A. INTRODUCTION

This document is a Residues Management Plan (RMP) for South West Water (SWW), which is required as part of the Environmental Permit application for Hayle at Hayle Waste Water Treatment Works (WWTW), Station approach, St Erth, Hayle, TR27 6LA (the Site).

This plan is designed to meet the requirements of the Environmental Permitting Regulations (EPR) permit process for waste installation activities and addresses management of waste residues including hazardous and non-hazardous waste.

The RMP is a set of measures to optimise the production of residues generated by the treatment of waste, to optimise the reuse, regeneration, recycling and/or recovery of the residues and to establish the proper disposal of internal residues or waste.

The list of residues for the Site is included as Appendix 1. This list should be reviewed bi-annually, or when significant changes are identified in either on-site processes or the management of residues.

This RMP has been prepared to demonstrate how SWW complies with the Industrial Emissions Directive 2010/75/EU (IED) and the Waste Directive [39, WFD 98/EC 2008]. The RMP will therefore address appropriate Best Available Technique (BAT) conclusions, as referenced in the Commission Implementing Decision (EU) 2018/1147 of 10 August 2018 establishing BAT conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council.

A RMP is part of the EMS (see Table 1 – BAT 1) and is a set of measures aiming to

1. Minimise the generation of residues arising from the treatment of waste;
2. optimise the reuse, regeneration, recycling and/or recovery of energy of the residues, and
3. ensure the proper disposal of residues.

This RMP considers the following BAT conclusions:

- BAT 1 (Table 1);
- BAT 11 (Table 2); and
- BAT 24 (Table 3).

Table 1 – BAT 1 EMS

BAT 1. In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:
I. commitment of the management, including senior management; II. definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation; III. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment; IV. implementation of procedures paying particular attention to: (a) structure and responsibility, (b) recruitment, training, awareness and competence, (c) communication, (d) employee involvement, (e) documentation, (f) effective process control,

(g) maintenance programmes,
(h) emergency preparedness and response,
(i) safeguarding compliance with environmental legislation;

V. checking performance and taking corrective action, paying particular attention to:
(a) monitoring and measurement (see also the JRC Reference Report on Monitoring of emissions to air and water from IED installations – ROM),
(b) corrective and preventive action,
(c) maintenance of records,
(d) independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;

VI. review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;
VII. following the development of cleaner technologies;
VIII. consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life;
IX. application of sectoral benchmarking on a regular basis;
X. waste stream management (see BAT 2);
XI. an inventory of waste water and waste gas streams (see BAT 3);
XII. residues management plan (see description in Section 6.6.5);
XIII. accident management plan (see description in Section 6.6.5);
XIV. odour management plan (see BAT 12);
XV. noise and vibration management plan (see BAT 17).

Table 2 – BAT 11 Monitoring

BAT 11. BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.
Description Monitoring includes direct measurements, calculation or recording, e.g. using suitable meters or invoices. The monitoring is broken down at the most appropriate level (e.g. at process or plant/installation level) and considers any significant changes in the plant/installation.

Table 3 – BAT 24 Waste

BAT 24. In order to reduce the quantity of waste sent for disposal. BAT is to maximise the reuse of packaging, as part of the residues management plan (see BAT 1).
Description Packaging (drums, containers, IBCs, pallets, etc.) is reused for containing waste, when it is in good condition and sufficiently clean, depending on a compatibility check between the substances contained (in consecutive uses). If necessary, packaging is sent for appropriate treatment prior to reuse (e.g. reconditioning, cleaning). **Applicability**

Some applicability restrictions derive from the risk of contamination of the waste posed by the reused packaging.

1.1. Review Process

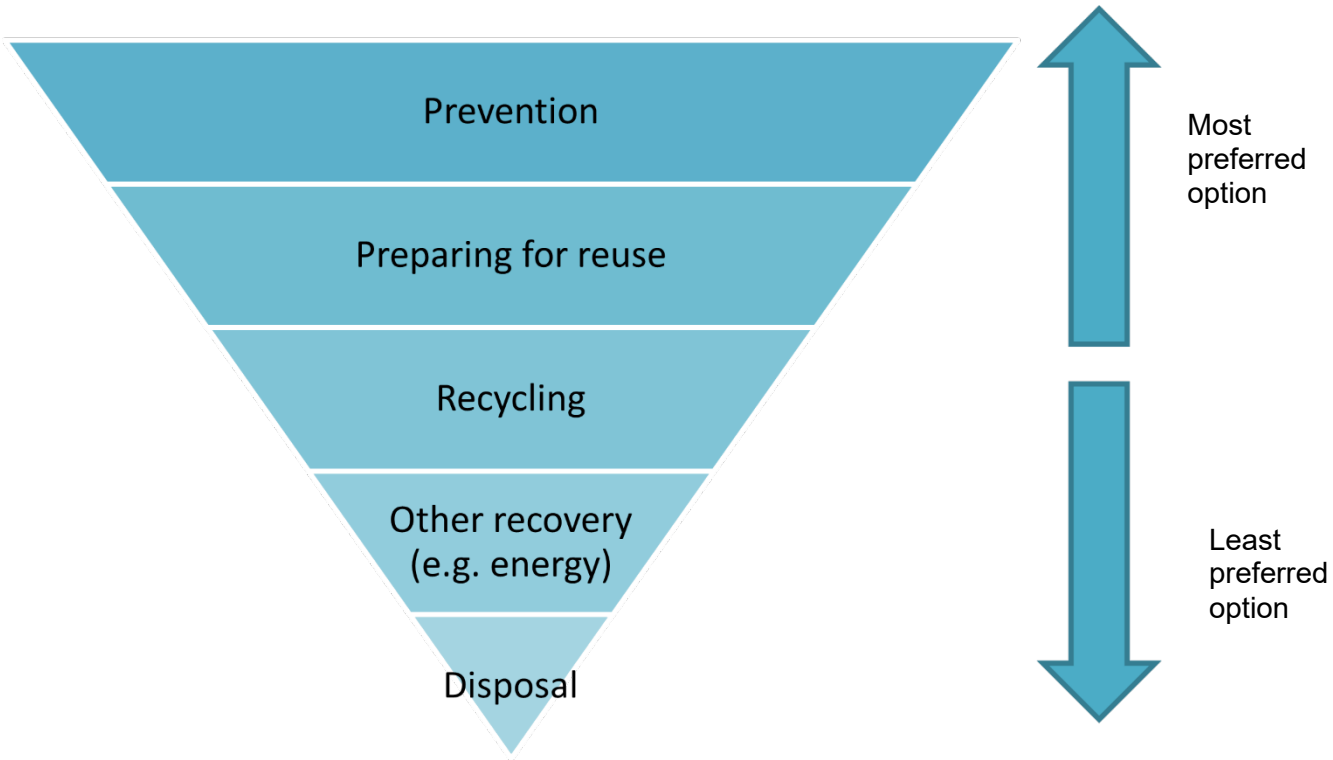
Version	Date	Revised By	Reviewed By	Amendment Details
01 (draft)	Sept 2022	C Austin-Bangs	J Parsons	Version 1 (draft)

B. CONTENTS

C. RESIDUES POLICY

The waste hierarchy sets out the most and least preferred options for waste management. SWW have goals to reduce their waste production, they are working towards zero waste to landfill. It is required that they manage specific waste streams in line with regulatory controls.

The residue list is shown in Appendix 1, identifying the key waste residues managed by SWW at the Site. It also shows the likely EWC, the nature of the material, and current storage methods. The waste hierarchy column indicates how this waste is currently managed by SWW. Residues will be recorded when sent from the Site in line with Duty of Care requirements; issued with a Waste Transfer Note or Hazardous Waste Consignment Note and recorded on Waste Returns submitted to the Environment Agency.



APPENDIX 1 – RESIDUES LIST SEPTEMBER 2022

Waste Type	EWC	Nature of Material	Storage Method	Management in line with waste hierarchy
Sludge screenings	19 08 01	Non-hazardous	Dedicated skip	Disposal
Waste oil	13 03 07*	Hazardous	Double-skinned bunded tank	Disposal / preparing for re-use
General waste	20 03 01	Non-hazardous	2 dedicated skips	Disposal
Metals	20 01 40	Non-hazardous	Dedicated scrap metal skip	Recycling
Mixed recycling (including WEEE)	20 03 01	Non-hazardous	Dedicated containers (including dedicated WEEE skip)	Recycling
Empty IBCs	15 01 10*	Hazardous	Dedicated area but only 2 anti-foam IBCs per year, taken away by Evans Chemicals within 2 weeks. (All other chemicals now bulk delivery – no containers).	Preparing for re-use
Poly spillages loaded into 25kg bags (reactive; not routine)	19 08 99	Hazardous	Dedicated area	Disposal (unusable if contaminated by water)
Grit dig-out (indigenous once every 10 years, plus grit from other SWW sites)	19 08 02	Non-hazardous	Dedicated skip for bulking then removal	Disposal
Oil filters	15 02 02*	Hazardous	Dedicated bag, for removal with waste oil	Disposal

Waste Type	EWC	Nature of Material	Storage Method	Management in line with waste hierarchy
Small liquid poly drums from other SWW sites	19 08 99	Hazardous	Dedicated storage area then general waste skip	Disposal

EWC codes included in the table above are likely appropriate codes, however will vary dependant on the exact nature of the waste.