

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	
Name of Installation	Lahinch
Licensee	Uisce Éireann
Licence Register No.	D0080-01
CRO Number	530363
Site Address	Clare
Site Visit Reference No.	SV32833

Report Detail	
Issue Date	06/08/2025
Prepared By	Brian Flynn

Site Visit Detail			
Date Of Inspection	22/07/2025		
Time In	11:30	Time Out	13:00
EPA Inspector(s)	Brian Flynn Dr John Feehan		
Additional Visitors			
Licensee Personnel and Role	Representing Uisce Éireann: Teresa Burke, Derek O'Toole, Gerard Maher, Roísín Breheny and Shane Foudy.		

> Summary

The Lahinch Wastewater treatment Plant has been on the Priority Action List since 2016 and a Compliance Investigation has remained open since October 2015. This plant is still subject to frequent flooding events. The flooding of the WWTP is so frequent that the WWTP cannot maintain an appropriate sludge biomass therefore it cannot provide adequate and appropriate treatment. This effectively means that sewage from the Lahinch agglomeration receives very limited treatment before discharging into tidal areas on the Inagh river entering Liscannor bay in close proximity to the designated bathing water area. Uisce Éireann were instructed in the last site visit conducted on the 14/08/2024 to take interim measures to prevent the treatment plant from being flooded. No progress has been made on implementing any preventative measures.

Uisce Éireann personnel stated there are plans to submit a planning permission application in 2027 to build a new wastewater treatment plant that will treat sewage from Lahinch and Ennistymon agglomerations.

Uisce Éireann is not currently conducting ambient monitoring both upstream and downstream of the final discharge as per the required locations and for the parameter Faecal Coliforms as stated in the licence for Lahinch.

Uisce Éireann must conduct outstanding items from the previous site visit report such as conduct a flood risk assessment, implement a contingency plan to protect the Inagh estuary Special Area of Conservation and designated bathing waters in Lahinch.

> Site Areas Inspected

- Wastewater treatment plant

> Documents Inspected

- Final effluent monitoring data 2023, 2024 to the 12/03/2025;
- Ambient monitoring data 2023, 2024;
- Dates on which the Lahinch WWTP was flooded in 2024 to the 15/07/2025;
- Oxidation ditch operational data from 2023 to the 03/06/2025.

> 1. General

	Answer	Condition Number	Non Compliance	Observation
1.1	Have you had any emission limit value breaches in the past 12 months?	Yes		
Comment / Action Required				
The Lahinch WWTP (See photograph No. 1) cannot provide adequate treatment to comply with the ELVs stated in the licence for this agglomeration.				
Significant breaches for multiple parameters have been recorded to-date in 2025 (See results below).				
It is noted that samples submitted to the agency on the 23/01/2025 and the 18/02/2025 were taken as grab samples. Compliance samples are required to be composite samples as stated in Schedule B.1 of the licence.				
Breaches of Emission Limit Value results for licensed parameters so-far in 2025:				
<u>Ammonia-Total (as N):</u>				
12/03/2025: 15.08 mg/l vs <u>10 mg/l ELV</u>				
16/04/2025: 27.49 mg/l vs <u>10 mg/l ELV</u>				
22/05/2025: 26.35 mg/l vs <u>10 mg/l ELV</u>				
24/06/2025: 18.54 mg/l vs <u>10 mg/l ELV</u>				

Carbonaceous BOD:

18/02/2025: **111.6** mg/l vs 25 mg/l ELV

12/03/2025: **93** mg/l vs 25 mg/l ELV

16/04/2025: **65** mg/l vs 25 mg/l ELV

24/06/2025: **30** mg/l vs 25 mg/l ELV

COD:

18/02/2025: **248** mg/l vs 125 mg/l ELV

12/03/2025: **184** mg/l vs 125 mg/l ELV

16/04/2025: **126** mg/l vs 125 mg/l ELV

24/06/2025: **132** mg/l vs 125 mg/l ELV

Suspended Solids:

18/02/2025: **81** mg/l vs 35 mg/l ELV

12/03/2025: **84** mg/l vs 35 mg/l ELV

16/04/2025: **380** mg/l vs 35 mg/l ELV

24/06/2025: **58** mg/l vs 35 mg/l ELV

Total Phosphorous (as P):

18/02/2025: **3.1** mg/l vs 2 mg/l ELV

12/03/2025: **3.5** mg/l vs 2 mg/l ELV

16/04/2025: **4.68** mg/l vs 2 mg/l ELV

22/05/2025: **2.39** mg/l vs 2 mg/l ELV

24/06/2025: **2.52** mg/l vs 2 mg/l ELV

Uisce Éireann are required to:

- Prioritise the upgrade of the Lahinch WWTP as the way the plant is currently configured is posing a significant potential threat to the Inagh river estuary and designated bathing waters.
- Provide an update, including timeframes on the upgrade of this wastewater treatment plant.
- Clarify why the samples taken on the 23/01/2025 and 18/02/2025 were grab samples rather than composite samples as required in the licence for the Lahinch agglomeration.



2. Inlet Works

2.1

	Answer	Condition Number	Non Compliance	Observation
Is there screening in place at the inlet works?	Checked			
Comment / Action Required				
There is a bar screen in place at the Lahinch WWTP. However, this bar screen is ineffective and does not prevent the majority of rags from entering the oxidation ditch. Uisce Éireann personnel stated that a Purchase Order has been raised and it is expected that a new screening mechanism will be installed within 10-12 weeks from the date on which the P.O was issued. Uisce Éireann are required to: • Ensure that the provision of a screening system occurs within a timely manner and is prioritised.				



3. Cone Test and Diluted Cone Test Observations

3.1

	Answer	Condition Number	Non Compliance	Observation
Does the full cone test reflect mixed liquor suspended solids levels in the plant?	Yes			
Comment / Action Required				
A cone test was conducted during the site visit, a result of 15mls was obtained (See photograph No. 2). This result indicates there is no mixed liquor present in the oxidation ditch. Therefore, very limited treatment of wastewater can occur at the Lahinch Wastewater Treatment Plant as there is insufficient biomass of activated sludge to allow the plant to operate as a conventional Wastewater Treatment Plant. The WWTP was flooded for multiple days prior to the site visit which prevents MLSS from building up to an adequate level to provide treatment. Uisce Éireann are required to: • See actions in site specific issue section.				



4. Settling Tank/Final Clarifier

4.1

	Answer	Condition Number	Non Compliance	Observation
Is there any evidence of operational problems?	Yes			
Comment / Action Required				
The final clarifier was flooded at the time of this site visit due to the plant's inability to discharge during high tide. The elevated water level in the tank prevented effective settlement (See photograph No. 3) Uisce Éireann are required to: • Implement immediate actions to prevent flooding occurring at WWTP.				



5. Site Specific Issues

5.1

	Answer	Condition Number	Non Compliance	Observation
Flooding of the Lahinch WWTP	Checked			Yes
Comment / Action Required				
From the 1st of January 2025 to the 22nd of July 2025 the Lahinch WWTP has been reported as flooded for a total number of 41 days, (see Appendix No. 1). The continual flooding of this plant prevents the build up of an adequate biomass, this was evident in the cone test conducted during this site visit. The cone test recorded a result of 15 mls, which indicates that there is not a sufficient level of biomass to allow treatment of wastewater to occur (See photograph No. 2). Lahinch Wastewater Treatment Plant remains highly vulnerable to flooding, as demonstrated by the significant number of flood events recorded. Uisce Éireann were instructed in the site visit conducted in October 2024 and Compliance Investigation actions to conduct a flood risk assessment and develop contingency measures. This has not been completed. UÉ has indicated that flooding will be addressed in the design of the new WWTP. However, this is unsatisfactory given the long timeline for completion. Without interim measures, continued flooding will result in the discharge of inadequately treated effluent to sensitive receptors, including the Inagh River Estuary Special Area of Conservation and Lahinch Beach designated bathing water. Discharges from the Lahinch WWTP including the primary and unauthorised discharges to adjoining land drains during flooding events have a potential impact on human health if members of the public come into direct contact with these discharges. It is noted that the primary discharge flows for approximately 3.2 km until entering Liscannor bay and is approximately 4km from the designated bathing water area. Uisce Éireann are required to: • Conduct a risk assessment and contingency planning in relation to potential flooding of the current site to include preventative measures to mitigate against frequent flooding of the Lahinch Wastewater Treatment Plant.				

5.2

	Answer	Condition Number	Non Compliance	Observation
Ambient monitoring.	Checked			Yes
Comment / Action Required				
Uisce Éireann is not currently conducting ambient monitoring both upstream and downstream of the final discharge as per the required locations stated in the licence for Lahinch. Uisce Éireann conducts downstream ambient monitoring at the station (RS28I010600). However, this location is not specified in the licence for Lahinch. Uisce Éireann does not conduct ambient monitoring U/S of the final discharge. Ambient monitoring results for the period 2023, 2024 and 2025 to-date were requested prior to the site visit. Ambient data was submitted by Uisce Éireann. However, the excel spreadsheet did not contain data for 2025. It was noted that the parameter Faecal coliforms is not tested for, which is required to be tested bi-annually as per the licence. It is important that Uisce Éireann begins sampling for this parameter without delay given the proximity to the Lahinch WWTP. Ambient sampling is required to be conducted monthly, ambient monitoring data submitted by Uisce Éireann does not contain sampling data for each month. Uisce Éireann are required to: • Conduct ambient monitoring at locations specified in the licence without delay. • Conduct ambient monitoring at the frequency specified in the licence for all parameters, and clarify why this was not conducted. • Submit the outstanding ambient monitoring data for 2025 to-date.				



Appendix

Table one: Dates that the Lahinch WWTP was reported as being flooded so far in 2025.

Month in 2025	Dates	Number of days Lahinch WWTP is flooded per month in 2025
January	1 st , 2 nd , 3 rd , 4 th , 5 th , 6 th , 7 th , 10 th , 11 th , 12 th , 13 th , 19 th , 23 rd , 31 st	14
February	2 nd , 3 rd , 4 th , 24 th , 25 th , 26 th , 28 th	7
April	25 th , 26 th , 27 th , 28 th	4
May	27 th , 28 th , 29 th , 31 st	4
June	26 th , 27 th , 28 th , 29 th	4
July	15 th , 16 th , 17 th , 18 th , 19 th , 20 th , 21 st , 22 nd	8
Total Number of days Lahinch WWTP was flooded so far in 2025 out of a total of 203 days.		41



Photographs

Photograph No. 1: Overview of the oxidation ditch of the Lahinch Wastewater Treatment Plant.



Photograph No.2: Cone test conducted during the site visit indicating no biomass of activated sludge which means that the plant is not operating as a conventional Wastewater Treatment Plant.



Photograph No. 3: Final clarifiers at the Lahinch WWTP which were found to be flooded due to the plant not discharging during high tides on the day off this site visit (22nd of July 2025).



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, 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.