Ebberston South Well Site Permit number EPR/BB3699AW

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

This permit is for re-injection of 556 cubic metres per day (m^3/d) of produced water in to the Ebberston South well.

This application is for a joint venture between Third Energy and Moorland Energy, however, the site is operated and maintained by Third Energy. The well site at Ebberston South is pre-existing site. The well was developed by Moorland Energy to target gas reserves in the Kirkham Abbey Formation (KAF) however, it was never brought into full production. This application will bring the site into production.

At this site gas is extracted from the KAF. Produced water is the naturally occurring water that is produced from a well alongside oil or gas. Historically produced waters are re-injected back into the formation from which they arose, however over time Third Energy believe this has lead to other similar wells becoming unproductive. This discharge is to re-inject the produced water originating from the KAF into the Sherwood Sandstone Formation (SSF) to try and overcome a similar situation occurring at Ebberston South. To enable the re-injection Third Energy will modify the existing well to become an re-injection borehole for produced water as well as a production well.

This is a direct discharge of produced water which is specifically allowed by paragraph 8 of Schedule 22 of the Environmental Permitting (England & Wales) Regulations 2010.

The discharge shall only take place where the concentration of Naturally Occurring Radioactive Material exceeds the value specified in the Environmental Permitting Regulations 2010, Schedule 23 Part 2(5), such that the discharge is radioactive waste for the purposes of Schedule 23 as authorised in Radioactive Substances Regulation permit EPR/NB3595DJ.

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/BB3699AW/A001 Duly made		Application for discharge of trade
	12/12/2014	effluent comprising of produced water.
Additional information received	28/04/2015	Cumulative impact report
Permit determined EPR/BB3699AW	18/08/2015	Permit issued to Third Energy UK Gas Limited.