Environment Agency permitting decisions

Variation

We have decided to issue the variation for Melton Ross Lime Works operated by Singleton Birch Limited.

The variation number is EPR/BL8805IZ/V008

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

This variation authorises the following changes to the Permit:

- Two further combined heat and power (CHP) combustion units are added (Gas Engines No 7 and No 8) for the use of resultant biogas from the anaerobic digestion (AD) plant.
- The digestate drier is upgraded from four modules to seven modules to dry additional AD digestate into a higher value fertiliser.
- The addition of a third digestate tank to increase the AD plant throughput.

Structure of this document

- Annex 1 the decision checklist

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/ notice.

Aspect considered	Justification / Detail	Criteria met Yes
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility A revised and updated plan 'Phase 3 EA Layout – Issue 2' of the AD Plant and associated equipment, detailing all emission points to air was submitted in response to the request for further information dated 03/07/2015. This plan is referenced in Table S3.2 of the Permit.	✓
Site condition report	The operator has provided a description of the condition of the site. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED– guidance and templates (H5).	✓
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat . One Site of Special Scientific Interest (SSSI) is located within 2,000m of the installation, Kirmington Pits. Three Local Wildlife Sites (LWS) are located within 2,000m of the installation: Melton Ross Quarry, Melton Ross Road Verges and New Barnetby Road Verges.	✓

Aspect considered	Justification / Detail	Criteria met Yes
	We consider that the application will not affect the features of the site and habitat. We have not formally consulted on the application. The decision was taken in accordance with our guidance.	
Environmental Risk Assessment and operating techniques		
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, all emissions may be categorised as unlikely to be environmentally significant.	✓
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes: • How to comply with your environmental permit: additional guidance for the cement industry (EPR 3.01a) • How to comply with your Environmental Permit: additional guidance for combustion activities (EPR 1.01) • Sector guidance note 5.06: recovery and disposal of hazardous and non-hazardous waste. • Standard rules SR2012 No.12 Anaerobic digestion facility with the use of resultant biogas The following operating techniques are proposed by the operator to minimise environmental impact of the activities carried out at the installation: • Acoustic enclosure around the CHP unit • Ammonia suppression system on the digestate drier (sulphuric acid) The proposed techniques/ emission levels for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility.	✓
The permit conditions		
Incorporating the application	We have specified that the applicant must operate the permit in accordance with descriptions in the application,	✓

Aspect considered	Justification / Detail	Criteria met Yes
	including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table in the permit.	
Emission limits	We have decided that emission limits should be set for the parameters listed in the permit. We have set limits for Oxides of Nitrogen, Carbon Monoxide, Sulphur Dioxide and Total Volatile Organic Compounds for the two additional CHP stacks (emission points A31 and A32). The limits mirror those within our Standard Rules SR2012 No.12 Anaerobic digestion facility with the use of resultant biogas. The operator has completed a H1 risk assessment for the emission to air from the eight CHP units. Eight stacks for the exhaust from the combustion of biogas were screened for nitrogen dioxide, carbon monoxide and sulphur dioxide using H1. Our guidance document H1 Annex F states that process contributions can be considered insignificant if: • the long term process contribution is <1 percent of the long term environmental standard • the short term process contributions is <10 percent of the short term environmental standard. Using the guidance both carbon monoxide and sulphur dioxide screen out as an insignificant emission to air from the combustion of biogas generated from the anaerobic digestion process. Nitrogen dioxide does not screen out as insignificant for short or long term process contributions against the relevant standards. However taking the existing background concentration of 19 ug/m^3 (Defra, 2012) for nitrogen dioxide into account and the conservative nature of H1 we are confident that there is sufficient headroom such that there will not will not be any breach of the relevant air quality standard for long term nitrogen dioxide. The operator has completed a H1 risk assessment for the	✓

Aspect considered	Justification / Detail	Criteria met Yes
	emission to air from the upgraded digestate drier. Seven stacks were screened for Ammonia and Particulates (PM_{10}) using H1. Using the guidance both Ammonia and Particulates (PM_{10}) do not screen out as insignificant process contributions against the relevant standards. Taking the existing background concentration of 20.89 ug/m^3 (Defra, 2012) for Particulates (PM_{10}) and 2.7ug/m^3 (Apis, 2010-12) for Ammonia into account and the conservative nature of H1 we are confident that there is sufficient headroom such that there will not will not be any breach of the relevant air quality standard for either short or long term particulate or ammonia emissions. We have not set limits for Particulates and Ammonia from the digestate drier.	
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified. These monitoring requirements have been imposed in order to annually monitor emission to air from the two additional CHP engine stacks (emission point A31 and AQ32). The monitoring requirements mirror our standard rules requirements for SR2012 No.12 Anaerobic digestion facility with the use of resultant biogas. Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.	✓
Reporting	We have specified reporting in the permit. Reporting form Air 1 has been updated for this permit variation to include the new emission points to air and renumbering of some of the existing emission points to air to accommodate the changes introduced by this variation, as detailed on drawing 'Phase 3 EA Layout – Issue 2'	✓
Operator Competence		
Environment management	There is no known reason to consider that the operator will not have the management systems to enable it to	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
system	comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	