

Permitting Decisions - Variation

We have decided to issue an operator led variation for Spennymoor Clinical Waste Treatment Facility operated by Sharpsmart Limited.

The variation number is [EPR/EB3804LV/V006](#).

Permit variation application

This variation makes the following changes to the permit that were applied for by the operator under permit variation application [EPR/EB3804LV/V006](#):

- Operation of a shredder and autoclave plant for treating infectious waste as an installation activity. This will treat waste from the existing repackaging activity and also waste received directly from producer sites;
- Addition of a 2.5 MWth gas fired boiler as a Medium Combustion Plant, to supply steam to the autoclave process;
- The existing repackaging activity is already permitted as a Waste Operation but the proposals will increase the throughput and add waste codes, becoming an installation activity. The repackaging activity will continue to be supported through the operation of the existing Washsmart wash plant, as an installation activity.
- Increase the site's annual throughput of waste to 30,000 tonnes to reflect the processing ability of the site with the proposed treatment activities. The site storage capacity is limited to less than 75 tonnes at any one time for all wastes awaiting treatment or transfer, of which hazardous will make up less than 50 tonnes.

In addition, we have implemented a permit review, in accordance with Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1).

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 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 [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.

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 Regulation 61 Notice to the operator on 10/02/2021 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.

We have also assessed the operator's variation application for the site against these appropriate measures. On 29/10/2021 we issued a Schedule 5 Notice to the operator on requiring the operator to provide additional information regarding the proposals, and how they will meet, the standards (appropriate measures) described in our technical 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.

Table 1 below provides a summary of the responses 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

The Schedule 5 notice response from the operator was received on 26/11/2021.

| 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 the appropriate measures in this section. |
| Waste storage, segregation and handling appropriate measures | CC | The operator confirmed that they currently meet the requirements of the appropriate measures in this section. |
| Waste treatment appropriate measures | CC | The operator confirmed that they currently meet the requirements of the appropriate measures in this section. |
| Emissions control appropriate measures | CC | We consider the operator will meet the currently complying standard for the existing operations. The new pre-shredder, autoclave and boiler are covered below. |
| Emissions monitoring and limits appropriate measures | CC | We consider the operator will meet the currently complying standard for the existing operations. Appropriate monitoring and limits have been included in the permit. The new pre-shredder, autoclave and boiler are covered below. |
| Process efficiency appropriate measures | CC | Appropriate measures have been set in the permit for process control based on compliance with the requirements of the Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020. We consider the operator will meet the currently complying standard. |
| Reg 61 requirement | Assessment of response received | |
| Soil and groundwater risk assessment | N/A for Reg 61 response. Updated assessment provided as part of the permit variation and was considered acceptable. | |

| | |
|---|---|
| Medium combustion plant and specified generators | N/A for the Reg 61 response. The variation includes addition of combustion plant within the scope of medium combustion plant requirements (a boiler greater than 1 MWth input) which is covered below. |
| Climate change | Operator has stated there are targets for emission reduction. 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. |
| Summary of other changes made to the permit as a result of our assessment of the Reg 61 response | |
| Change | Reason for change |
| None | N/A |

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

Variation application made by operator

This section summarises the key issues that we considered in relation to permit variation application JB3604FF/V002, which was made by the operator on 05/06/2021 and separate to the permit review detailed above.

The variation was for the addition of a steam auger to treat healthcare wastes and also amends the waste types. We ensured that the permit met the standards for the healthcare review when allowing this additional activity and also that the additional waste types were acceptable under the new permit template.

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:

Fire and Rescue Service

Director of Public Health

UK Health Security Agency

Food Standards Agency

Local Authority – Planning

Local Authority – Environmental Health

Health and Safety Executive

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

The application was publicised on the GOV.UK website.

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 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 comprises an installation:

Section 5.3 Part A(1)(a)(ii) - Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment – standalone pre-shredding of waste.

Section 5.3 Part A(1)(a)(ii) - Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment – comprising treatment of shredded infectious waste by thermal treatment in an autoclave (including post-treatment compaction of treated floc).

Section 5.3 Part A(1)(a)(iv) - Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving repackaging – comprising operation of sharps bin wash plant and repackaging (bulking) of emptied sharps.

Section 5.3 Part A(1)(a)(iv) - Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving repackaging – repackaging of hazardous healthcare waste.

And directly associated activities: cleaning and disinfection of carts, raw material handling and storage, and a medium combustion plant that provides steam for the treatment process.

The site also has waste operations for:

Repackaging of non-hazardous waste.

Light compaction of non-hazardous waste.

Storage of hazardous and non-hazardous waste.

The site

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

This shows the extent of the site of the facility.

The plan is included in the permit.

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:

Thrislington Special Area of Conservation (SAC)

Cow Plantation Local Nature Reserve (LNR) and Local Wildlife Site (LWS)

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.

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 measures for the facility.

The operating techniques that the applicant must use are specified in S1.2 in the environmental permit.

Environmental risk

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

The operator's risk assessment is satisfactory.

Updating permit conditions during consolidation

We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

Changes to the permit conditions

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

Odour Management

We have reviewed the odour management plan in accordance with our guidance on odour management.

While we consider that the applicant's proposals represent the appropriate measures for control of odour from the site.

Improvement programme

We have included an improvement programme in the permit.

Table S1.3, IC1 – To develop and implement performance KPIs in accordance with the appropriate measures of technical guidance Healthcare waste: appropriate measures for permitted facilities, dated 13 July 2020.

Table S1.3, IC2 - To ensure a proposed monitoring programme to characterise and assess the facility's point source emissions. This will ensure the emissions from the process are in line with Healthcare waste: appropriate measures for permitted facilities and BAT-AELs (see also Emissions and Monitoring below).

Table S1.3, IC3 – To ensure the steam vent from the autoclave has appropriate measures for removal of any bioaerosols.

Table S1.4, IC4 – during determination it became apparent that the operator did not possess an accurate drainage plan for the site – an improvement condition has therefore been set for a survey to be undertaken and the results provided to the Environment Agency.

Pre-operational Condition

We have included a pre-operational condition in the permit.

Table S1.4, PO1 – To ensure the operator provides a written validation report to the Environment Agency for approval. The treatment efficacy tests must take into account the range of waste types that the plant is permitted to treat and must comply with the appropriate measures of technical guidance Healthcare waste: appropriate measures for permitted facilities, dated 13 July 2020. The operation shall not be made operational until the Environment Agency has given prior written approval under this condition.

Table S1.4, PO2 – To ensure the light compaction of non-infectious offensive waste in the external yard shall not commence until an impermeable site surface

and sealed drainage have been provided in the area. The operation shall not be made operational until the Environment Agency has given prior written approval under this condition.

Emission limits

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

Emission Point A1: (Emission to air from the gas fired boiler):

We have applied the Medium Combustion Plant standards for this plant for Oxides of Nitrogen, which is considered a new medium combustion plant.

Emission Point A2: (Emission to air from the abatement plant serving the autoclave (condenser and carbon filter)):

We have applied limits for Total volatile organic compounds (TVOC) and Bacillus spores (spiked organisms) in accordance with the requirements set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

Emission point A3: (Emission to air from the abatement plant serving the shredder (HEPA filter and carbon filter)):

We have applied limits for TVOC, particulate matter (dust) and Bacillus spores (spiked organisms) in accordance with the requirements set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

Emission point A4: (Emission to air from the abatement plant serving the Washsmart plant (HEPA filter)):

We have applied limits for TVOC, in accordance with the requirements set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

Emission point A5: (Emission to air from the Washsmart plant (dryer vent))

We have applied limits for TVOC, in accordance with the requirements set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

Emission point S1: (Site effluent to sewer):

We have applied a limit for Bacillus spores (spiked organisms) in accordance with the requirements set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

In table S3.4 we have also set limits for fugitive microbial emissions for Bacillus spores (spiked organisms) in accordance with the requirements set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

Monitoring

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

A1: monitoring for oxides of nitrogen and carbon monoxide, every three years, in accordance with the Medium Combustion Plant standards for this type of gas-fired boiler plant, which is considered a new medium combustion plant.

A2, A3, A4, A5, S1: monitoring for the parameters set out in the Emission Limits section above. Frequency of monitoring is set in accordance with the requirements set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

In addition to the emissions monitoring, the operator is also required to undertake regular efficacy testing of the steam disinfection plant, and also undertake regular revalidation of the process once every four years and also after specified events (see process monitoring table S3.5). This is in accordance with the requirements set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.

Reporting

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

Reporting of the monitoring set out above is required.

We have imposed our standard reporting requirements for a healthcare waste steam disinfection plant. These are set out in Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020. In addition to the reporting of emissions monitoring, the operator is also required to report on the regular efficacy testing of the steam disinfection plant, and the regular revalidation of the process.

We made these decisions in accordance with Healthcare waste: appropriate measures for permitted facilities dated 13 July 2020.

The reporting on monitoring of the gas-fired boiler is in accordance with Medium Combustion Plant requirements.

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.

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 (unless listed, no response was received).

Response received from: **UK Health Security Agency (UKHSA)**

Brief summary of issues raised:

Based on the information contained in the application supplied to us, UKHSA has no significant concerns regarding the risk to the health of the local population from the installation.

Summary of actions taken:

No actions taken.

Response received from: **Durham County Council**

Brief summary of issues raised:

1. Concerns regarding noise from the site - two (unsubstantiated) complaints in relation to noise from the site Jan/Feb 2021. The complaints were concerning noise from the delivery and unloading of bins/wagons during the night-time period.

Concerns regarding carrying of activities during the night-time period when the levels of background noise are much lower which has the potential to increase disturbance to neighbouring sensitive receptors.

A note that the noise assessment that was carried out in support of the planning application identified that an 'adverse impact' may occur. These activities are managed to minimise the noise impact arising from deliveries/unloading of bins/wagons during the night-time period.

2. Concerns regarding operation of the gas-fired boiler has the potential to give rise to emissions of NO_x, and whether air quality modelling had been commissioned to ensure that short-term concentrations of NO_x are not significant at the nearest sensitive receptors.

Summary of actions taken:

1. The site is operational for treatment 24 hrs/day. The operator has confirmed that primarily vehicle movements will be during normal working hours, there will be occasions where they will need to occur out of hours (transportation distances/restrictions/routes, contingency, abnormal scenarios etc.). The site

does have the ability to 'dock' the vehicles via the loading bay. The permit contains our standard noise condition, and if necessary a Noise Management Plan can be requested by the Environment Agency which can stipulate actions needed to minimise noise.

2. NOx emissions were assessed as part of the determination. Modelling of short-term NOx emissions was provided by the operator as part of a Schedule 5 Notice response. This showed that emissions of short-term NOx from the operation of the boiler are not significant at nearby sensitive receptors. The new boiler will meet the Medium Combustion Plant (MCP) emission standards for gas fired plant, and will be monitored in accordance with MCP requirements.