



### Proposed Wastewater Treatment Plant Chemicals Stream

(in relation to BAT 3 of the Waste Treatment BAT Conclusions).

The proposed wastewater treatment plant for ABP Kingswinford will use physico-chemical methods in order to treat raw effluent from the process, prior to emission to sewer, in accordance with the site's Consent to Discharge.

This is a pre-treatment stage prior to discharge to sewer and is essential to ensure compliance with consent to discharge. All chemicals for the process, washdown and WWTP are stored on site within bunded structures. All chemicals stored on site for the wastewater treatment process are stored appropriately and in accordance with the manufacturer's guidelines.

Ferric chloride is an essential chemical to produce flocs with the aid of a polymer, used in the dissolved air flotation unit to remove gross contaminants from the wastewater stream. The ferric chloride listed in the MSDS (Attachment S) is a flocculation agent, and is removed from the effluent with the sludge, during the sludge dewatering process.

Ferric chloride does not impact further downstream treatment such as that within Severn Trent. This chemical is used nationwide for the flocculation process and across all ABP sites, within the physico-chemical treatment process.

Boiler blowdown consists of steam and as there is no steam boiler on site this will not arise.

Cleaning chemicals are utilized within the site as it is a food facility, to ensure sanitization of work surfaces, however detailed control measures are in place to ensure excess chemicals are not used within the process areas.

Any contaminants within following physico-chemical treatments are biodegradable and will undergo further removal by Severn Trent. The discharge arising from this facility utilizing physicochemical treatment will not impact further downstream treatment.

Attachment Y- H1 Screening Tool gives information on chloride associated with the use of ferric chloride in the effluent treatment. The results of this screening was a pass.

Treated effluent will be tested on a regular basis to ensure compliance with the consent to discharge, issued by the utility provider, Severn Trent, and results recorded as part of the EMS.



Below is a diagram of process flow through the proposed wastewater treatment plant for ABP Kingswinford.

