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MM/07/4084L05Rev.1 24th October 2008

Administration, Licensing Unit, Office of Climate, Licensing & Resource Use, Environmental Protection Agency, Headquarters, P.O. Box 3000

Dear Sir or Madam,

RE: W0244-01 Waste Licence Application for Waterford WWTP

Response to Notice in accordance with Article 14(2)(ii) of the Waste Man (Licensing) Regulations

In accordance with Article 14(2)(b)(ii) of the Waste Man (Licensing) Regulations, please find enclosed additional information in relation to the gas burner for the excess gas produced by the digesters that is not required for the boilers.

Included are 2 no. drawings, one is a P&ID of the gas burner (Drawing C1197-1211) and the second is a diagram of the gas collection system (Drawing 28682-003-GS210). These should be viewed in conjunction with Drawing C1197-1024 and Attachment C1197-8418 (included with the previous response), which detail the overall process of gas production, storage and use.

With regard to the burner, the burner temperature is typically $1000 - 1100^{\circ}$ C at the nozzle, i.e. where the gas is burned. The exit temperature is typically $500 - 600^{\circ}$ C. The air is drawn in at the base of the burner; as the gas is released from the exit point, it draws air in from the atmosphere.

The typical composition of the gas before burning is 60 - 65% methane and 30 - 35% CO₂ (carbon dioxide), once the gas is burned, the end products are H₂O and CO₂. The retention time is not predictable, as the gas storage will depend on the amount of gas produced and on the the demand of the boilers for the gas produced.

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If you have any queries in relation to this response, please direct all formal enquires to Mr Ray Mannix of Waterford City Council. In addition, I would be happy to respond to any queries or questions.

Yours sincerely,

MAIREAD MORRISSEY

Senior Environmental Consultant

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