PENYBONT WASTEWATER TREATMENT WORKS NEWSLETTER

Issue 2
31 May 2024

You will be aware from our newsletter published last week (23 May) that a pollution incident was impacting on a section of the River Ogmore near Penybont wastewater treatment works (WwTW).

A form of black sludge appeared in this section of the river (circled below) which turns into an Oxbow Lake but refills on each high tide.

Our investigations

Following over 1,200 hours of detailed investigations, analysis, trial holes, CCTV inspections, and 3D scanning of pipes and tanks, **no further evidence of a leak has been identified** at the site and associated assets and drainage connected to the site.

Furthermore, extensive dye testing – where dye is put into the wastewater to trace it through the process and to pinpoint leaks – has not identified any leaks within the pipework or tanks on site or along the sewer network connected to the site. Over 1,000 pots of dye have been used over the course of our investigation but it should be noted that this dye does not have any impact on the environment.

Dye has been observed leaving the discharge point from the works – i.e. where treated wastewater is discharged via an outfall to river Ogmore – and a faint discolouration was observed reaching the channel where the pollution incident was initially reported. This seems to be due to the incoming tide driving river water up into the channel and thus carrying over the dye and potentially silt from the riverbed. The wastewater treatment works is operating and discharging as normal and compliant with its permits.

What about the leak?

Our initial identification of a potential leak on site was later established to be a ground water pipe unrelated to our treatment works or sewer network. Our examination of the "sludge" in the channel where the pollution incident was reported is not consistent with the microbiology of our biological process at the wastewater treatment plant. Therefore, we do not have evidence to pinpoint this material back to our treatment plant.

Since we cannot find a route from our assets into the channel, the source of the pollution and our investigations remain inconclusive and we will continue to work with Natural Resources Wales (NRW).

Whilst investigations are inconclusive, we have undertaken comprehensive water quality testing on the river and bathing waters. The results have shown that the water quality downstream of this incident was not impacted as we measured ammonia and coliforms below levels of detection.

Data for 24th and 25th (before any rainfall) shows that the river and bathing water would be classed as good or excellent. From our dataset, we noticed a marked increase in coliforms during a rainfall event on the 26th which seemed to impact levels of coliforms upstream of our outfall and consequently the river quality downstream indicating therefore that this increase is unrelated to our treatment works. Due to the nature of the tests takes approximately 4 days to analyse and therefore the latest results to date are for the 26th May.

Water quality is however determined by many factors – not just a result of Welsh Water operations – and include run-off from streets, road and agricultural land as well as other sources.

We have done all we can to be open and transparent with our investigation, ensuring that our environmental regulator NRW has been briefed throughout. NRW are undertaking their own sampling and ultimately responsible for water quality classifications.

If you have any further queries, please do not hesitate to contact **sewerage.services@dwrcymru.com**