Conclusion on BAT for Wastewater Treatment Plant

Conclusions on BAT	**Applicability Assessment (describe how the technique applies or not to your installation)**	**State whether it is In place or state schedule for implementation**
BAT 1. BAT is to implement an environmental management system.	Environmental management system is in place currently	In place currently
BAT 2. To use all BAT to improve overall environmental performance.	Included as part of EMS	In place currently

BAT 3. In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of wastewater and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all the following features: (i) Information about the characteristics of the waste to be treated and the waste treatment processes, including. (a) Simplified process flow sheets that show the origin of the emissions. (b) Descriptions of process-integrated techniques and wastewater/ waste gas treatment at source including their performances. (ii) Information about the characteristics of the wastewater streams, such as: (a) Average values and variability of flow, pH, temperature and conductivity. (b) Average concentration and load values of relevant substances and their variability (e.g. COD/TOC, nitrogen species, phosphorus, metals, priority substances/ micropollutants); (c) Data on bioeliminability. (iii) Information about the characteristics of the waste gas streams, such as.	**(i)** wastewater flowing to the automated WWTP will originate from the process areas, yard run-offs, surface water drainage systems, offices, and toilets. There are no waste gas streams because of the waste treatment process. Wastewaters will be segregated into surface and foul effluent lines. **(a)** Process flows are included in the Site Plan. **(b)** Wastewaters from site with be captured via the onsite drainage system (as outlined in the site plan) and pass to the proposed WWTP for treatment prior to release to sewer under the Trade Effluent Consent to Discharge for the site. **(ii)** **(a)** Routine monitoring of wastewater characteristics is carried out by an accredited laboratory and by the utility provider, Severn Trent, in accordance with the Consent to Discharge. The sampling results are recorded in accordance with our EMS.	(i) (a) In place currently (b) To be undertaken (ii) (a) In place currently (b) In place currently (c) N/A (iii) N/A

(a) Average values and variability of flow and temperature; (b) Average concentration and load values of relevant substances and their variability (e.g. organic compounds, POPs such as PCBs); (c) Flammability, lower higher explosive limits, reactivity; **(d)** Presence of other substances that may affect the waste gas treatment system or plant safety (e.g. oxygen, nitrogen, water vapour, dust).	**(b)** Relevant substances are routinely tested by an accredited laboratory and by the utility provider in accordance with the Consent to Discharge. **(c)** Not applicable. **iii)** no waste gas streams are produced as a results of wastewater treatment activities. **(a)** Not applicable. **(b)** Not applicable. **(c)** Not applicable. **(d)** Not applicable.	

BAT 4. BAT is to reduce environmental waste storage associated risks.	Dewatered sludge will be stored and dealt with in accordance with SOP 9 of the EMS	To in undertaken
BAT 5. BAT is to implement handling and transfer procedures to reduce environmental risk of waste transfer.	SOP 9.1/9.2/9.5/9.6/9.8/9.11 of the EMS outline procedures for the handling and transfer of waste on site relating to the WWTP.	In place currently
BAT 6. For relevant emissions to water as identified by the inventory of wastewater streams (see BAT 3), BAT is to monitor key process parameters (e.g. wastewater flow, pH, temperature, conductivity, BOD) at key locations (e.g. at the inlet and/or outlet of the pretreatment, at the inlet to the final treatment, at the point where the emission leaves the installation).	Monitoring of effluent is conducted at emission points to sewer (as indicated in the Site Plan) and are sampled and tested by an accredited laboratory and by the utility provider, Severn Trent in accordance with the Consent to Discharge.	To be undertaken
BAT 7. BAT is to monitoring emissions to water in accordance with EN standards.	Surface water emissions to water are monitored in accordance with EMS.	In place currently
BAT 8. BAT is to monitoring emissions to air in accordance with EN standards.	Not applicable	N/A
BAT 9. BAT is to monitor emissions of organic compounds to air from treatment of solvents.	Not applicable	N/A
BAT 10. BAT is to monitor odour emissions.	Odour emissions are monitored in accordance with the Odour Management Plan implemented as part of the EMS	In place currently
BAT 11.	Monitoring is done in accordance with EMS.	In place currently

BAT is to monitor water, energy, and raw materials consumption annually as well as generation of residues and wastewater.		
BAT 12. BAT is to implement and regularly review an odour management plan as part of the EMS.	Odour management plan is In place currently in accordance with the EMS.	In place currently
BAT 13. BAT is to use one or a combination of techniques to reduce odour emissions, including (a) minimising residence times, (b) use of chemical treatment and (c) optimising aerobic treatment.	(a) WWTP will be run 7 days a week thus minimising residence time of potentially odorous wastewaters. (b) N/A (c) Regular maintenance and monitoring of WWTP tanks.	(a) To be undertaken (b) N/A (c) To be undertaken
BAT 14. BAT to reduce diffuse emission to air by dust, organic compounds, and odour.	WWTP will be regularly maintained, and equipment assessed by a competent person	To be undertaken
BAT 15. BAT is to use flaring for safety reasons for non-routine operating conditions.	Not applicable	N/A
BAT 16. BAT is to reduce emissions to air from flares when unavoidable.	Not applicable	N/A
BAT 17. BAT is to implement regular review of noise management plan as part of EMS	Noise management plan is implemented and reviewed regularly in accordance with EMS	In place currently

BAT 18. BAT is to implement a combination of techniques to reduce noise and vibration emissions.	Noise surveys are undertaken in accordance with the noise management plan as part of the EMS.	In place currently
BAT 19. BAT is to optimise water consumption and reduce volume of wastewater generated to prevent or reduce emission to soil and water.	Water management systems are In place currently on site to reduce water consumption. Regular maintenance of drainage infrastructure and proposed WWTP is/will be carried out by a trained operator.	In place currently/to be undertaken
BAT 20. BAT is to treat wastewater using a combination of techniques to reduce emissions to water.	Proposed WWTP will use physico-chemical techniques to treat wastewater prior to emission to sewer using screens, DAF unit and flow control tanks.	To be undertaken
BAT 21. BAT is to use techniques included in an accident management plan to prevent or limit environmental consequences of accidents or incidents.	Accident Management Plan is included in the Environmental Risk Assessment as is In place currently as part of the EMS covering potential incidents, preventions and mitigation measures.	In place currently
BAT 22. BAT is to substitute materials with waste to use materials efficiently.	Not applicable	N/A
BAT 23. BAT is to use an energy efficiency plan and an energy balance record to improve energy efficiency.	Energy and fuel usage will be recorded in the proposed WWTP	To be undertaken

BAT 24. BAT is to maximise the reuse of packaging to reduce quantity of waste sent for disposal.	Drums, IBCs, and pallets use in the proposed WWTP will be reused where possible.	To be undertaken
BAT 25. BAT is to use a combination of techniques to reduce emissions to air of dust and particulate bound metals.	Not applicable	N/A

BAT 26- 32 deal with treatment of metal in shredders, WEEE and waste of calorific value- Not Applicable

BAT 33-39 deal with biological and aerobic/anaerobic treatment of waste- Not Applicable

BAT 40-41 deal with physico-chemical treatment of solid and/or pasty waste- Not Applicable

BAT 42-44 deal with the re-refining of waste oil- Not Applicable

BAT 45 deals with the physico-chemical treatment of waste of calorific value- Not Applicable

BAT 46-47 deal with the regeneration of spent solvents- Not Applicable

BAT 48-53 are not applicable.