

Permitting Decisions- Environment Agency Initiated Variation

We have decided to issue an Environment Agency initiated variation for Fort Road operated by Medisort 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/QP3536TW/V007.

Permit Review

This 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 Best Available Techniques (BAT) Conclusions.

We have reviewed the permit for these regulated facilities 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 [Healthcare waste: appropriate measures for permitted facilities](#) 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.

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

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 must be in compliance with the BAT Conclusions within 4 years (i.e. by August 2022).

On 13 July 2020, Healthcare 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 healthcare waste, providing relevant standards (appropriate measures) for those sites and incorporating the relevant requirements of the BAT Conclusions.

We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 26/11/2020

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

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, 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 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.

The Regulation 61 notice response from the Operator was received on 12/03/2021.

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 a response on 15 March 2021, the information included:-

- Confirmation that waste is treated in the autoclaves for disposal and recovery – singles use instruments and WEEE is treated for recovery
- Confirmation of waste storage capacities and the maximum quantity of waste that can be stored at any one time (hazardous and non-hazardous)
- Confirmation that the treated/compacted floc is stored outside
- Confirmation that hazardous waste is also stored for recovery
- Confirmation that some healthcare wastes (18 01 09) need to repackaged into skips for incineration
- Confirmation the operator complies with emission control appropriate measures

A further request was made and the operator provided a response on the 17 November 2022, the information included:-

- Confirmation that the Coronalux plant has been disconnected from electricity and gas services and it will be removed from site as soon as practicable. In addition the request from the operator to remove the activity from the permit on 17 November 2022.

A further request was made and the operator provided a response on the 08 December 2022, the information included:-

- Lead foils from dental care are accepted under 15 01 04
- Confirmation that paper, cardboard and glass are stored in metal 1100's in the yard
- Confirmation of the effluent sources are from autoclaves, bin wash, hot well and boiler discharge.
- D001 Plan to show equipment layout and ground level storage.

- D0044 Plan to show emission points, foul sewer line, surface water line.

A further request was made and the operator provided a response on the 21 February 2023, the information include:-

- Confirmation that non-hazardous waste (18 01 04 and 18 02 03) is not treated in the autoclave.
- Confirmation that 09 01 02*, 09 01 03*, 09 01 05* and 09 01 08 wastes can be removed from the list of waste types permitted to be stored or repackaged.
- Confirmation that 16 02 11* and 16 02 12* wastes can also be removed.
- Confirmation that the shredder is used only for shredding waste following treatment in the autoclave.

We made a copy of this information available on our public register.

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	<i>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. Whilst the operator has confirmed they have an Odour Management Plan (OMP) it has not been agreed by the Environment Agency. An improvement condition IC3 has been included in Table S1.3 requiring the OMP to be submitted for written agreement. In addition a further improvement condition IC2 has been included to require the operator to submit a Fire Prevention Plan (FPP) because they wish to continue to store, treat and transfer Waste Electrical and Electronic Equipment (WEEE).</i>
Waste pre-acceptance, acceptance and tracking appropriate measures	CC	<i>The operator confirmed that they currently meet the requirements of all the appropriate measures in this section. The operator has included two referenced documents to support compliance E007.5i6 Waste Management Procedure and E007.4.1.1 i12 Pre-Acceptance Waste Audit Form in addition E007.5.9 i4 MediTrack Tracking provides details of the tracking process. 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.</i>
Waste storage, segregation and handling appropriate measures	CC	<i>The operator confirmed that they currently meet the requirements of all the appropriate measures in this section. The operator has included three referenced documents to support compliance E007.5i6 Waste Management Procedure, E005.4 Non conformance procedure, E007.4.1.1 i12 Pre-Acceptance Waste Audit Form and E007.5.9 i4 MediTrack Tracking 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.</i>
Waste treatment appropriate measures	CC	<i>The operator confirmed that they currently meet the requirements of all the 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. However the operator has not submitted an up to date H1 assessment. We have included IC1 in Table S1.3 to require the submission of a report that proposes a monitoring programme to characterise and assess emissions to air and water (including sewer) and, report on the results and conclusions of the monitoring and assessment undertaken. We have clarified that this should include emissions from the autoclaves (autoclave vacuum vent and autoclave door) and the shredder. In IC1 we have also required the operator to carry out a Best Available Techniques (BAT) assessment and review the facility's emissions particularly the autoclave vacuum vent, autoclave door and shredder against the specifically the Emission monitoring and limits appropriate measures and Emission control appropriate</i>

		<i>measures for point source and fugitive emissions to air in the Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.</i>
Emissions control appropriate measures	<i>FC</i>	<i>The operator did not answer this question on the Regulation 61 notice so no confirmation of compliance or explanation about why it is not applicable. For point source emissions to air, the appropriate measures require that waste treatment plants should be contained and emissions released via an abatement system. The operator has confirmed that there is an emission point from the autoclaves A1 which is a vacuum vent, it has been previously considered and it was concluded that abatement was not required. The justification is that the vacuum vent only emits clean air as all the waste loaded into the autoclaves is contained within bags. The vacuum is applied at the beginning of the autoclave cycle when the waste is contained. We consider this will need to be reviewed and have included an improvement condition IC1 in Table S1.3. The operator has confirmed effluent is generated from autoclaves, bin wash, hot well and boiler blow down and discharged to sewer via S1. There is also a below ground holding tank with a capacity of 2600 litres for effluent. We have also included IC1 in Table S1.3 to require the submission of a report that proposes a monitoring programme to characterise and assess emissions to air and water (including sewer) and, report on the results and conclusions of the monitoring and assessment undertaken. We have clarified that this should include emissions from the autoclaves (and the shredder).</i>
Emissions monitoring and limits appropriate measures	<i>FC</i>	<i>The operator has confirmed that emissions monitoring and limits are not applicable. We have included the emission monitoring and limits from the Healthcare waste: appropriate measures for permitted facilities in table S3.1 and S3.2. Alternative limits, or frequencies can be agreed in writing with the Environment Agency following the completion of IC1.</i>
Process efficiency appropriate measures	<i>CC</i>	<i>The operator confirmed that they currently meet the requirements of all the appropriate measures in this section.</i>
Reg 61 requirement	Assessment of response received	
Soil and groundwater risk assessment	<i>The Operator has chosen not to submit any baseline data so will be accepting that there is zero pre-existing contamination and accepting the risk that they may be required to clean up any pre-existing contamination when they surrender the permit.</i>	
Medium combustion plant and specified generators	<i>The boiler used to generate steam has a thermal input capacity of 2.14 MWth as it is an existing MCP, MCPD controls will be required by 1 January 2030, and the permit will be required to be varied to implement this closer to the time.</i>	

Climate change	<i>The Operator has not completed a climate change assessment. Climate Change adaption will be delivered through the Environmental Management System condition.</i>
Summary of other changes made to the permit as a result of our assessment of the Reg 61 response	
Removal of the Coronalux Plant – Activity A2 S5.3A(1)a ii) Pyrolysis of waste with subsequent chemical oxidation and pyrolysis of gas.	<p><i>Variation EPR/QP3536TW/V005 authorised a trial to treat clinical waste through pyrolysis, the pre-operational conditions were not completed and the plant was never fully operational.</i></p> <p><i>The operator requested that this activity is removed from the permit during this permit review and confirmed that the electricity and gas supplies to the plant have been disconnected and it will be removed as soon as practicable. We have removed the activity from the permit and all associated conditions and references.</i></p>
Waste Types	<p><i>We reviewed the waste types permitted to be treated in the autoclaves, there will be no treatment of offensive waste (18 01 04 and 18 02 03) the operator clarified the waste types were limited to:</i></p> <ul style="list-style-type: none"> <i>• 18 01 03* and 16 02 14 discarded WEEE medical equipment with infectious contamination e.g. blood analysers, centrifuges, equipment is sent to another facility where components that can be re-used/recovered are removed and then it is sent to Medisort for decontamination.</i> <i>• 18 01 03* and 16 02 16 components from discarded equipment with infectious contamination</i> <i>• 18 01 03* infectious waste not contaminated with chemicals or medicines including single use medical instruments</i> <i>• 18 02 02* infectious waste not contaminated with chemicals or medicines</i> <i>• 20 01 99 infectious waste, not contaminated with chemicals or medicines – municipal separately collected fractions, not from healthcare or research-related sources.</i> <p><i>The operator revised the waste types for accepted for storage and repackaging – they requested to remove the following waste as they no longer receive them.</i></p> <ul style="list-style-type: none"> <i>• 09 01 02* water based offset plate developer solutions,</i> <i>• 09 0103* solvent based developer solutions,</i> <i>• 09 01 05* bleach solutions and bleach fixer solutions,</i> <i>• 09 01 08 photographic film and paper free of silver or silver compounds.</i> <i>• 16 02 11* discarded equipment containing chlorofluorocarbons, HCFC, HFC</i> <i>• 16 02 12* discarded equipment containing free asbestos.</i>

	<p><i>The operator wished to continue to accept some WEEE wastes for storage and repackaging, and confirmed compliance with the WEEE appropriate measures and we have included an improvement condition requiring the submission (for written approval) of a Fire Prevention Plan.</i></p>
--	--

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