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.

Licensee

Name of Installation	Thurles
Licensee	Irish Water
Licence Register No.	D0026-01
CRO Number	
Site Address	Commons, Thurles, Tipperary
Site Visit Reference No.	SV01614

Report Detail

Issue Date	06/10/2014
Prepared By	Dermot Burke

Site Visit Detail

Date Of Inspection	26/08/2014	**Time In**	13:40	**Time Out**	16:30
Visit Types	Appendix - Template			**Announced**	No
Agency Personnel On Site	Dermot Burke Suzanne Monaghan				
Licensee Personnel and Role	Valerie Hannon, Waste Water Compliance Specialist Southern Region, Irish Water Pat Murphy, Waste Water Lead South East, Irish Water Aidan Delaney, Executive Scientist, Tipperary Co Co Kevin McDonnell, Environmental Technician, Tipperary Co Co Joe Kiely, WWTP Caretaker, Tipperary Co Co Vincent Costello, Acting WWTP Caretaker, Tipperary Co Co				
Photo Taken	No	**Samples Taken**	No	**Video Taken**	No

Scope

To assess performance against Urban Waste Water Treatment Directive and Waste Water Discharge Licence requirements.

Media

Surface water.

Site Areas Inspected

Inlet works, screens, grit traps, aeration basin, final clarifier, composite sampler and final effluent discharge point.

Documents Inspected

Monitoring records (influent, effluent, receiving waters upstream & downstream).

Priority substances study report.

AER for 2013.

Waste Water Discharge Licence Audit Report

Licensee:	Irish Water	**Date of Audit:**	26th August 2014
Agglomeration:	Thurles	**Licence Register Number:**	D0026-01
Licensee representatives:	Valerie Hannon, *Regional Waste Water Compliance Monitoring specialist, Irish Water* Pat Murphy, *Waste Water Lead South East, Irish Water* Aidan Delaney, *Executive Scientist, Tipperary Co Co* Kevin McDonnell, *Environmental Technician, Tipperary Co Co* Joe Kiely, WWTP Caretaker, Tipperary Co co, *General Operative* Vincent Costello, *Acting WWTP Caretaker, Tipperary Co Co*	**EPA Inspectors:**	Dermot Burke, *Inspector* Suzanne Monaghan, *Inspector*
Audit Criteria:	To assess performance against Urban Waste Water Treatment Directive (UWWTD) and Waste Water Discharge Licence (WWDL) requirements.		

1. Background

The Waste Water Discharge Licence (WWDL) for Thurles agglomeration (D0026-01) was granted on 13th September 2013. Schedule C of the WWDL prescribes improvement works including:

Schedule C. 1 Specified Improvement	Completion Date
Improvement works as required for the achievement of Orthophosphate (as P) ELV set in the licence	As agreed

The Thurles agglomeration was listed in the European Infringement Case in relation to Article 3 Collecting system. Ireland stated that additional works were underway to achieve compliance; and this was taken as acknowledgement of non-compliance by the Commission. The Commission also decided that Article 4 (secondary Treatment) is also not complied with in Thurles because all waste water must be collected and conducted for treatment.

2. Audit Meeting

The audit commenced at 13:40 and the attendees were as listed on page 1 of this report. The EPA representatives outlined the purpose and scope of the audit. The reasons for the Thurles agglomeration to be listed in the European Infringement Case were discussed. Both Irish Water and Tipperary County Council were not sure as to the reason why the agglomeration had failed in relation to the collection system. Irish Water is to investigate this issue further and clarify the situation in relation to the collection system.

The audit started with the completion of the Waste Water Discharge Licence Audit Report checklist which is included in this document. A documentation review was carried out and a site visit of Thurles WWTP and effluent discharge point was conducted.

3. Urban Waste Water Reporting

- The EPA Focus on Urban Waste Water Treatment in 2012 report showed that Thurles agglomeration passed the UWWTD criteria. Data for 2013 received by the EPA in 2014 (as yet unpublished) shows the plant was also compliant for Phosphorus in 2013 and Total Nitrogen did not apply. The WWTP is compliant for all other parameters measured under UWWTD requirements.
- Monitoring data for 2014 to date was inspected on the day and found to be compliant.

4. Specified Improvement Programme/ Condition 5 Improvement Programme

Condition 5.1 of the Licence requires the licensee to prepare and submit to the Agency a programme of infrastructural improvements to maximise the effectiveness and efficiency of the waste waterworks. Schedule C.1: Specified Improvement Programmes of the Licence requires improvement works as required for the achievement of Orthophosphate (as P) Emission Limit Value (ELV) set in the Licence. The WWTP in Thurles provides secondary treatment with nutrient removal for wastewater from the Thurles agglomeration and it was noted on the day of the inspection that the discharge has been consistently compliant in relation to Orthophosphate.

5. Condition 4.13 Storm Water Overflows Assessment

A report on identification and assessment of storm water overflows is required to be carried out prior to the submission of the second AER. This report is to be included in the AER for 2014.

6. Annual Environmental Report (AER) for 2013

The sewer integrity tool has been completed for the Thurles Agglomeration. The overall risk score is High Risk, with Hydraulic and Structural assessment falling into the High Risk category. Kevin McDonnell of Tipperary County Council stated that there were a lot of information gaps in relation to the integrity tool and that there were no plans for filling these gaps. The Agency outlined that the sewer integrity tool should be used as a work in progress, and that the information gaps need to be filled in over time.

Aidan Delaney of Tipperary County Council stated the investigation into the sources of priority substances detected during the monitoring of discharges required under Condition 4.12 of the Licence will be carried out in 2014 and will be included in the AER for 2014.

The Agency noted the AER for 2013 states that the receiving water, the River Suir, was achieving less than good status as described in the European Communities Environmental Objectives (Surface Water) Regulations 2009 by comparing BOD, Total Ammonia and Orthophosphate with the standards set out in these regulations. It is noted the status of the River Suir both upstream and downstream of the discharge from the WWTP is less than good. The results of ambient monitoring of River Suir for 2014 to date showed the concentration of Ammonia upstream ranged from 0.01 to 0.081mg/l and 0.01 to 0.073mg/l downstream. The concentrations of Orthophosphate upstream ranged from 0.01 to 0.025mg/l and 0.012 to 0.026mg/l downstream.

It is noted that the report on the progress made and proposals being developed to meet the Improvement Programme Requirements detailed in the AER for 2013 states a process and optimisation review is underway in order to examine if improved compliance with the Orthophosphate ELV can be achieved utilising the existing infrastructure.

Valerie Hannon of Irish Water requested that if there were changes proposed to the EPA AER template that they be flagged with the Licensee before December as the Licensee collates the information for the AER prior to Christmas.

7. Emergency Response Procedure

Irish Water outlined that they are preparing a national Wastewater Incident Response Plan (WINREP), which will be a standard national policy and procedure for all licenses. A site-specific WINREP for the Thurles licence will be prepared and will use the up to date EPA incident classification. The Irish Water Draft Incident Management Procedure was available for inspection on the day of the Audit.

8. Public Awareness and Communication Procedure

There was no Public Awareness and Communication Procedure for review on the day of the audit and it was currently being drafted.

9. Incidents

Incidents detailed in the AER related to Ammonia exceedances in 2013 were discussed. Aidan Delaney stated the incidents were due to the adjustment of the WWTP in order to meet the newer stringent discharge limits required by the licence.

10. Article 17 Programme for Implementation of the Directive

The response to the Article 17 request was discussed with the Licensee. The Agency noted that the comment in the response states “Consultants will be appointed to carry out a study of the network..” and a forecasted investment of €30,000 has been allocated for this work in the Irish Water Capital Investment Programme (CIP). The Licensee was unsure on the day of the audit as to the exact details of the work to be carried out.

11. Site Inspection

A site inspection took place at the Thurles WWTP, which included the inlet works, aeration tanks, final clarifier and the composite sampler. The final discharge on the River Suir was also inspected.

It was noted that there appeared to be some sludge floating on the surface of the final clarifier and the scum box appeared to be full. Pat Murphy of Irish Water said that there could be an issue with the scraper in the clarifier.

12. Recommendations/Actions

1. The Licensee is requested to investigate the reasons why the Thurles Agglomeration had failed in relation to the collection system and has been listed on the European Infringement Case. The Licensee shall provide a report on their investigations, which should be submitted as a site update via the Thurles web portal page on the EDEN system.
2. The Licensee is requested to provide details in relation to the work to be carried out by Consultants referred to in the Article 17 response. The Licensee shall provide a report on their investigations, which should be submitted as a site update via the Thurles web portal page on the EDEN system.
3. The Licensee is requested to provide details of the outputs from the process and optimisation review at the Thurles WWTP and provide a plan for implementation of any recommendations arising. The Licensee shall provide a report on their investigations, which should be submitted as a site update via the Thurles web portal page on the EDEN system.
4. The Condition 4.13 Storm Water Overflows assessment must be carried out by the Licensee and reported in the AER 2014. The assessment shall include a determination

of compliance with the criteria for storm water overflows as set out in the DoECLG guidance.

5. Information gaps in the sewer integrity tool must be addressed by the Licensee with any deficiencies identified being included in the improvement programme.
6. The Licensee shall finalise the Emergency Response Procedure as required under Condition 6.5 of the Licence.
7. The Licensee shall finalise the Public Awareness and Communication Procedure as required under Condition 6.6 of the Licence.
8. The investigation into the sources of priority substances detected during the monitoring of discharges required under Condition 4.12 of the Licence shall be carried out in 2014 and included in the AER for 2014.

Waste Water Discharge Licence Audit Report

The audit is a random sample on a particular day of a facility's operation and environmental performance. Lack of reporting of an area or issue should not be construed to mean that this area is fully satisfactory.				
NAME OF AGGLOMERATION:**Thurles WWTP**	Date of Audit:**26/08/2014**			
LICENSEE/WATER SERVICES AUTHORITY:**North Tipperary County Council**	Name of EPA Personnel:**Dermot Burke, Suzanne Monaghan**			
LICENSE REGISTER NUMBER:**D0026-01**	Name of Licensee Personnel:**Valerie Hannon (See Note. 1)**			
NAME OF RECEIVING WATER:**River Suir**	Job Title of Licensee Personnel:**Waste Water Compliance Specialist South**			
WEATHER CONDITIONS:**Dry, Cloudy**	Time In:**13:40**		Time Out:**16:30**	
WEATHER CONDITIONS OVER 24HRS:**Wet**				
	Yes	**No**	**N/A**	**Comment**
1. Scope				
1.1 Has there been any alteration to the plant since the last audit/visit that is likely to result in a significant change in the quality/quantity of the discharge?		X		See Note 2
1.2 Have there been any significant changes to the overall loading of the plant since the agglomeration was licensed or the last audit?		X		Circa 11,200pe in 2014. Designed for 15,000PE.
1.3 Are any of these changes likely to increase the risk of a breach of the licence conditions?			X	
1.4 Were all the alterations agreed in writing by the EPA?		X		Done before licence issued
2. Flow Meter				
2.1 Is there a continuous flow meter in place at the primary discharge?	X			
2.2 Is there a continuous flow recorder in place?		X		Not graphed. No Scada. Reading taken daily.
2.3 Is the flow meter operating as per the licence requirements?	X			Ultrasonic
2.4 Is the flow meter calibrated and within the calibration date?		X		Not calibrated in the last 2 years at least
2.5 Are the calibration records for the flow meter available for review?		X		
2.6 Is the flow meter maintained?	X			Cleaned & Checked
2.7 Are the maintenance records for the flow meter available for review?	X			Noted in Caretakers Diary
3. Composite Sampler				
3.1 Is there a 24hr composite sampler available for compliance monitoring at the primary discharge?	X			Timed Basis.
3.2 Is the composite sampler operating as per the license requirements?	X			
3.3 Is the composite sampler maintained?	X			Cleaned & Checked

3.4 Are the maintenance records for the composite sampler available for review?	X			Noted in Carketakers Diary

	Yes	No	N/A	Comment
4. Control & Monitoring				
4.1 Are sampling, analyses and measurements of the waste water discharges being undertaken in accordance with the requirements of the licence? (see *Schedule B* of licence)	X			13 No. samples per year
4.2 Are the discharge monitoring records available for review?	X			
4.3 Is monthly monitoring of the influent stream being undertaken to measure mass loadings and removal efficiencies?	X			
4.4 Are the influent monitoring records available for review?	X			
4.5 Is there an established Data Management System in place?	X			Lab Info.
4.6 Who carries out the compliance monitoring testing?			X	Tipperary Co. Co.
4.7.a. Is there a quality system in place for internal compliance testing?	X			EPA Intercalibration
4.7.b. Is there a quality system in place for external compliance testing?	X			ELS do priority substance.
4.8 Is other additional monitoring being carried out by the licensee?	X			1 No. Extra Sample per year.
4.9 Is there a maintenance programme in place for plant and equipment?		X		
5. Improvements, Discharges & Storm Water Overflows				
5.1 Have discharges ceased from the points identified in the licence as *discharges to be discontinued?*, where the time specified in Schedule A of the licence has passed? (The answer to this question is N/A if the date specified in the licence has not passed)			X	
5.2 Have specified improvement works identified in Schedule C of the licence been completed, where the time specified in Schedule C of the licence has passed? (The answer to this question is N/A if the date has not passed or no works are specified)	X			There was fine tuning of the ferric dosing system.
5.3 Has the Storm Water Overflow Identification and Inspection assessment been completed, where the time specified in the licence has passed? (The answer to this question is N/A if the date specified in the licence has not passed)			X	Completed in 2nd AER
5.4 Does the assessment demonstrate that all SWOs in the agglomeration comply with the licence requirements? (The answer to this question is N/A if the date has not passed)			X	
5.5 If the assessment has been completed - how many of the total number of SWOs were identified as non-compliant?			X	
6. Notifications, Records & Reports				
6.1 Since the last audit, have all discharges from the waste water works complied with the Emission Limit Values, as set out in Schedule A of the licence (subject to the requirements of Condition 2 of the licence)?	X			
6.2 Have there been any notifiable incidents since the last WWDL audit, apart from those reported to the EPA?		X		This is the first formal EPA audit.
6.3 Is there a record of incidents including all corrective actions taken to manage, minimise and avoid recurrence?	X			Submitted incidents re. ferric dosing
6.4 Have there been any complaints received of an environmental nature related to the discharge to water?		X		
6.5 Are details of the any such complaints received recorded?			X	
6.6 Is there a documented Emergency Response Procedure in place?		X		Being drafted at present.
6.7 Is there a Public Awareness & Communications Programme in place?	X			Being Revised

6.8 Are all reports submitted to the EPA in relation to the licence certified accurate and representative by the Director of Services or a nominated, suitably qualified and experienced deputy?	**X**			Signed off by Irish Water
7. Additional Information				
7.1 Site Location Grid Reference:	S 11015 56230			

NAME OF AGGLOMERATION:**Thurles WWTP**	
NAME OF RECEIVING WATER:**River Suir**	GIS CO-ORDINATES OF DISCHARGE:**S 10888 56037**
PRIMARYDISCHARGE POINT CODE:**SW1**	PHOTOGRAPHS TAKEN:**No** VIDEO TAKEN:**No**

8. DISCHARGE

	Yes	No	COMMENTS
8.1 Is the primary discharge monitoring point clearly labelled?	X		
8.2 Is there safe and permanent access to the sampling point?	X		
8.3 Was there evidence of gross solids or litter in the discharge?		X	
8.4 Was a grab sample taken?		X	
8.5 Was a split sample offered to the licensee?		X	
8.6 Time that sample was taken:	12:23		
8.7 What is the colour of the discharge sample?			Not observed
8.8 Is there floc present in the discharge sample?			Not observed

9. RECEIVING WATER

	Yes	No	N/A	COMMENTS
9.1 Was there evidence of gross solids or litter in the receiving water associated with the discharge resulting in an impairment of, or an interference with, amenities or the environment?		X		

10. Primary Discharge Observations

10.1 Has the licensee's representative been informed of the observations made while on site? (Yes/No)**Yes**

10.2 Other Observations/Comments?

11. Audit Observations and Comments

12. Audit Notes

Note 1: Other attendees were Pat Murphy, Irish Water, WW Lead in South East, Aidan Delaney, Exec. Scientist, Tipperary County Council, Vincent Costello, Acting WWTP Caretaker, Tipperary County Council, Kevin McDonnell, Env. Technician Tipperary County Council, Joe Kiely, WWTP Caretaker, Tipperary County Council.

Note 2: Mechanical and Electrical upgrade 3 - 4 yrs ago, screening, ferric dosing including diffuse aeration.

Date: 08/09/2014

Name: Dermot Burke

Signed:

Summary

The Thurles WWTP is well run and the discharge is achieving compliance with the emission limit as set out in the Licence. The discharge does not appear to be having any significant adverse effects on the River Suir. The Licensee should investigate the reasons as to why the agglomeration had failed in relation to the collection system and has been listed on the European Infringement Case. There are a number of assesment required by the Licence that need to be completed in 2014 for reporting in the AER for 2014.

FOLLOW-UP ACTIONS

You are required to complete the instructions and actions, as outlined in this report, within the specified timeframe. Where required, you shall respond to actions specified in Compliance Investigations within the required timeframe. The licensee shall maintain documentary evidence, for review by the EPA, that the prescribed corrective actions were completed within the required timeframe.

You are not required to respond directly to this EPA site visit report; where an issue requires a direct response, the EPA will generate a Compliance Investigation through the ALDER/EDEN system, (you will receive notification when a Compliance Investigation instruction or action is generated).

Where you do wish to respond directly to a site visit report, you should do this by generating a 'Licensee Return' of the type 'Site Updates/Notifications' and the sub-type 'Response to EPA Report' in ALDER/EDEN.

Please note that you are required to comply with the conditions of your licence at all times, and where non-compliance occurs you must restore compliance within the shortest possible time. These actions will be verified during subsequent EPA visits.

Please quote the above Inspection Reference Number in any future correspondence in relation to this Report.