

Response to Site Visit Report dated 16/05/2024**EPA Item 1.1**

The final effluent monitoring results breached the emission limit values (ELVs) for ammonia (ELV of 3mg/l) for all samples taken in 2022, 2023 and to date (March 2024), one breach of orthophosphate (ELV of 1mg/L) was recorded in September 2023 and breaches of suspended solids (ELV of 35 mg/L) occurred once in 2022 and on three occasions in 2023. The wastewater treatment plant is not designed for ammonia removal and cannot meet the ELV without a plant upgrade.

Uisce Éireann are required to:

- 1. Provide an update regarding the upgrade of this plant so that it can meet all emission limit values stated in the licence for this agglomeration.*

Uisce Éireann Response:

As CI000213 update dated 27/03/2024 - Cloughjordan has been nominated as a candidate for inclusion in the Small Towns & Villages Growth Programme (STVGP), it has not been formally announced under the STVGP, however the optioneering process for upgrade works at Cloughjordan are on-going and UE are continuing to assess the preferred option. The project will continue through the standard capital investment delivery processes and will be required to meet governance and budgetary requirements at each phase. A decision will be taken on the progression of upgrade works post completion of the feasibility study.

EPA Item 2.1

It was observed that multiple sparge holes were blocked (see photograph No.1). Uisce Éireann stated that, the effectiveness of the treatment at the plant including the trickling filters was reviewed in 2022 and 2023.

Uisce Éireann are required to:

- 1. Ensure that the sparge holes in the trickling filters are fully operational at all times to ensure satisfactory distribution of liquid over the media.*
- 2. Provide the main recommendations of the process optimisation testing undertaken at this plant in 2022 and 2023.*

Uisce Éireann Response:

1. Sparge holes on each of the trickling filters distribution arms are flushed out daily to aid in even distribution of liquid over the media.
2. The following recommendations of the process optimisation have been implemented:
 - a. Clean out surplus sludge from trickling filters using Bauer connections and valves on the side wall of the trickling filters (blue scour valves) - completed 08/09/2023.
 - b. Check sludge blanket depth in imhoff tank on a regular basis (recommended minimum frequency once per week). Adjust wasting from imhoff settlement tanks based on sludge depths – completed 08/09/2023.
 - c. Additional alkalinity testing on both influent and final effluent samples, this is to determine if we have enough alkalinity for the oxidation of ammonia at the WWTP – completed 25/10/2022.

Disclaimer: The information contained within this document is the best available at this point in time.

- d. Investigate if the sludge pump inhibits of the sludge holding tank is operating correctly – completed 08/09/2023.
- e. Replace Ferric Sulphate IBC with new IBC – completed 20/02/2024.

EPA Item 3.2

One breach of the ortho-phosphate ELV was recorded on the 12th of September 2023 recording a result of 1.2 mg/L vs a ELV of 1mg/L.

Uisce Éireann are required to:

- 1. Ensure this plant is operated and maintained to comply with the ELV's in the licence for this agglomeration at all times.*

Uisce Éireann Response: Cloughjordan WWTP has been compliant with the WWDL ELVs for Ortho P, from Jan 2023 to date with the exception sample taken on 12/07/2023. This Breach of ELV was reported under INCI009860. The plant operator continues to optimise the treatment process to achieve the ELVs. P dosing was installed in February 2024 and the plant has been fully compliant for Ortho P since then.

EPA Item 3.3

The newly installed ferric dosing system is comprised of duty and stand-by dosing pumps, the system does not have an alarm system to notify the plant operator to manually switch over the pumps.

Uisce Éireann are required to:

- 1. Ensure that daily checks of the dosing system are conducted to verify that the pumps are operating satisfactorily.*
- 2. Configure the system so that the two pumps operate in a duty/stand-by configuration with automatic switchover.*

Uisce Éireann Response:

1. Daily inspection of the Ferric dosing system is currently being carried out by the Caretaker to verify the dosing pumps are operating correctly.
2. The two pumps are currently manually switched over by the caretaker on daily basis. In the event that there is any issue with one of the pumps there is automatic switch over to the second pump.

EPA Item 4.1

Waste water discharges from the Cloughjordan agglomeration were identified during the Characterisation for the second and third cycles of Ireland's River Basin Management Plan as a significant pressure on the Ballyfinboy stream putting it at risk of not meeting its environmental objective of good status.

Uisce Éireann are required to:

- 1. Prioritise the upgrade of this plant to ensure the Ballyfinboy river is not adversely affected by the final discharge.*

Uisce Éireann Response:

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As CI000213 update dated 27/03/2024 - Cloughjordan has been nominated as a candidate for inclusion in the Small Towns & Villages Growth Programme (STVGP), it has not been formally announced under the STVGP, however the optioneering process for upgrade works at Cloughjordan are on-going and UE are continuing to assess the preferred option. The project will continue through the standard capital investment delivery processes and will be required to meet governance and budgetary requirements at each phase. A decision will be taken on the progression of upgrade works post completion of the feasibility study.

A review of the 2022 and 2023 ambient monitoring results indicate that the upstream and downstream results are similar and that the river both upstream and downstream meets the EQS for good status 95%ile. Uisce Éireann will continue to operate the plant to the best of its current capabilities pending the upgrade to consistently meet the ELV's.