



Drinking Water Audit Report

Local Authority:	Laois County Council	Date of Audit:	29/11/2013
Plant(s) visited:	Roundwood Supply 1600PUB 0028	Date of issue of Audit Report:	19/12/2013
		File Reference:	DW2013/28
		Auditors:	Mr Niall Dunne
Audit Criteria:	<ul style="list-style-type: none"> • The <i>European Communities (Drinking Water) (No. 2) Regulations, 2007</i>. • The <i>EPA Handbook on the Implementation of the Regulations for Water Services Authorities for Public Water Supplies (ISBN: 978-1-84095-349-7)</i> • The recommendations specified in the EPA Report on <i>The Provision and Quality of Drinking Water in Ireland</i>. • The recommendations in any previous audit reports. 		

MAIN FINDINGS

- i. A direction for the upgrade of the UV disinfection system was issued on the 8th April 2013. Laois County Council have not yet complied with this Direction. The Direction required Laois County Council to complete the works by the 28th June 2013. In lieu of this, LCC propose to abandon the well and connect the supply to the Mountrath Supply. LCC must ensure that these works are carried out as a matter of priority.
- ii. The current UV system in place is not adequate. There is no standby unit, the duty UV unit is not validated and is not connected to a UVT monitor.
- iii. There is no secondary disinfection system in place.

1. INTRODUCTION

Under the *European Communities (Drinking Water) (No. 2) Regulations 2007* the Environmental Protection Agency is the supervisory authority in relation to the local authorities and their role in the provision of public water supplies. This audit was carried out to assess the performance of the local authority in providing clean and wholesome drinking water and to assess whether the EPA Direction issued on the 8th April 2013 to upgrade the UV disinfection system had been complied with.

The source for this supply is a bored well and serves a population of approximately 36. The average daily flow from the plant is approximately 8 m³/day. The treatment plant consists of a single UV unit. Laois County Council propose to abandon this supply and connect it to the Mountrath Public Water Supply.

Photographs taken by Niall Dunne during the audit are attached to this report and are referred to in the text where relevant.

The opening meeting commenced at 10.15 at the treatment plant. The scope and purpose of the audit were outlined at the opening meeting. The audit process consisted of interviews with staff, review of records and observations made during an inspection of the treatment plant. The audits observations and

recommendations are listed in Section 2 and 4 of this report. The following were in attendance during the audit.

Representing the Local Authority: (* indicates that person was also present for the closing meeting)
 Jack Creegan – Senior Executive Engineer* ; John Gavin – Senior Executive Engineer*; Larry Gittens-
 Sanitary Service Supervisor; Declan Carroll – Caretaker*.

Representing the Environmental Protection Agency:
 Niall Dunne - Inspector.

2. AUDIT OBSERVATIONS

The audit process is a random sample on a particular day of a facility's operation. Where an observation or recommendation against a particular issue has not been reported, this should not be construed to mean that this issue is fully addressed.

1.	<p>Source Protection</p> <ul style="list-style-type: none"> a. The source for this supply is a bored well. b. The well head is located below ground level (see photograph 1). The cover for the well is not secure against surface water ingress. c. Laois County Council (LCC) stated that they do not have borehole records for this well. d. LCC stated that farmers within the vicinity of the source have not been written to with regard to the GAP regulations. e. There is a turbidity monitor in place, the reading on the day of the audit was 0.065 NTU. The high turbidity alarm was set at 1 NTU.
2.	<p>Chlorination and Disinfection</p> <ul style="list-style-type: none"> a. The Direction issued on the 8th April 2013, required LCC to upgrade the UV system. The works were required to be completed by the 28th June 2013. LCC propose to abandon this supply and connect consumers to the Mountrath supply. These works were scheduled to be completed by 9th December 2013. b. The disinfection system in place at the time of the audit consisted of a single UV unit, which was not validated. The UV unit was not connected to a UV monitor, recording device or alarm. (see photograph 2). c. There is no secondary disinfection system in place on this supply.
3.	<p>Management and Control</p> <ul style="list-style-type: none"> a. No written procedures manual was observed on the day of the audit.

3. AUDITORS COMMENTS

A direction was issued to Laois County Council on 8th April 2013 for the UV system to be upgraded by the 28th June 2013. Laois County Council proposed to abandon the Roundwood supply and connect it to the Mountrath Supply. These works were scheduled to be completed by the 9th December 2013. Laois County Council must ensure that the works are carried out as a matter of priority as this supply is extremely vulnerable to contamination due to the poor standard of the disinfection system.

The disinfection system that was in place, at the time of the audit, does not conform to Regulation 13(2) of the DW Regulations, which requires that the efficiency of the disinfection treatment is verified.

Furthermore, the disinfection system is inadequate and does not meet the guidelines set out in EPA Advice Note No.3. There was no standby UV unit in place. There was only a duty unit which was not validated and which was not connected to a UV monitor, recording device or alarms. There was also no secondary chlorination system in place. This leaves the supply vulnerable to contamination and puts the health of the consumers at risk.

4. RECOMMENDATIONS

1. The Water Services Authority must as a matter of priority ensure that the consumers on this supply receive properly disinfected water, as per EPA Advice Note Number 3.

FOLLOW-UP ACTIONS REQUIRED BY THE LOCAL AUTHORITY

During the audit the Water Services Authority representatives were advised of the audit findings and that action must be taken as a priority by the Water Services Authority to address the issues raised. This report has been reviewed and approved by Ms Yvonne Doris, Drinking Water Team Leader.

The Water Services Authority should submit a report to the Agency within one month of the date of this audit report detailing how it has dealt with the issues of concern identified during this audit. The report should include details on the action taken and planned to address the various recommendations, including timeframe for commencement and completion of any planned work.

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 the Water Services Authority.

Please quote the File Reference Number DW2013/28 in any future correspondence in relation to this Report.

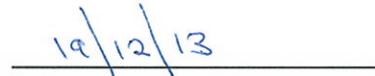
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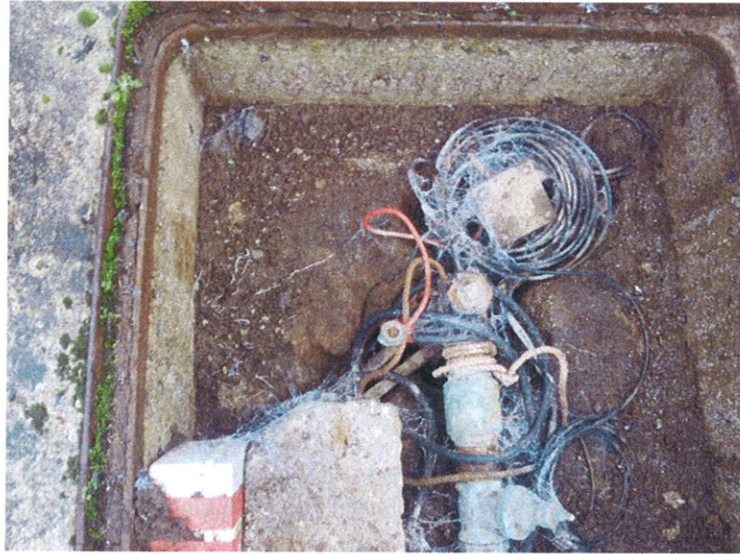
Niall Dunne

Inspector

Date:



Photograph 1 : Well head below ground level.



Photograph 2: Duty UVunit only.

