

Environmental Statement (ES) Summary and Sign-Off

Title:	Katy Field Development (Formerly Harrison Field) ES
Operator:	ConocoPhillips (UK) Limited
Report No:	D/4108/2011
Submission Date:	September 2011
Block No:	44/19b
Development Type:	Field Development
Reviewer:	Julie Cook
Date:	28 February 2012

A) Project Description:

The Katy Field development will consist of a single production well, the installation of a Normally Unattended Installation (NUI), the installation of two subsea protection structures (a Tee assembly at Katy and a pigging manifold at Kelvin) and a new 14 km 10" gas production pipeline with a piggy-backed 2" methanol pipeline. The pipeline will connect the Katy platform to the existing Kelvin Subsea Tee, which is tied-back to the Murdoch Complex. Commingled gas from Katy and other connected fields will be exported from the Murdoch Complex to the Theddlethorpe Gas Terminal via the CMS pipeline system.

The proposed development is located in Blocks 44/18, 44/19b and 44/23 in the Southern North Sea, approximately 190 km east of the UK coast and 20 km west of the UK / Netherlands median line. The Katy platform will be located approximately 14 km and 26 km north east of the Kelvin and Murdoch platforms respectively. Water depths range from 26 metres at Katy to 32 metres at the Kelvin platform.

Drilling, construction and installation is planned for Q2/3 2012, with first gas anticipated in Q4 2012. Production is expected to peak at approximately 25.8 billion cubic feet of gas per year in 2013.

Drilling will be completed using a jack-up drilling rig located over the well location. The top-hole sections of the well will be drilled using sea water with cuttings discharged directly to the seabed. Subsequent sections will be drilled using Low Toxicity Oil Based Mud (LTOBM) with all cuttings recovered for onshore treatment and disposal.

Pipelay will be undertaken using a dynamically positioned reel-lay vessel, using a water-jet trencher. The trench will be allowed to backfill naturally. An estimated 6,200 tonnes of rock and 40 concrete mattresses will be needed to protect the exposed pipeline sections and tie-in points at Katy and the Kelvin Subsea manifold.

All of the proposed facilities and activities will be the subject of an approved Oil Pollution Emergency Plan (OPEP).

B) Key Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- Fishery stocks: The area is within spawning grounds for Mackerel (May to August), herring (September to October), sprat (May to August), sole (March to May), plaice (January to March) and *Nephrops* (January to December) and nursery areas for sprat, *Nephrops*, and whiting.
- Seabirds: Seabird vulnerability is very high in March, May and October to December and moderate to low to high for the remainder of the year;
- Annex I Habitats: The proposed Katy Development is located approximately 8 km within the eastern border of the Dogger Bank cSAC.
- Annex II Species: Frequent sightings of the harbour porpoise, white-beaked dolphin and white-sided dolphin have been recorded in the Katy Development area and neighbouring blocks and quadrants, mainly in the summer months. Low numbers of grey and common seals may also be present within the area.
- Other users of the sea: The Katy Development is located within ICES rectangle 37F2. Overall fishing effort and shipping traffic density are low.

C) Key Environmental Impacts:

The EIA identified the following potential impacts and related mitigation measures:

Physical interference: The installation of the NUI and pipeline system, the placement of the spud cans of the jack-up drilling rig and the proposed drilling operations could interfere with other users of the sea. However, appropriate mitigation measures will be put in place, including 500m safety zones around the NUI, drilling rig and wellhead, and the issue of Kingfisher Bulletins and Notices to Mariners. The area has low shipping and fishing activity and any impact on other users of the sea is therefore expected to be negligible.

Seabed disturbance: A number of the proposed activities will impact the seabed, the most significant being the installation of the platform, the spud cans of the drilling rig, the cuttings discharges relating to the drilling activities, the installation of the subsea infrastructure, the installation of the proposed pipeline and the placement of concrete mattresses and rock deposits. The estimated worst-case total area of impact within the Dogger Bank cSAC is 0.076km², which equates to 0.0006% of the area of the cSAC. It is therefore concluded that the proposed project will not have an adverse effect on the structure, function and integrity of the Dogger Bank cSAC.

Noise: Noise will be generated during various activities, including piling operations during platform installation, drilling operations, pipeline installation operations and vessel movements. With the exception of the piling operations, noise levels are not expected to significantly exceed normal background levels in the area, and the piling operations will be of short duration and undertaken in accordance with the JNCC guidelines. The noise is therefore unlikely to result in injury or significant disturbance of European Protected Species.

Atmospheric emissions: The main sources of atmospheric emissions during operations will be the drilling operations, the well testing, the installation of the infrastructure and the steady-state production operations. Emissions will result from power generation on board the rig, as well as from the standby and supply vessels, and from the use of helicopters during drilling, installation and production operations. The emissions will contribute towards global greenhouse emissions, but are expected to disperse rapidly in the offshore environment and there will be no significant impact on local, regional or global air quality.

Marine discharges: The top hole sections of the well will be drilled using Water Based Mud (WBM) which will be discharged directly to the seabed. Selection of chemicals for the drilling, pipeline commissioning and production operations will take account of potential environmental impacts, and chemical use will be monitored on a daily basis. Further risk assessment will be undertaken in subsequent chemical permit applications for the proposed operations.

Accidental events: All the proposed operations will be covered by an Oil Pollution Emergency Plan, and appropriate control measures will be in place to minimise the risk of accidental events. Modelling of worst-case scenarios has been undertaken for a 8,800 m³ spill of associated condensate resulting from a well blow-out.

Cumulative Impacts: The area of the proposed development includes a range of oil and gas operations, in addition to shipping and commercial fishing operations. However, it is considered that the development will have an insignificant effect in combination with other projects.

Transboundary Impacts: The UK / Netherlands median line is approximately 20 km from the development area. No transboundary impacts are likely as a result of operational activities.

D) Consultation:

Comments were received from The Joint Nature Conservation Committee (JNCC), the Centre for Environment, Fisheries and Aquaculture Science (CEFAS Environment & Chemical Advisers), the Maritime and Coastguard Agency (MCA), the Ministry of Defence (MoD) and Trinity House Lighthouse Board (THLB). The ES was also subject to public notice.

JNCC: JNCC requested additional information in relation to the presentation of environmental survey data, the benthic fauna analyses, the discharge and deposition of drill cuttings and WBM and the wider impacts of the development. JNCC further recommended that, as the development lies within the boundary of the Dogger Bank cSAC DECC should undertake a Habitats Regulations Assessment (HRA) Screening to demonstrate that the development, alone and in combination with existing, consented, and proposed activities would not result in direct effect on the qualifying Annex I sandbank habitat of the cSAC. A HRA Screening was carried out by DECC, and it was concluded that the Katy Development would not have a significant adverse effect on any protected habitats or species.

CEFAS (Environment): CEFAS Environment confirmed that there are no English fisheries-related restrictions on drilling or seismic activities. and recommended that the ES should be accepted.

CEFAS (Chemical): CEFAS Chemical confirmed that they have no objections, and that a detailed assessment of chemical use and discharge would vbe undertaken at the relevant chemical permit application stages.

MCA: MCA confirmed that they have no objections.

MoD: MoD confirmed that they have no objections.

NLB: NLB advised that standard requirements for offshore installations will apply to the platform and drilling rig.

Public Notice: No comments were received in response to the public notice.

E) Further Information:

Further information was requested from ConocoPhillips which addressed the issues raised by JNCC and during the internal DECC review, which included clarification in relation to the environmental survey data, benthic fauna analysis, discharge and deposition of drill cuttings and WBM, and the wider impacts of the development. Additional information was provided by ConocoPhillips on 22 December 2011 which adequately addressed the issues raised.

F) Conclusion:

Following consultation, the provision of further information and a review of the HRA screening, DECC OED is satisfied that this project will not have a significant adverse impact on the receiving environment or the living resources it supports, or on any protected sites or species or other users of the sea.

G) Recommendation:

On the basis of the information presented within the ES and advice received from consultees, DECC OED is content that there are no environmental or navigational objections to approval of the proposals, and has advised DECC LED that there are no objections to the grant of the relevant consents.

Approved : Sarah Pritchard - Head of Environmental Operations Unit

| *...Sarah Pritchard*
.....

Date: 28 February 2012.....