

From: EIR Compliance

To:

Subject: 20250904 - EIR - Data Supplied

Date: 04 September 2025 16:14:00

Reference Number: **EIR**

Dear

We refer to your request for information submitted to Yorkshire Water dated 27 April 2025:

"A. Richmond Treatment Works

1. *We noted that YW intends re-purposing the 3 redundant Dortmund tanks on site to become extra storm overflow tanks so as to reduce the amount of sewage dumping into the Swale. Can you give a date when this work is due to be completed as it is a question often raised in our correspondence? In addition, can you specify the current storm overflow storage capacity of the 2 purpose-made tanks, which we understand will be enhanced by a further 183,000 litres of storm overflow storage once the Dortmund tanks are refurbished?*
2. *We understand from the Environment Agency CAR dated 17/9/21 S/O745045 that at that time YW said they could utilise the Dortmund Tanks when the Primary Settlement Tank was blocked. For example, how often since 17/9/21 have the Dortmund Tanks been used in this way? What will happen if or when the PST gets blocked after the Dortmund Tanks have been repurposed as storm overflows?*
3. *According to the EA CAR dated 18/4/22 I/0747329 it was noted that 'on multiple occasions FFT was not being met when the storm tanks were filling and on many occasions the tanks also discharged to river....this*

problem has persisted for over 15 months without a resolution.’ Such discharges are of course non-permitted and, according to the EA, may have adversely impacted ‘on the performance of the biological filters, the quality of the effluent discharged to river and [whether] this is affecting compliance with the Look-Up table BOD limits outlined in the permit.’ Could you specify what work YW has carried out to rectify the problem of the storm tanks filling when they were not permitted to do so, and on what dates this work took place?

4. Similarly, a question on future use – how does YW plan to avoid FFT not being met with the re-purposed Dortmund Tanks? Both the flow to treatment channel and the storm tank inlet channel are fitted with Parshall flumes for flow measurement. The measurement equipment for the storm tank feed has been disconnected and not replaced. Surely knowing the quantities of spill is essential for efficient operation?

5. Also, can you please let us know the physical distance between TWL in the flume when passing FFT and the top level of the storm weir as we had a specific question raised on this from an engineer?

6. In the EA’s 17/9/21 report they found that ‘During 2020 and 2021 there have been multiple exceedances of the Look-Up permit limits, mainly for BOD.’ Clearly this site was not operating to permit at the time. Could you tell us what work has been carried out, and when, to remedy these multiple exceedances?

7. From the EA’s CAR dated 11/08/22 R/0747366, it is clear that the above two issues of storm tanks filling when not permitted and BOD levels being exceeded, had still not been dealt with (please see page 2 of the report). The EA found it ‘extremely concerning’ that incoming flows were approaching FFT in dry weather, (raising the question of totally illegal dry-dumping), and asked whether ‘incoming loads exceed the design capacity of the works’. Could you tell us what YW has done, and when, to ensure the capacity of the works will be able to deal with the incoming loads?

8. For example, why does a town the size of Richmond only have one PST? Is that really sufficient when we know that it is 'prone to blockages'? (EA CAR 17/09/21). Also, is one PST going to be able to cope with the additional 183,000 litres of storm overflow that will be stored on site once the conversion work on the Dortmund tanks is completed?

9. From the same EA report we know that the percolating filter containing the plastic media and which takes 60% of the flow does not perform as well as the other 2 filters. Couldn't the redundant filter bed in the middle of the site be refurbished so as to improve capacity?

This is particularly relevant as Richmond is a tourist destination with a much expanded population during holidays, quite apart from the fact that the new government intends to green light more house building in the area, so the population will grow.

10. Similarly, there is concern regarding the input from surrounding feeds to the treatment works and local residents have questions on capacity provision for housing developments. Specifically, could you confirm whether the Richmond works receive feeds from Hudswell, Gilling West, Skeeby and Brompton, or whether these are processed directly by the Colburn works?

11. Whilst SOS understands that the STW's permit does not cover discharging Coliforms including E.coli into the Swale through its outflow pipe, this subject is of great concern to the public. Recent samplings at the outflow have revealed alarmingly high coliform counts -eg. 126,000 counts per 100ml on the 30/10/24 and 250,000 counts per 100ml on the 21/3/25. The health of the public, domestic and wild animals surely requires that treated effluent needs to be passed through UV filters before discharge into the river?

12. SOS learned that a number of other YW STWs have introduced phosphate strippers into their plants so as to improve the quality of the treated effluent returned to the river. Could this not also be done at Richmond? Phosphate levels

have been high eg. 15.4 mg/l at the site's outflow pipe on the 21/3/25 and 12.9 mg/l on the 4/2/25. It cannot be in the interests of the river's ecology to have such high levels entering the river and these levels may explain, eg, why there is a relatively healthy invertebrate count upstream of the STW, but a NIL count at Brompton.

B. Combined Sewer Overflows – Reeth Road to Rugby Field

Having a STW that is fit for purpose and well maintained only goes so far, in the sense that Richmond's CSOs also have to be fit for purpose and well-maintained –

1. Can you confirm when the Reeth Road and Riverside Road CSO works are going to start, what will these works consist of, and how are these projected to reduce the sewage dumping figures for these sites?
2. Sewage dumping figures for The Batts CSO doubled between 2023 and 2024, (586.5 hours last year), and have been a concern to our supporters as a primary contribution to river pollution. As you know from the footage Channel 4 News sent to you on the 27/3/25, The Batts was dry dumping into the Swale, although this was not recorded on your CSO monitoring map. It has been dry dumping since then also, and operatives have been working there. Could you please explain what is going on at The Batts CSO, what works are being carried out and how these works will reduce the sewage dumping figures here and end dry dumping?
3. In December 2024 you informed us that the Batts CSO had been investigated by YW but there was no model. How did this investigation assess hydraulic behaviour over a range of flows without any form of model? You also informed us at that time that a full model of all overflows would be delivered in February 2025. Was this delivered, and if so, what does it indicate?

4. *From the 2/4/24 – 3/4/25 Yorkshire Water had a tanker on Mercury Bridge pumping out sewage from a manhole cover near Richmond Sso (which also discharged for more hours last year than in 2023). Please can you explain what the problem was here, how it has been dealt with and whether it involved dry dumping from Richmond Sso? If the latter, what works will you be carrying out to ensure that sewage dumping figures are reduced and dry dumping ended?*
5. *Of the £1.5 bn YW has earmarked for making improvements to CSOs between 2025–30, could you please state how much has been set aside for improving which CSOs along the Swale?*
6. *Finally, what facility is there for reviewing priorities within the incoming AMP8 installations across the networks?"*

Please find attached our response to your questions below, please accept our sincere apologies for the delay in this been forwarded to us to record and process under Environmental Information Regulations 2004.

1. A1 Response:

This work is now all complete and fully operational, it was completed in June 2025 and the work was undertaken to reduce spills from storm events.

2. A2 Response:

If we had blockages, we would be required to jet the line as and when needed and tanker direct from primary tank as we would any other site if we had unforeseen issues, we would also raise jobs for the Ram Pumps to be looked at and serviced if deemed necessary.

3. A3 Response:

The Penstock was fully opened and securely locked off approximately two months ago to ensure the site complies with PFF requirements. Ongoing monitoring is being conducted using the Umon 4 and current readings indicate everything is in order.

4. A4 Response:

The FFT and reduction of storm spills are different elements as noted above the FFT shortfall has been addressed and the storm tank feed is as it was the flows now will also utilise the extra capacity in the repurposed tanks

5. A5 Response:

In consulting with the business we have been able to confirm that we do not hold this information. As such for the purpose of EIR we applied exemption 12(4)(a), a public authority may refuse to disclose information to the extent that it does not hold that information when an applicant's request is received.

6. A6 Response:

BOD is taken on the monthly OSM Look up visits and Lab tested to ensure it passes

7. A7 Response:

This answered has been provided in response to point 1, both FFT shortfall and reduction of storm spills

8. A8 Response:

The storm will return once inlet levels permit; site will only pass forward FFT and as such will not affect the primary tank, the site is designed to work with 1no primary tank and has done for many years

9. A9 Response:

As above when site was redesigned which removed 2 old stone filters and replace with the High-Rate Plastic, the plastic media filter is sampled separately when required and mitigation such as flushing can take place to improve performance

10. **A10 Response:**

The site takes flows from Richmond only.

YWS supports and encourages sustainable development, as this creates the lowest environmental impact and keep future YWS customer bills lower. For housing developers this means that we want to ensure appropriate surface water disposal to prevent unnecessary hydraulic loading particularly with rainfall. If surface water from new developments is retained in the combined sewerage system, this can lead to additional use of storm overflows and will mean that Yorkshire Water (funded by customers) will invest in larger infrastructure to prevent environmental harm of the local water environment.

The National Planning Policy Framework (NPPF) sets out the principle of sustainable drainage, while the National Planning Practice Guidance (NPPG) and Part H3 of the Building Regulations 2010 establish a hierarchy for surface water disposal. This hierarchy prioritises discharge to ground (infiltration), followed by discharge to a surface water body, then to a surface water sewer, and finally to a combined sewer.

YWS seeks to promote this hierarchy in collaboration with Local Planning Authorities and developers to improve water quality and reduce flood risk. As such, in practical terms when New Developments are proposed within catchments, our responses to planning applications will generally be as follows;

1. Where a development will discharge more surface water to the combined sewerage system we may object to the application on the grounds of the non-sustainable impact on the environment and our customers. We will separately review the impact of any foul discharges.
2. Where a development will discharge less surface water to the combined sewerage system than current volumes from that site we are unlikely to object to the application. We will separately review the impact of any foul discharges.

3. Where a development will not discharge surface water to the combined sewerage system we will review the impact of the foul discharges but are unlikely to object to the application.

4. Where a development will connect surface water into an existing surface water sewer, subject to EA agreement and flood risk assessments being accepted, we are unlikely to object to the application. We will separately review the impact of any foul discharges.

Where we object to a development but it is ultimately approved, we will build the impact of the development into our plan.

11. All Response:

The Urban Waste Water Treatment Directive (UWWTD) was implemented in 1994. Following Brexit, the UK continues to rely on the 1994 regulations, which were brought into EU law when the UK was still a member.

The Environment Agency (EA) regulates STWs by assessing the quality of the waste water they discharge against set compliance limits. The level of treatment and monitoring that is needed is based on the population the STW serves, and where the sewage is discharged.

Tertiary treatment (such as UV or similar disinfection to remove more pathogens) is required for STWs that serve a population equivalent of more than 10,000, and that discharge into "sensitive areas". It is for the EA to stipulate whether or not a STW is within a sensitive area, and as such whether it needs to have tertiary treatment, however for reference, one example of what constitutes a sensitive area is a designated bathing water area.

1. B1 Response:

There will not be any work undertaken in regards to the AMP7 storm spill programme. Whilst these sites were heavily investigated, our regulatory requirements limited our ability to proceed with a solution for the site, and so a decision was made for these sites to not have a solution delivered by the storm spill programme.

2. B2 Response:

This has turned into a much bigger job than what was first anticipated. Over pumping was deployed on the 16th June to bypass the flows to the CSO and prevent any further spills. On site the plan is to deconstruct the CSO chamber, remove the deteriorating scum boards and re-build the weir wall. This work is still in progress.

3. B3 Response:

An investigation was undertaken which suggested surface water separation , SuDS, lining where appropriate. Storage was quickly ruled out as return flows and volumes couldn't be accurately determined. Ultimately due to the lack of model info and the knowledge that model data would be available.

4. B4 Response:

This work relates to the CCTV survey / root cutting work downstream of The Batts CSO. An investigation was undertaken on the network due to the high-level alarms at The Batts CSO. A combination of roots and silt was removed from the 450mm sewer, along with a defective patch liner that was subsequently re-installed.

5. B5 Response:

£10.5m

6. B6 Response:

How Yorkshire Water spends its waste water budget is largely shaped by environmental legislation and policy. This includes: Urban Wastewater Treatment

Works Directive 1994, Environment Act 2021 (including the Storm Discharge Reduction Plan), and the Water Framework Directive.

In reference to storm overflow upgrades, the Environment Act specifies that water companies must upgrade all storm overflows by 2050. This includes hitting the discharge reduction target of less than 10 discharges a year, as well as causing no environmental harm.

There are a number of interim targets that are set within this:

- The headline target must be achieved for most (at least 75%) of storm overflows discharging into or near 'high priority sites' by 2035, and 100% completion by 2045.
- 100% of storm overflows entering bathing waters must be upgraded by 2035 (Yorkshire Water have committed to achieving this by 2030 for inland bathing waters)
- Water companies must achieve this target for all remaining storm overflows sites by 2050

Another large section of Yorkshire Water's environmental investment surrounds phosphorous removal schemes, reducing the risk of eutrophication in our waterways. This is guided by the following legislation:

- The Environment Act specifies that water companies must reduce phosphorous loading from final effluent by 80% by 2038 (from a 2020/21 baseline)
- The Urban Wastewater Treatment Work regulations ensures that sewage works have appropriate nutrient removal processes that have large population equivalents, or that flow into sensitive areas (see table below)

Parameter	Concentration limit (annual mean)	Minimum percentage reduction in relation to the load of the influent (annual mean)
Total phosphorus	2 mg/l P (10,000 - 100,000 PE) 1 mg/l P (>100,000 PE)	80
Total nitrogen (the sum of total nitrogen Kjeldahl nitrogen (organic N + NH ₃), nitrate (NO ₃)-nitrogen and nitrite (NO ₂)-nitrogen)	15 mg/l N (10,000 - 100,000 PE) 10 mg/l N (>100,000 PE)	70 - 80

- The Water Framework Directive guides water company investment to water bodies where the water sector is identified as a reason for not achieving good status

For example, if a waterbody is identified as failing due to high phosphorous levels and the local sewage works is identified as a source of the phosphorous, we will calculate the appropriate level of phosphorous reduction required at that sewage works to achieve good status under the EA's Polluter Pays Principle and other appropriate EA Guidance. Following this, the water company will then implement the relevant FairShare phosphorous removal scheme during that asset management period (5 year cycle)

We trust that the provision of this data satisfies your request. In accordance with the Environmental Information Regulations 2004, if you are not satisfied with this reply to your request you can ask for an internal review. A request for an internal review must be submitted within 40 working days by contacting the Data Protection Team.

Thank you for contacting Yorkshire Water.

Yours sincerely,

Data Protection Team

Email: EIR@Yorkshirewater.co.uk