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Mr Denis Mullally  
Facility Manager  
ERAS ECO Limited  
Foxhole  
Youghal  
County Cork

16 December 2016

Reg No: W0211-02

Dear Mr Mullally

I refer to your application for a licence review.

I am to advise in accordance with Regulation 10(2)(b)(ii) of the EPA (Industrial Emissions) (Licensing) Regulations 2013, that the following information is required in support of the application under Regulation 9 of the Regulations:

**Discharge and emissions to surface water**

1. Provide in tabular format all monitoring results for effluent emissions at SE1 for the years 2014, 2015 and 2016.
2. Provide in tabular format all monitoring results for stormwater discharges at SW1 for the years 2014, 2015 and 2016.
3. Digestate is proposed for treatment in the on-site waste water treatment plant. Clarify why and under what circumstances this is necessary and why digestate has no beneficial use off-site.
4. In relation to the proposal to treat digestate in the waste water treatment plant, identify the following:
  - the nature and characteristics of the digestate;
  - the treatment objectives in the waste water treatment plant (in terms of pollutant removal); and
  - the effect of digestate on the effluent quality from the waste water treatment plant.
5. Provide a detailed description of the waste water treatment plant as built and currently (or as proposed to be) operated, its treatment stages and the objective of each stage.
6. In relation to discharges and emissions to surface water, the arrangements as described in the licence application document are not fully clear. For example,



the text of the application suggests that all discharges and emissions are carried by Irish Water sewer to surface water whereas drawing no. 15-193-02 (and the EIS) indicates that stormwater will discharge directly to the estuary. Also, drawing no. 15-193-02 appears to indicate that treated sanitary waste water will be discharged directly from the installation whereas the application documentation states that this treated effluent will be further treated in the process effluent waste water treatment plant.

Provide a drawing or schematic diagram, accompanied by explanatory text as necessary, that clearly shows and illustrates the following:

- all sources of stormwater and the route followed by stormwater through the installation's treatment and retention infrastructure, out to the storm sewer, foul sewer or drain and final discharge into the waterbody;
  - all sources of process effluent (and treated sanitary effluent if relevant) flowing into the waste water treatment plant;
  - the route followed by treated effluent from the waste water treatment plant to the Irish Water sewer and into the waterbody.
7. Table E.3(i) states that the sewage undertaker is Cork County Council. Clarify the ownership of all sewers or drains used to carry discharges or emissions from the installation.
  8. Drawing no. 15-193-03 provided in attachment E of the application shows emission point SE1 positioned on or in the stormwater retention tank and SW1 on or near the puraflo waste water treatment plant. State if this is correct or provide an amended drawing.
  9. Clarify the location(s) of SE1 and SW1 as discharge points (stated to be the same location) versus their notation and use as monitoring locations. Illustrate the respective locations on a drawing if necessary.
  10. Provide a comprehensive environmental assessment of the impact of the discharge of treated effluent (discharged via SE1) on water quality in the receiving water at the point of its discharge to the receiving water body. The assessment should consider the discharge of the treated effluent alone and cumulatively in combination with other relevant wastewaters discharged into the same water body.

#### **Air dispersion model report**

11. The heading "Volumetric airflow rate ( $\text{Nm}^3/\text{hr}$ )" in tables 3.1 to 3.4 appears incorrect. Please clarify.
12. A concentration of  $<1000\text{mg}/\text{Nm}^3$  is used for CO in table 3.1 whereas the existing licence limits CO emissions to  $150\text{mg}/\text{Nm}^3$ . Please clarify the reason for the increase and whether an increased limit value is sought for authorisation.
13. A volume flow rate of  $2,000\text{Nm}^3/\text{hr}$  is used in table 3.2 whereas table E.1(ii) of the application states the maximum flow rate is  $1,500\text{Nm}^3/\text{hr}$ . Please clarify and state what flowrate has actually been measured at the emission point.
14. A volume flow rate of  $29,980\text{Nm}^3/\text{hour}$  is used in table 3.3 whereas table E.1(ii) of the application states the maximum flow rate is  $29,980\text{Nm}^3/\text{day}$ . Please clarify and state what flowrate has actually been measured at the emission point.

15. The Medium Combustion Plant Directive specifies a limit value for sulphur dioxide. Please revise the air dispersion model to take into consideration SO<sub>2</sub> emissions at A1 (sludge dryer boiler stack).
16. The contour plots provided with the air dispersion model report show only the process contribution. Also the contour plots do not illustrate the process contribution values shown in table 4.1 of the report. Please explain these apparent discrepancies and in particular the lack of background concentration (and lack of illustration of total predicted ground level concentration including background) in the plots.
17. In relation to scenario 15, state what is at the 'nearest sensitive receptor'.
18. Revise the air dispersion model report on foot of any changes in the model's conclusions in accordance with the items listed above.

**Emissions to air and odour complaints**

19. State the rated thermal input value for the proposed CHP plant.
20. Identify the quantity and frequency of use of the following fuels in the steam-raising boiler: diesel and woodchip. State when and in what circumstances, other than start-up, diesel is used. It is noted that 328,068 litres of diesel is used annually – state where this is used.
21. State the characteristics and nature of the gaseous emissions from the condensate (cooling) tower and the waste water treatment plant. Provide evidence in the form of monitoring for key parameters before and after the biofilter that the biofilter removes the pollutants of concern in the gaseous emissions from the condensate (cooling) tower and the waste water treatment plant. Provide evidence that the biofilter is BAT for the treatment of these emissions. State what alternative treatment methods exist for removing the pollutants of concern in the gaseous emissions from the condensate (cooling) tower and the waste water treatment plant.
22. (a) Provide detailed information on the characteristics and nature of input gases for the proposed odour control unit (carbon filter) at A3.  
 (b) State how many air changes per hour in building 1 will be provided by an extraction rate of 15,000Nm<sup>3</sup>/hr and provide the calculation.  
 (c) State the source of extracted air from the AD plant and the basis for this design flow parameter (<15,000Nm<sup>3</sup>/hr).  
 (d) State why gas will need to be extracted from the AD plant for treatment.  
 (e) State why the carbon filter at A3 will be required for the treatment of air from building 2 and the sludge drying process (currently served by a biofilter at A2) and how and when it will be determined whether this is necessary.  
 (f) State how many air changes per hour will be provided by the design extraction rate (<15,000Nm<sup>3</sup>/hr) for building 2 and provide the calculation.
23. It is noted that odour complaints were received in 2014 and 2015. Describe the source of the odour nuisance and how the complaints were resolved. Identify all actual and potential sources of odour nuisance at the installation (existing and proposed). State how these sources are isolated to prevent odour nuisance or the recurrence of odour nuisance.

**Waste acceptance and treatment activities**

24. Elaborate on the detail of the waste treatment activities that are proposed to be carried out under the classes of activity listed in Annex II (Recovery Operations) of the Waste Framework Directive, namely R1, R3, R4, R5, R11, R12, R13.
25. Clarify whether any waste is or is proposed to be accepted at the installation for the purposes of treatment for disposal or storage pending disposal elsewhere. In particular, clarify the matter through identification of:
- any relevant waste disposal activities in class II of the First Schedule of the EPA Act 1992 as amended, and
  - any relevant waste disposal operations in Annex I of the Waste Framework Directive.

The proposed acceptance and treatment of landfill leachate would appear to be relevant in the context of this question. Also potentially relevant in this context are the entries in table H.3(i) that refer to mixed municipal waste, mixed C&D waste and treated sludges (no quantities quoted) that are all dispatched for deposit on land (D1 and D2).

26. In order to capture an accurate overall picture of activities (existing and proposed) at the installation, provide by way of reference to each of the treatment processes the following information:
- the name of each treatment process,
  - an appropriate 'D' or 'R' code for each process,
  - the capacity of each process (per hour or per day; tonnes or m<sup>3</sup> for storage operations),
  - the proposed maximum throughput of each process (same units as capacity),
  - the List of Waste codes to be applied to each of the processes,
  - a description of the outputs from each of the processes,
  - the classification (waste or not waste) of each of the outputs including List of Waste code,
  - the onward fate of each of the outputs.

The treatment processes to be addressed here should include:

- anaerobic digestion,
- sludge drying,
- leachate treatment,
- yeast and permeate drying,
- waste wood shredding,
- waste wood combustion,
- municipal waste processing,
- waste storage (various types and locations), and
- other processes as may be identified by you but not listed here.

27. Provide evidence to demonstrate there is sufficient storage and treatment capacity at the installation for the quantities of waste proposed in each building and/or treatment process.
28. State the maximum quantity of waste that is proposed to be stored at the installation at any one time.
29. Item 20 of the non-technical summary refers to a waste solvent treatment process. Please clarify this in the context of section E.1.B that states that no solvents will be accepted as waste or used at the installation.
30. Clarify the basis for stating that the spent yeast and whey permeate drying processes are not waste processes. Clarify what emissions will be generated from the drying process and how these emissions will be managed at the installation and whether there will be a unique emission point or points arising from the processes. Characterise any such emissions and carry out an environmental assessment of their potential impact.
31. Section B.3A of the application states that chapter IV of the Industrial Emissions Directive is not relevant. The application refers to the use of waste wood and recovered waste wood as fuel at the installation. Please clarify how and whether this waste wood is exempted from the requirements of chapter IV of the Directive and from the European Union (Waste Incineration Plants and Waste Co-Incineration Plants) Regulations 2013. Provide relevant technical information to justify any exemption.
32. Explain the basis for the sludge dryer operating 24 hours a day, and not least in the context of this being a change to existing operations. State the need for 24-hour operation and whether the operation is automatic or will require staff to be in attendance.

#### **Documents and drawings**

33. Section D.1 of the application refers to drawing no 12659-tek02-01. State the location of this drawing in the application documents or provide a copy of the drawing.
34. Attachment B.2 refers to 4 drawings, only two of which were included in the attachment. Provide copies of the omitted drawings.
35. Table E.1(ii) of the application is incomplete for emission point A4. Please complete and submit.
36. Table E.3(b) is incomplete and the column headed "Date" has incongruous data. Please revise the table and resubmit.
37. Provide a larger version of drawing no. 15-193-02 at a scale where the readability of the text is improved.

#### **Environmental Impact Statement**

38. State whether the EIS (dated December 2010) provided with the licence review application is the same EIS that was provided to Cork County Council as part of planning application 114123 and used by An Bord Pleanála in consideration of appeal PL04.239166.

#### **Appropriate Assessment**

39. The NIS suggests that improvements will be realised in the quality of discharged wastewater due to mixing/dilution with high quality treated wastewater from the

proposed AquaCritox process. Given that the latter process is not now proposed for development, state how the lack of availability of this dilution influence will amend the conclusions of the Natura Impact Statement and the overall assessment of the installation's impact on the adjacent SAC and SPA. If appropriate, provide an updated NIS that reflects the proposals being presented to the Agency as part of the licence review application.

**Financial provision**

- 40. The table in section D.2.2 of the application has been completed incorrectly in that there is no unit cost provided for the disposal of waste and no total closure cost provided. Also the correlation between tonnes and cubic metres is not evident. Please revise the table and resubmit.
- 41. Provide a fully-costed Closure, Restoration and Aftercare Management Plan and an Environmental Liabilities Risk Assessment that reflect the activities at the installation proposed for licensing in this licence review.

**Baseline report**

- 42. The baseline report in attachment 1.4 of the application appears incomplete. Please provide a complete baseline report that meets the requirements of Regulation 9(2)(n) of the Regulations.

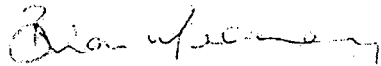
In addition to the above please also provide an updated non-technical summary to reflect the information provided in your reply.

The requested information should be submitted to the Agency within 10 weeks of the date of this notice, in order to allow the Agency to process and determine your application.

In the circumstances, you should make arrangements to have the required documents (1 signed original and 1 copy in hardcopy format, and 2 copies of all files in electronic searchable PDF format on CD-ROM) submitted to the Agency. Your response to this request should be directed to Grainne Oglesby, Administration Officer, Office of Environmental Sustainability.

It should be noted that the eight-week period within which the Agency is to decide the proposed determination will commence on the day on which this notice has been complied with.

Yours sincerely



Brian Meaney  
Environmental Licensing Programme  
Office of Environmental Sustainability