# **Application SCR evaluation template**

Name of activity and site address	Europa Oil & Gas Limited Holmwood Wellsite Bury Hill Wood, Coldharbour Lane, Dorking, Surrey, RH5 6HN
	Surrender application reference: EPR/YP3735YK/S002
Document reference of application SCR Date and version of application SCR	<ul> <li>Document entitled 'Homwood Wellsite – Site Condition Report at Surrender', document number EOG-EPRA-HW- SCR-006-PS and dated November 2018.</li> <li>Appendix 1 – Site Location Plan and Boundary Plan.</li> <li>Appendix 2 – Envireau Water Technical Note.</li> <li>Original Application Site Report (ASR) entitled 'Holmwood Wellsite Site Condition Report – Exploratory Operations', revision 3 and dated September 2017.</li> </ul>

1.0 Site details
Has the applicant provided the following information as required by the application SCR template?
Site plans showing site layout, drainage, surfacing, receptors, sources of emissions/releases and

monitoring points

Provided in support of Environmental Permit application EPR/YP3735YK; accepted and determined on 23/07/2018.

# 2.0 Condition of the land at permit issue

#### (Receptor)

Has the applicant provided the following information as required by the application SCR template?

- a) Environmental setting including geology, hydrogeology and surface waters
- b) Pollution history including:
- pollution incidents that may have affected land
- historical land-uses and associated contaminants
- visual/olfactory evidence of existing contamination
- evidence of damage to existing pollution prevention measures
- c) Evidence of historic contamination (i.e. historical site investigation, assessment, remediation and verification reports (where available)
- d) Has the applicant chosen to collect baseline reference data?

The Application Site Report (ASR) contained details of:

- a) The environmental setting: geology, hydrogeology and hydrology (no superficial deposits, Lower Greensand Group comprising Hythe Formation (predominantly sandstone) underlain by Atherfield Clay Formation (predominantly mudstone), underlain by the Whealdon Group (Weald Clay Formation and Hastings Bed Formation) and the Purbeck Group; principal aquifer (Hythe Formation, part of the Lower Greensand Group), groundwater flow anticipated to the to be westwards towards Pipp Brook; several springs present to the east and west up to 500m from the site, and the closest watercourse is Pipp Brook (located approximately 250m west). Environment Agency records indicate there are 3 groundwater abstraction licences and 3 surface water abstraction licences within a 5km radius.
- b) Pollution history:
  - Environment Agency records indicated the closest pollution incident was approximately 3.2km north-east and involved sewage materials. Recorded in 2006 with no impact to land and minor impact to water.

## 2.0 Condition of the land at permit issue

# (Receptor)

# Has the applicant provided the following information as required by the application SCR template?

- Site history (earliest mapping shows the site as open land and then from 1876 onwards forming part of the Waterden Plantation. The site and immediate surrounding area is predominantly agricultural farmland or forestry land, interspersed with farms and rural properties);
  - No indication to suggest historic contamination at the site.
- c) Information collected through a desk study, including an ecology assessment and hydrogeological risk assessment.
- d) No baseline reference data collected for the ASR.

#### 3.0 Permitted activities

(Source)

Has the applicant provided the following information as required by the application SCR template?

Response (Specify what information is needed from the applicant, if any)

a) Permitted activities

b) Non-permitted activities undertaken at the site

A mining waste permit (EPR/YP3735YK) was issued for the management of extractive wastes not involving a waste facility to allow the drilling and testing of a single well for the purposes of onshore oil and gas exploration. An additional standard rules permit SR2015 No2 was issued concurrently for the handling and storage of crude oil within the wellsite.

A separate Radioactive Substances Regulation (RSR) Standard rules permit (EPR/EB3594DF) was issued which covered the testing, storage and disposal of Naturally Occurring Radioactive Material (NORM) associated with drilling activities.

NB: Permit EPR/EB3594DF was surrendered in February 2019.

## 3.0(a) Environmental Risk Assessment

(Source)

The H1 environmental risk assessment should identify elements that could impact on land and waters, cross- referenced back to documents and plans provided as part of the wider permit application.

Risk assessment provided in support of Environmental Permit application EPR/YP3735YK; accepted and determined on 23/07/2018.

The operator's assessment of the environmental risk from the facility was reviewed and the Environment Agency considered it to be satisfactory. The assessment showed that, applying the conservative criteria in our guidance on environmental risk assessment, that all emissions may be categorised as environmentally insignificant.

# **3.0(b) Will the pollution prevention measures protect land and groundwater?** (Conceptual model)

Are the activities likely to result in pollution of land?

The ASR provided a description of the site based on a desktop assessment, which the Environment Agency considered satisfactory and the decision was taken in accordance with our guidance on site condition reports. The permit was issued with a pre-operational condition requiring the operator to submit a report describing the baseline water quality for the site from three groundwater monitoring boreholes installed around the site. The report must be provided before operations commence and the information will be used to update the ASR. Monitoring of the groundwater level and quality will verify the operator's site conceptual model.

The operator will also be undertaking soil sampling during the site construction phase to confirm the baseline condition of soils underlying the site. This information will be used to update the ASR.

The Environment Agency concluded that site surfacing and containment as described in the Site Condition Report and Waste Management Plan were sufficient to mitigate risks to surface and groundwater receptors for the proposed duration of the exploration activity.

Sufficient information was provided to show that the risks to the groundwater environment from the proposed design and specification of the well had been considered and were acceptable. The method of construction of the exploratory well was reviewed and it was concluded that the methods were appropriate and would ensure groundwater protection.

For dangerous and/or hazardous	The use of chemical additives, hydrochloric acid wash and for
substances only, are the pollution	the hydrochloric acid squeeze were considered during the
prevention measures for the relevant	determination and it was considered to be of a quantity and
activities to a standard that is likely	concentration so small as to obviate any present or future risk
to prevent pollution of land?	of deterioration in the quality of any receiving groundwater.

Application SCR decision summary	Tick relevant decision
Sufficient information has been supplied to describe the condition of the site at permit issue	Accepted at permit determination of EPR/YP3735YK on 23/07/2018
· · · · · · · · · · · · · · · · · · ·	The ASR was considered satisfactory,
Pollution of land and water is unlikely with the conditions set in the permit	however, the permit was issued with pre- operational measures to undertake baselin monitoring prior to the commencement of operations to verify the site conceptual model.
Date and name of reviewer:	Team Leader
(signature of authorising officer on permit)	23 <sup>rd</sup> July 2018

## **Operational phase SCR evaluation template**

### 4.0 Changes to the activities

(Source)

#### Have there been any changes to the following during the operation of the site?

- a) Activity boundaries
- b) Permitted activities
- c) "Dangerous substances" used or produced

N/A – The proposed development did not commence.

#### 5.0 Measures taken to protect land

(Pathway)

Has the applicant provided evidence from records collated during the lifetime of the permit, to show that the pollution prevention measures have worked?

N/A – The proposed development did not commence.

NB: Groundwater monitoring boreholes constructed during determination of the permit, prior to the intended commencement of development, in line with an approved Groundwater Monitoring Strategy.

# **6.0 Pollution incidents that may have impacted on land and their remediation** (Sources)

Has the applicant provided evidence to show that any pollution incidents which have taken place during the life of the permit and which may have impacted on land or water have been investigated and remediated (where necessary)?

The Surrender Report confirms that no environmental incidents were identified during the operation of the site that could have caused harm to land, air or groundwater.

## 7.0 Soil gas and water quality monitoring (where relevant)

Where soil gas and/or water quality monitoring has been undertaken, does this demonstrate that there has been no change in the condition of the land? Has any change that has occurred been investigated and remediated?

A number of groundwater monitoring boreholes were constructed prior to the construction of the proposed wellsite. The purpose of the monitoring boreholes was to provide evidence of the condition of the groundwater prior to the development commencing, the condition of groundwater during the development (noting any significant changes to quality) and the condition following the cessation of operations and site restoration.

Three monitoring boreholes were constructed at the wellsite between June and July 2017, during the determination of the permit, to a depth of approximately 35.8mbgl, 38.4mbgl and 38.9mbgl. No groundwater monitoring was undertaken as the boreholes did not provide sufficient water volumes for sampling and analysis.

The groundwater monitoring boreholes were subsequently abandoned September 2018 following the decision not to develop the Holmwood proposal. The decommissioning specifications for each monitoring borehole are presented in Appendix 2 of the Surrender Report. The abandonment methodology was previously agreed with the Environment Agency prior to decommissioning.

#### Surrender SCR Evaluation Template

#### 8.0 Decommissioning and removal of pollution risk

Has the applicant demonstrated that decommissioning works have been undertaken and that all pollution risks associated with the site have been removed? Has any contamination of land that has occurred during these activities been investigated and remediated?

As previously stated, three groundwater monitoring boreholes were constructed during the determination of the permit. These were decommissioned as per the technical note in Appendix 2 of the Surrender Report.

Due to external factors, construction of the proposed Holmwood wellsite did not commence.

#### 9.0 Reference data and remediation (where relevant)

Has the applicant provided details of any surrender reference data that they have collected and any remediation that they have undertaken?

N/A – The proposed development did not commence.

#### **10.0 Statement of site condition**

Has the applicant provided a statement, backed up with evidence, confirming that the permitted activities have ceased, decommissioning works are complete and that pollution risk has been removed and that the land and waters at the site are in a satisfactory state?

With the exception of the groundwater monitoring boreholes, which were installed during the determination, the land for the proposed Holmwood development has remained unchanged.

The permitted activities did not begin operation as due to external factors, the decision was made not to commence with construction of the proposed Holmwood wellsite.

Therefore we, the Environment Agency, have reviewed the application for surrender made by the Operator and accept the statement of site condition and view it as being returned in a satisfactory state

Surrender SCR decision summary	Tick relevant decision
Sufficient information has been supplied to show that pollution risk has been removed and that the site is in a satisfactory state – accept the application to surrender the permit.	$\checkmark$
Date and name of reviewer:	
Kirsty Hobbs (NPS – Permitting Officer) – 02/04/2019	
Laura Mellor (NPS –Permitting Officer) – 05/04/2019	