[Crude sewage coagulant mixing point – example scenarios](#)

The dataset provided contains example scenarios of typical challenging sites for crude sewage coagulant mixing to support the associated Marketplace challenge. The dataset shows four example water recycling centres (wastewater treatment works) with a range of population equivalents and flow to full treatment flow rates which challenge entrants' technology must be suitable for. The dataset provides information on the relevant treatment stages within the section of the process where we require the coagulant mixing technology to be installed.

Each example scenario will provide you with:
- A simple site description,
- An aerial photograph of the relevant section of the site,
- Population equivalents, flow to full treatment and dry weather flow rates, and example permit details for iron and phosphorus consents
- A process flow diagram section displaying the treatment process at the example wastewater treatment centre
- Photographs showing the infrastructure in the inlet works and preliminary treatment at the example sites
- A description of the specific challenges at each example site in providing good coagulant mixing

Acronyms in the example dataset:
WRC – water recycling centre
FFT – flow to full treatment
DWF – dry weather flow
PE - Population Equivalent
PS – pumping station
WRPS – works return pumping station
UFS – up flow square (settlement tank)
PST – primary settlement tank
EDM – event duration monitoring
MCERTS – is the 'Monitoring Certification Scheme' from the Environment Agency

Dataset collation:

The permit data provided is an example of some of the compliance permits we are set and agree with the Environment Agency.

The description of the treatment processes in the dataset is real asset data from our water recycling centres, collected as part of our design process. All of the example scenarios have had the challenges stated in the dataset either during design or construction. They are all recent examples, from the last 2 years of design work.

Dataset update frequency:

The dataset is a fixed set of information that we do not anticipate updating.