

Dear [REDACTED]

Thank you for your request for environmental information. We appreciate your interest, and we want to let you know that your request has been carefully considered in accordance with the Environmental Information Regulations (EIR).

As your request contained a number of specific questions, this response restates each part of the request (in bold) and then follows this with our response:

1. What part do these bio-beads play in the final purification process at Bury WTW?

The bio-beads provide a surface for nitrifying bacteria to grow on within the BAFF plant. For awareness, the BAFF plant is a tertiary treatment process, designed to help polish the effluent and ensure Bury wastewater treatment works (WwTW) meets its consent limits.

2. As other treatment works use less harmful ceramic beads why does Bury WTW not do so?

The bio-beads are part of the standard design for the Brightwater BAFF plant, which is used at Bury WwTW. Currently, Brightwater do not have any applications where ceramic beads could be used instead. In order for us to change the type of media used, we would also need to reconsider the design of the BAFF plant. This does unfortunately mean that we're unable to change the media.

3. What are the particulars of the discharge of bio-beads from Bury WTW earlier this year?

At present, there are ongoing investigations into the cause of this. Once we have more information, we will look to share this with you.

4. How many other instances of this have there been, and when?

At present, there are ongoing investigations into the scale and impact of this. Once we have more information, we will look to share this with you.

5. What measures do you have in place to try to prevent bio-bead discharge?

Each reactor on the BAFF plant has a retaining steel mesh which contains the bio-beads. Work to investigate the cause of the media loss is currently being scoped out, with a view to carry out any necessary remedial works once this investigation has been concluded. In the meantime, we have also installed a retro-fit mesh on the final effluent channel, which is designed to capture any media which is escaping in the final effluent.

6. Do the EA monitor bio-bead release from Bury WTW?

The EA do not monitor bio-bead releases from our WwTWs.

7. We understand that as part of the UU investigation samples of bio-beads were collected from the same area at Springwater. Please provide more info.

As part of the investigations discussed above, samples of the bio-beads were collected from Springwater Park riverbed by a member of staff, and these appear to be identical to the beads which are used within the BAFF plant at Bury WwTW. We are therefore confident that the beads are coming from the BAFF plant.

8. Are the bio-beads a carrier of pathogens? And how long do pathogens survive in our local rivers from the time of discharge, whether attached to raw sewage or bio-beads?

The majority of traditional wastewater treatment works contain primary and secondary treatment processes with the effluent then being directly discharged to river. As discussed above, Bury WwTW also contains a BAFF plant which is a tertiary treatment process, which contains the bio-beads. This means that the effluent arriving at the BAFF plant has already been through primary and secondary treatment processes which are designed to remove the majority of pathogens and biological load from the raw sewage arriving at the works.

9. How do UU clear the riverbed of bio-beads after a discharge?

As set out above, we have put temporary measures in place to reduce the risk of bio-bead discharge and are investigating potential longer-term solutions. Therefore, we do not have standard processes to clear the riverbeds following a spill of bio-beads, however going forward we're hoping to utilise either our River Rangers or Vector Services Teams to identify and remove any beads that are safe and accessible.

We hope that this response answers your request. However, if you're not satisfied with how we've handled it, you can request an internal review. To do this, please write to us at Environmental Information Office, Haweswater House, Lingley Mere, Warrington, WA5 3LP or email us at EIRRequests@uuplc.co.uk, addressing your request to [REDACTED], and explaining why you're unhappy with our response. We'll be very happy to review your request and ensure we've done everything we can to assist you.

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.

Many thanks

[REDACTED]

We'd love to hear your feedback on how we handled your request! If you have a moment, please complete our short survey [here](#) – your input helps us improve our service.