



**Mooresfort,
Lattin,
Co. Tipperary**

**Tel: - 062 55385
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Environmental Protection Agency,
Licensing Department,
Johnstown Castle Estate,
Co.Wexford.

3rd March 2016

**RE: Industrial Emissions Activities Licence Application for Timoleague Agri Gen Ltd.,
Barryshall, Timoleague, Bandon, Co. Cork.Reg. No: P0968-01.**

Dear Sir/Madam,

I refer to your letter requesting clarification of further information dated 2nd September 2015 and subsequent letters in relation to same dated 14th January 2016 and 12th February 2016 which relate to the above Industrial Emissions Activities Licence Application for Timoleague Agri Gen Ltd. We here in attach our clarification response in the same numerical order.

I trust that this submission meets with your requirements.

Yours Sincerely,

Michael Sweeney
(Director – NRGE Ltd.)

086 – 8188904

1. In relation to the three district heating loops shown in Drawing No. 029 Rev. 4 please confirm:

- (i) **If it is proposed to put this infrastructure inclusive in particular of the exhaust boiler in place;**
- a) **If yes, provide an updated air dispersion model which includes the predicted impacts from the operation of the boiler (which as per the above drawing burns biogas to generate heat);**
- b) **If no, please confirm how it is proposed to deal with the heat generated at (i) the gas purification unit, (ii) the CHP engine, and (iii) the exhaust boiler**

NRGE LTD. RESPONSE

The process flow diagram indicates 3 heating loops identified as “Process Heating” and “District Heating”. The term District Heating in this particular application refers to heat utilisation other than the heat required for the process. There is a requirement for heat generated by the CHP Engine to be recovered heat in accordance with the Commissioner for Energy Regulation criteria for High Efficiency CHP. The proposal is to install an exhaust boiler as part of the water heating recovery system from the exhaust of the CHP unit and an auxiliary Boiler which will provide a means of maintaining process temperatures in the Digestion and Pasteurisation process in the event of the CHP Unit shutting down.

The auxiliary boiler capacity equates to the maximum heat generated from the CHP Unit and its utilisation is only a substitute heating source during scheduled servicing. The capacity of the CHP Unit is sized to utilise the entire quantity of biogas produced by the plant. Therefore there would not be sufficient biogas fuel to run the boiler when the CHP Unit is operational. Therefore there are no additional emissions impacts when the boiler is in service, as the CHP will be out of service.

To clarify, the Process Flow Diagram (most up to date drawing attached), is for the purpose of illustrating the Biogas Process, indicating the routes of manure, digestate, condensate and Biogas. The hot water loops with the heat meters syndicated illustrate the parts of the process where heat is emitted; the remaining heating icons indicate where heat is utilised.

2. Confirm if an effluent is generated from the gas scrubber tank. If an effluent is generated confirm how this will be managed and controlled.

NRGE LTD. RESPONSE

The Gas Scrubber is rinsed down periodically; the accumulated sulphur is diluted in the wash water (100 to 200 litres per flushing) and is pumped to the manure storage where the sulphide becomes a trace element in the final digestate which is recovered as an agricultural fertiliser.

In addition to the above please also provide an updated non-technical summary to reflect the information provided in your reply. The non-technical summary must meet the requirements of Section A of the Industrial Emission Licence Application form...

An updated Non-Technical Summary is attached.

Attachments

Attachment 1 – Drawing No 29 - Rev 4 - Flow Diagram

Attachment 2 – Non Technical Summary (revised)

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