

4. Monitoring

4a. Describe the measures you use for monitoring emissions by referring to each emission point in Table 2 above. This document includes an assessment to how the standards in BS EN 15259 are met.

Point source emissions to air

All monitoring (where required) is conducted in accordance with MCerts Environment Agency's Monitoring Certification Scheme. It provides the framework for businesses to meet the Environment Agency's quality requirements. The frequency of current emissions monitoring is undertaken in accordance with Table S3.1 of the environmental permit reference FP3137GF or as otherwise agreed in writing with the Environment Agency (**Document reference WWPSE1**). Sample points are identified in line with M1 guidance and in conjunction with an MCerts accredited external contractor.

New point source emissions to air (document reference WWPSEAP1)

The operator proposes to reposition the existing auxiliary flare to serve the CHP engines. This will be located adjacent to an additional new flare to be installed to serve the gas to grid infrastructure (A4).

A new purpose designed carbon filter will be installed to replace the existing carbon filter to treat extracted channelled air from the waste reception and process building with a new emission stack at approximately 12.7 metres high (A5). See Odour Dispersion Modelling **document reference WWOEM1**.

Air from the existing headspace of Digestate Storage Tank 1 is currently extracted through to a containerised woodchip biofilter. This will now be replaced with an acid scrubber. Air from the headspace will be extracted through to an acid scrubber for treatment prior to dispersion to air via a 4 metre emissions stack.

This same new acid scrubber will also treat extracted channelled air from a new purpose built sealed digestate screening room (A6) housing a Borger separator. See Odour Dispersion Modelling **document reference WWOEM1**. Treated air will then emit to air via a 4 metre stack.

The below ground sump within the waste reception building is no longer used for the temporary storage of feedstock and for digester material return. As such, the cockle biofilter formerly treating extracted air from the sump is no longer required and has been isolated and decommissioned as agreed with the Environment Agency. This point source emission to air can be removed from the permit (A7). See **document references WWBGS1 & WWBGSEA1**.

2 new boilers will burn biogas from the RWBT, Digesters 1 and 2, and both Pasteurisers to provide heat for Digesters 3, 4 and 5 for gas to grid generation. Both boilers will be positioned inside the existing pump room each equipped with their own 8 metre high emission stack to air to aid dispersion. See Odour Dispersion Modelling **document reference WWOEM1**.

New PRVs will be installed on the RWBT, all five Digesters and both Pasteurisers.

Point source emissions to water (other than sewer) and land

In accordance with Table S3.2 of environmental permit reference FP3137GF the only listed emissions to surface water excluding sewers is for the discharge of uncontaminated site surface water from roofs and non-operational areas as shown as W1 on the site plan in Schedule 7 to a field drainage ditch through a reed bed soakaway. This permitted discharge is for visual monitoring of uncontaminated site surface water. This includes clean surface water from roofs, or from areas of the site that are not being used in connection with storing and treating waste which can be discharged directly to surface waters, or to groundwater by seepage through the soil via a soakaway.

Currently rainwater captured within the secondary containment area is put through the treatment process. The Sump Inspection and Release Procedure procedure highlights the inspection and sampling procedure for the sump and pond prior to release of captured rainwater to ensure contaminated water is not released from site.

New point source emission to water (other than sewer) and land (document reference WWPSEWP1)

The operator wishes to treat captured rainwater from within the secondary containment area prior to discharge to the existing onsite attenuation pond (see application from part C6). Captured rainwater will be pumped to an above ground 140m³ water storage tank (currently known as a FOG tank). Treatment is to take place in the form of aeration and the possible addition of an ammonia reducing agent (if required) within the tank prior to discharge to the pond (subject to visual assessment and ammonia testing).

Emissions to sewers, sewage treatment plants or other transfers offsite

There are no permitted emissions to sewers, sewage treatment plants or other transfers offsite listed in environmental permit reference HB3138AU. There are no new proposed emissions to sewers, sewage treatment plants or other transfers offsite as part of this permit variation application.

Emissions to land

There are no permitted emissions to land listed in environmental permit reference HB3138AU. No emissions to land take place. There are no new proposed emissions to land proposed as part of this permit variation application.

Emissions to groundwater

There are no permitted emissions to groundwater listed in environmental permit reference HB3138AU. No emissions to groundwater take place. There are no new proposed emissions to land as part of this permit variation application.