• **NRW require you to submit information describing the standards and measures to be implemented, in order to control the risk of pollution from the changes proposed to your process. This should include an assessment against Best Available Techniques (BAT) to explain how you will comply with relevant indicative BAT for your sector. Please provide details of your operational techniques as well as an updated C3 form with this question answered.**

During 21/22 Tremofa food waste facility underwent an NRW led permit review with regards to demonstrating the site met BAT requirements. This involved reviewing the sites processes and procedure and updating where required. These have been submitted to the NRW site office and the majority have been accepted and closed out (H1 sewer discharge assessment to accepted).

The following assessment and details relate to the BAT Tables and requirements that potentially may be impacted by the variation for the addition of the biogas boiler and liquid waste tank.

Currently the biogas boiler is in place but not operational and the liquid waste tank is not in place/use – this will be a future development at site.

The following site processes and procedures have been identified that relate to the changes in the variation – some of the procedures will not require updating, where updating is required, we have highlighted and request that a pre operation measure is put in place.

Bat table 2

- **PART A - waste characterisation and pre-acceptance procedures**
  A site-specific Liquid waste pre-acceptance procedure will be in place. Before waste is accepted to site a customer must complete a waste information form detailing the process generating the waste, waste composition and EWC code and submit a sample for analysis.
- **Part B** - **implement waste acceptance procedures –** A site specific procedure for liquid waste will be in place detailing on site sampling and analysis to confirm the waste can be accepted.
- **Part C - waste tracking system and inventory –** Current WWOE (3) 05 Weighbridge Procedure covers the requirements for waste tracking. Time, date, DoC, weigh will all be recorded as per the site procedures and reported via the quarterly retuns.
- **Part D - output quality management system –** The site is PAS110 accredited – WWOE (02) 01 PAS110 Management System Description, provides details on the system that is in place. This is audited externally as required to maintain PAS110 accreditation
- **Part E - Ensure waste segregation –** food waste will be handled and stored separately to the liquid waste. Specific site procedures will be in place for accepting and handling liquid waste. No Hazardous waste will be accepted, pre acceptance testing will assess suitability for treatment through the Anaerobic Digestion process. Mainly high COD strength food based liquid waste.
- **Part F - waste compatibility prior to mixing or blending of waste –** Waste Pre acceptance and on-site waste acceptance procedures assess the waste is suitable for the AD process. Sample will be obtained before accepting the liquid waste and full analysis carried out to access its suitable to accept and will not inhibit the treatment process.

BAT 5 In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures.

The site procedures relating to the handling and transfer of the liquid waste will include the site-specific liquid waste acceptance procedures and the current site WWOE (3) 05 Weighbridge Procedure and WWOE (3)15 Spillage procedure which details how any spillages are handled.
The area where tankers will off load is contained by kerbing and the drainage sump in the area will capture contaminated rainwater/spillages.

BAT 19 – in order to optimise water consumption, to reduce the volume of wastewater generated and to prevent or, where that is no practicable, to reduce emissions to soil and water, BAT is to use appropriate combination of the techniques described within BAT 19 Table.

With reference to table 19 -

a. **Water Management** – Potable water supply is recorded and monitored, and unusual activity investigated. A rainwater harvesting system is in place and all water used for hosing down/clean-up is all captured and stored in a dilution tank for use in the process. Future planned action is to install a liquid waste tank to reduce the requirement for portable water to be used in the process.
b. **Water Recirculation** – Rainwater harvesting system and all drainage in the food hall directed to dilution tank, and water returned from Odour control unit to dilution tank**.**
c. **Impermeable surface** – The main bunded area where the process tanks are located, and where the liquid waste tank will be located, is impermeable and all clean surface water is directed to the rain harvesting system. If there is a spillage within the bund, there is an agreement DCWW to potentially dispose to sewer once tested and DCWW agree to the discharge. If any spillages or contaminated surface water cannot go to sewer the wastewater will be tankered to a suitable waste disposal site.
d. **Techniques to reduce the likelihood and impact of overflows and failures from tanks and vessels** –bioreactors/pasteurises – future liquid waste tank are all located in the main bund. The liquid waste tank will have level sensors to prevent over filling of the tank.
e. **Segregation of water streams –** Clean surface water is contained and used in the process, washdown water is also captured and stored in a dilution tank.
f. **Adequate drainage infrastructure –** The tanker bay for the liquid waste tank is a kerbed/contained area and there is a drainage sump in the area to collect spillages/contaminated rainwater.
g. **Design and maintenance provisions to allow detection and repair of leaks –** The liquid waste tank and associated pipework will be above ground within the bunded area. As part of the preventative site maintenance visual inspection will take place of the assets. The bunded area has sensors which detect leeks and generate alarms.

Bat 21 – in order to prevent or limit the environmental consequences of accidents and incidents, BAT is to use all of the techniques described within BAT 21 table

a. **Protection measures – malevolent acts, fire/explosion, emergency** – As part of the site IMS system - WWOE (3) 38 Out of Hours security procedure, WWOE (3) Emergency response procedure, WWOE (03) 03 Fire Evacuation Procedure
b. **Management of incidental/accidental emissions -** WWOE (3) Emergency response procedure, WWOE (3) 15 Spillage procedure

c. **Incident/accident registration and assessment system –** WWOE participated in the wider DCWW electronic assure system that logs, reports and analyses all aspects of H&S incidents, including safety conversations, incidents, near misses**,** Hazard interventions. These involve logging the details of incidents, who was involved, resulting actions, and internally analysed as a company to inform H&S issues

BAT 22 - In order to use materials efficiently, BAT is to substitute materials with waste.

The site uses waste material to produce gas and generate electricity, and a digestate product that can be used for land conditioning. Part of this variation is to add a liquid waste storage tank, to reduce the use of portable water in the process.