

Site Visit Report

Under the European Union (Drinking Water) Regulations 2014 as amended, the Environmental Protection Agency is the supervisory authority in relation to Irish Water and its role in the provision of public water supplies. This Audit was carried out to assess the performance of Irish Water in providing clean and wholesome water to the visited public supply.

The audit process is a sample on a given date of the facility's operation. Where a finding against a particular issue has been reported this should not be construed to mean that this issue is fully addressed.

Water Supply Zone	
Name of Installation	Kealkill
Organisation	Irish Water
Scheme Code	0500PUB4105
County	Cork
Site Visit Reference No.	SV19201

Report Detail	
Issue Date	20/01/2020
Prepared By	Criona Doyle

Site Visit Detail			
Date Of Inspection	06/01/2020	Announced	Yes
Time In	12:10	Time Out	12:45
EPA Inspector(s)	Criona Doyle Orla Harrington		
Additional Visitors			
Company Personnel	Irish Water: Deirdre O'Loughlin, Oliver Harney. Cork County Council: Michael Russell. EPS: David Cotter.		

> Summary of Key Findings

1. The audit confirmed that the upgrade of the Kealkill Water Treatment Plant has not been completed by the Remedial Action List proposed date of completion of November 2019. Irish Water indicated that the works are nearing completion with an expected date of 21/01/20 for the completion of the commissioning phase.
2. Irish Water intend to submit the verification data for assessment of the supply for removal from the EPA's Remedial Action List by the end of Quarter 1 2020.

> Introduction

The Kealkill Public Water Supply (PWS) was added to the EPA's Remedial Action List in Q3 2014 due to persistent trihalomethanes failures in the supply.

The proposed remedial works at the Kealkill PWS include the decommissioning of the slow sand filters and the upgrading of the treatment process to include dissolved air flotation (DAF), rapid gravity filtration and UV disinfection.

> Supply Zones Areas Inspected

The purpose of the audit was to verify if the Kealkill Public Water Supply can be removed from the EPA's Remedial Action List. The audit inspected the treatment plant processes to determine progress with the remedial works.



1. Supply on the Remedial Action List

		Answer
1.1	Is the Action Programme on track to meet the Remedial Action List completion date?	No
	Comment	
	The remedial works have not been completed by the Remedial Action List (RAL) proposed completion date of November 2019. At the audit it was outlined that commissioning of the new treatment process would be completed by 21/01/20.	
		Answer
1.2	Do the audit findings support progress made with the Remedial Action List upgrades?	Yes
	Comment	
	The remedial works to upgrade the treatment process at Kealkill PWS are progressing.	
	Works progressed since the previous audit on 18/09/19 include the installation of the electrical panels, dosing cabinets, chemical storage tanks, monitoring equipment and media in the rapid gravity filters.	
	Irish Water are awaiting the connection of an upgraded power supply from the ESB. The ESB has not provided a completion date for the works. Irish Water propose to install a generator at the site to complete the wet commissioning phase at the treatment plant. Following commissioning of the plant it is proposed to continue to operate the treatment plant using a generator until the upgraded permanent ESB connection is completed.	
		Answer
1.3	Is further information needed to assess completion of the Remedial Action List upgrade?	Yes
	Comment	
	Irish Water have indicated that verification data will be provided in Quarter 1 2020 following the commissioning of the new treatment process to demonstrate that the actions undertaken have been adequate to address the non compliance with the trihalomethanes parametric value. Verification data will also be required for the UV disinfection system.	

Recommendations

Subject	Kealkill Audit 06 01 2020	Due Date	20/02/2020
Action Text	<p>Recommendation(s)</p> <ol style="list-style-type: none"> 1. Irish Water should complete the proposed upgrade works to ensure the supply is compliant with the trihalomethanes parametric value and notify the EPA when the works are complete. 2. Irish Water should submit verification data to demonstrate that the actions undertaken have been adequate to address the non compliance with the trihalomethanes parametric value. The verification data should include at least 3 consecutive compliant samples for trihalomethanes on different dates from various locations in the network. 3. Irish Water should submit 2 months verification data for the UV disinfection system to demonstrate it has been operating within its validation range. <p>Follow-Up Actions required by Irish Water</p> <p>During the audit, Irish Water representatives were advised of the audit findings and that action must be taken as a priority by Irish Water to address the issues raised.</p> <p>This report has been reviewed and approved by Regina Campbell, Drinking Water Team Leader.</p> <p>Irish Water should submit a report to the Agency on or before 20/02/2020 detailing how it has dealt with the issues of concern identified during this audit.</p> <p>The report should include details on the action taken and planned to address the various recommendations, including time frame for commencement and completion of any planned work.</p> <p>The EPA also advises that the findings and recommendations from this audit report should, where relevant, be addressed at all other treatment plants operated and managed by Irish Water.</p> <p>Please quote the Action Reference Number DW2009/355 in any future correspondence in relation to this Report.</p>		