Environment Agency permitting decisions

Variation

We have decided to issue the variation for Leyland Waste Treatment Facility operated by Global Renewables Lancashire Operations Limited.

The variation number is EPR/EP3397EA/V004.

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

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

Structure of this document

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation, web publicising and newspaper advertising responses

Key issues of the decision

This variation increases the height of the biofilter stacks as well as incorporating the operation of a regenerative thermal oxidiser (RTO) for the treatment of the most malodorous vent stream.

Simultaneously the permit activities are updated in line with the Environmental Permitting (England and Wales) Regulations (Amendment) 2013, where some operations that were previously regulated as waste operations transition to being a waste installation.

The variation is intended to reduce the odour impact of the facility.

The H1 risk screening tool has been used to assess the point source emissions. Detailed modelling files have been submitted and show there will be no significant impacts and that the site will be able to operate within benchmark limits.

Air Quality

The operator has submitted detailed air quality modelling files. The applicant's modelling was audited by the our Air Quality Monitoring and Audit team. An assessment of the information contained within these files has shown that the site will able to operate within the benchmark emission limits and will therefore cause no significant deterioration to air quality. The site is not within a designated air quality management area. Ambient air monitoring will also take place regularly to establish quantities of bacteria (gram negative; aspergillus fumigatus) upwind, downwind and at the nearest sensitive receptor.

Odour

The applicant carried out an odour assessment to predict odour impact from the site. The odour modelling files have shown that there is unlikely to be any problems with odour leaving the site. Additionally, all activities that have the potential to generate odour will be carried out in a building operated under negative pressure, thus reducing the amount of air escaping any building unabated. The ventilated air will be diverted to biofilter stacks or the RTO.

The odour assessment was carried out using two scenarios citing a concentration of 1500 ou/m³ of odorous air with a flowrate of 445000 m³/hr from the original release points at the increased elevation of 25 m, with the second scenario including a further 90000 m³/hr of odorous air (at 500 ou/m³) from the new release point associated with the RTO.

We do not accept that this risk assessment represents an acceptable emission of odorous air from the facility on the basis that odour complaints continue to be received from the facility and the initial permit application (and planning application) was based on an emission limit of 500 ou/m³. No variation application has been received requesting an increase in the volumetric flow or concentration of odorous air from the facility. A clarifying statement was received from the applicant as part of the Schedule 5 response indicating that they were not seeking an increase in odour unit concentration.

An odour management plan was submitted with the application, but this did not include the operation of the RTO. An updated odour management plan was provided by the applicant that included the operation of the RTO. However we have not accepted this management plan because it is does not include all of the odour control techniques that the operator will have in place. We are however satisfied that, because the RTO is being installed to reduce the impact of odour, the necessary odour control techniques can be included in a further revision of the odour management plan. The techniques we expect to be included in the revised odour management plan relate to process monitoring (temperature and residence time) and confirmation that the RTO will run continuously not just on VOC's.

Noise

The applicant carried out a noise assessment and used noise modelling software SoundPLAN (version 7.1Sound) to predict the noise impact from the

proposed facility. SoundPLAN implements the attenuation calculation scheme detailed in ISO 9613-2. The noise modelling provided only accounts for levels at the site boundary and results are consistent with planning requirements. However, no assessment has been made of the potential impact of noise on any receptors beyond the site. We have therefore included an improvement condition in the permit to carry out such an assessment within 2 months of issue of this variation notice.



Annex 1: decision checklist

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

Justification / Detail	Criteria
	met Yes
The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.	√
The web publicising and newspaper advertising responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
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.	~
ctives	
All applicable European directives have been considered in the determination of the application.	✓
The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓
The application is within the relevant distance criteria of a European Site – Ribble and Alt Estuaries Special Protection Area. The combined thermal input of the biogas engines (4MW) and regenerative thermal oxidiser (1.5MW) is greater than 5MW. This is based on a resource usage of natural gas of 700,800m³/year and a caloric value of natural gas of 39.6MJ/kg.	✓
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Aspect considered	Justification / Detail	Criteria met
Constacted		Yes
	application and its potential to affect the site as part of the permitting process. We consider that the application will not affect the features of the site.	
	We have not formally consulted on the application. The decision was taken in accordance with our guidance.	
Environmental	Risk Assessment and operating techniques	
EIA	In determining the application we have considered the Environmental Statement.	✓
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 environmentally insignificant.	
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The technique proposed is the incorporation of a thermal oxidiser to destroy the malodorous components in the air stream. 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 ensure compliance with relevant BREFs and BAT Conclusions, and ELVs deliver compliance with BAT-AELs. This is inline with our guidance in EPR5.01: 'The Incineration of Waste'. We consider that the emission limits included in the installation permit reflect the BAT for the sector.	
The permit con	ditions	
Updating permit conditions during consolidation.	We have updated previous permit conditions to those in the new generic permit template as part of permit consolidation. The new conditions have the same meaning as those in the previous permit.	✓

Aspect	Justification / Detail	Criteria
considered		met
		Yes
	The operator has agreed that the new conditions are acceptable.	
Improvement conditions	Based on the information on the application, we consider that we need to impose improvement conditions.	√
	We have imposed improvement condition reference IC3 to ensure that the appropriate measures are in place to prevent annoyance from noise.	
	We have imposed improvement condition reference IC4 to ensure that appropriate measures are in place to prevent the generation of sulphur dioxide by sulphuric acid, from the acid scrubber, entering the RTO.	
Incorporating the application	We have specified that the applicant must operate the permit in accordance with descriptions in the application, 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.	✓
	The following substances have been identified as being emitted in significant quantities and ELVs have been set for those substances: Ammonia, Carbon Monoxide, oxides of Nitrogen, Non-Methane Volatile Organic Compounds and Sulphur Dioxide.	
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 ensure the efficient operation of the thermal oxidiser unit.	
	We made these decisions in accordance with our guidance, EPR 5.01: 'The Incineration of Waste'.	
	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.	

Aspect considered	Justification / Detail	Criteria met Yes		
Reporting	We have specified reporting in the permit. These are unchanged from the previous variation.	✓		
Operator Competence				
Environment management system	There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓		



Annex 2: Consultation, web publicising and newspaper advertising responses

The application was publicised on our website and in the local newspapers, the Leyland Guardian and the Lancashire Evening Post.

No consultation responses were received.

