

DP-SK-015: Monitoring emissions

The quality of the abattoir wastewater has been assessed against the level of treatment and monitoring that is required for discharge into Skellingthorpe Main Drain. Using the H1 Annex D2: assessment of sanitary and other pollutants in surface water discharges guidance set by the Environment Agency, the treated abattoir wastewater meets the permissible concentration for discharge as the receiving surface water, Skellingthorpe Main Drain, does not deteriorate more than 10% for Biochemical Oxygen Demand (BOD).

Target standards for ensuring water quality does not deteriorate more than 10% were provided by the EA to calculate the allowable discharge concentration for the parameters that are of concern: ammoniacal nitrogen, phosphorus and BOD. Due to the nature of the wastewater, only BOD is present in the treated wastewater.

Document reference 'DP-SK-010' outlines the calculations within the parameters set by the EA. A BOD concentration of 22mg/l with a flow rate of 2.31l/s over 24 hours remains within acceptable limits, causing no more than a 10% deterioration in water quality. This concentration is considered permissible for discharge according to the EA guidance, H1 Annex D2. Document reference DP-SK-013 shows the treated effluent quality.

The wastewater does not contain any hazardous chemicals as defined by the EA. FPC-11 and Maxichlor are cleaning detergents for the plant to enhance the DAF process (Data safety sheets: Document references- DP-SK-011 and DP-SK-012). These containers will be stored within a bunded container. Training given to staff on spillage procedures.

The Treatment Plant has a final effluent sampling and measurement chamber and is continuously monitored before entering surface water. A flow recorder and logger will be installed to ensure the daily flows are not exceeded and provide a record for EA inspection. The following sample locations are listed below:

The effluent sample point at grid reference: SK9404572765

The inlet sampling point at the Skellingthorpe Main Drain at grid reference: SK9374272602

Regular and randomised samples will be taken monthly and analysed for all final effluent parameters. Management system will be updated with methods to carry out checks, equipment used, maintenance and frequency.