

Substantial Variation Application

2. Non-Technical Summary

In order to further improve the quality of the discharge of the Wigton Cellophane Plant trade effluent into the River Waver at Raby Cote, U UW propose to construct a dedicated Activated Sludge Process (ASP) plant on land to the north of the existing WwTW, providing enhanced treatment of the trade effluent. Currently the treatment of the trade effluent takes place within the dedicated trade effluent sewer; as part of the project to improve the quality of the discharge at Raby Cote the trade effluent sewer is being replaced and will be redesigned so that upon arrival at the Wigton WwTW site it will pass through an overflow/bypass chamber (with the bypass to occur should the ASP not be available) and then discharge into a wet well/pumping station. From there, the effluent will enter the ASP treatment process.

Once the ASP treatment is complete the treated effluent will be discharged via a pipeline into which there will be a discharge point for the blended dosing plant chemicals; a dosing plant will continue to be used to provide a final treatment by the addition of hydrogen peroxide to the effluent leaving the ASP (with formic acid and sodium hydroxide no longer to be used).

From this point the effluent will travel via the dedicated trade effluent sewer to the Raby Cote discharge point.

The activities will continue to have no relation to any urban wastewater treatment at the wider Wigton WwTW site.

Surplus activated sludge (SAS) from the process will be stored on site in a dedicated closed storage tank before being removed offsite for disposal. Odours generated within the tank will be contained and extracted for treatment through a dedicated odour control unit before being released to atmosphere via discharge stack.

The variation requires an extension to the existing permit boundary. All infrastructure within the permit boundary will be constructed and operated to BAT standards. The ASP treatment system, including associated sludge storage and other ancillary processes, will be located within a bund. This will consist of a shaped earthworks lined with a suitably impermeable and UV resistant membrane. The base of the area will be fully concreted and the total storage volume of the bund will meet or exceed the requirements of the Environment Agency's S5.06 guidance. Sealed drainage within the bunded area will be returned to the treatment plant. Any pipework within the permit boundary but outside/underneath the bund will be dual contained with leak detection.

Due to the nature of wastes handled at the installation, the site falls outside the requirement to prepare and operate a fire prevention plan (FPP).