

AMP Groundwater Discharges - Setting Discharge Consent Limits Environment Agency

*Supporting the
Environment Agency
in the review and
assessment of
intrusive
investigations at
21 Sewage Treatment
Works*



A Wastewater Company has completed intrusive investigations at 21 of their Sewage Treatment Works (STWs) under the AMP3 and AMP4 programmes. The purpose of the investigations was to demonstrate compliance with the Groundwater Regulations.

Entec has supported the Environment Agency in reviewing the investigations, assessing whether the discharges are compliant with Groundwater Regulations and to derive provisional discharge consent limits. This work will aid in identifying which sites need to be taken forward to PR09 for improvement works.

In detail the project involved:

- Development of methodology, in association with the Environment Agency, for setting consent limits for STW discharges to ground;
- Review of final effluent and groundwater monitoring data to identify hazardous (List I) substances for which there was evidence that the discharge had resulted in a discernible impact on groundwater quality at the compliance borehole;

- Review of final effluent and groundwater monitoring data to identify non-hazardous (List II) substances for which there was evidence that the discharge had resulted in pollution of groundwater quality at a down-gradient compliance borehole;
- Determination of provisional discharge consent limits taking account of dilution and attenuation.

A spreadsheet tool was developed to: facilitate assessment of the monitoring data; to calculate site specific dilution and attenuation factors; and to determine provisional discharge consent limits.

The results of the study have been discussed at a meeting with the Environment Agency and A Wastewater Company and will feed through to further investigations and the proposed discharge consents limits will be incorporated within future consent conditions.

Facts and Figures

Project
AMP Groundwater Discharges
Client
Environment Agency
Capital Project Value
£25,000

