

Permitting Decisions- Environment Agency Initiated Variation

We have issued an Environment Agency initiated variation for Star Works Treatment Plant operated by Grundon Waste Management 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/YP3237SD/V004.

Permit Review

This Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2016, 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 this [regulated facility and varied the permit to make a number of changes to necessary 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](#).

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.

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 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 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 3(18) 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 15/05/2021.

We considered that the response did (did not) contain sufficient information for us to commence determination of the permit review. We therefore issued a further information request to the operator on 11/5/2021. Suitable further information was provided by the operator on 01/07/2021.

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 further information regarding (waste types) on 12/03/2025. 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	FC	<p>The operator has confirmed that they comply with all applicable general management appropriate measures other than the following relating to fire issues.</p> <p><i>2,4,8 – The site is manned 24-7 and any fires will be extinguished without the need for excessive fire water, so we do not need a fire water collection system.</i></p> <p>We have set an improvement condition (Table S1.3 IC4) for the site to submit a report that demonstrates the ability of the site to retain fire water on site in the event of a fire.</p>
Waste pre-acceptance, acceptance and tracking appropriate measures	CC	<p>The operator has confirmed that they comply with all applicable waste pre-acceptance, acceptance and tracking appropriate measures other than their quarantine storage procedure, which needed updating – this was confirmed.</p>
Waste storage, segregation and handling appropriate measures	FC	<p>The operator has confirmed that they currently comply with all applicable waste storage, segregation and handling appropriate measures other than in the following areas.</p> <p>The site is not currently in accordance with the offensive waste storage requirements for length of storage (set by the Healthcare Wastes: appropriate measures for permitted sites as stored for no longer than 7 days if outside, or for no longer than 14 days if stored in a building). An improvement condition (Table S1.3, IC1) has been set to ensure the site meets this requirement within 3 months.</p> <p>The external storage area does not have an impermeable surface or sealed drainage system, as required by the Healthcare Wastes: appropriate measures for permitted sites. An improvement condition (Table S1.3, IC2) has been set which requires proposals to improve the external storage areas to meet the required standard.</p> <p>Wastes stored externally at the site are currently held within vehicle trailers. This is contrary to the requirements of the Healthcare Wastes: appropriate measures for permitted sites, which does not allow storage within vehicles other than where they are being received for immediate offloading or prepared for imminent transfer (that is, they will be removed from site within 24 hours, or 72 hours if over a weekend). An improvement condition (Table S1.3, IC3) has been set to require the cessation of the use of trailers within 3 months to ensure the site meets this requirement.</p>

Waste treatment appropriate measures	CC	<p>The operator confirmed that they comply with all applicable waste treatment appropriate measures.</p> <p>During the review period, the operator confirmed that they had decommissioned their steam disinfection treatment plant (including pre-shredders, emissions abatement equipment and boiler), but that they wished to retain the activity on their permit, as their plans for the site may include a similar operation in the future.</p> <p>We have retained the treatment activity in the permit (and boiler DAA), but have set a pre-operational condition (Table S1.4, PO1) which requires the operator to submit a variation to demonstrate that prior to recommencement of the steam treatment activity, they meet the requirements of the Waste Treatment BAT conclusions, Healthcare Wastes: appropriate measures for permitted sites, and other appropriate measures guidance as applicable.</p>
Emissions control appropriate measures	FC	<p>The operator has confirmed that they comply with all applicable emissions control appropriate measures other than as outlined below.</p> <p>Measure 6.2, 5 - The storage operations are controlled in such a manner as to ensure there are no potential risks from odour.</p> <p>However following changes to the site regarding the decommissioning of the steam disinfection treatment plant (including pre-shredders, emissions abatement equipment and boiler), the Odour Management Plan (OMP) for the site is no longer in accordance with how the site operates. We have set an improvement condition (Table S1.3, IC6) for the operator to provide an up to date OMP for the site.</p>
Emissions monitoring and limits appropriate measures	CC	<p>The site had two emission points to air, one from the treatment plant activities and one the steam raising boiler. There is one emission point to foul sewer from the treatment process and associated activities (washing etc).</p> <p>The operator had confirmed that they comply with all the emission monitoring and limits. However, as stated above the operator has decommissioned the steam disinfection treatment process, but the activity (and boiler DAA) are retained on the permit. Emission limits and the necessary monitoring have not been set – these are subject to the pre-operational condition PO1. Any replacement equipment may have different emissions characteristics and therefore emissions and necessary monitoring would need to be reassessed.</p>
Process efficiency appropriate measures	CC	<p>The operator confirmed that they comply with the requirements of all appropriate measures in this section.</p>

Reg 61 requirement	Assessment of response received
Soil and groundwater risk assessment	<p>The operator responded that a site report detailing the condition of the land and, in particular identifying any substance in, on or under the land which may constitute a pollution risk is detailed in Appendix 2, Application Site Report (ASR), of the original PPC Permit Application.</p> <p>The Operator has not submitted any baseline data so they 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 the permit is surrendered.</p>
Medium combustion plant and specified generators	<p>The site has an existing medium combustion plant (MCP) comprising a natural gas-fired steam-raising boiler with a net thermal input approximately 2.8 MWth which is a DAA to the hydroclave thermal treatment process.</p> <p>However, as stated above the operator has decommissioned the treatment process, but the activity (and boiler DAA) are retained on the permit. Emission limits and the necessary monitoring have not been set – these are subject to the pre-operational condition PO1. Any replacement equipment may have different emissions characteristics and therefore emissions and necessary monitoring would need to be reassessed.</p>
Climate change	<p>Site is not in a flood risk area. Climate Change Adaptation will be delivered through the EMS condition and an improvement condition is not required.</p>
Summary of other changes made to the permit as a result of our assessment of the Reg 61 response	
Change	Reason for change
Changes to site-specific conditions	<p>The current permit for the site contains a number of non-standard conditions within the permit which added as a result of an appeal process. These are both outside of our template permit conditions for the healthcare waste sector as it stands and also concern issues that have been scrutinised for the site in the past at some length.</p> <p>We have therefore set out each condition below and show how each issue is now covered:</p> <p><i>2.3.7 Notwithstanding the operating techniques referenced in condition 2.3.1 the following restrictions shall apply to activities in the external storage area.</i></p> <p><i>(a) The total number of waste container movements into and out of the external storage area shall not exceed 5 in any day.</i></p> <p>2.3.7 (a) has been deleted. Limiting the number of container movements is related to the potential for noise disturbance and is specified in an improvement condition for submission of a Noise Management Plan (NMP) in Table S1.3, IC5.</p> <p><i>(b) Waste containers shall only be moved into or out of the external storage area between the hours of; 0700 – 1900 Monday to Friday and 0700 – 1200 Saturday and Sunday.</i></p> <p>2.3.7 (b) has been deleted. This requirement is related to noise</p>

	<p>disturbance and is specified in an improvement condition for submission of a Noise Management Plan (NMP) in Table S1.3, IC5.</p> <p><i>(c) Containers shall not be stacked on top of other containers.</i></p> <p>2.3.7 (c) has been deleted. The requirement to not stack containers on top of each other is now covered by the Healthcare waste: appropriate measures for permitted facilities guidance, Waste storage, segregation and handling appropriate measures section, paragraph 19. The operator has signed up to this aspect of the Healthcare waste: appropriate measures guidance.</p> <p><i>(d) Operating procedures will put in place to prevent and contain any spillage of waste from the containers. The condition of containers will be checked daily.</i></p> <p>2.3.7 (d) has been deleted. The requirements to have spillage prevention and containment measures, and daily checks on containers, are covered by the Healthcare waste: appropriate measures for permitted facilities guidance, Waste storage, segregation and handling appropriate measures section, paragraphs 31 and 32. The operator has signed up to this aspect of the Healthcare waste: appropriate measures guidance.</p> <p><i>(e) Containers will be removed from the storage area in the event that there is any risk of nuisance from odour. Daily odour checks will be carried out.</i></p> <p>2.3.7 (e) has been deleted. Healthcare waste: appropriate measures for permitted facilities requires that storage areas and containers are inspected daily and that any issues (such as causing odour) are dealt with immediately. Written records of the inspections must be kept. The operator has signed up to this aspect of the Healthcare waste: appropriate measures guidance.</p> <p><i>(f) Waste shall not be loaded into or removed from the containers while they are in the external storage area.</i></p> <p>2.3.7 (f) has been deleted. Loading or unloading of containers in the external storage area is considered to fall under repackaging of healthcare waste (activities AR2 and AR9 in the permit). Healthcare waste: appropriate measures requirements are that repackaging must be done inside a building. The operator has signed up to this aspect of the Healthcare waste: appropriate measures guidance.</p> <p><i>(g) In the event that refrigeration equipment is used it will not be operated between the hours of 1900 and 0700.</i></p> <p>2.3.7 (g) has been deleted. This requirement is related to noise disturbance and is specified in an improvement condition for submission of a Noise Management Plan (NMP) in Table S1.3, IC5.</p> <p><i>(h) Wastes with code 18 01 02 shall not be stored in the external storage area.</i></p> <p>2.3.7 (h) has been deleted. 18 01 02 is anatomical waste, which must be stored inside a building in accordance with the Healthcare waste: appropriate measures for permitted facilities guidance, and this is reflected in the varied permit.</p> <p><i>(i) Records shall be kept of all container movements into and out of</i></p>
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	<p><i>the external storage area including a record of the days each container remains in store.</i></p> <p>2.3.7 (i) has been deleted. Healthcare waste: appropriate measures for permitted facilities requires that all sites have a computerised waste tracking system for all wastes, which is capable of providing (amongst other information) the location on site and length of time on site for all waste containers. The operator has signed up to this aspect of the Healthcare waste: appropriate measures guidance.</p> <p><i>3.2.3 Litter or mud arising from the activities shall be cleared from affected areas outside the site as soon as practicable.</i></p> <p>3.2.3 has been deleted. Healthcare waste: appropriate measures for permitted facilities requires that storage areas and containers are inspected daily and that any issues (such as litter or mud) are dealt with immediately. Written records of the inspections must be kept. The operator has signed up to this aspect of the Healthcare waste: appropriate measures guidance.</p> <p>In addition, as described above, IC2 requires that the external storage area is upgraded to have an impermeable surfacing and sealed drainage to meet the Healthcare waste: appropriate measures requirements for existing sites which store wastes outside.</p>
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Table 1 – Summary of our assessment of the operator’s Reg 61 response