UISCE ÉIREANN : IRISH WATER

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IW-ER-LT0043

Re: Regulation 18(3)(b) Notice for Clones Waste Water Discharge Authorisation (Ref. D00206-01)

Dear Michael Martin,

In response to the Regulation 18(3)(b) request for further information notice dated the 1st of August 2012, please see below relevant information.

Assess the likelihood of significant effects of the waste water discharges from the agglomeration on the relevant European sites by referring to Circular L8/08 'Water Services Investment and Rural Water Programmes - Protection of Natural Heritage and National Monuments' issued by the Department of Environment, Heritage and Local Government. In particular, the flow diagram in Appendix 1 should be completed and the results of each section recorded. If significant effects are likely then an appropriate assessment must be carried out and a report of this assessment forwarded to the Agency

Irish Water will undertake this and submit when complete.

Provide details of the maximum and average primary discharge parameter concentrations, which are considered achievable with the current WWTP infrastructure, for BOD, COD, Suspended Solids, Orthophosphate, Total Phosphorus, Total Nitrogen and Ammonia;

Please see attached Excel Spreadsheet of final effluent results from 2013. It is considered that the following final effluent standards are achievable at the current WWTP:

BOD:	20mg/l
Ammonia:	6mg/l
Ortho-phosphate:	6mg/l

The existing WWTP was not designed for nutrient removal. Nitrogen removal is currently being achieved due to the low loading to the WWTP. Phosphorus removal is limited to phosphorus removed in the biological process.

Irish Water also conducted a review of the estimated agglomeration load. Based on 2011 CSO population data, a 16% non-domestic factor and 33PE[1] for industrial loading, it is estimated that the Clones agglomeration currently generates a loading of 2,161 P.E with a daily flow of 468.7m^3/day, based on 225 l/PE/day. The estimated 2020 Population Equivalent is 2,331P.E (based on an annual growth rate of 1.39%[2] per year for 6 years) with a daily flow of 472m^3/day, based on 225 l/PE/day.

Provide primary effluent discharge monitoring results and ambient monitoring results in the receiving waters for the last twelve months for the following parameters, where available: BOD, COD, Suspended Solids, Orthophosphate, Total Phosphorus, Total Nitrogen and Ammonia;

Please see attached Excel Spreadsheet.

Provide an update on the Preliminary Report in relation to upgrade of the WWTP infrastructure;

A Preliminary Report on the Castleblayney, Ballybay and Clones Sewerage Schemes was prepared and the report proposed to carry out necessary improvements to their Wastewater collection and treatment systems in order to provide adequate wastewater infrastructure for each of the three towns and their respective environs for the next 25 years. The Preliminary Report was not formally submitted to The Department of the Environment, Community and Local Government or Irish Water for approval. The Preliminary Report recommended the complete replacement of all civil and mechanical and electrical works at the plant.

In the case of Clones WWTP, the proposed upgrade is not included on the Draft Capital Investment Programme 2014-2016. The provision for any further upgrade of this plant will be reviewed as part of the planning for the next capital investment programme. Any further upgrade is unlikely to commence prior to 2018.

Provide details of 'emergency works', identified in your response received on the 7th August 2009, to be installed at the waste water treatment plant prior to a full refurbishment and provision of a new outfall;

The following works have been complete :

1. New Inlet Screen - - Commissioned April 2011
2. Trickle Filter Tank upgrade - - Commissioned Feb 2012
    - New plastic media
    - New distribution arms
    - Associated civil works

[1] Industrial loading of one IPC facility discharging to sewer
[2] Based on ESRI Urban Growth Rate Estimates for County Monaghan

3. Inlet Pumps Upgrade + Decommissioned Trickle Filter Tank converted to Storm Tank -- Commissioned Aug 2013
    - Civil Works to Storm Tank
    - 3 no. new inlet pumps and associated pipework and flow meter
    - New Control Panel
    - 2 no. new actuated valves

Identify measures to be undertaken including timeframe for completion of such measures, if any, to ensure compliance with the European Communities Environmental Objectives (Surface Water) Regulations 2009 for parameters including BOD, Total Ammonia, and Molybdate Reactive Phosphorus (MRP).

Upgrade works for the Clones WWTP are not included on the Draft Capital Investment Programme 2014-2016, therefore any further proposed upgrade works will not take place prior to 2018. However the requirement for further upgrade works will be reviewed as part of the planning for the next capital investment programme and will consider the requirement to comply with the European Communities Environmental Objectives (Surface Water) Regulations 2009. The objective for the River Finn under the Water Framework Directive is to meet good quality by 2021.

Kind Regards,

Gerry Galvin
Chief Technical Advisor