Response from Severn Trent – received 13/8/26

Thank you for your recent request for information, which we have answered in line with the Environmental Information Regulations 2004 ("Regulations"). We have outlined our response below, including your original questions for reference.

- *The current capacity (foul water and drainage management) for Eccleshall? This capacity should make clear what percentage is managed through any off site vehicle movements and on-site treatment to avoid any misunderstanding on the volumes and capacity of the on-site facility without the need for off-site additional management.*
- *If there is any spare capacity at present, how many additional residential units will this support?*

The capacity of Eccleshall wastewater treatment works (WwTW) is defined by various aspects of its discharge permit.

a. Dry Weather Flow (DWF) permit – the total daily volume (TDV) of treated flow that may be returned to the environment (at or better than the quality set by other permit limits) to ensure against environmental deterioration of the downstream water course. The permitted DWF for Eccleshall WwTW is 1,650 m3/day. Compliance is achieved where 10% of all measured total daily volumes for a calendar year are less than the permitted DWF value. The 10% value (i.e. the 37th smallest total daily volume in a year, also known as the Q90 value) recognises that flow received, treated and discharged to the environment on the majority of days can comprise significant volumes of rainwater.

b. Flow to Full Treatment (FFT) – the minimum flow (measured in litres per second) that must be passed forward to treatment before a permitted storm overflow is allowed to operate.

c. Limits set in the permit that define the minimum quality of treated effluent that may be returned to the environment.

Eccleshall WwTW currently treats a population equivalent (PE) of approximately 7,200 (including permitted trade flows). As Eccleshall WwTW operates within its permit limits, then we can confirm that the capacity of Eccleshall WwTW is at least 7,200 PE.

DWF is linked most closely to population served by a sewage treatment works – i.e. the greater the population, the greater the measured daily volume on a dry day. Some treatment works also receive significant trade flows. Eccleshall WwTW's daily volume could be 5-10% trade flow on any given day.

DWF performance can vary from year to year because of the influence of weather. A single year where measured Q90 TDV exceeds permitted DWF does not mean non-compliance with the permit. If there is an exceedance, however, and there have been two or more other exceedances in the previous four years, then the works would be adjudged to be exceeding its permit. Eccleshall WwTW is compliant with its permitted DWF. The Q90 TDV in 2024, recognised as a particularly wet year, was 1,680 m3/d compared with the permitted DWF value of 1,650 m3/d. There haven't been any other years where Q90 TDV exceeded permitted DWF. The average Q90 TDV over the last five years is 1,464 m3/d – i.e. capacity headroom of 186 m3/d.

This translates into a capacity headroom for 350-550 houses (depending upon the quality of sewerage serving new developments and the level of water efficiency measures built into new housing).

It is important to highlight that as part of all wastewater treatment processes, we separate solids, which is called sludge, from the liquid, which is treated to ensure compliance with our environmental permit and is called the effluent. The effluent is treated and discharged into the receiving watercourse, however, the sludge is collected and taken to a specialised bioresource centre for sludge treatment via tankers. This is part of the standard wastewater treatment process and is part of the routine site activity. The frequency of emptying and the volume of sludge produced will vary site to site and will depend on factors such as the incoming wastewater.

Additional tankering may be required at a wastewater treatment works to support site operations during periods of increased demand, such as during essential maintenance or exceptional weather. In these circumstances, the frequency of tankering will vary depending on operational requirements and site conditions at the time.

The treatment process at Eccleshall also includes the use of ferric sulphate solution. The ferric sulphate is added to precipitate out Phosphorous, which is then removed from site via the sludge route. Ferric sulphate is delivered by tanker, although deliveries should be occasional, typically once every 2-3 weeks.

- *With regards to drainage capacity improvements in the Stafford Street area which we note is a planned project regardless of potential additional units, what is the current timetable for these planned upgrades and what is the number of additional units this could accommodate once completed?*

The current forecast work completion date is the end of the current Asset Management Period (AMP), which is 31 March 2030. The scheme is intended to accommodate a minimum of (circa) 800 dwellings, however, the final number (which we expect to be higher) is still subject to the completion of the design.

- *With regards to treatment facilities, are these planned improvements works subject to development approvals or are they to be undertaken regardless? What number of additional units would this support once completed?*

We will be undertaking investment at Eccleshall WwTW to ensure capacity is available for expected housing growth over the next decade. We will deliver the capacity improvements regardless of whether the current proposed developments receive planning approval. Following completion of capacity improvements, we would expect Eccleshall WwTW to be cable of treating flow from an additional 1,000-1,500 houses above those served today.

Any request for an internal review should be made within 40 working days of receipt of this response, and we will reply within 40 working days from receipt of the request for internal review.

Kind regards

Severn Trent Water EIR Team