

**Third Energy UK Gas Limited**  
Knapton Generating Station  
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09<sup>th</sup> October 2017

Environment Agency,  
Coverdale House,  
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Dear [REDACTED]

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### **Third Energy UK Gas Limited – Kirby Misperton A Wellsite – Waste Management Plan**

Third Energy UK Gas Limited (Third Energy) has recently submitted an amended Waste Management Plan (Revision 8) to the Environment Agency for approval. Amongst other things, the amended Waste Management Plan seeks to remove the treatment of flowback water by electrocoagulation and its associated waste streams, as it is no longer considered viable to treat the flowback water on site and reuse it in subsequent zones being stimulated. The purpose of this letter is to provide justification for removing the treatment of flowback water by electrocoagulation from the Waste Management Plan.

Third Energy fully understands its requirement under Article 4 of the revised EU Waste Framework Directive, which is transposed through UK law through the Waste (England and Wales) Regulations 2011, specifically the waste hierarchy, with the aim of reducing waste quantities.

Whilst the environmental permit authorises both the treatment and non-treatment of flowback water, Third Energy has now taken the decision to remove the treatment of flowback water from its hydraulic fracture stimulation operations. The decision is based on the following two influencing factors, which are explained in more detail below:

- Uncertainty as to the rate of flowback, potentially leading to an increase in duration of operation; and
- Only a small volume of the flowback water would be treated.

The process of electrocoagulation treatment can only be considered if flowback water returns to surface at a suitable and sufficient rate. Although the flowrate of the hydraulic fracture cannot be confirmed until the hydraulic fracture has taken place, Third Energy has taken the decision to remove any ambiguity over the timing of its operations by using fresh water for each hydraulic fracture stimulation.

It is anticipated that approximately 30%-50% of the hydraulic fracture fluid used in the operation will flow back to surface. Notwithstanding the ambiguity associated with flowback rates, the overall volume of flowback water is not significant. Likewise, the number of HGV movements required to transfer the waste to an Environment Agency permitted waste water treatment facility is not significant, having been assessed as part of the Environmental Impact Assessment.

Whilst the removal of flowback water treatment from the Waste Management Plan represents a change in the hierarchy of waste, the permit application did maintain the option to either treat and reuse the flowback water or remove it from the site for subsequent offsite treatment at an Environment Agency permitted waste water treatment facility.

This letter simply confirms that Third Energy has taken the decision in advance to remove flowback water treatment from the Waste Management Plan.

Yours Sincerely

