

Permitting Decisions - Variation

We have decided to grant the variation for **Empire Treatment Works** operated by **Veolia ES (UK) Limited**.

The variation number is **EPR/XP3037SE/V009**.

The variation is for the addition of an additional treatment tank (designated as 'T5' in the Application, an enclosed 80m capacity cylindrical tank, linked to the existing scrubber and emission point at A16) and associated mixer unit (mixer 4, which will also be fully enclosed and connected to a scrubber and emission to air at point A6; it will also remove the issue associated with conveyance of treatment residues) to the existing APCr treatment process which is present in the permit, as a hazardous waste physico-chemical treatment Activity. This will be carried out via a phased Improvement Programme, which will also see emissions point A6 ultimately replaced by a three-phase scrubber emissions point, A18.

In addition to the substantial variation to the APCr treatment process, the Applicant has sought to add healthcare wastes to the permit for a waste transfer Activity. This includes both hazardous and non-hazardous waste codes, where the wastes will be stored in a bespoke clinical waste building on the site, prior to their treatment off site. The healthcare waste storage bins will be washed and disinfected off site. There will be some repackaging of hazardous and non-hazardous wastes within the clinical waste building under both an installations Activity (S5.3 Part A(1)(a)(iv)) and a Waste Operation (for non-hazardous wastes).

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

- summarises the decision making process in the decision considerations section to show how the main 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 and the variation notice.

Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The comments and our responses are summarised in the [consultation responses](#) section.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

- Walsall Council (Environment Department);
- United Kingdom Health Security Agency (UKHSA); and
- The Health and Safety Executive (HSE).

The comments and our responses are summarised in the [consultation responses](#) section.

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 RGN2 'Defining the scope of the installation' and Appendix 1 of RGN 2 'Interpretation of Schedule 1'.

The site

The operator has provided a plan which we consider to be satisfactory.

These show the extent of the site of the facility.

Site condition report

The operator has provided a description of the condition of the site, which we consider is not satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.

The report provided with this Application is dated from 2007 and the site has undergone significant changes to the installation and Activities since that time. There was evidence of historic contamination present at the site, given the changes in Activities and potential for disturbance/mobilisation of contaminants in the ground and/or groundwater an update should be submitted to the Environment Agency for approval.

We have advised the operator what measures they need to take to improve the site condition report.

Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

There are a number of SSSI Sites and a single SAC presenting within 3.5km of the site. These SSSIs include Swan Pool and the Swag, Daw End Railway Cutting, Stubber's Green Bog and Jockey Fields. The SAC present is the Cannock Extension Canal.

There are also a number of Local Wildlife Sites present within the screening distance of the site.

The emissions all screen out from the H1 Assessment for ecological risk – see next section for results.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have not consulted Natural England.

The decision was taken in accordance with our guidance.

Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility

The Operator has provided an assessment for all emissions potentially emanating from the Activities on site affected by the proposed variation; Noise and vibration, Odour, Dust and other emissions to air.

The operator's risk assessment is satisfactory.

For risks to amenity and of acidification, change in nutrients, toxic contamination and siltation all the relevant determinands (from which each of the risks would arise) have been screened out as per the H1 Screening Assessment results carried out by the Operator, which are shown here:

Air Impact Screening Stage One									
Screen out Insignificant Emissions to Air									
This page displays the Process Contribution as a proportion of the EAL or EQS. Emissions with PCs that are less than the criteria indicated may be screened from further assessment as they are likely to have an insignificant impact.									
Number	Substance	Long Term	Short Term	Long Term			Short Term		
		EAL	EAL	PC	% PC of EAL	> 1% of EAL?	PC	% PC of EAL	> 10% of EAL?
		µg/m3	µg/m3	µg/m3	%		µg/m3	%	
1	Ammonia (human he)	180	2,500	0.00110	0.000609	No	0.0289	0.00116	No
2	Particulates (PM10) (-	50.0	-	-		0.278	0.555	No
2	Hydrogen chloride	-	750	-	-		0.137	0.0182	No
3	Particulates (PM10) (40.0	-	0.0106	0.0264	No	0.278	-	
3	Hydrogen sulphide	140	150	0.00406	0.00290	No	0.107	0.0714	No
4	Sulphur Dioxide (15	-	266	-	-		0.138	0.0518	No
5	Nitrogen Dioxide	40.0	200	0.00335	0.00837	No	0.0882	0.0441	No
6	Chlorine	-	290	-	-		0.414	0.143	No
7	Ammonia (ecological	1,000	-	0.00110	0.110	No	0.0289	-	
8	Nitrogen Dioxide (Ec	30.0	75.0	0.00335	0.0112	No	0.0882	0.118	No
9	Sulphur Dioxide (1 H	-	350	-	-		0.138	0.0393	No
10	Sulphur Dioxide (24 I	-	125	-	-		0.138	0.111	No
11	Sulphur Dioxide (Ecc	10.00	-	0.00522	0.0522	No	0.138	-	
14	Sulphuric acid	10.00	300	0.00116	0.0116	No	0.0306	0.0102	No

Based on the results of the screening assessment provided, there is no likely significant effect to the receptor from the PPP and aforementioned proposals. The Environment Agency concurs with the conclusions and the screening carried out at the Installation.

The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment supplied by the operator and reviewed by ourselves, all emissions may be screened out as environmentally insignificant.

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 Appropriate Measures for Healthcare Waste and for Chemical Wastes are considered to be relevant to the Activities present on site; both have been discussed in the Application Documents (Supporting Statement Appendix F – BAT Assessments).

Additional Operating Techniques related to the cylinder processing Activity (AR7) have been added to Table S1.2, following their approval by the Environment Agency following the discharge of Pre-Operational Conditions 1 to 4.

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 to air of:

- Ammonia;
- Particulates (PM10);
- Hydrogen Chloride;
- Hydrogen Sulphide;
- Nitrogen Dioxide (NO₂);
- Sulphur Dioxide (SO₂);
- Chlorine; and
- Sulphuric Acid.

have been screened out as insignificant (see section above with screening results), and so we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

We consider that the emission limits included in the installation permit reflect the BAT for the sector.

National Air Pollution Control Programme

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting emission limit

values in line with technical guidance we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

Fire prevention plan

We haven't requested a Fire Prevention Plan at this time, but we will request one in the future if we consider the site poses a risk of fire.

Raw materials

We have specified limits and controls on the use of raw materials and fuels.

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:

- they are suitable for the proposed activities
- the proposed infrastructure is appropriate; and
- the environmental risk assessment is acceptable.

We made these decisions with respect to waste types in accordance with the Healthcare Waste Appropriate Measures.

Pre-operational conditions

The existing Pre-operational Conditions in the permit have been retained as incomplete from the previous variation.

An additional Pre-Operational Condition has been added to the permit to enable a phased approach to the replacement of various elements for the APCr treatment plant on site. This Pre-Operational Condition has been designated PO5 and will allow the following:

- The operation of 'Trial Mixer 4';
- The phased replacement of emissions point A6 (scrubber unit) with point A18 (a three-stage scrubber);
- The installation of 'New Mixer 1' and removal of 'Trial Mixer 4';
- The removal of the old open conveyors, Mixers 1-3 and emissions point A6;
- The extension of the ash bay and relocation of 'New Mixer 1'; and

- The installation and operation of 'New Mixer 2' – projected as complete in June 2025.

With the phased commissioning and removal of these items of plant, the Operator has been required to submit confirmation to the Environment Agency at each stage and then undertake monitoring and further compliance.

The completion of this Pre-Operational Condition will be linked to the Improvement Condition below (IP22 in the permit) which will require reporting and verification that the proposed approach to reconfiguring the treatment plant has been successful and is commensurate with the conclusions and modelling in the H1 Assessment, submitted to the Environment Agency in February 2022 as part of the Application.

Improvement programme

The Improvement Conditions have been removed from this permit as discharged; Table S1.3 has been retained in this permit as a record to show the conditions have been completed and/or removed.

An additional Improvement Condition (IP22) has been included in the permit for the purposes of confirming the phased replacement and reconfiguration of the APCr treatment plant has been successful and the modelling/conclusions of the H1 Risk Assessment are verifiable. Monitoring of the plant's emissions has been prescribed following the installation of emissions point A18 and following each of the installations of each of the 'new mixers' 1 and 2, which will be submitted to the Environment Agency as part of the reporting for the Improvement Programme.

The dates for compliance are tied into the Pre-Operational condition added to the permit in this variation (PO5), giving the Operator four months to provide the Environment Agency a report to confirm completed commissioning of the new plant.

Emission limits

Emission Limit Values (ELVs) and equivalent parameters or technical measures based on Best Available Techniques (BAT) have been added for the following substances:

- **Particulates** (limit of 5mg/m³);
- Total Volatile Organic Compounds [**TVOC**] (no limit set – screen out); and
- Ammonia [**NH₃**] (no limit set – screen out).

We added these parameters and limits due to the variation to emissions points A6, A16 and A18 (as part of the Improvement Programme), in accordance with the requirements of waste treatment BAT.

Monitoring

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified:

- **Particulates** (Every Six Months to BS EN 13284-1);
- Total Volatile Organic Compounds [**TVOC**] (Every Six Months to BS EN 12619); and
- Ammonia [**NH₃**] (Every Six Months to EN ISO 21877).

These monitoring requirements have been included in order to comply with the requirements for BAT.

We made these decisions in accordance with the requirements of the waste treatment BAT.

Monitoring parameters related to emissions points A15 and A17 in Table S3.1 for the cylinder processing have been updated to reflect agreement made with the Area Enforcement team, with monitoring agreed in writing on 14th August 2015 following the discharge of Pre-Operational Conditions 1 to 4.

Reporting

We have not changed the requirements for reporting in the permit for this variation, other than those mentioned in relation to the Pre-Operational Condition 5 and Improvement Condition 22.

Management system

We are not aware of any 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 the CIWM/WAMITAB scheme.

We are satisfied that the operator is technically competent.

Previous performance

We have assessed operator competence. There is no known reason to consider the applicant will not comply with the permit conditions.

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 variation.

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 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

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section

Response received from the **UKHSA**.

Brief summary of issues raised: The Consultee sent a list of observations about the proposed Activities on site.

- Whilst the Installation is located in a primarily industrial area, it is in an Air Quality Management Area for NO₂, with sensitive receptors located just over 500m to the South and West of site, and others located between 1 and 2.5km in other directions.
- Considerations of emissions to Air and Water are the main concern, with modelling provided based on the monitoring results from January 2019 to October 2021. The EA should be satisfied that these results and no modelling for abnormal conditions are appropriate and that no other chemical emissions should be considered in the modelling.
- There were previous issues with Odour from the site; the regulator should be satisfied these will be managed in future and adequately mitigated.
- The UKHSA confirmed that they have no significant concerns about the proposals of the variation to the permit assuming compliance with BAT.

Summary of actions taken: Response sent via email, 23rd May 2023, to the UKHSA to confirm the EA is satisfied with the information and modelling provided regarding emissions from the Installation. Issues around odour have abated and the proposals for the variation are suggested to be improvements in mitigating any odorous emissions from the site, with the additional mixing tank and tank being enclosed, abated via scrubbers and the former items of plant having an automated cleaning function, increasing the effectiveness of cleaning.