


<b>Project details</b>	Environmental Permit Variation Application – EPR XP3493VP/V006 Sharpsmart Limited – Clinical Waste Facility Stoke on Trent
<b>Applicant details</b>	Sharpsmart Limited 9 Longport Enterprise Centre Scott Lidgett Road Stoke on Trent ST6 4NQ
<b>Report details</b>	<b>EP Variation Application – Appendix E: Non-Technical Summary</b> <b>Document reference: SHSMT_2018.01/03</b>
<b>Report date</b>	4 February 2019
<b>Submitted to</b>	Permitting and Support Centre Environmental Permitting Team Environment Agency Quadrant 2 99 Parkway Avenue Parkway Business Park Sheffield S9 4WF Email: PSC@environment-agency.gov.uk
<b>Author</b>	Rebecca Hodkinson EHS Consultant
<b>Signature</b>	



## Table of Contents

### Contents

1	Non-Technical Summary .....	3
1.1	Introduction .....	3
1.2	Application Objective .....	3
1.3	Proposed Activities .....	3
1.4	Market Need .....	<b>Error! Bookmark not defined.</b>
1.5	Pollution Prevention .....	4
2	Application Contents.....	5

## **1 Non-Technical Summary**

### **1.1 Introduction**

Sharpsmart Ltd (the ‘applicant’) has requested that Reva Environmental Ltd (the ‘agent’) prepares an Environmental Permit (EP) variation application, for its clinical waste facility at 9 Longport Enterprise Centre, Scott Lidgett Road, Stoke on Trent, ST6 4NQ.

This Non-Technical Summary provides an overview of the application.

The applicant supplies re-usable sharps containers to the healthcare sector and provides a collection service to its customers whereby the used containers (UN approved) are taken to an applicant transfer facility, emptied and cleaned and sent back to the customer. The contents are transferred to an appropriately permitted facility for treatment. In addition to the sharps containers, a proportion of the incoming waste is bagged and in bulk containers (wheeled bins – UN approved containers). This waste stream is currently simply stored at the Stoke facility pending transfer to another treatment or disposal facility.

The facility is currently authorised by EP ref. EPR/XP3493VP which was originally granted in November 2011 and most recently varied (V005) 2018. The EP currently limits the quantity of hazardous waste to be stored or treated for disposal to 10 tonnes per day and the annual waste acceptance is capped at 3,650 tonnes.

### **1.2 Application Objective**

The objective of this application is to vary the EP to enable the applicant to also carry out a waste treatment activity at the facility as a standalone, but supporting, activity to the existing transfer operations. This will facilitate recovery of the waste and will result in a liquid effluent and solid refuse derived fuel (RDF) that can be recovered through combustion at an energy from waste plant.

### **1.3 Proposed Activities**

The proposed treatment plant is an autoclave which will have the capacity to process more than 10 tonnes per day. The plant includes a standalone pre-treatment shredder unit and a standalone post-treatment compaction unit.

There is no intention to change the type of waste being received at the facility; the permitted waste list in the current EP (V005) is not required to be amended. The quantity of hazardous waste that will be stored at the facility, pending treatment, is constrained by the floor space in the existing building and is limited to <50 tonnes. The maximum storage period for any load of waste is 2 weeks; this provides allowance for the operational contingency plan to be implemented.

The steam required for the autoclave process will be delivered by a new gas-fired steam-raising boiler. The applicant recognises that as the input capacity exceed 1 MWth the Medium Combustion Plant Directive (MCPD) is applicable and that emission limits will be imposed on this exhaust via EP conditions.

Whilst the proposed treatment activity will be able to operate independently of the existing transfer and repackaging operations, it is inherently linked by virtue of the acceptance of a proportion of the waste from the transfer activity.

The waste is all ‘in-house’ in that it is from the applicant’s customers, and is collected under a service contract. No third party waste is currently received at the facility however the proposed plant will have available capacity to consider the acceptance of waste from third parties to supplement its own contracted waste stream.

The proposed 3 stage treatment plant will process the following existing waste streams in 1, 2 or all of the 3 stages depending on the waste type:

- 18 01 03\* – wastes whose collection and disposal is subject to special requirements in order to prevent infection (from human source); and
- 18 02 02\* – wastes whose collection and disposal is subject to special requirements in order to prevent infection (from animal source).

The presence of the standalone shredding unit will provide the ability to shred offensive (non-hazardous) waste in isolation. The shredded offensive waste (18 01 04) can be compacted with the autoclaved waste (also non-hazardous) so it can be transferred off site as RDF. The offensive waste would only be subjected to shredding; it would not be treated in the autoclave.

No offensive waste, cytotoxic or cytostatic, non-hazardous, pharmaceutical, or anatomical waste will be processed in the autoclave treatment plant. All other incoming waste types will continue to be processed in the transfer facility as is currently permitted.

The identified waste types for treatment will be diverted from the existing process above and, upon receipt and weighing in accordance with the existing waste acceptance procedures, will be placed in a dedicated area of the treatment side of the building pending treatment.

The addition of the treatment facility will provide a significantly larger throughput capacity than that of the current transfer activity alone and, as such, in future the applicant may seek to fill this capacity with third party waste that is classified under the same waste codes above. The proposed thermal treatment process is autoclaving, an established technology for the treatment of infectious healthcare waste.

The industry is currently under scrutiny as the recent issue relating to the disposal of NHS waste has highlighted the concerns regarding availability of capacity in incineration and alternative treatment plants across the UK. This is an issue that is not going to be resolved quickly, but that can be eased with the installation and operation of additional facilities to both clear the current waste backlog and to provide comfort for the future of healthcare waste disposal, given the ageing infrastructure that is currently relied upon.

## **1.4 Pollution Prevention**

Existing measures will be rolled out across the treatment activity part of the building, including maintenance and inspection regimes and relevant operational procedures. For new pollution sources introduced by the treatment activity, BAT will be implemented and will include (but not be limited to):

- Bunding and containment of stored raw materials, and process effluent;
- Air extraction from the shredder unit and around the autoclave loading door which are each directed via a 2 stage filtration systems comprise HEPA filters and activated carbon filters and released via Emission Point A2 and Emission Point A3 respectively;
- Dedicated incoming waste storage areas, where all waste is contained within UN approved containers. All storage is within the confines of the building; no waste will be stored outside;
- Spillage materials will be available and appropriate to the potential spill. Staff will be trained in the use of these materials and any spent materials will be disposed of appropriately;

- The drainage system has been designed to capture process effluent and can be changed between two settings to either allow the effluent to drain to sewer under the existing consent or to capture it for disposal off site.

## 2 Application Contents

A substantial variation application has been made to the EA to vary the existing EP to include the proposed treatment activities and directly associated activities. The application comprises the following documents, in accordance with the EP Regulations and sector guidance.

- EA Application Form – Parts A, C2, C3 and F1. The application form is provided at the front of the EP variation application document.
- Supporting Statement. This has been written to provide an explanation of the application to the EA and to provide signposts to supporting documentation that is required by the application forms. This is marked as CONFIDENTIAL and requested to be excluded from the public register.
- Copies of the existing EP documents, and a copy of the existing discharge consent for discharge of process effluent to sewer. No changes to limits or parameters are required in the latter consent as a result of the variation application. Additional or new limits may be required in the EP in relation to the new treatment process; it is recognised that these will be set in accordance with legislation.
- Copies of relevant qualifications for the technically competent manager for the facility, confirming the applicants ability as an operator.
- A summary of the certified environmental management system (EMS) that is already in place, including an extract of the site EMS manual and the 2017-2019 certificate from the auditing body.
- A set of site plans detailing the location of the facility, the proposed layout, the drainage, the site setting (in relation to local receptors), and the fire prevention measures that will be in place.
- A copy of the fire prevention plan. This is required for all permitted facilities that store potentially combustible waste and sets out the measures in place to prevent a fire, to detect a fire, and to manage a fire should it occur, and the emission from such a fire.
- A copy of the site condition report. This sets out the condition of the land prior to the operation of activities under the current EP. It serves to define the state to which the land would need to be returned at the point of EP surrender in the future. It places the responsibility for any remediation needed, on the operator.
- A copy of the environmental risk assessment for the proposed treatment activity. This follows the EA's source-pathway-receptor methodology to identify potential risks and assess the potential impacts of those risks following implementation of suitable control/mitigation measures.
- A copy of the Best Available Techniques (BAT) Assessment. This seeks to confirm that the proposed treatment activity accords with the best techniques (as defined by the EU Commission and the EA) to ensure pollution prevention and control. This is marked as CONFIDENTIAL and requested to be excluded from the public register.
- A copy of the Accident Management Plan.

Payment of the application fee of £17,242 has been made by the applicant, by BACs, reference PSCAPPSHARP123.