

## Consents given under the Petroleum Act 1998 and Reviews under the Assessment of Environmental Effects Regulations 1999

### Kelvin Field Development

The Kevin Field is located in Block 44/18b & 44/23b in the Southern North Sea, approximately 12Km northeast of the Murdoch Platform, 170 Km from Flamborough Head on the UK coast and 19Km from the UK/Netherlands median line. ConocoPhillips intend to develop the field by installing a normally unmanned platform and drilling a single well which will be tied back to the Murdoch MD platform by a new 12", 12.53Km carbon steel pipeline, piggybacked with a 3" methanol line. The anticipated hydrocarbons from the Kelvin Field are gas and condensates and these will be comingled with the production fluids from Cavendish and the CMS II fields and will be exported via the existing CMS pipeline to Theddlethorpe Gas Terminal.

It is planned to install the platform during May 2007 over a 15 day period, the drilling programme is likely to be undertaken between June and September 2007 and the pipeline installation in June 2007, lasting approximately 10 days. First Oil is planned for December 2007 with an expected life of field until 2018. Peak production is expected to be 126 mmscf/day. The concept of the Kelvin Field is also to provide an immediate access point for future ConocoPhillips projects and therefore the NUI would comprise a minimum of 2 slots.

The well will be drilled using a jack up drilling rig once the platform has been installed and is expected to last approximately 139 days. The top hole sections of the well (34" & 26") will be drilled with sea water & viscous spud mud sweeps, whilst the 16", 12.25" 8" & 6" will be drilled using either low toxicity oil based mud (LTOBM) or water based mud (WBM). The well will generate 2,031 tonnes of cuttings, with 161 tonnes being discharged directly to seabed, 938 tonnes of cuttings discharged to sea and 1099 tonnes of cuttings either discharged to sea if WBM is chosen or contained and returned to shore if LTOBM is selected. There is no plan to undertake an extended well test. Although not anticipated, ConocoPhillips have included a contingency of 3,000 tonnes of rockdump for rig stabilisation.

The piggybacked pipelines will be laid using a dynamically positioned vessel and will be jet trenched. The Murdoch platform only requires minor modifications to control and telecommunication systems as a result of the Kelvin Development. There will be no produced water from Kelvin discharged to sea as it will be exported to the Theddlethorpe Gas Terminal via the export line.

The following aspects were assessed as having significant risks:-

- The physical presence of jack up rig
- The installation and physical presence of the platform & pipeline,
- The underwater noise created during piling operations
- The permitted discharge of water-based mud and cuttings
- The accidental spillage of hydrocarbons
- An accidental blow out of gas & condensate

### **Habitats Issues**

The proposed development is located approximately 11Km within the proposed boundary of the draft Special Area of Conservation (dSAC) of the Dogger Bank, to the SE of the South West Patch in the South Dogger Ground. Water depth at the platform is 31.7m Although the Dogger Bank currently has no legal status, it meets the qualifying criteria of a shallow sandbank habitat as defined in the Habitats Directive. The Dogger Bank is a sublittoral sandbank and a draft boundary has been proposed by JNCC and is currently under consideration by DEFRA. The total site surface area of the dSAC is 13,405 Km<sup>2</sup>. There was no indication of biogenic reef structures which would qualify as an Annex 1 Habitat

Seabird vulnerability is very high to high during the proposed development activities but it is felt there is adequate mitigation in place. The development schedule will co-incide with the spawning periods for herring, mackerel, plaice, sole, sprat & nephrops. White beaked dolphins & harbour porpoises have been recorded within quadrant 44.

Following consultation and review of the ES, additional information was provided by ConocoPhillips on the 15 February 2007 and the 01 March 2007. On the basis of the information provided, the advice from consultees and the conclusions from the screening exercise, we are satisfied that the project is unlikely to have a significant environmental impact and, in particular, that it will not have a significant adverse effect on the marine environment in general or on any protected sites or species covered by the 'Habitats Regulations'. A screening for an appropriate assessment was carried out in relation to this project, which concluded that whilst the Kelvin Development could impact the Dogger

Bank, this impact is predicted to be localized and short term and is unlikely to adversely affect the integrity of the dSAC site.

### **Recommendation**

On the 19 March 2007 ConocoPhillips were advised that the Department required no further information with regard to the ES and it was recommended to the Licensing and Consents Unit of the DTI that the project be granted consent.

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