

 <p>Environmental Protection Agency An Ghníomhaireacht um Chaomhnú Comhshaoil</p>	<b>OFFICE OF ENVIRONMENTAL SUSTAINABILITY</b>
<b>ENVIRONMENTAL LICENSING PROGRAMME</b>	
<b>TO:</b>	Micheál Lehane, Director
<b>FROM:</b>	Michelle Reddy, Inspector, Environmental Licensing Programme
<b>DATE:</b>	10 May 2021
<b>RE:</b>	Technical Amendment to Industrial Emissions Licence Register Number: W0287-01, held by Ormonde Organics Limited, Ballinalacken, Attanagh, Co. Kilkenny.

The Agency received a request on 10 February 2020 from Ormonde Organics Limited, Licence Reg. No. W0287-01, to technically amend their Licence. The request relates to the proposal to change the reference condition for oxygen content to 15%, from the existing 3%, when monitoring emissions to air from the combustion of biogas in the onsite combined heat and power plant (CHP). As per Condition 4.2.2 of Licence W0287-01, the standard conditions for monitoring air emissions from combustion sources are: Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels, 6% oxygen for solid fuels”.

## 1. Background

Ormonde Organics Limited was granted a licence; Reg. No. W0287-01 on 13 October 2016 for an installation located at Killowen, Portlaw, County Waterford. The installation is licenced under 11.4 of the First Schedule to the EPA Act 1992 as amended.

A technical amendment request was previously submitted by the licensee on 7 February 2018, where the licensee proposed to change the reference condition of oxygen content to 5%, from the existing 3%, when monitoring emissions to air from the combustion of biogas in the onsite combined heat and power plant. This technical amendment request was refused by the Agency on 20 January 2020 as it was demonstrated that compliance with the relevant air emission limit values would not be achieved by moving to a 5% reference oxygen condition standard.

Ormonde Organics Limited is authorised to operate a composting and anaerobic digestion installation at Killowen, Portlaw, County Waterford under IE (Industrial Emissions) Licence register number W0287-01 and is permitted to accept 40,000 tonnes of non hazardous biodegradable waste per annum.

## 2. Technical Amendment request

On the 10 February 2020 the Agency received a request for a Technical Amendment of IE Licence Reg. No. W0287-01, to change the wording in Condition 4.2.2 in order to allow for the oxygen reference condition for emissions to atmosphere to be increased from 3% to 15%.

Condition 4.2.2 states "From combustion sources: Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels, 6% oxygen for solid fuels".

The licensee states that it "considers that the reference to 3% oxygen for gas fuels in Condition 4.2.2 as applied to the gas engines to be a clerical error as it is not consistent with the requirement of the Industrial Emissions Directive (2010/75/EU)". Further, the licensee "requests the wording of the condition be altered to bring it into conformance with the requirements of Part 2 of Annex V of the Directive...".

### **3. Consultation with the Office of Environmental Enforcement (OEE)**

I have consulted with the OEE Team, in relation to this technical amendment request. The OEE confirmed that the proposed amendment cannot be accommodated under the existing licence. OEE has confirmed that there are no legal proceedings in train in respect of this licence.

### **4. Assessment**

At the installation organic waste and biomass is offloaded and fed via the feeding system to anaerobic digestion (AD) tanks. The contents of the tanks are continuously agitated and maintained at an optimum temperature for the process, which takes approximately 50 days. The outputs from the process are biogas and digestate. The biogas is scrubbed to reduce the levels of ammonia and hydrogen sulphide before it is used as a fuel in two gas engines (AEP-1 and AEP-2) in the CHP plant. The heat and electricity generated in the CHP is used on-site or is exported to the national grid.

EPA licences require monitoring of emissions to atmosphere from combustion sources to be corrected to a standard reference condition for oxygen. In the existing licence W0287-01, reference oxygen conditions are defined according to the type of fuel utilised in the combustion system, i.e. Gas and Liquid fuels- 3% reference oxygen; Solid fuels- 6% reference oxygen. Therefore the 3% reference oxygen condition applies to the biogas fuel utilised in the CHP plant by Ormonde Organics.

It is noted that the licensee has breached the licenced emission limit value (ELV) of 1000 mg/m<sup>3</sup> for Total VOCs (incl. CH<sub>4</sub>) at the CHP gas engine air emission point reference No. AEP-2 during monitoring in 2020 on the following dates: 20/10/2020, 02/09/2020, 28/05/2020, 26/03/2020 and 16/01/2020. The ELV for TVOC at AEP-2 was also breached on several occasions in 2019 and 2018 on the following dates: 25/09/2019, 18/06/2019, 20/03/2019, 20/11/2018, 13/09/2018, 27/04/2018 and 12/04/2018. It is noted that the CHP gas engine air emission point reference No. AEP-1, which has the same Emission Limit Values as AEP-2, has not been in breach of any licensed ELV. It is also noted that the licensee utilised a 5% reference oxygen condition standard when reporting all results. The compliance history demonstrates the consistent breaches of an ELV at AEP-2 are occurring and regularising an on going breach of a licence condition cannot be accommodated under a technical amendment.

Part 2 of Annex V of the Industrial Emissions Directive, which the licensee refers to, is only applicable to Large Combustion Plants (LCP) with a thermal input >50MW as set out in the scope of Article 28 of Chapter III of the Directive. The thermal input of the CHP plant at Ormonde Organics Limited is <50MW therefore Part 2 of Annex V is not applicable and a clerical error was therefore not made in relation to this in Condition 4.2.2. It is further noted

that, in the air dispersion model which was submitted with the initial licence application, the licensee utilised a 5% correction standard for oxygen and not 15%. Therefore, it has not been demonstrated that compliance with the relevant air emission limit values will be achieved in the event of a 15% correction standard for oxygen being used.

## **5. Recommendation**

I recommend that the requested amendment to change the oxygen reference condition to 15% in Condition 4.4.2. of the existing licence W0287-01 be refused.

Signed,



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Michelle Reddy  
Inspector  
Environmental Licensing Programme