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Dear Jo

DRINKING WATER INSPECTORATE'S (DWI) RESPONSE TO THE UTILITY REGULATORS PC13 DRAFT DETERMINATION

Thank you for the opportunity to comment on the Draft Determination for PC13.

The Inspectorate's response aims to make several general comments and also provides more detail on specific aspects regarding quality improvements.

I recognize that while competing priorities exist, the Inspectorate remains focused for PC13 outputs on meeting existing and future statutory obligations to enable high quality drinking water supplies to be sustained. Significant improvements have been delivered regarding drinking water quality particularly over the last 10 years as major capital infrastructure projects at several water treatment works completed. Our focus now is to ensure that where we have identified remedial action for:

- additional water treatment requirements;
- improvements in operational practices; or
- targeted remedial measures within the distribution systems

through either enforcement or the risk assessment process, we ask that the Utility Regulator pays due regard to these regulatory requirements in determining NI Water's Business Plan.

I also consider it is important that as the Business Plan is delivered for PC13 we continue to be committed to the work that has already commenced regarding the next Price Control Period, PC15. This can be achieved through our constructive engagement to uphold the 'Stakeholder Partnership Agreement'; our participation in the Water Investment Co-ordination Group; and our work activities associated with the Department for Regional Development's 'Social and Environmental Guidance' and the 'Long Term Water Strategy'.

In matters relating to the governance framework and in particular the lack of 'end of year flexibility' relating to spending allocated budgets within that year, we will continue to work with NI Water and others to highlight at as early a stage as possible, any quality and/or infraction risks that may arise during the price control period. At all times we will uphold the Inspectorate's primary responsibility to safeguard the quality of drinking water supplies through taking appropriate action. We will continue to require improvements to water supplies where there is evidence of a 'significant risk' of a particular water supply failing to meet the regulatory standards.

We are committed to working with other stakeholders to reduce the risk of non-compliance with the drinking water quality regulations by improving resilience to the risks identified within NI Water's drinking water safety plans.

Water Quality Programme - Capital outputs

We welcome the provision of the statutory drinking water quality programme contained within the Draft Determination and therefore consider that the delivery of this programme of work should be funded.

Where it is necessary to reprioritize because of a significant breach of NI Water's regulatory duties which requires more immediate mitigation measures to safeguard drinking water supplies to be put in place, we welcome the change control process.

Water Treatment Works

Two specific water treatment projects have been identified as nominated outputs in PC13: Killylane; and Killyhevlin which are necessary to improve drinking water quality compliance and **should** remain in the overall PC13 programme as a drinking water quality priority. It is our **expectation** that the completion of the required works identified for Killyhevlin and Killylane will be in place by the end of the PC13 price control period.

Additional Nominated Project

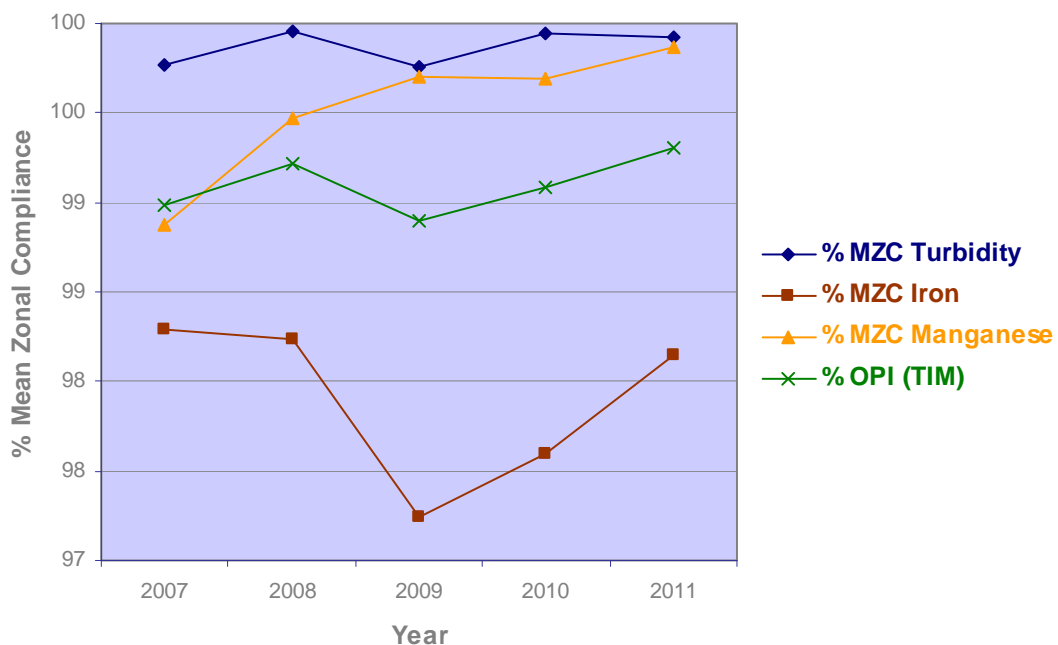
We are in ongoing discussion with NI Water regarding remedial measures necessary to address significant non-compliance issues through application of the regulatory 'enforcement process' at one site: **Dorisland Water Treatment Works**. Currently a Consideration of a Provisional Enforcement Order is in place at this treatment works to address contraventions of the individual pesticide, MCPA. The Inspectorate has accepted an Undertaking from NI Water that it will carry out a feasibility study by **31 December 2012** for treatment options to address significant pesticide non-compliance issues. Due to the persistent recurring nature of pesticide contamination in the catchment associated with this site we **require** measures that will address the removal of MCPA from the water going into supply. The requirement for additional treatment within PC13 is necessary to safeguard this public water supply and we have an **expectation** for this project to be identified as an additional project output to be delivered in this planning period.

Water Mains Improvement Programmes - Reducing Iron Levels in Distribution Systems

In assessing the overall need for investment in water mains to improve water quality we recognize that this work must be prioritized with competing demands for budgets. We welcome the continued investment to deliver new, or rehabilitated water mains over the PC13 period. Drinking water quality investment plans need to address the condition of the distribution network to improve the acceptability of the quality of tap water to consumers, particularly its appearance. Consumer concerns regarding the quality of their drinking water mainly relate to appearance, particularly colour. As with previous years, the highest number of contacts (59 per cent) made by consumers in 2011 related to appearance, of which 64 per cent were regarding discoloured water.

NI Water must continue to address the issue of significant non-compliance with the iron standard through delivery of its mains rehabilitation programme and application of good operational practice. Currently NI Water reports on the performance indicator OPI (TIM) which is used to assess the overall water quality of the distribution system. As can be seen in the graph below iron continues to be the parameter which contributes to the highest non-compliance of the OPI (TIM) calculation. Data reported to the Inspectorate from NI Water for January to September 2012 indicates significant iron non-compliances (provisional figures: OPI (TIM) is 98.81% [2012 target, 99.10%] and iron MZC, 96.94% [2012 target, 98.00%]). The Inspectorate is currently assessing data from water supply zones at a District Metered Area level. Where the recurring nature of these iron non-compliances will require NI Water to take remedial action in 2013, we will consider appropriate enforcement mechanisms to secure compliance.

OPI (TIM) and MZC for Turbidity, Iron and Manganese 2007-2011



The focus in PC13 through into the PC15 business planning period is to significantly improve the overall quality of water in the distribution systems, by improving regulatory compliance and to continue to see a reduction in the overall number of concerns reported to NI Water regarding the discoloured appearance of drinking water. The Inspectorate requires NI Water to take account of all compliance, operational and consumer concern/complaints information in identifying the risks of non-compliance for iron within its distribution systems, as part of the ongoing review of its drinking water safety plans.

We support that as part of PC13 and onwards into PC15 that NI Water continues to develop its methods of assessing what the overall customer benefits are following the delivery of the mains rehabilitation programme. Data from the regulatory compliance sampling programmes such as percentage number of tests meeting the regulatory standard for iron is insufficient to demonstrate the benefits gained from the investment to date. NI Water must continue to undertake appropriate 'pre and post evaluation' of the mains rehabilitation programme work packages which should include quality criteria as part of that assessment to properly evaluate the improvements that have been gained to date for consumers.

Securing Wholesome Supplies - Reducing Lead Levels

We welcome the provision of funding in PC13 to enable a proactive programme of lead communication pipe replacement to be delivered to target 'high risk' areas where compliance with the 10 µg/l standard has still to be achieved.

The Inspectorate has asked NI Water to provide an updated lead reduction strategy as part of DWI's annual information assessment requirement (due by end of December 2012). We have an **expectation** that as part of the business planning for PC13 NI Water will detail the outputs from its lead strategy to demonstrate how progress towards achieving compliance with the lead standard is to be met (10 µg/l by 25 December 2013). We expect to see greater visibility as part of the proactive programme of communication pipe replacement the areas that have been specifically identified as 'high risk' and we expect this identification to be carried through to the updated risk assessments in the associated drinking water safety plans for those supplies.

We note that based on the information returns for 2011 to the Inspectorate from NI Water, there are six lead treatment zones identified as not achieving 98% compliance with the 10 µg/l lead standard following optimization of the orthophosphate treatment process. These are Killylane; Dunore Point; Glenhordial; Forked Bridge; Carran Hill and Drumaroad.

We expect that data from the compliance and operational optimization sampling programmes together with consumer request samples information and any records that NI Water has regarding the location of lead communication pipes will be used to inform the 'high risk' areas of non-compliance with the 10 µg/l lead standard. The introduction of orthophosphoric acid treatment has been ongoing since 2004 and information from operational lead monitoring has been recorded subsequent to this.

We will continue to actively encourage the collective approach to reducing lead levels, with relevant stakeholders (in particular DHSSPS, Department of Education; and Housing Executive). We welcome the Long Term Water Strategies work packages that have identified issues relating to improving compliance with the 10 µg/l lead standard and that consideration is given to the development of a comprehensive strategy involving 'key stakeholders' as we move onwards from PC13/15.

Operational Expenditure Efficiencies

Regarding the allowance for operating expenditure, in protecting the safety of drinking water it is difficult to evaluate the direct impact such proposed efficiencies could have on securing and sustaining drinking water quality. I am therefore unclear as to what effect this may have on NI Water's ability to substantively continue with the necessary investigation, identification and implementation of corrective action to prevent recurrence of contraventions of the regulatory standards, all of which could have regulatory implications. The Inspectorate requires NI Water to proactively continue to provide sustainable operational management strategies to manage the operation of its water treatments works and the distribution of its water supplies. In reducing its operational costs, NI Water must continue to manage its resources to ensure that it does not increase the risks of non-compliance.

Risk Identification and Mitigation - Drinking Water Safety plans

Risk assessments carried out by NI Water should identify any significant shortfalls in NI Water's management of risk to comply with drinking water quality regulatory requirements. Developing a prioritized programme of integrated risk management using the drinking water safety plan approach will improve resilience in safeguarding drinking water supplies. This is fundamental to maintaining and securing high levels of drinking water quality compliance and the management of any risks will be of particular significance for supporting investment from PC13 onwards into PC15.

Preparation for PC15

NI Water should look to review the comprehensiveness of its risk assessment process. It is the Inspectorate's opinion that the ongoing development of this process requires that fuller consideration be given to ensuring that the substantive regulatory requirements regarding all aspects of risk identification, assessment, mitigation and review within the totality of the supply chain can be delivered. NI Water should give consideration to undertaking further work to better inform the risks throughout the supply chain from 'source to tap' this includes e.g. a risk based raw water monitoring programme which must be kept under review; identification of prioritized mains rehabilitation; development of the effective use of critical monitoring points within the distribution system regarding chlorine levels; the inclusion of specific high risk areas regarding lead; and the assessment of concessionary supplies.

We welcome the opportunity for NI Water to include within its PC13 Business Plan projects that would require investment in the first years of PC15. The Inspectorate is currently in discussions with NI Water regarding the

importance of ongoing reviews of risk identification and mitigation measures through the application of the drinking water safety plan approach to allow sufficiently informed translation of risks into investment priorities to be made. This will be important work to be identified at an early stage within the PC15 Working Groups as NI Water must continue to proactively manage contamination risks and identify appropriate remedial measures for its drinking water supplies. We are supportive of the opportunity in PC13 for NI Water to include proposals for investigatory work to allow it to develop strategic, sustainable and risk based solutions and in particular we would support investigative studies such as in selected catchments to look at ways to improve abstracted water quality particularly for ongoing water quality issue such as pesticides and disinfection by-products (e.g. trihalomethanes).

Monitoring of Water Quality Outputs

While the Inspectorate notes the Utility Regulator's benchmarking approach which will continue to be used in PC13 to monitor both actual and projected performance, we welcome the work activity that has commenced through the Long Term Water Strategy to review water quality targets. We fully support the discussion that needs to take place to enable all stakeholders to have clearly defined outputs that will be sufficiently informed and that will satisfy our respective monitoring requirements, without additional reporting burdens.

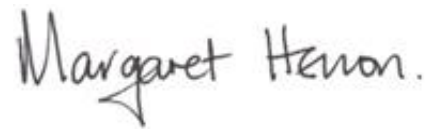
Performance based on existing measures as part of PC10-PC13 only makes provision for a limited data set. In regards to water quality; % MZC; and % OPI (TIM) are two such output measures that are regularly used by NI Water and the Utility Regulator. The Inspectorate has noted to NI Water that while internal performance measures are reported for comparative purposes that the Inspectorate has to assess and report on a more comprehensive data set to demonstrate compliance as part of its data returns to the European Commission. A point to note is compliance with statutory obligations has shown a downward trend in 2011 and based on monitoring results to date indications are that this will be likewise reported for 2012.

We note the additional inclusion of serviceability monitoring for a selection of parameters in the Draft Determination for PC13. Based on microbiological monitoring results from the 2011/2012 sampling programmes where NI Water's performance has shown a downward trend, we suggest that consideration is given to review the serviceability indicator '% service reservoirs with coliforms greater than 5%' to reporting any service reservoir containing coliforms. Or alternatively, consider widening out the scope of the 'events' reported at water treatment works to capture 'events' at service reservoirs and water supplies zones which are already part of the 'event' notification process between NI Water and the Inspectorate.

I trust you will consider these comments as you arrive at your Final Determination.

I would be happy to discuss any of the issues, as necessary.

Yours sincerely

A handwritten signature in black ink that reads "Margaret Herron." The signature is written in a cursive style with a prominent initial 'M'.

Margaret Herron
Chief Inspector of Drinking Water
Drinking Water Inspectorate