Record as l/s | 15 minute | N/A | Continuous | N/A |

| Effluent name | Discharge Point | Discharge point NGR | Receiving water / environment |
|---------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Discharge of produced water from oil and gas extraction to re-injection borehole FA-2 | FA-2 | In a north westerly direction between TF 05829 73102 (well surface) and TF 05569 73107 (Reservoir interface) | Basal Westphalian Sandstone formation via re-injection borehole FA-2 |

| Effluent(s) and discharge point(s) | Monitoring type | Monitoring point NGR | Monitoring point reference |
|------------------------------------------------------------------------------------------|-------------------|----------------------|----------------------------|
| Discharge of produced water from oil and or gas extraction to re-injection borehole FA-2 | Effluent sampling | TF 05829 73102 | FA-2 |
| | Flow monitoring | | |

| 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 |
| Groundwater monitoring locations as specified in Groundwater monitoring plan in table S1.2 following approval of IC 11 in table S1.3. | As specified in Groundwater monitoring plan in table S1.2 following approval of IC 11 in table S1.3. | As specified in Groundwater monitoring plan in table S1.2 following approval of IC 11 in table S1.3. | BS ISO 5667-11:2009 and condition 3.5.3 | Three borehole volumes must be purged prior to sampling. Samples must be filtered samples. In accordance with Groundwater monitoring plan in Table S1.2 |
| Groundwater monitoring locations as specified in Groundwater monitoring plan in table S1.2 following approval of PO 1 in table S1.4 | As specified in Groundwater monitoring plan in table S1.2 following approval of PO 1 in table S1.4 | As specified in Groundwater monitoring plan in table S1.2 following approval of PO 1 in table S1.4 | BS ISO 5667-11:2009 and condition 3.5.3 | Three borehole volumes must be purged prior to sampling. Samples must be filtered samples. In accordance with Groundwater 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 |
| Re-injection borehole FA-2 | Well integrity monitoring summary report | Annually | In accordance with the HRA, as referenced in table S1.2 | N/A |
| | Concentration and volume of all process chemicals added to the produced water prior to re-injection via FA-2 | Monthly | | N/A |
| Gas to oil ratio of production from the installation | Gas to oil ratio | Monthly | | |

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 (vent stack serving eight oil storage tanks) | Monthly | 1 January |
| Emissions to groundwater (produced water reinjection) via FA-2 Parameters as required by condition 3.5.1 (Maximum daily discharge volume and rate of discharge) and listed in table S3,2 | FA-2 | Every 6 months | 1 January, 1 July |
| Process monitoring Parameters as required by condition 3.5.1 | Description as indicated in Table S3.6 | Every 6 months | 1 January, 1 July |
| Groundwater monitoring Parameters as listed in Table S3.5 | As Table S3.5 | Every 6 months | 1 January, 1 July |

| Table S4.2: Annual production/treatment | |
|------------------------------------------------|------------------|
| Parameter | Units |
| Crude oil | Tonnes |
| Average water cut | % of production |
| Average Gas to oil Ratio (GOR) | scf gas/bbls oil |

| Table S4.3 Performance parameters | | |
|------------------------------------------|--------------------------------|--------------------------|
| Parameter | Frequency of assessment | Units |
| Energy usage | Annually | MWh |
| Water usage | Annually | Tonnes or m ³ |

| 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 | 28/02/2019 |
| Energy usage | Form energy 1 or other form as agreed in writing by the Environment Agency | 28/02/2019 |
| Other performance indicators | Form performance 1 or other form as agreed in writing by the Environment Agency | 28/02/2019 |
| Groundwater emission | Form as agreed in writing by the Environment Agency | 28/02/2019 |
| Produced water reinjection: Total daily volume | WISKI electronic format or some other format agreed in writing by the Environment Agency | 28/02/2019 |
| Produced water reinjection: 15-minute flow | WISKI electronic format or some other format agreed in writing by the Environment Agency | 28/02/2019 |

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 | |

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| (a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant 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 the 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 | |
| Measures taken, or intended to be taken, to stop the emission | |

| Time periods for notification following detection of a breach of a limit | |
|--------------------------------------------------------------------------|---------------------|
| Parameter | Notification period |
| | |
| | |
| | |

| (c) Notification requirements for the detection of any significant adverse environmental 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 submitted as soon as practicable

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Any more accurate information on the matters for notification under Part A. | |
| Measures taken, or intended to be taken, to prevent a recurrence of the incident | |
| Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission | |
| The dates of any unauthorised emissions from the facility in the preceding 24 months. | |

| | |
|-----------|--|
| 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.

“emissions to land” includes emissions to groundwater.

“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

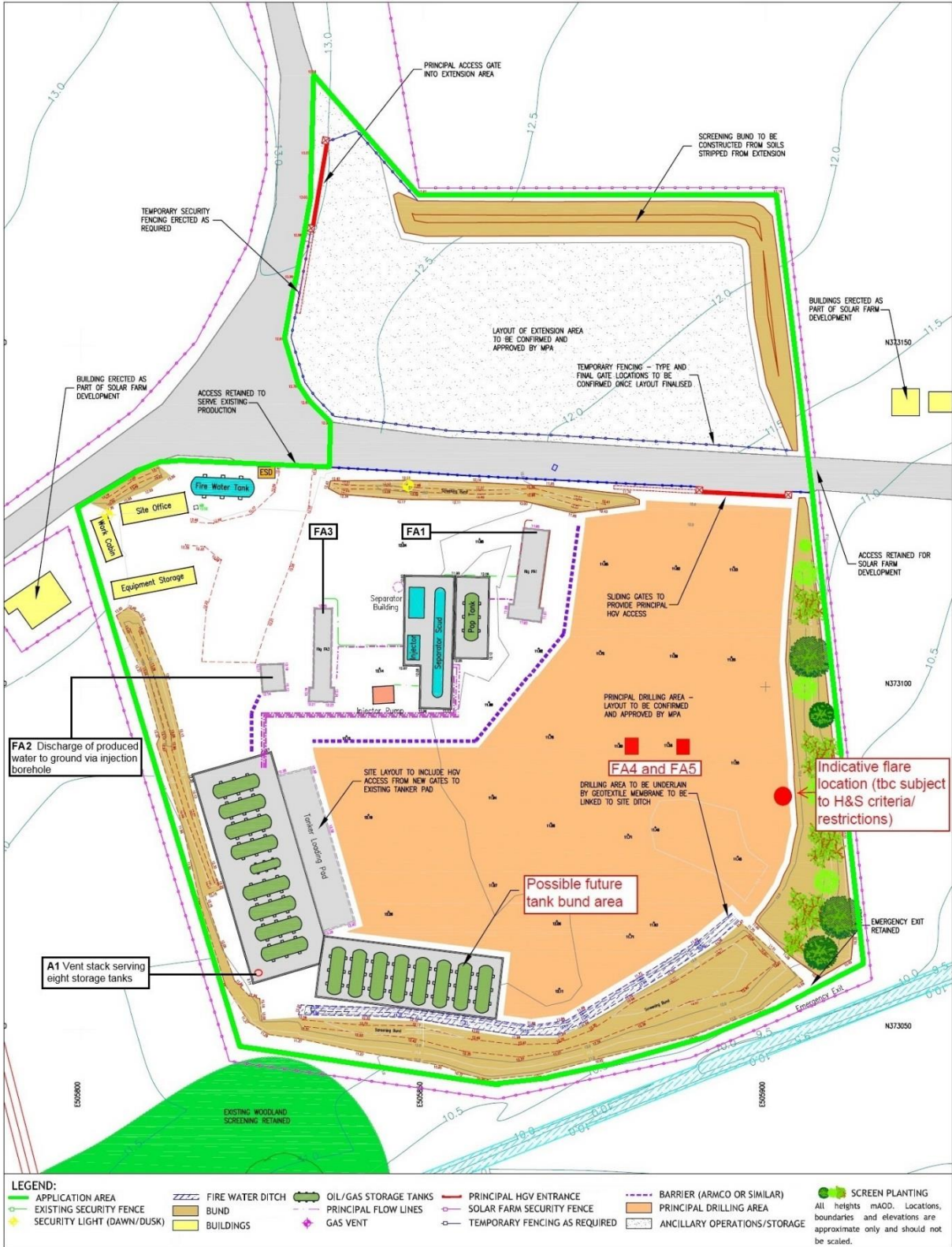
“year” means calendar year ending 31 December.

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

Reporting forms

Permit Number: **EPR/SP3527JF**

Operator: **Egdon Resources U.K. Limited**

Facility: **Fiskerton Airfield well site**

Form Number: **Air1 28/02/2019**

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] |
|----------------|-----------------------|----------------------|------------------|-----------------------|----------------------------|--------------------------------------|----------------------------|
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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/SP3527JF
Facility: Fiskerton Airfield well site

Operator: Egdon Resources U.K. Limited
Form Number: Energy1 28/02/2019

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 | - | | |

*Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed

Date.....

(Authorised to sign as representative of Operator)

Permit Number: EPR/SP3527JF
Facility: Fiskerton Airfield well site

Operator: Egdon Resources U.K. Limited
Form Number: Performance1 28/02/2019

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

| Parameter | Units |
|-------------------------|--------|
| Total raw material used | Tonnes |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Operator's comments:

Signed

Date.....

(Authorised to sign as representative of Operator)