Environmental Permitting (England and Wales) Regulations 2010

Environment Agency Specification

Environment Agency Specification made under conditions 3.2.1, 3.2.2, 3.2.3 and 4.2.2 of permit number: EPR/KB3098DE

Issued to: Third Energy UK Gas Limited

for the accumulation and disposal of radioactive waste at or from:

Kirby Misperton A Wellsite, Off Habton Road, Kirby Misperton, North Yorkshire YO17 6XS

Permit conditions

The relevant permit conditions are:

3.2.1 If required by the Environment Agency, the operator shall

(a) take such samples and conduct such measurements, tests, surveys, analyses and calculations, including environmental measurements and assessments, at such times and using such methods and equipment as the Environment Agency specifies; and

(b) keep samples, provide samples, or dispatch samples for tests at a laboratory, as the Environment Agency specifies, and ensure that the samples or residues thereof are collected from the laboratory within three months of receiving written notification that testing and repackaging in accordance with the relevant legislation are complete.

4.2.2 The operator shall supply such information in relation to:

(a) the disposals of radioactive waste; and

(b) the samples, tests, surveys, analysis and calculations, environmental monitoring and assessments undertaken under condition 3.2.1;

in such format and within such timescales as the Environment Agency may specify in writing.

Issued by: *Team Leader Radioactive Substances Regulation*
(Authorised to issue such documents on behalf of the Environment Agency)

Date:

Radioactive substances monitoring

You should monitor any aqueous radioactive waste to determine:

- the total disposals (off-site transfer), other than NORM contaminated well stimulation fluid remaining in situ, per month of Ra-226, Ra-228 (which may be inferred via Ac-228 measurement), Pb-210 and Po-210
- the total activity in accumulation on the last day of each month of Ra-226 and Ra-228

The results of your measurements and analysis should be available, wherever practicable, before aqueous waste is removed from the site.

You should monitor any solid radioactive waste to determine:

- the total disposals per month of Ra-226, Ra-228, Pb-210, Po-210 and Th-228

The results of your measurements and analysis should be available before solid waste is removed from the site.

Analyses should be carried out by suitably accredited laboratories.

We set limits and specify monitoring for radioactive substances from on-shore oil and gas operations, in line with the requirements of the off-shore environment and emissions monitoring system (EEMS).

For **aqueous** radioactive wastes, you will need to;

a) measure the volume(s) of aqueous radioactive waste(s) disposed of each month by each separate disposal route and take at least one representative sample of each waste form disposed of.

b) analyse each sample for

- Ra 226
- Ra 228[1]
- Po 210
- Pb 210

c) calculate

- for each disposal route, the total volume and activity for each radionuclide in (b) above, disposed of each month;
- for aqueous waste the concentration [Bg/l] of each radionuclide above on a rolling 12 monthly average
- the maximum accumulated volume and activity of each radionuclide during each month.

[1] this may be done by monitoring of Ac228

For **solid** radioactive wastes, you will need to;

- analyse each consignment for
    - Ra 226,
    - Ra 228,
    - Th 228,
    - Pb 210
    - Po 210
- determine the volume of the waste and the activity of each radionuclide in (a) above, in each consignment of solid waste removed from the site

Analysis of your radioactive wastes must be carried out by a laboratory which is accredited by the United Kingdom Accreditation Service (UKAS).

You must obtain the results of analyses before removing radioactive wastes from site