Permitting decisions

Bespoke permit

We have decided to grant the permit for Sale WwTW Sludge Treatment Facility operated by United Utilities Water Limited.

The permit number is EPR/EP3239JR.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision making process. It:

- highlights key issues in the determination
- summarises the decision making process in the decision checklist to show how all relevant factors have been taken into account
- shows how we have considered the consultation responses.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

Key issues of the decision

1. **Introduction**

   The Application is for a plant for thickening of sewage sludge. The plant will take sludge from the adjacent Waste Water Treatment Works (WWTW) and also from other plants operated by United Utilities.

   Sludge will be received by pipeline from the WWTW to the sludge wet well. Sludge from other plants will be delivered by tanker into the wet well via a mobile screen. Sludge from the wet well will be pumped via an underground pipe line to the 3 storage tanks. Each tank has storage capacity of 660 m^3. The storage tanks will be connected to a carbon filter odour control unit (OCU) that will vent via a stack. Sludge from the tanks will be pumped to a mobile centrifuge where it will be thickened from <3% dry solids (DS) to >25% DS. The centrate will be transferred back into the head of the WWTW. A mobile diesel generator (~0.3MW) will be used to power the centrifuge and conveyor. The thickened sludge will be transferred by conveyor into a trailer for removal from site; the sludge will be sent for digestion at another facility.

The thickening process will not be in continual use. It will only be operated as a contingency when existing sludge thickening facilities are nearing capacity. The mobile screen, centrifuge and conveyors will be removed from site when not in use.

2. Containment

The sludge storage and treatment operations sits within a bunded area (consisting of kerbs with an impermeable surface. The area drains to a sealed drainage system back to the WWTW. There are a number of unsealed areas of ground near to the activity. The Applicant has committed to sealing these areas. We have set IC1 to ensure that the improvement are carried out. The sludge storage tanks are above ground, made of glass-fused-to-steel. This material is designed to have the strength and flexibility of steel combined with the corrosion resistance of glass.

The tanker discharge area is a concrete apron. Tankers reverse onto the apron and discharge to the wet well using a flexible hose. The concrete apron drains to the sludge wet well. The Applicant has identified improvement works to improve the containment of the tanker area including the use of sleeping policemen and improved kerbing. We have set IC1 to ensure that the improvements are carried out.

Diesel, for the generator, is stored in a twin walled fuel bowser, situated within the bunded centrifuge area.

3. Odour

The Applicant assessed the risk of odour and prepared an odour management plan (OMP). The key features of odour control are:

- The storage tanks will be connected to a carbon filter odour control unit (OCU) that will vent via a stack. An elevations diagram shows that the stack height is ~ 30 m high. The OCU is subject to a planned preventative maintenance regime.
- The tanker discharge area can connect to the OCU if required.
- The centrifuge is a sealed system.
- Transfer of thickened sludge by conveyor to the trailer is recognised as a potential odour source. However inspections have shown that the odour is very close to the unit.
- No odour complaints were received during the trial of the thickening process. No odour complaints from the WWTW over the last 2 years.
- Trailers will be partially sheeted during loading and fully sheeted during transport.
- Regular checks on equipment and planned preventative maintenance.
- Daily sniff testing and in response to concerns of complaints.

The OMP also includes:

- Use of odour masking sprays or temporary OCUs in the event of OCU malfunction.
- Maintenance activities avoided when wind is towards receptors.
- Activities reduced in the event of electricity failure and delivery of emergency generator.
- The risk assessment lists actions that will be taken in the event of various scenarios that could cause odour.

4. Noise

The Applicant stated that the treatment process is not inherently noisy and that the generator will be situated at a position ~ 350 m from the nearest houses. The generator was stated to be <1 MW thermal input. The unit for the trial was rated at 325 kVA which equates to <300 kW. Our experience is that such generators typically are rated at about 70 dB(A) at 7 m away. Our checks show that the nearest residential property is ~ 280 m away from the location of the generator. Noise levels reduce by 6 dB for every doubling of the distance, so at 280 m the noise level due to the generator would be ~ 38 dB (A) and not likely to be discernable. In addition the nearest houses are the other side of a main road (A 6144) reducing the risk of any noise issues due to the sludge thickening process.

5. Emissions to air

There are two point source emissions to air.

A1 – odour control unit stack. This abates ait vented from the sludge storage tanks. The impacts from this are discussed in section 3 above.

A2- emissions from the diesel generator.

The generator is small at ~ 300 kW thermal input, fired on low sulphur diesel. The residential receptors are residential properties located ~280 m away. At this distance we are satisfied that there will not be a significant impact from a unit of this size. There are footpaths closer to the installation, the closest being ~130 m away. Given the size of the generator we are satisfied that there is unlikely to be a significant impact from the generator at the receptors.

Impacts at ecological sites were screened out using AQTAG 14. AQTAG 14 has the following screening thresholds.

Size of individual combustion Process (MW)	Distance to European site (km)	Basis
>50	<10	Appendix 7 criteria (included for completeness)
20-50	<2	Criteria applied to Part B PPC installations in local authority guidance
5 - 20	<0.5	Combustion process below Part B threshold
<5	0	No assessment required due to size of combustion plant

Based on these screening distances, “This installation is not considered ‘*relevant’* for assessment under the Agency’s procedures which cover the Conservation (Natural Habitats &c.) Regulations 1994 (Habitats Regulations). This was determined by referring to the Agency’s guidance ‘AQTAG014: Guidance on identifying ‘*relevance’* for assessment under the Habitats Regulations for installations with combustion processes.’

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. The application was publicised on the GOV.UK website. We consulted the following organisations: • Public Health England • Director of Public Health • Trafford Council • Food Standards Agency • Health and Safety Executive The comments and our responses are summarised in the consultation section.
Operator	
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.
The facility	
The regulated facility	We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN 2 'Defining the scope of the installation', Appendix 1 of RGN 2 'Interpretation of Schedule 1', guidance on waste recovery plans and permits. The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.
The site	
Extent of the site of the facility	The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. The plan is included in the permit.

Aspect considered	Decision
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.
Biodiversity, heritage, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process. We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified. We have sent a habitats risk assessment form to Natural England for information. The decision was taken in accordance with our guidance.
Environmental risk assessment	
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator’s risk assessment is satisfactory.
Operating techniques	
General operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility. The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.
Operating techniques for emissions that screen out as insignificant	Emissions of combustion products from the diesel generator have been screened out as insignificant, and so we agree that the applicant’s proposed techniques are BAT for the installation.
Odour management	We have reviewed the odour management plan in accordance with our guidance on odour management. We consider that the odour management plan is satisfactory.
Permit conditions	
Raw materials	We have specified limits and controls on the use of raw materials and fuels. 0.1% sulphur for the diesel
Waste types	We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility. We are satisfied that the operator can accept these wastes for the following reasons:

Aspect considered	Decision
	• they are suitable for the proposed activities • the proposed infrastructure is appropriate • the environmental risk assessment is acceptable.
Improvement programme	Based on the information on the application, we consider that we need to impose an improvement programme. See key issued section for further details.
Emission limits	We have decided that emission limits are not required in the permit.
Reporting	We have specified reporting in the permit under table S4.2 'annual production /treatment' for the amount of sludge treated per year.
Groundwater	Due to ongoing appeals the groundwater monitoring condition was not included in this permit. This is in line with other UU permits – Runcorn and Blackburn
Operator competence	
Management system	There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions. The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Technical competence	Technical competence is required for activities permitted. The operator is a member of an agreed scheme. We are satisfied that the operator is technically competent.
Relevant convictions	The Case Management System and National Enforcement Database has/have been checked to ensure that all relevant convictions have been declared. Relevant convictions were found and declared in the application. We considered relevant convictions as part of the determination process.
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit. Paragraph 1.3 of the guidance says: "The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the

Aspect considered	Decision
	delivery of the protections set out in the relevant legislation." We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections. We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation

Responses from organisations listed in the consultation section

Response received from Public Health England
Brief summary of issues raised
Recommend that the permit controls odour. No significant concerns over health
Summary of actions taken or show how this has been covered
Permit conditions and an odour management plan will control odour