

Permitting Decisions - Environment Agency Initiated Variation

We have issued an Environment Agency initiated variation for Carr Crofts Waste Treatment Facility operated by Oates Environmental Limited following a review of the permit in accordance with Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1).

The variation number is EPR/YP3832WS/V006.

The permit variation was issued on 14/10/2026.

We consider in reaching this 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.

Permit Review

The Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2016 (EPR), regulation 34(1), to periodically review permits.

Article 21(3) of the Industrial Emissions Directive (IED) also requires the Environment Agency to review conditions in permits to ensure that they deliver compliance with relevant standards, within four years of the publication of updated decisions on Waste Treatment Best Available Techniques (BAT) Conclusions.

We have reviewed the permit for this regulated facility and varied the permit to make a number of changes to reflect relevant standards and best practice. These changes principally relate to the implementation of our technical guidance:

- Chemical waste: appropriate measures for permitted facilities - Guidance - GOV.UK and the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.
- Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities - Guidance - GOV.UK and the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.
- Waste temperature exchange equipment: appropriate measures for permitted facilities - Guidance - GOV.UK and the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.

- Non-hazardous and inert waste: appropriate measures for permitted facilities - Guidance - GOV.UK and the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.
- Healthcare waste: appropriate measures for permitted facilities - Guidance - GOV.UK and the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.

In this decision document, we set out the reasoning for the variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the operator in the operation and control of the plant and activities of the installation (operating techniques) against our technical guidance listed above.

As well as considering the review of the operating techniques used by the operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

Purpose of this document

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

- explains how the Environment Agency initiated variation has been determined;
- summarises the decision-making process in the decision considerations section to show how the main relevant factors have been taken into account;
- highlights key issues in the determination.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

Key issues of the decision

Emissions to sewer

Permits for waste treatment installations, undertaking the treatment of water-based liquid waste, are required to implement the BAT AELs set out in the Waste Treatment BAT Conclusions. This is set out in Defra's guidance '[Industrial emissions Directive EPR Guidance on Part A installations](#)' *'Setting ELVs where Article 15(3) applies'*.

The Waste Treatment BAT Conclusions were published in 2018, the implementation dates for BAT-AELs compliance for existing sites has now passed (4 years after publication of BAT Conclusions).

Our regulatory approach to emissions to sewer (indirect discharges to water) is not specific to the waste treatment sector; we follow this approach when permitting any type of installation that indirectly releases polluting substances into water, following the guidance 'UK Cross-Cutting Interpretation Guidance and Permitting Advice on the Best Available Techniques (BAT) Conclusions published under the Industrial Emissions Directive (IED) Version 2 – July 2024'.

The BAT-AELs apply on issue of a permit as the timescale for existing site compliance has passed and no derogation application was made. We have produced RPS 371 to mitigate impact on relevant installations.

We have therefore included BAT-AELs into the permit in Table S3.2 which apply on issue of this permit.

These BAT-AELs are subject to table notes and condition 3.5.1 and compliance will be assessed by the Environment Agency in line with RPS 371.

Operator representations on emissions to sewer

During the determination, Oates Environmental Limited raised technical representations on the application of BAT AELs and monitoring requirements for indirect emissions to sewer.

We considered these representations alongside the Core Guidance, Defra's guidance on setting emission limit values where Article 15(3) applies, and the requirements of the Industrial Emissions Directive to achieve a high level of protection of the environment as a whole.

For indirect releases to water, the regulator may take account of downstream waste water treatment where an equivalent level of protection is guaranteed and where this does not lead to higher levels of pollution. We do not consider that the information provided demonstrates that these tests are met for the relevant pollutants.

Yorkshire Water's confirmation does not state that Knostrop WwTW abates the relevant hazardous pollutants. It confirms that the discharge is not expected to affect the WwTW permit compliance and notes that the works is not designed to actively treat those pollutants. Our position is that toxic metals are not effectively treated by Knostrop WwTW. They are not removed or destroyed. They will partition into sludge, which will later be spread to land, or pass through the WwTW and remain in the water environment. This does not demonstrate equivalent protection of the environment as a whole.

In correspondence the operator referenced acceptable levels of zinc in drinking water. As mentioned above, we are obligated to implement BAT-AELs. We have also explained that the potential environmental effects of zinc are not limited to human health. Elevated zinc concentrations can affect aquatic organisms, including freshwater macroinvertebrates, and may contribute to deterioration in the receiving water environment. Although Knostrop WwTW does not currently cause an EQS exceedance in the river, it contributes to deterioration towards the EQS.

We have therefore decided not to disapply the BAT AELs under Note 5, and not to reduce the monitoring requirements under Note 6 at this stage. BAT AELs and monitoring requirements have been included in Table S3.2 to ensure emissions are controlled and compliance can be demonstrated at the point where the discharge leaves the installation.

Environment Agency led variation – permit review

We have carried out an Environment Agency initiated variation to the permit following a permit review as required by legislation to ensure that permit conditions deliver compliance with relevant legislative requirements and appropriate standards to protect the environment and human health.

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. Article 21(3) of the IED requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

The BAT Conclusions for Waste Treatment (the BREF) was published on 17 August 2018 following a European Union wide review of BAT, implementing decision (EU) 2018/1147 of 10 August 2018. Relevant existing facilities were expected to be in compliance with the BAT Conclusions within 4 years (i.e. by August 2022).

On 18 November 2020, Chemical waste: appropriate measures for permitted facilities guidance was published on gov.uk. This technical guidance explains the standards that are relevant to regulated facilities with an environmental permit to treat or transfer chemical waste, providing relevant standards (appropriate measures) for those sites and incorporating the relevant requirements of the BAT Conclusions.

The following Appropriate Measures guidance is also applicable to the permitted activities being varied under this permit review and has been included in the operating techniques table.

- Healthcare waste: appropriate measures for permitted facilities - published 13 July 2020.
- Non-hazardous and inert waste: appropriate measures for permitted facilities - published 12 July 2021.
- Waste temperature exchange equipment (WTEE): appropriate measures for permitted facilities - published 13 July 2022.
- Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities – published 13 July 2022.

We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 18 November 2021 requiring the operator to provide information to confirm that the operation of their facility currently meets, or how it will subsequently meet, the standards (appropriate measures) described in our technical guidance.

The notice required that where the revised standards are not currently met, the operator should provide information that:

- Describes the techniques that will be implemented to ensure operations meet the relevant standards and by when, or
- Explains why they are not applicable to the facility in question, or
- Justifies why an alternative technique is appropriate and will achieve an equivalent level of environmental protection to the standards described in our guidance
- Confirms if they intend to cease operating any activity which would be in breach of the relevant new BAT Conclusion (BATC) after the compliance date, and the date by which they intend to cease operation;
- Confirms where there is a BAT-Associated Emission Level (BAT-AEL) specified in the BAT conclusion, which they will not comply with by the compliance date and they wish to continue operating, they should request a derogation.

The standards described in our technical guidance are split into 7 chapters:

- General management appropriate measures
- Waste pre-acceptance, acceptance and tracking appropriate measures
- Waste storage, segregation and handling appropriate measures
- Waste treatment appropriate measures
- Emissions control appropriate measures
- Emissions monitoring and limits appropriate measures
- Process efficiency appropriate measures

We have set emission limit values (ELVs) and monitoring requirements for relevant substances in line with our technical guidance and the BAT Conclusions for Waste Treatment, unless a tighter, i.e. more stringent, limit was previously imposed and these limits have been carried forward.

The Regulation 61 notice required the operator to confirm whether they could comply with the standards described in each of these chapters. Table 1 below provides a summary of the response received and our assessment of it. The overall status of compliance with the standards (appropriate measures) is indicated in the table as:

NA – Not Applicable

CC – Currently Compliant

FC – Compliant in the future (through improvement conditions set in permit)

NC – Not Compliant

In accordance with Article 22(2) of the Industrial Emissions Directive, the Regulation 61 notice asked the operator to provide a soil and groundwater risk assessment, along with a baseline report or summary report confirming the current state of soil and groundwater contamination, where listed activities are undertaken that involve the use, production or release of relevant hazardous substances.

The Regulation 61 notice also asked the operator to confirm whether they operate a medium combustion plant or specified generator (as per Schedule 25A or 25B of EPR 2016) and whether they had considered how their operations could be affected by climate changes (e.g. through a climate change adaptation plan).

Our assessment of the responses received from the operator regarding soil and groundwater risk assessment, medium combustion plant and specified generators, and consideration of climate change are also summarised in Table 1.

Regulation 61 Response

The Regulation 61 notice response from the operator was received on 04/04/2022.

We considered that the response did contain sufficient information for us to commence determination of the permit review. Although we were able to consider the Regulation 61 notice response generally satisfactory at receipt, we needed more information in order to complete our permit review assessment. We requested this by email, and the operator provided further information on 07/07/2025, 06/08/2025 and 03/10/2025. We made a copy of this information available on our public register.

Table 1 – Summary of our assessment of the operator's Reg 61 response

Appropriate measures	Compliance status	Assessment of the installation's compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator
General management appropriate measures	CC	The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste pre-acceptance, acceptance and tracking appropriate measures	CC	The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste storage, segregation and handling appropriate measures	CC	The operator confirmed that they currently meet the requirements of all appropriate measures in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste treatment appropriate measures	CC	The operator has provided updated information on the waste treatment process. This has been incorporated into Table S1.2 of the permit as operating techniques. Supporting process flows and treatment protocols were submitted as part of the Regulation 61 response. The operator undertakes physico-chemical treatment of hazardous and non-hazardous liquid wastes. The treatment process includes pre-mixing, settlement, phase separation, equalisation and ultrafiltration. Waste streams may be combined as part of this treatment process. We have assessed this approach against the Waste Treatment BAT Conclusions and the Chemical Waste Appropriate Measures. We consider that the combination of waste streams is integral to the treatment process and is not carried out for dilution. The process is designed to separate and remove pollutants, with residues retained for appropriate off-site disposal. We are satisfied that this approach is consistent with BAT, provided the treated effluent complies with the emission limits and monitoring requirements specified in the permit. Compliance with the relevant appropriate measures has been incorporated into the permit through the operating techniques specified in Table S1.2.

Emissions control appropriate measures	FC	Emissions from treatment and storage tank vents do not meet Waste Treatment BAT 14 and Chemical Waste Appropriate Measures point 6.1.1. The operator has not demonstrated that emissions are negligible or that equivalent techniques are in place for point source emission to air from tank 4 to tank 10 vents. The wastes handled have the potential to generate volatile organic compounds during storage and treatment. We consider these emissions to be significant. The permit has therefore been varied to require enclosure, extraction and abatement of emissions from these sources. Improvement Conditions IC2, IC4A and IC4B require the installation, operation and maintenance of appropriate abatement systems.
Emissions monitoring and limits appropriate measures	FC	The operator has not established a complete inventory of emissions to air as required by Waste Treatment BAT 3. Improvement Condition IC3 requires the operator to develop and maintain an emissions inventory and to quantify emissions from relevant sources. Emission limits and monitoring requirements have been included in the permit based on BAT- associated emission levels for the treatment activities carried out at the installation. The operator must demonstrate compliance with those limits through monitoring in accordance with the permit.
Process efficiency appropriate measures	CC	The operator has confirmed that they are able to comply with all appropriate items in the appropriate measures for process efficiency. Additional reporting has been added to the permit in Schedule 4 to capture the site's process efficiency.
Reg 61 requirement	Assessment of response received	
Healthcare waste appropriate measures	The operator has stated the following in their Regulation 61 response: • We comply with these requirements under appropriate measures Compliance with the appropriate measures of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.	

Non-hazardous and inert waste appropriate measures	The operator has stated the following in their Regulation 61 response: • We comply with these requirements under appropriate measures. Compliance with the appropriate measures of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste electrical and electronic equipment (WEEE) appropriate measures	The operator confirmed that they comply with the appropriate measure. Compliance with the appropriate measures of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste temperature exchange equipment (WTEE): appropriate measures	The operator confirmed that they comply with the appropriate measure. Compliance with the appropriate measures of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Soil and groundwater risk assessment	The operator provided a site condition report as part of the Regulation 61 response. A detailed assessment of this information was not required as part of this permit review. The permit requires periodic monitoring of groundwater and soil at 5-yearly and 10-yearly intervals in accordance with permit conditions.
Medium combustion plant and specified generators	The site operates a specified generator with a rated thermal input of less than 1 MW. This plant is permitted as a Directly Associated Activity and does not meet the threshold for regulation under the Medium Combustion Plant Directive. It is therefore not subject to emission limit values or monitoring requirements under that regime.
Climate change	Submission of a climate change risk assessment was not required within the scope of this permit review. Climate change risks are managed through the operator's environmental management system and will be assessed through ongoing compliance activities.
Summary of other changes made to the permit as a result of our assessment of the Reg 61 response	
Updated template conditions	We have updated the standard permit conditions in line with our standard permit template for this sector.

Review of waste codes for all activities.	We have removed the following EWC codes from Table S2.3 for the blending or mixing of hazardous waste: 11 01 05*, 11 01 06*, 11 01 07*, 20 01 14* and 20 01 15*. We consider these wastes are not appropriate for the authorised blending or mixing activity and could not be managed in accordance with the applicable technical standards. This decision has been made in accordance with the Waste Treatment BAT Conclusions and Chemical Waste Appropriate Measures guidance.
Removal of disposal code D13	We have removed disposal code D13 from the blending and mixing activities authorised under the permit. We consider that the blending and mixing of waste at this installation forms part of a treatment process aimed at recovery and does not constitute a disposal activity. The inclusion of D13 is therefore not appropriate for the activities carried out on site. This decision has been made in accordance with the Waste Treatment BAT Conclusions and Chemical Waste Appropriate Measures guidance.
Maximum storage duration	We have agreed to extend the maximum storage duration for specified wastes to 6 months. We consider this acceptable based on the nature and volume of wastes stored, the containment arrangements in place, and the inspection and management controls applied at the site. The change does not alter the nature or scale of the authorised activities. The extension also applies to oxidisers and aerosols. We have assessed this against the storage arrangements and consider that risks remain controlled where appropriate containment, segregation and inspection measures are implemented. Improvement Condition IC5 requires the operator to update and submit a revised fire prevention plan for approval. The plan must demonstrate that fire risks associated with the authorised storage arrangements are managed in accordance with Chemical Waste Appropriate Measures and Fire Prevention Plan guidance.
Operating techniques	The operating techniques have been revised to reflect compliance with the Waste Treatment BAT Conclusions and the relevant Appropriate Measures guidance. This includes Chemical Waste Appropriate Measures, Healthcare Waste Appropriate Measures, Non-hazardous and Inert Waste Appropriate Measures, WEEE Appropriate Measures, and WTEE Appropriate Measures, as incorporated within the permit.

Emission limit values and monitoring set for emissions to air	Emission limits and monitoring requirements have been included for emissions from treatment tanks 4, 5 and 6. Storage tanks 7, 8, 9 and 10 are subject to abatement requirements, but no emission limits have been set.
Improvement conditions and pre-operational measures	The following completed conditions have been removed from the permit: • Improvement Condition IC1, completed on 14/07/2020. • Pre-operational Measure 1 in Table S1.4A, completed on 22/10/2016. • Pre-operational Measure 1 in Table S1.4B, relating to the provision of a Trade Effluent Discharge Consent, completed on 14/12/2016. • Pre-operational Measure 2 in Table S1.4B, relating to the use of Yard 2 storage infrastructure, completed on 09/11/2023. These conditions have been completed and are no longer required within the permit.

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 Regulation 61 notice response that we consider to be confidential.

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

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', Appendix 1 of RGN 2 'Interpretation of Schedule 1'.

The site

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

This shows the extent of the site of the facility including the discharge points.

The plan is included in the permit.

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.

Changes to the permit conditions

We have varied the permit as stated in the variation notice.

Management plans

We did not review any management plan under the scope of the permit review. Under the conditions of the permit, where we consider that activities are giving

rise to pollution in the form of fugitive emissions, we will ask for the submission and implementation of a suitable management plan.

Improvement programme

We have included new improvement conditions to ensure that the permit complies with the appropriate technical guidance for this facility, Chemical waste: appropriate measures for permitted facilities. See Table 1 above.

Changes to EWC codes

We reviewed the list of wastes accepted by the operator in accordance with the scope of the permit review.

We have removed the following unsuitable EWC waste codes from Table S2.3 - blending or mixing of hazardous waste:

11 01 05*	pickling acids
11 01 06*	acids not otherwise specified
11 01 07*	pickling bases
20 01 14*	acids
20 01 15*	alkalines

This change ensures that the waste codes are aligned with the specific treatment activities and associated environmental controls, supporting compliance with BAT requirements and improved permit clarity.

Emission limits

Emission limit values (ELVs), based on Best Available Techniques-Associated Emission Levels (BAT-AELs) for waste treatment, have been set for point source emissions to air arising from the treatment of water-based liquid waste in tanks 4, 5 and 6. The requirements are:

- TVOCs: 20 mg/m³
- HCl: 5 mg/m³
- NH₃: No limit set; monitoring required

Emissions limits have been added for indirect emissions to sewer as a result of this variation based on Best Available Techniques – Associated Emission Levels (BAT-AELs) for Waste Treatment. This is explained fully in the Key Issues section under ‘Emissions to sewer’. The limits are as follows:

- Adsorbable organically bound halogens (AOX), 1 mg/l

- Arsenic (As), 0.1 mg/l
- Cadmium (Cd), 0.1 mg/l
- Chromium (Cr), 0.3 mg/l
- Copper (Cu), 0.5 mg/l
- Free cyanide (CN⁻), 0.1 mg/l
- Hexavalent chromium (Cr (VI)), 0.1 mg/l
- Hydrocarbon oil index (HOI), 10 mg/l
- Lead (Pb), 0.3 mg/l
- Mercury (Hg), 10 µg/l
- Nickel (Ni), 1 mg/l
- Zinc (Zn), 2 mg/l

Monitoring

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

- Total Volatile Organic Compounds (TVOCs)
- Hydrogen Chloride (HCl)
- Ammonia (NH₃)

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

- Adsorbable organically bound halogens (AOX)
- Arsenic (As)
- Benzene, toluene, ethylbenzene, xylene (BTEX)
- Cadmium (Cd)
- Chromium (Cr)
- Copper (Cu)
- Free cyanide (CN⁻)
- Hexavalent chromium (Cr(VI))
- Hydrocarbon oil index (HOI)
- Lead (Pb)
- Manganese (Mn)
- Mercury (Hg)
- Nickel (Ni)
- PFOA
- PFOS
- Zinc (Zn)

We made these decisions in accordance with Waste Treatment BAT Conclusions, Chemical Waste: Appropriate Measures for Permitted Facilities.

Reporting

We have added reporting in the permit for the following parameters:

- point source emissions to air specified in Table S3.1.
- point source emissions to sewer specified in Table S3.2.
- process monitoring specified in Table S3.3.

We have also added reporting of annual production/treatment of hazardous and non-hazardous wastes.

We made these decisions in accordance with Waste Treatment BAT Conclusions, Chemical Waste: Appropriate Measures for Permitted Facilities

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 100 of that Act in deciding whether to grant the variation of 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 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.