

# Site Visit Report

The site visit process is a sample on a particular day of an installation's compliance with some of its licence conditions. Where non-compliance against a particular condition has not been reported, this should not be construed to mean that there is full compliance with that condition of the licence.

Instructions and actions arising from the visit shall be addressed, or where applicable noted, by the licensee in order to ensure compliance, to improve the environmental performance of the installation and to provide clarification on certain issues.

The licensee shall take the actions specified to close out the non-compliances and observations raised in this Site Visit Report.

The licensee may also be requested to provide a response to the Environmental Protection Agency (hereafter referred to as the Agency) in relation to the site visit report findings.

Licensee	
<b>Name of Installation</b>	Kanturk
<b>Licensee</b>	Uisce Éireann
<b>Licence Register No.</b>	D0203-01
<b>CRO Number</b>	530363
<b>Site Address</b>	Cork
<b>Site Visit Reference No.</b>	SV31937

Report Detail	
<b>Issue Date</b>	14/02/2025
<b>Prepared By</b>	Brian Flynn

Site Visit Detail			
<b>Date Of Inspection</b>	29/01/2025		
<b>Time In</b>	10:30	<b>Time Out</b>	11:50
<b>EPA Inspector(s)</b>	Brian Flynn Aidan Jarvis		
<b>Additional Visitors</b>			
<b>Licensee Personnel and Role</b>	Representing Uisce Éireann: Richard Ellard. Representing Cork County Council (working in partnership with Uisce Éireann): Chris Ashe, Carol O'Sullivan, and Eugene O'Sullivan.		

## > Summary

During this site visit a number of issues regarding the operation and management of the WWTP were noted.

The Kanturk Wastewater Treatment Plant and pump station requires an upgrade in order to protect Freshwater Pearl Mussel populations located downstream of the treatment plant. The Kanturk WWTP is not included in the current investment plan RC4. There is currently no screening system in place, the lack of a screening system is adversely affecting the treatment plants performance.

Uisce Éireann are required to implement the findings of this report to ensure that adequate and appropriate treatment is provided at all times in order to protect FWPM populations located downstream of the WWTP.

## > Site Areas Inspected

- Wastewater Treatment Plant.

## > Documents Inspected

- Current and design Population equivalent.
- Effluent monitoring data for 2024.
- Upstream and downstream ambient monitoring data for 2024.
- Calibration and maintenance records for critical equipment.
- Critical spares list.
- Emergency response procedure.

## > 1. General

	Answer	Condition Number	Non Compliance	Observation
1.1	Have Uisce Éireann determined the critical spare parts required for the site?	No		
<b>Comment / Action Required</b>				
A list of Critical equipment was provided prior to the site visit. However, it lacked detail and did not include all critical assets at this site.				
<b>Uisce Éireann are required to:</b>				
<ul style="list-style-type: none"><li>• Establish a list of all critical equipment and spares required for the site, including estimated replacement times.</li></ul>				



## 2. Inlet Works

2.1

	Answer	Condition Number	Non Compliance	Observation
Is there screening in place at the inlet works?	No			
<b>Comment / Action Required</b>				
<p>There is a screening system at the Pump station prior to the WWTP. However, this screen has been off line for a significant amount of time. Therefore, all incoming influent is unscreened and is impacting the treatment process. No progress to repair this screen since the previous site visit on the (15/06/2023) has been made.</p>				
<b>Uisce Éireann are required to:</b>				
<ul style="list-style-type: none"><li>Repair the screens as a priority and provide a plan and timeline to complete these works.</li></ul>				



### 3. Aeration Basin

	Answer	Condition Number	Non Compliance	Observation
3.1	Is there good evidence of mixing in the aeration basin?	Checked		
<b>Comment / Action Required</b>				
<p>Several diffusers were observed to be broken in both oxidation ditches during this site visit (See photograph No.1). There was no timeline available for their repair. This does not allow uniform oxygen delivery across the basin. Excessive ragging was also observed in both basins (See photograph No. 2) and this was stated to be adversely impacting the diffusers resulting in uneven air distribution across the basin.</p> <p><b>Uisce Éireann are required to:</b></p> <ul style="list-style-type: none"> <li>• Repair the broken diffusers without delay.</li> <li>• Remove ragging from both oxidation ditches to ensure optimum treatment is provided.</li> </ul>				

	Answer	Condition Number	Non Compliance	Observation
3.2	Have there been breakdowns of the sludge pumps in the last 12 months?	Yes		
<b>Comment / Action Required</b>				
<p>Sludge pump number 1 was reported as out of operation on the 28/01/2025. The oxidation ditches are operating on one duty pump with no back up pump available. It was stated that no preventative maintenance and service's were conducted on both sludge pumps.</p> <p><b>Uisce Éireann are required to:</b></p> <ul style="list-style-type: none"> <li>• Ensure that pump 1 is restored to full operation without delay.</li> <li>• Include the sludge pumps on a preventative maintenance schedule.</li> </ul>				



## 4. Phosphate Treatment

	Answer	Condition Number	Non Compliance	Observation
4.1	Is there dosing for phosphate removal at the plant?	Yes		
<b>Comment / Action Required</b>				
<p>There is a ferric dosing system in place at the Kanturk WWTP. However, no ferric dosing took place at the plant from the 20/11/2024 to the 22/01/2025 due to no ferric available on site. A delivery of ferric was received on the 22/01/2025 and dosing resumed. It was stated that improvements to operational protocols were made to avoid further ferric shortages going forward.</p> <p><b>Uisce Éireann are required to:</b></p> <ul style="list-style-type: none"> <li>Implement preventative actions to ensure that adequate ferric is stored on site at all time.</li> </ul>				
	Answer	Condition Number	Non Compliance	Observation
4.2	Is the plant compliant with ortho-phosphate ELV for last 12 months?	Checked		
<b>Comment / Action Required</b>				
<p>No exceedances were recorded for Ortho-P in 2024. However, the final effluent monitoring conducted in November 2024 did not contain results for Ortho-P. Stated to issues with the contract laboratory.</p> <p><b>Uisce Éireann are required to:</b></p> <ul style="list-style-type: none"> <li>Conduct monthly sampling for the parameter Ortho-p as required under schedule A of the licence.</li> </ul>				



## 5. Water Framework Directive

5.1

	Answer	Condition Number	Non Compliance	Observation
Is the agglomeration categorised as a significant pressure under the Water Framework Directive?	Yes			
<b>Comment / Action Required</b>				
<p>Waste water discharges from the Kanturk 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 River Allow putting it at risk of not meeting its environmental objective of good status.</p> <p><b>Uisce Éireann are required to:</b></p> <ul style="list-style-type: none"><li>• Prioritise the upgrade of this plant to ensure the River Allow is not adversely affected by the discharges from the Kanturk agglomeration.</li></ul>				



## 6. Site Specific Issues

	Answer	Condition Number	Non Compliance	Observation
6.1	Sludge press breakdown.	Checked		Yes
<b>Comment / Action Required</b>				
<p>A breakdown of the sludge press was reported on the 20/01/2025, it was stated that tankering is occurring until the sludge press is repaired. No service history reports were available to review for the sludge press. The incident for this breakdown was updated after the site visit was conducted and detailed that the sludge press was repaired and serviced on the 30/01/2025.</p> <p><b>Uisce Éireann are required to:</b></p> <ul style="list-style-type: none"> <li>• Include the sludge press on a preventative maintenance schedule.</li> </ul>				
	Answer	Condition Number	Non Compliance	Observation
6.2	Emergency response protocol.	Checked		Yes
<b>Comment / Action Required</b>				
<p>A emergency response protocol for the Kanturk WWTP was submitted prior to the site visit. The protocol was produced in 2018 and has not been updated since.</p> <p><b>Uisce Éireann are required to:</b></p> <ul style="list-style-type: none"> <li>• Update the emergency emergency protocol for the Kanturk Agglomeration.</li> </ul>				
	Answer	Condition Number	Non Compliance	Observation
6.3	Powercut during storm Eowyn.	Checked		
<b>Comment / Action Required</b>				
<p>It was stated that the Kanturk Wastewater Treatment Plant had no electricity estimated from 5am Friday morning (24/01/2025) to 6pm Saturday evening the (25/01/2025), a red weather warning was in place during this time. No incident was submitted at the time of this site visit. No treatment to all incoming wastewater was provided during this time, a generator was not deployed during this outage. It was stated that no ambient or effluent sampling was conducted during this power outage to assess the impact of untreated wastewater on the River Allow.</p> <p><b>Uisce Éireann are required to:</b></p> <ul style="list-style-type: none"> <li>• Report the power outage to the EPA as an incident.</li> <li>• Review the deployment of generators for future power cut events.</li> <li>• Conduct ambient monitoring for all power cut events to determine the impact on the receiving environment.</li> </ul>				
	Answer	Condition Number	Non Compliance	Observation
6.4	Upgrade of the Kanturk WWTP.	Not Applicable		
<b>Comment / Action Required</b>				

Freshwater pearl mussels (FWPM) are globally endangered molluscs that need clean, fast flowing, well oxygenated rivers and a clean river bed. They are declining both nationally and internationally due to deteriorating river quality. Pollution by inadequately treated waste water can be detrimental to the survival of new generations of mussels. Kanturk has been identified as one of 12 towns and villages where improvements to waste water treatment is required to protect vulnerable freshwater pearl mussels in the local rivers.

The Kanturk Wastewater Treatment Plant and pump station requires an upgrade in order to protect Freshwater Pearl Mussel populations located downstream of the treatment plant. It was stated that the Kanturk WWTP is not included in the current investment plan RC4.

**Uisce Éireann are required to:**

- Give greater priority to the upgrade of the Kanturk WWTP in order to protect Freshwater Pearl mussel populations downstream of the WWTP.

	Answer	Condition Number	Non Compliance	Observation
6.5 Ambient monitoring.	Not Applicable			Yes

**Comment / Action Required**

Ambient monitoring results submitted prior to the site visit contained 4 downstream sample results in 2024. Uisce Éireann are required under the discharge licence for this agglomeration to sample at a minimum 10 occasions during the year.

**Uisce Éireann are required to:**

- Increase the frequency of downstream ambient monitoring to comply with the sampling requirements as stated under Schedule A in the licence for this agglomeration.

	Answer	Condition Number	Non Compliance	Observation
6.6 Measures to protect Freshwater Pearl Mussel.	Checked			Yes

**Comment / Action Required**

Condition 4.23 of the wastewater discharge licence for the Kanturk agglomeration requires Uisce Éireann to review the Freshwater Pearl Mussel Allow Sub Basin Management Plan for the Allow catchment annually, implement measures that are applicable to the wastewater discharges and submit a report of the measures implemented as part of the Annual Environmental Report (AER). The 2023 AER does not contain a report on such measures.

**Uisce Éireann are required to:**

- Review the Freshwater Pearl Mussel Allow Sub Basin Management Plan as required under condition 4.23.



**Photograph No. 1:** Uneven distribution of air from the diffused aeration system due to multiple broken diffusers attributed to excessive ragging and build up of solids in both oxidation ditches.



**Photograph No. 2:** Excessive build up of solids observed in both oxidation ditches affecting the effectiveness of treatment provided.

## **FOLLOW-UP ACTIONS**

The licensee is required to complete the actions outlined in this site visit report within the specified timeframes. Where required, the licensee shall also respond to actions specified in Compliance Investigations and/or submit a response to this site visit report via the EDEN system. The licensee shall maintain a documentary evidence, for review by the Agency, that the prescribed actions were completed within the required timeframe.

### **(i) Compliance Investigations**

The Agency may generate a Compliance Investigation through the EDEN system and issue instructions and actions to the licensee. The licensee will receive notification when an instruction or action is issued and the licensee must respond to the actions within the Compliance Investigation within the specified timeframe.

### **(ii) Response to Site Visit Report**

Where the licensee is requested to (or wishes to) respond to the Agency in relation to this site visit report, the licensee may select the 'Make a Response' link on the Site Visits page in EDEN where a .pdf document containing the response can be attached and submitted. The response should include details of the actions taken by the licensee to address the issues raised in this site visit report and the target completion dates. This Licensee Public Response provides the licensee with an opportunity to inform both the Agency and the public about the implementing of actions set out in the Agency site visit report. The response must be submitted **within 21 calendar days** of the issue date of this site visit report.

### **(iii) Publication of Reports**

This site visit report will be published on the EPA's website, [www.epa.ie](http://www.epa.ie), 30 calendar days after the site visit report issue date.

Any licensee response to this site visit report will be published on the EPA's website simultaneously (i.e. 30 calendar days after the site visit report issue date).

**Please note that licensees are required to comply with the conditions of the licence at all times, and where non-compliance occurs, compliance must be restored within the shortest possible time. These actions will be verified during subsequent Agency visits. Please quote the above Inspection Reference Number in any correspondence in relation this Report.**