

Drinking Water Quality Report for Northern Ireland 2018

Mid-Ulster District Council

Water Quality by Northern Ireland Council Area

This local council report is designed to demonstrate water quality by individual council area based on the percentage Compliance at Customer Tap (including Supply Points) over the water supply zones associated with that council area, as shown on the enclosed map.

For monitoring purposes, NI Water's supply area is divided into water supply zones. These are areas serving not more than 100,000 people, each of which are normally supplied from a single water supply source or combination of sources. There are areas where owing to topography and dispersal of population, it is not practicable to provide a mains water supply. Currently over 99.9% of Northern Ireland's population receive public water supplies.

In a number of cases, water supply zones overlap council boundaries. The council reports indicate which water supply zones are wholly or partially contained within the council areas, including those zones that may have a relatively small area within the council area. Separation of data within these water supply zones across council boundaries is not practicable, therefore the information used in calculating the zonal and council compliance relates to the whole zone and not merely the part included within a council boundary. Following discussions with the Drinking Water Inspectorate, water supply zones with fewer than 40 properties within the council area have not been used to calculate the individual council compliance. The information is based on samples taken randomly from customer taps in each water supply zone and from planned samples at authorised supply points. Due to the nature of random sampling, there may be fluctuations in water quality across the water supply zones.

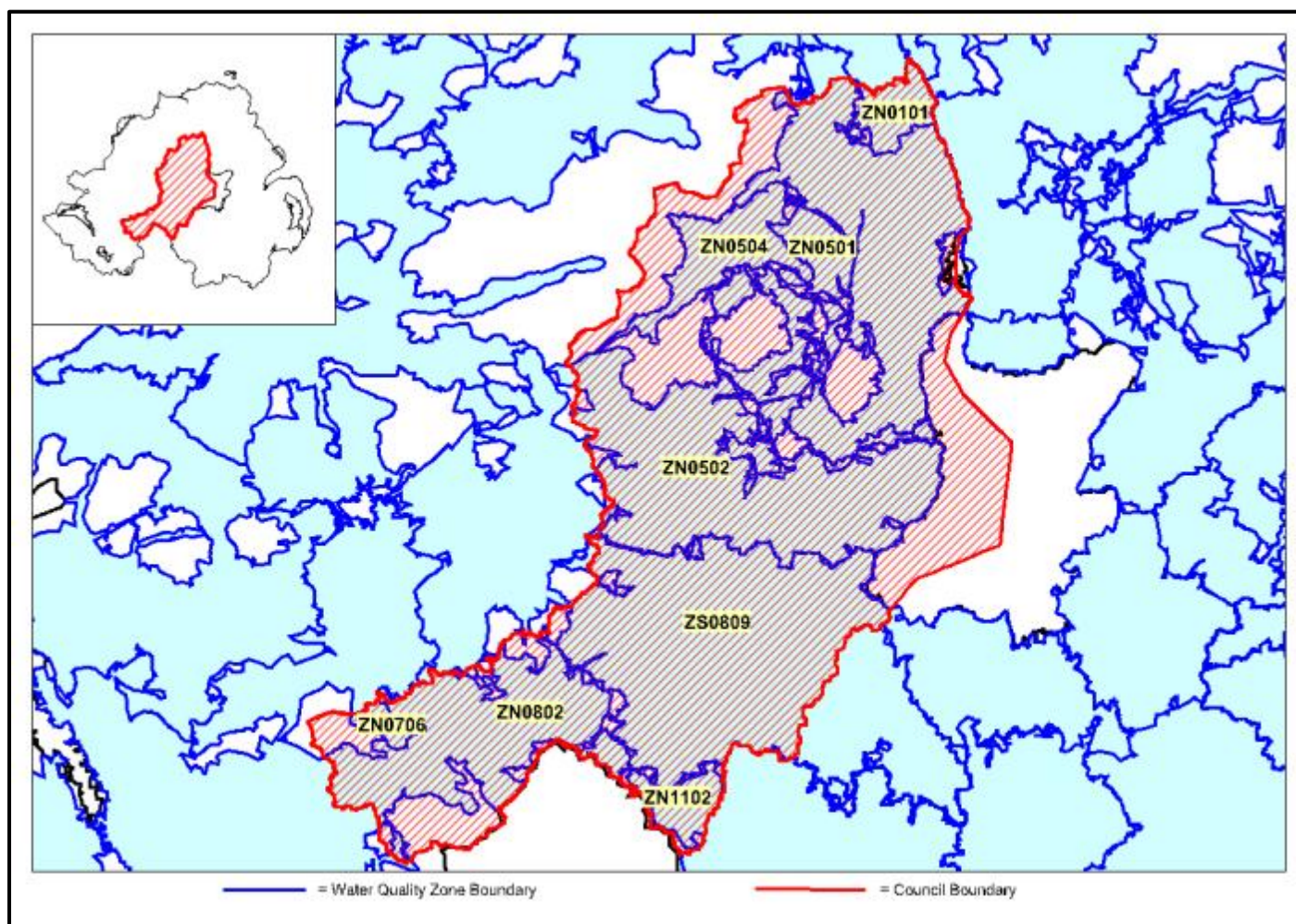
The report also details Capital Work Programmes affecting the council area, which directly related to water quality during the reporting period.

Small variations in water quality compliance performance occur across Northern Ireland. This reflects the need to continue to invest in and to maintain water treatment works, and to improve the water mains network.

A change to the Drinking Water Quality Regulations in 2017 resulted in a reduction of testing frequencies for some parameters at Authorised Supply Points for 2018 onwards. This has slightly lowered the percentage Compliance at Customer Tap at council level, but has not affected the overall compliance.

NI Water has identified the need to deliver a significant volume of water mains rehabilitation and other works across its ageing network. The works are necessary to ensure the efficient and cost effective operation of its water supply system in the immediate future and longer term as well as ensuring adequate levels of water quality and customer supply. To achieve this goal, NI Water has implemented a Water mains Rehabilitation Framework, within which it undertakes work on a Northern Ireland wide basis as identified by the zonal study programme of work.

Mid-Ulster District Council



% Compliance at Customer Tap (including Supply Points)

	Target	2014	2015	2016	2017	2018
Overall Northern Ireland Compliance	99.7%	99.8%	99.7%	99.8%	99.9%	99.9%
Mid-Ulster Compliance	99.7%	99.7%	99.8%	99.8%	99.9%	99.9%

2018 Water Supply Zones wholly or partially within the council area:

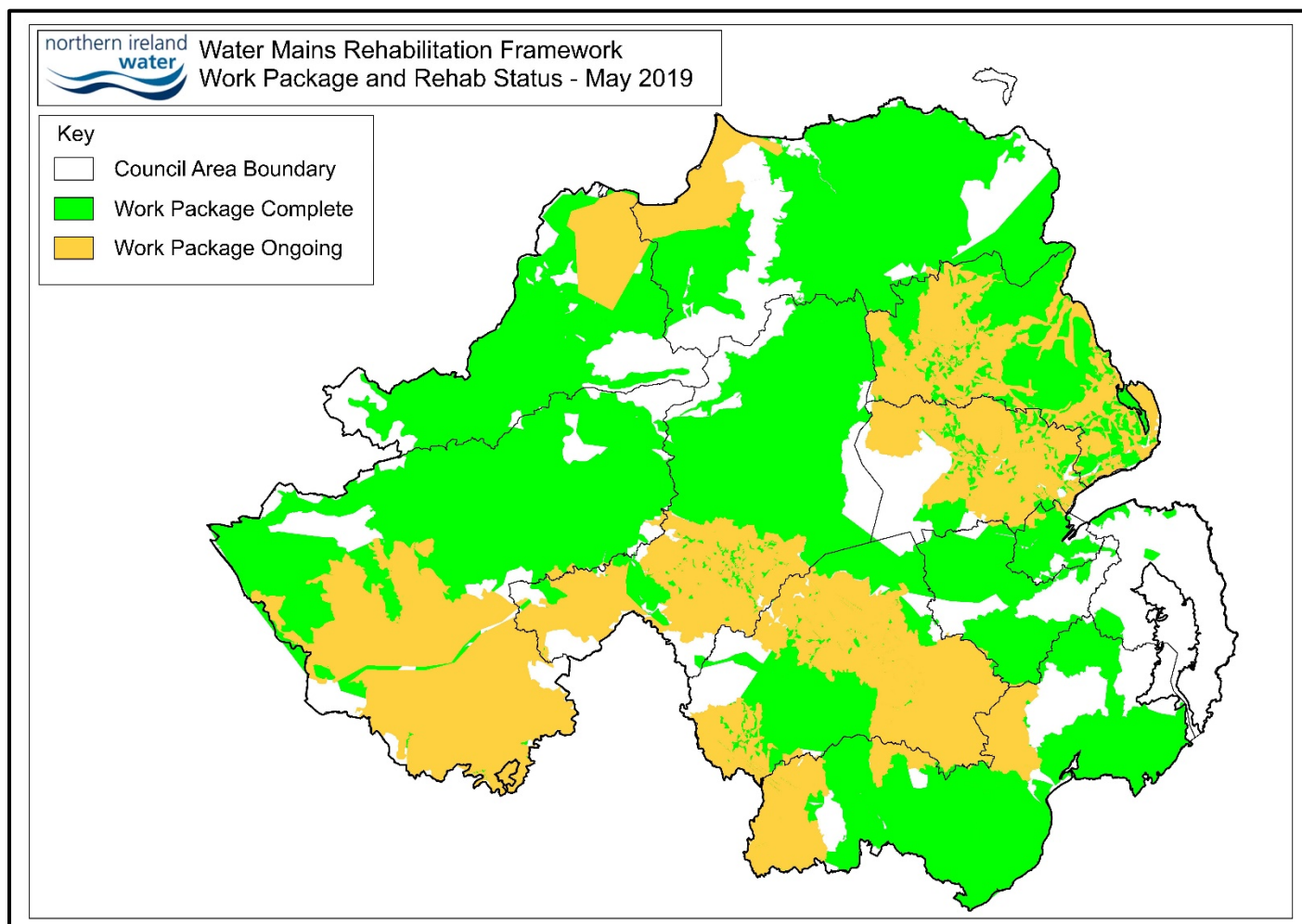
Zone Code	Zone Name	Zone Code	Zone Name
ZN0101	Ballinrees Coleraine	ZN0706	Lough Macrory Killyclogher
ZN0501	Moyola Magherafelt	ZN0802	Killyhevlin Enniskillen
ZN0502	Lough Fea Cookstown	ZN1102	Seagahan Armagh
ZN0504	Moyola Unagh Morneal	ZS0809	Castor Bay Dungannon
ZN0705	Lough Macrory Beragh		

2018 Water Quality Capital Works Programmes affecting the council area:

A6 Castledawson to Randalstown
 Antrim North WIIM 2.1 Work Package
 Castor Bay Outage Feasibility Studies
 Castor Bay to Dungannon Strategic Trunk Mains
 Central Zone Resilience
 Compiling Prioritised Lead Comms Pipe Workpackages Phase 2
 Cookstown Phase 3 Watermain Improvements
 Hydraulic Model Rebuilds & Project Management (PC15 Year 2)
 Lough Fea CWB Capacity Increase

NIW Historic Estate Condition Assessments
PC15 Abstraction Monitoring
PC15 Lead Communication Pipe Replacement Programme
PC15 Service Reservoir Sample Taps
PC15 Year 1 Base Maintenance - Chlorine Dosing Sites
Professional Services Framework Watermains Network PC15
Review benefits of UV Disinfection treatment within NIW clean water.
SEMD Surveys PC10 Water
Service Reservoir Security Phase 1
Southern Zone Resilience
Tyrone North WIIM 2.1 Work Package
Water Resource and Supply Resilience Plan
Water Treatment Sites - Water Regulation Compliance & Energy Efficiency Programme
Water Treatment Works Treatability Study
Watermains Rehabilitation, New & Replacement Incorporating First Time Services
WIIM Phase 2 Lough Fea WP
WIIM Phase 2 Moyola Magherafelt WP

Water Mains Rehabilitation Framework Current Work Package Status



The map above shows the extent of the current Water Mains Rehabilitation Framework covering most of Northern Ireland. To assist clarity, whilst the council boundaries are shown, the individual councils are not named. Regions in white on the map are largely watercourses or upland areas that do not receive public water supply.

Water Quality Events

Major Drinking Water Quality Events in 2018

Date of Major Event	Area and Estimate of Population/ Properties Potentially Affected	Nature and Cause of Major Event	Associated Council Area(s)
12/06/18 - 02/07/18	Castor Bay WTW (415,293 population)	Algal bloom in Lough Neagh led to a major drinking water quality event with widespread taste and odour complaints. The treatment available at the time of this event was inadequate.	Armagh Banbridge Craigavon District; Belfast City; Lisburn & Castlereagh City; Mid-Ulster District; and Newry Mourne & Down District

Serious Drinking Water Quality Events in 2018

Date of Serious Event	Area and Estimate of Population/ Properties Potentially Affected	Nature and Cause of Serious Event	Associated Council Area(s)
15/02/18 - 22/02/18	Drumroad WTW (408,595 population)	Treatment difficulties following power spikes led to aluminium contraventions in the works final water and the related supply area. A Consideration of Provisional Enforcement Order (CPEO) has been issued by the Inspectorate.	Belfast City; Lisburn & Castlereagh City; Newry Mourne & Down District; and North Down & Ards Borough
28/06/18 - 19/07/19	Northern Ireland (1.8m population)	A prolonged spell of hot weather resulted in significant increased demand on the water network throughout N. Ireland. Tankering was required to keep people on supply, and a hosepipe ban was in place for 3 weeks.	All council areas
29/07/18 - 07/08/18	Carn Road & Green Road, Meigh (43 properties)	Consumers experienced a significant hydrocarbon odour after the mains water was contaminated with oil.	Newry Mourne & Down District
13/12/18 – 16/12/18	Finaghy Area (16,603 population)	Consumer complaints of discoloured water were received following operational work by NI Water. There were also contraventions of the iron and manganese standards.	Belfast City

Significant Drinking Water Quality Events in 2018

Date of Significant Event	Area and Estimate of Population/ Properties Potentially Affected	Nature and Cause of Significant Event	Associated Council Area(s)
03/01/18 - 09/01/18	Lough Bradan WTW (48,158 population)	Contraventions of the taste parameter occurred in the works final water. NI Water's investigation was unable to determine a cause for the contraventions.	Fermanagh & Omagh District
05/01/18	Killylane WTW (51,120 population)	Contraventions of the aluminium, iron, and turbidity standards occurred in the works final water. The most probable cause for this event was the use of a chemical past its recommended shelf life.	Mid & East Antrim Borough
16/01/18 - 21/01/18	Drummaroad WTW (556,706 population)	Contraventions of the aluminium parameter occurred in the works final water following treatment difficulties. The treatment difficulties were caused by a telecommunications failure. A CPEO has been issued by the Inspectorate.	Belfast City; Lisburn & Castlereagh City; Newry Mourne & Down District; and North Down & Ards Borough
19/01/18 - 26/01/18	Bleary Road, Portadown (2 properties)	Coliform bacteria contraventions led to "Boil Water before Use until Further Notice" advice being issued to two properties. NI Water's investigation was unable to determine a cause for the contraventions, and resamples were satisfactory.	Armagh City, Banbridge & Craigavon Borough
02/02/18 - Present	Friary Road, Armoy (6 properties)	Consumer complaints of discoloured water were received by NI Water. Samples taken in response to this event contravened the aluminium, iron and manganese standards and were above the Health Notification Values (HNVs).	Causeway Coast & Glens Borough
09/02/18 - 14/02/18	Killyglen SR (9,500 properties)	A large number of consumers complained about discoloured water following a burst main at the inlet to the reservoir. A contravention of the turbidity standard (above the HNV) was reported.	Mid & East Antrim Borough
28/02/18 - 09/03/18	Northern Ireland (1.8m population)	Severe weather event. Interruptions to water supply occurred over many areas of Northern Ireland primarily due to frozen and burst pipes, necessitating the use of alternative water supplies.	Most council areas
02/03/18	Drummaroad WTW (408,595 population)	Elevated aluminium levels occurred in the works final water following treatment difficulties. These were caused by a generator failure. A CPEO has been issued by the Inspectorate.	Belfast City; Lisburn & Castlereagh City; Newry Mourne & Down District; and North Down & Ards Borough
04/03/18	Lough Fea WTW (43,872 population)	Contraventions of the aluminium, iron and turbidity parameters occurred in the works final water following treatment difficulties. This event was related to the "Severe weather event" reported previously.	Mid Ulster District
06/03/18 - 11/03/18	Drummaroad WTW (457,036 population)	A Cryptosporidium oocyst was detected in the works final water and a further one detected in Sampsons Stone SR. A warning letter was issued by the Inspectorate in relation to this matter.	Belfast City; Lisburn & Castlereagh City; Newry Mourne & Down District; and North Down & Ards Borough
09/04/18	Lough Fea WTW (43,872 population)	Contraventions of the aluminium and iron parameters occurred in the works final water following treatment difficulties. This event was related to the works not having	Mid Ulster District

Date of Significant Event	Area and Estimate of Population/ Properties Potentially Affected	Nature and Cause of Significant Event	Associated Council Area(s)
		fully returned to normal operation following the previous event in March and/or the CWT having been at a very low level.	
23/04/18 - Present	Rathlin Island (2 properties)	The elevated level of bromoform (produced by the disinfection of the raw water which has a high bromide level) in the works final water led to trihalomethane (THM) contraventions and WHO Index values for THMs > 1. An enforcement notice was issued by the Inspectorate in relation to this matter.	Causeway Coast & Glens Borough
02/05/18 - 04/05/18	Edenaveys SR (34,941 properties)	Chlorine was overdosed due to a component failure in the chlorinator. Elevated chlorine levels were detected in the related supply area. There is now a critical alarm in place to prevent a recurrence.	Armagh City, Banbridge & Craigavon Borough and Newry Mourne & Down District
15/05/18 - Sept. 18	Ballinrees WTW (111,856 population)	Taste & Odour complaints in the area supplied by Ballinrees WTW.	Causeway Coast & Glens Borough and Derry City & Strabane
23/05/18 - Present	Derg WTW (38,989 population)	Contraventions of the individual pesticide standard for MCPA occurred in the works final water due to insufficient treatment. An enforcement notice was issued by the Inspectorate in relation to this matter.	Derry City & Strabane and Fermanagh & Omagh District
28/06/18 - 06/07/18	Killyhevlin Enniskillen (2,502 properties)	Consumer complaints of discoloured water were received in the Glencuil SR supply area. Samples taken in response to this event contravened the aluminium, iron, manganese and turbidity standards. This event was related to the "high network demand event" reported previously.	Fermanagh & Omagh District
27/07/18 - 31/07/18	Unagh SR (2,432 properties)	E.coli were detected in the SR final water and in the related supply area. The chlorine levels were lower than normal at the time of these contraventions and all subsequent samples have been satisfactory.	Mid Ulster District
07/08/18 - 20/08/18	Glenelly Road, Plumbridge (6 properties)	E.coli and coliform bacteria contraventions led to "Boil Water before Use until Further Notice" advice being issued to three properties. NI Water's investigation was unable to specify a cause for the contraventions. Further resamples were satisfactory.	Derry City & Strabane
28/08/18	Drummaroad WTW (382,217 population)	Elevated aluminium levels occurred in the works final water following treatment difficulties caused by instrument failure. A CPEO has been issued by the Inspectorate.	Belfast City; Lisburn & Castlereagh City; Newry Mourne & Down District; and North Down & Ards Borough
04/09/18 - 18/09/18	Dungonnell WTW (Population 26,601)	A contravention of the trihalomethanes (THMs) parameter occurred in the works supply area after a period of sub-optimal treatment. Resamples were satisfactory.	Mid & East Antrim Borough

Date of Significant Event	Area and Estimate of Population/ Properties Potentially Affected	Nature and Cause of Significant Event	Associated Council Area(s)
26/09/18 - 27/09/18	Carmony WTW (51,470 population)	A low chlorine event occurred following the leakage of some filter-cleaning reagent into the works final water.	Derry City & Strabane
15/10/18 - 19/10/18	Caugh Hill WTW (75,020 population)	Contraventions of the aluminium, iron and turbidity parameters occurred in the works final water and iron contraventions occurred in the related supply area following treatment difficulties.	Causeway Coast & Glens Borough and Derry City & Strabane
09/10/18 - Present	Rathlin Island (4 props)	The elevated level of bromoform (produced by the disinfection of the raw water which has a high bromide level) in the works final water led to trihalomethane (THM) contraventions and WHO Index values for THMs > 1. An enforcement notice was issued by the Inspectorate in relation to this matter.	Causeway Coast & Glens Borough
19/10/18 - 21/10/18	Altnahinch WTW (31,903 population)	Contraventions of the aluminium, hydrogen ion (pH) and turbidity parameters occurred in the works final water.	Causeway Coast & Glens Borough
23/10/18 - 26/10/18	Dungonnell WTW (Population 26,601)	Contraventions of the aluminium parameter occurred in the works final water following treatment difficulties.	Mid & East Antrim Borough
02/11/18 - 09/11/18	Drummaroad WTW (408,919 population)	Contraventions of the aluminium parameter occurred in the works final water and the related supply area following treatment difficulties. The treatment difficulties were caused by chemical dosing problems. A CPEO has been issued by the Inspectorate.	Belfast City; Lisburn & Castlereagh City; Newry Mourne & Down District; and North Down & Ards Borough
30/12/18 - 02/01/19	Drummaroad WTW (428,690 population)	A contraventions of the aluminium parameter occurred in the works final water. NI Water's investigation was unable to specify a cause for the contravention. A CPEO has been issued by the Inspectorate.	Belfast City; Lisburn & Castlereagh City; Newry Mourne & Down District; and North Down & Ards Borough

After investigations during the reporting period, there were also eight events categorised by Drinking Water Inspectorate (DWI) as "Minor", and 12 events categorised as "Not Significant".

UNDERSTANDING YOUR WATER QUALITY RESULTS

Where the water quality standards come from

The water we supply for domestic use or food production must comply with the standards in The Water Supply (Water Quality) Regulations (NI) 2017, which incorporate European Union standards and more stringent UK national standards. These Regulations detail the acceptable levels of certain characteristics, elements and substances allowed in drinking water. Usually, this is a maximum level; but, occasionally, a minimum is also set (e.g. pH). This permissible level is known as the Prescribed Concentration or Value (PCV). Some of the regulatory levels are set for aesthetic reasons and not for health (e.g. Colour).

Where we sample

Samples are taken from our service reservoirs, water treatment works and taps in customers' homes. Every year, our accredited laboratories carry out over 100,000 sophisticated tests to ensure quality standards are met. The Drinking Water Inspectorate (DWI) within the Northern Ireland Department of Agriculture, Environment and Rural Affairs (DAERA) also independently audits these tests and issues a report each year on its findings. DWI ensures that NI Water meets more than 50 legal standards for drinking water quality to match water companies across the rest of the UK. The standards are strict and generally include wide safety margins. They cover: bacteria; chemicals, such as nitrates and pesticides; metals, such as lead; and how water looks and tastes.

What happens if a test fails?

If a sample fails a test, this does not necessarily mean the water is unsafe to drink. Sometimes, the water in our mains or pipes and in the neighbouring properties is good, but the failure is caused by the householder's own plumbing system. However, we take all failures of these standards very seriously and these are dealt with by a team of specialists. All failures are recorded, investigated and action is taken to resolve the problem. If the contamination is found to be due to the tap or internal plumbing, NI Water will inform the customer in writing of the reason for the failure so that they can take appropriate action. A copy of the letter is also provided to the Public Health Agency, the local Environmental Health Officer and the DWI.

All PCV failures are also reported externally to the DWI, respective health boards, Environmental Health departments, the Consumer Council for Northern Ireland (CCNI), DRD Water Policy Unit and the Utility Regulator (NAIUR).

Units of measurement

The units of measurement used in this factsheet are as follows:

- 1 milligram per litre (mg/l) is one part per million (ppm)
- 1 microgram per litre (µg/l) is 1 part per billion (or thousand million)
- NTU – Nephelometric turbidity units (for turbidity measurement)
- Pt/Co – Platinum-cobalt units Standard (for colour measurement)
- µS/cm – micro siemens per centimetre (for conductivity measurement)

Concentration or value

Shown in three ways:

- **Min**(imum), the lowest result during the period
- **Mean**, the average of the results
- **Max**(imum), the highest result during the period.
- A '<' symbol means a result was less than the value at which a parameter can be detected.
- A '>' symbol means a result was greater than the range within which a parameter is normally detected.

Number of samples

- Total taken – the number of samples tested for each parameter
- Contravening – shows the number of samples that exceeded the PCV
- % of samples contravening PCV – the number of samples that contravened the PCV compared to the total number of samples taken expressed as a percentage.

INDIVIDUAL PARAMETERS / SUBSTANCES

Hardness

Total Hardness is normally caused by dissolved calcium and, to a lesser extent, magnesium in rocks through which the water has passed. In Northern Ireland, our water is predominantly soft to moderately soft or slightly to moderately hard. Hardness means you may have to use more soap when washing as hard water lathers less than soft water. It has not been proven to have adverse effects on health and is safe to drink. There is no standard specified in the current regulations. Dependent upon the origin and manufacturer of your dishwasher, you may require a specific parameter, such as Clarke degrees (a.k.a. English degrees) or French or German degrees. GH is general hardness, while KH is Carbonate, or temporary hardness.

pH (listed under 'Hydrogen Ion')

This is a scientific term used to describe the acidity or alkalinity of a fluid. We need to control the pH of water because:

- If water is too acidic, it may corrode metal pipes in the distribution system
- If water is too alkaline, it may cause deposits to form in the pipes. The standard is to keep water pH levels in the 6.5-9.5 range

Colour

The colour of drinking water is usually dependent on the presence of naturally- occurring dissolved organic matter. For example, the higher the peat content of a catchment, (e.g. the Mourne Catchment), the higher the level of colour in the raw water. However, colour may also be due to the presence of iron contributed by old cast-iron mains.

- PCV for colour is 20 mg/l Pt/Co.

Sometimes, the water coming out of the tap has a milky or cloudy appearance, which is usually caused by excess air dissolved in the water as micro bubbles. This is not harmful and, if the water is left to stand for a few minutes, it will clear from the bottom upwards (i.e. the bubbles of air rise to the top of the glass and escape).

Turbidity

Turbidity is caused by very fine insoluble materials that may be present in water. Levels are closely monitored during the treatment processes.

- PCV at the customer's tap is 4 NTU

Odour and taste

Customer complaints quite often relate to taste and odour. Quality control tests are carried out to measure the level of taste and odour and are performed by a specialist testing panel.

- PCV for each = Dilution Number >0

Conductivity

Conductivity is proportional to the dissolved solids content of the water and is often used as an indication of the presence of dissolved minerals, such as calcium, magnesium and sodium.

- PCV is 2500 μ S/cm at 20°C

Chlorine (Cl - listed under Free-Residual disinfectant)

Chlorine is added to water to ensure water is free from bacteria. When chlorine is added, not all of it is used up in the process. Some remains as 'free chlorine' to make sure the water remains safe as it passes through the distribution system.

No PCV is prescribed for chlorine in the regulations and these levels are set to ensure that a small concentration remains at the end of the distribution system to maintain customer safety.

***E. coli* and enterococci**

If present, these indicate a possible breach in the integrity of the water supply system. An effective treatment process will kill any organisms present.

PCV standards are:

- 0 /100ml for *E. Coli*
- 0 /100ml for Enterococci

Coliform bacteria

These are naturally present in the environment. Their presence may indicate a possible breach in the integrity of the supply system or contamination from the kitchen sink or taps.

Nitrite and nitrate (NO₂ and NO₃)

Normally only trace amounts of these compounds are found in water.

- PCV for nitrite = 0.5 mg NO₂/l
- PCV for nitrate = 50 mg NO₃/l

Chloride (Cl)

Chloride in water originates from natural sources such as mineral deposits. It can contribute to taste that may be unacceptable to customers if the standard is exceeded.

- PCV = 250 mg Cl/l

Fluoride (F)

NI Water does not add fluoride to any water supply in Northern Ireland. Fluoride can occur naturally in some raw water supplies at low levels.

- PCV = 1.5 mg F/l

Sulphate (SO₄)

Sulphate occurs naturally in water and originates from mineral deposits. High concentrations may give rise to taste problems and, in the long-term, damage pipe work.

- PCV = 250 mg SO₄/l

Copper (Cu)

Copper can occur naturally in some water sources, and is normally found in low concentrations in drinking water.

- PCV = 2 mg Cu/l

Iron (Fe)

This is one of the most abundant metals found naturally in surface and ground waters. After treatment, it is normally reduced to trace concentrations in drinking water. Increased levels can occur due to the corrosion of old cast-iron water mains. There is no known health risk associated with high iron concentrations, but staining of clothing in washing machines can occur.

- PCV = 200 µg Fe/l

Manganese (Mn)

Manganese occurs naturally in water. High concentrations of manganese in tap water may cause discolouration and possible staining of clothing in washing machines.

- PCV = 50 µg Mn/l

Aluminium (Al)

Aluminium can occur naturally in water within certain catchments. However, aluminium compounds are used in the treatment process to help remove impurities. Any aluminium compounds added during the treatment process are removed before the final treated water leaves the treatment works.

- PCV = 200 µg Al/l

Sodium (Na)

Sodium occurs naturally in trace amounts in water. High concentrations may impart a level of taste that is unacceptable to customers.

- PCV = 200 mg Na/l

Lead (Pb)

Lead is not normally present in water sources, but significant concentrations may be present at customers' taps if lead or copper pipes with lead joints have been used in the plumbing system. More information is available [here](#).

- PCV = 10 µg Pb/l

Trihalomethanes (THMs)

THMs occur in drinking water as by-products of the reaction of chlorine with naturally occurring dissolved organic materials. In drinking water, only four compounds out of the group of THMs have health significance, the most common of which is chloroform. The PCV is based on the sum of the concentrations of all four constituents.

- PCV = 100 µg/l

Other substances

In addition to those listed and explained above, we also test for substances such as hydrocarbons, pesticides and herbicides, phenols and organic carbon. We also carry out extensive monitoring of our supplies for cryptosporidium through sampling of raw and final treated water.

Home-brewers may be interested in the Calcium, Magnesium, Carbonate, Sodium, Sulphate, Chloride and pH levels of their water supply. If you cannot locate the information you require, please contact us at waterline@niwater.com

Zonal Commentaries and Public Registers

2018 WATER SUPPLY COMMENTARY

ZN0101 - Ballinrees Coleraine

The water supplied in this zone within your council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017.

WATER SUPPLY ZONE - ZN0101 - Ballinrees Coleraine
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter		U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven- ing PCV	% of samples contraven- ing PCV	Concentration or value (all samples)		
								Min.	Mean	Max.
1,2 Dichloroethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	ug/l	AS	8	9		0	0.000	< 0.001	< 0.003	0.013
2,4-DB	ug/l	AS	8	9		0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	ug Al/l	S	76	76		0	0.000	< 1.000	< 23.845	72.010
Ammonium	mg NH4/l	S	76	77		0	0.000	< 0.012	< 0.012	0.014
Antimony	ug/l Sb	S	8	8		0	0.000	0.030	0.078	0.103
Arsenic	ug/l As	S	8	8		0	0.000	< 0.300	< 0.319	0.409
Asulam	ug/l	AS	8	9		0	0.000	< 0.005	< 0.005	< 0.005
Bentazone	ug/l	AS	8	9		0	0.000	< 0.001	< 0.002	< 0.007
Benzene	ug/l	S	8	8		0	0.000	< 0.020	< 0.020	< 0.020
Benzo(a)pyrene	ug/l	S	8	8		0	0.000	< 0.001	< 0.001	< 0.001
Boron	mg/l B	S	8	8		0	0.000	0.002	0.006	0.011
Bromate	ug BrO3/l	S	8	8		0	0.000	< 0.300	< 0.374	0.610
Bromoxynil	ug/l	AS	8	9		0	0.000	< 0.004	< 0.004	< 0.004
Cadmium	ug/l Cd	S	8	8		0	0.000	0.010	0.015	0.044
Chloride	mg Cl/l	S	8	8		0	0.000	14.089	22.794	25.267
Chlorotoluron	ug/l	AS	8	9		0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	ug/l	AS	8	9		0	0.000	< 0.002	< 0.003	< 0.003
Chromium	ug/l Cr	S	8	8		0	0.000	< 0.100	< 0.337	0.848
Clopyralid	ug/l	AS	8	9		0	0.000	< 0.004	< 0.010	0.033
Clostridium perfringens (sulph red)	No./100 ml	AS	8	11		0	0.000	0.000	0.000	0.000
Clostridium perfringens (sulph red)	No./100 ml	AS	1	1		0	0.000	0.000	0.000	0.000
Colony Counts 22	No./1 ml	S	76	76		0	0.000	0.000	4.211	247.000
Colony Counts 37 (48hrs)	No./1 ml	S	76	76		0	0.000	0.000	4.579	198.000
Colour	mg/l Pt/Co	S	76	76		0	0.000	< 1.000	< 1.433	5.380
Conductivity	uS/cm 20 C	S	76	76		0	0.000	134.000	306.171	360.000
Copper	mg Cu/l	S	8	8		0	0.000	0.001	0.003	0.005
Cyanide	ug/l CN	AS	8	9		0	0.000	< 1.700	< 1.700	< 1.700
Dicamba	ug/l	AS	8	9		0	0.000	< 0.012	< 0.012	< 0.012
Dichlorprop	ug/l	AS	8	9		0	0.000	< 0.001	< 0.001	< 0.001
Diffufenican	ug/l	AS	8	9		0	0.000	< 0.003	< 0.003	< 0.004
Diuron	ug/l	AS	8	9		0	0.000	< 0.003	< 0.003	< 0.003
E. coli	No./100 ml	S	228	228		0	0.000	0.000	0.000	0.000
Enterococci	No./100ml	S	8	8		0	0.000	0.000	0.000	0.000
Epoxiconazole	ug/l	AS	8	9		0	0.000	< 0.002	< 0.002	< 0.002
Fenpropimorph	ug/l	AS	8	9		0	0.000	< 0.003	< 0.003	< 0.004
Fluoride	mg F/l	S	8	8		0	0.000	< 0.020	< 0.020	< 0.020
Fluroxypyr	ug/l	AS	8	9		0	0.000	< 0.005	< 0.011	0.018
Free - Residual disinfectant	mg Cl/l	S	228	228		0	0.000	0.050	0.166	0.960
Glyphosate	ug/l	AS	8	9		0	0.000	< 0.003	< 0.003	< 0.003
Hydrogen Ion	pH value	S	76	76		0	0.000	6.840	7.618	7.950
Iron	ug Fe/l	S	76	76		1	1.316	< 2.000	< 29.822	293.300
Isoproturon	ug/l	AS	8	9		0	0.000	< 0.002	< 0.002	< 0.002
Lead	ug Pb/l	S	8	8		0	0.000	< 0.100	< 0.147	0.368
Linuron	ug/l	AS	8	9		0	0.000	< 0.006	< 0.006	< 0.006
MCPA	ug/l	AS	8	9		0	0.000	0.005	0.018	0.052
MCPB	ug/l	AS	8	9		0	0.000	< 0.004	< 0.004	< 0.004
Manganese	ug Mn/l	S	76	76		0	0.000	0.410	1.848	12.880
Mecoprop	ug/l	AS	8	9		0	0.000	0.001	0.005	0.011
Mercury	ug/l Hg	S	8	8		0	0.000	< 0.010	< 0.023	0.098
Metalaxyl	ug/l	AS	8	9		0	0.000	< 0.004	< 0.004	< 0.005
Metamitron	ug/l	AS	8	9		0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	ug/l	AS	8	9		0	0.000	< 0.003	< 0.003	< 0.004
Metoxuron	ug/l	AS	8	9		0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	ug/l	AS	8	9		0	0.000	< 0.002	< 0.002	< 0.003
Nickel	ug Ni/l	S	8	8		0	0.000	1.150	3.563	18.166
Nitrate	mg/l	S	8	8		0	0.000	< 0.400	< 1.548	2.700
Nitrite	mg/l	S	8	8		0	0.000	< 0.010	< 0.010	< 0.010
Odour	Diln No	S	76	76		2	2.632	0.000	0.158	9.000
PAH - Sum of four substances	ug/l	S	8	8		0	0.000	< 0.000	< 0.000	< 0.000
Pendimethalin	ug/l	AS	8	9		0	0.000	< 0.003	< 0.003	0.006
Pesticides - Total Substances	ug/l	AS	8	9		0	0.000	< 0.050	< 0.059	0.104
Phorate	ug/l	AS	8	9		0	0.000	< 0.004	< 0.004	< 0.005

WATER SUPPLY ZONE - ZN0101 - Ballinrees Coleraine										
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.										
Parameter		U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven	% of samples contraven	Concentration or value (all samples)		
					Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.
Pirimicarb	ug/l	AS	8	9		0	0.000	< 0.002	< 0.003	< 0.003
Propachlor	ug/l	AS	8	9		0	0.000	< 0.004	< 0.004	< 0.005
Propiconazole	ug/l	AS	8	9		0	0.000	< 0.002	< 0.002	< 0.002
Propyzamide	ug/l	AS	8	9		0	0.000	< 0.002	< 0.002	< 0.002
Prothioconazole	ug/l	AS	8	9		0	0.000	< 0.006	< 0.006	< 0.006
Selenium	ug/l Se	S	8	8		0	0.000	< 0.200	< 0.286	0.472
Sodium	mg Na/l	S	8	8		0	0.000	8.281	14.865	16.389
Sulphate	mg SO4/l	S	8	8		0	0.000	< 2.000	< 45.871	74.070
Taste	Diln No	S	76	76		2	2.632	0.000	0.066	3.000
Tebuconazole	ug/l	AS	8	9		0	0.000	< 0.002	< 0.002	< 0.002
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
Total - Residual disinfectant	mg Cl/l	S	228	228		0	0.000	0.120	0.286	1.210
Total Indicative Dose	mSv/year	AS	1	2		0	0.000	< 0.100	< 0.100	< 0.100
Total Organic Carbon	mg C/l	S	8	9		0	0.000	1.690	2.222	2.800
Total Trihalomethanes	ug/l	S	8	8		0	0.000	25.000	58.750	87.000
Total coliforms	No./100 ml	S	228	228		1	0.439	0.000	0.004	1.000
Triclopyr	ug/l	AS	8	9		0	0.000	< 0.004	< 0.004	0.006
Tritium	Bq/l	AS	1	2		0	0.000	< 10.000	< 10.000	< 10.000
Turbidity	NTU	S	76	76		0	0.000	0.110	0.216	1.750

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 93780

This zone has a surface water source :R1701

PCV Exceedances:

Sample failed 28-AUG-2018 (ZN0101AE) Iron = 290 ug Fe/.
Sample failed 02-JUL-2018 (ZN0101AE) Odour = 9 Diln No.
Sample failed 23-JUL-2018 (ZN0101AE) Odour = 3 Diln No.
Sample failed 23-JUL-2018 (ZN0101AE) Taste = 2 Diln No.
Sample failed 06-AUG-2018 (ZN0101AE) Taste = 3 Diln No.
Sample failed 12-OCT-2018 (ZN0101AE) Total coliforms = 1 No./100.

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point

2018 WATER SUPPLY COMMENTARY

ZN0501 - Moyola Magherafelt

The water supplied in this zone within the Mid Ulster council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017 except for the following parameter(s):-

Total coliforms – single exceedance

Total coliforms are an indication of microbiological contamination. Exceedances can occur when there are problems with disinfection of the water supply or where the sample tap is contaminated. Most total coliform / E Coli exceedances are because of contamination of the customer tap. Investigation of this exceedance found that the water supply was satisfactory and that the contamination was most likely related to the customer tap.

WATER SUPPLY ZONE - ZN0501 - Moyola Magherafelt

Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter	U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven ing PCV	% of samples contraven ing PCV	Concentration or value (all samples)		
							Min.	Mean	Max.
1,2 Dichloroethane	S	8	9		0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	AS	16	17		0	0.000	< 0.001	< 0.002	0.008
2,4-DB	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	S	36	36		0	0.000	3.760	28.566	74.920
Ammonium	S	36	36		0	0.000	< 0.012	< 0.012	< 0.012
Antimony	S	8	8		0	0.000	0.095	0.111	0.120
Arsenic	S	8	8		0	0.000	< 0.300	< 0.335	0.397
Asulam	AS	16	17		0	0.000	< 0.005	< 0.005	0.006
Bentazone	AS	16	17		0	0.000	< 0.001	< 0.001	< 0.007
Benzene	S	8	9		0	0.000	< 0.020	< 0.020	< 0.020
Benzo(a)pyrene	S	8	8		0	0.000	< 0.001	< 0.001	< 0.001
Boron	S	8	8		0	0.000	0.002	0.009	0.014
Bromate	S	8	8		0	0.000	< 0.300	< 0.300	< 0.300
Bromoxynil	AS	16	17		0	0.000	< 0.004	< 0.004	0.004
Cadmium	S	8	8		0	0.000	< 0.010	< 0.014	0.024
Chloride	S	8	8		0	0.000	11.974	23.135	25.254
Chlorotoluron	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.003
Chromium	S	8	8		0	0.000	0.111	0.311	0.535
Clopyralid	AS	16	17		0	0.000	< 0.004	< 0.009	0.033
Clostridium perfringens (sulph red)	AS	16	19		0	0.000	0.000	0.000	0.000
Colony Counts 22	S	36	36		0	0.000	0.000	0.250	3.000
Colony Counts 37 (48hrs)	S	36	36		0	0.000	0.000	0.611	7.000
Colour	S	36	36		0	0.000	< 1.000	< 1.208	1.960
Conductivity	S	36	36		0	0.000	131.000	383.167	421.000
Copper	S	8	8		0	0.000	0.002	0.015	0.041
Cyanide	AS	16	17		0	0.000	< 1.700	< 1.935	3.400
Dicamba	AS	16	17		0	0.000	< 0.012	< 0.012	< 0.012
Dichlorprop	AS	16	17		0	0.000	< 0.001	< 0.001	< 0.001
Diiflufenican	AS	16	17		0	0.000	< 0.003	< 0.003	0.004
Diuron	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
E. coli	S	108	108		0	0.000	0.000	0.000	0.000
Enterococci	S	8	8		0	0.000	0.000	0.000	0.000
Epoxiconazole	AS	16	17		0	0.000	< 0.002	< 0.002	0.003
Fenpropimorph	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
Fluoride	S	8	8		0	0.000	< 0.020	< 0.021	0.028
Fluroxypyr	AS	16	17		0	0.000	< 0.005	< 0.010	0.016
Free - Residual disinfectant	S	108	108		0	0.000	< 0.050	< 0.431	0.900
Glyphosate	AS	16	17		0	0.000	< 0.003	< 0.004	0.010
Hydrogen Ion	S	36	36		0	0.000	7.490	7.828	8.060
Iron	S	36	36		0	0.000	< 2.000	< 16.044	108.300
Isoproturon	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Lead	S	8	8		0	0.000	< 0.100	< 0.103	0.120
Linuron	AS	16	17		0	0.000	< 0.006	< 0.006	< 0.006
MCPA	AS	16	17		0	0.000	< 0.001	< 0.010	0.045
MCPB	AS	16	17		0	0.000	< 0.004	< 0.004	0.005
Manganese	S	36	36		0	0.000	0.100	0.697	2.720
Mecoprop	AS	16	17		0	0.000	< 0.001	< 0.004	0.014
Mercury	S	8	8		0	0.000	< 0.010	< 0.018	0.061
Metalaxyl	AS	16	17		0	0.000	< 0.004	< 0.004	< 0.004
Metamitron	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.004
Metoxuron	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.003
Nickel	S	8	8		0	0.000	1.442	2.879	7.013
Nitrate	S	8	9		0	0.000	< 0.400	< 2.190	6.100
Nitrite	S	8	8		0	0.000	< 0.010	< 0.010	< 0.010
Odour	S	36	36		0	0.000	0.000	0.000	0.000
PAH - Sum of four substances	S	8	8		0	0.000	< 0.000	< 0.000	< 0.000
Pendimethalin	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
Pesticides - Total Substances	AS	16	17		0	0.000	< 0.050	< 0.055	0.089
Phorate	AS	16	17		0	0.000	< 0.004	< 0.004	< 0.005
Pirimicarb	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.003

WATER SUPPLY ZONE - ZN0501 - Moyola Magherafelt										
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.										
Parameter		U/A	No. of	No. of	PCV	No. Of	% of	Concentration or value		
		Freq.	samples	samples		samples	samples	(all samples)		
			per annum	taken in year	Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.
Propachlor	ug/l	AS	16	17		0	0.000	< 0.004	< 0.004	< 0.005
Propiconazole	ug/l	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Propyzamide	ug/l	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Prothioconazole	ug/l	AS	16	17		0	0.000	< 0.006	< 0.006	< 0.006
Selenium	ug/l Se	S	8	8		0	0.000	< 0.200	< 0.325	0.459
Sodium	mg Na/l	S	8	8		0	0.000	6.012	15.054	17.000
Sulphate	mg SO4/l	S	8	8		0	0.000	28.784	77.154	94.254
Taste	Diln No	S	36	36		0	0.000	0.000	0.000	0.000
Tebuconazole	ug/l	AS	16	17		0	0.000	< 0.002	< 0.002	0.003
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
Total - Residual disinfectant	mg Cl/l	S	108	108		0	0.000	0.190	0.574	1.040
Total Indicative Dose	mSv/year	AS	2	3		0	0.000	< 0.100	< 0.100	< 0.100
Total Organic Carbon	mg C/l	S	8	7		0	0.000	1.000	2.163	3.000
Total Trihalomethanes	ug/l	S	8	8		0	0.000	33.000	46.125	65.000
Total coliforms	No./100 ml	S	108	108		1	0.926	0.000	0.009	1.000
Triclopyr	ug/l	AS	16	17		0	0.000	< 0.004	< 0.004	0.008
Tritium	Bq/l	AS	2	3		0	0.000	< 10.000	< 10.000	< 10.000
Turbidity	NTU	S	36	36		0	0.000	0.100	0.130	0.300

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 44814

This zone has a surface water source :R1301

PCV Exceedances:

Sample failed 06-AUG-2018 (ZN0501AE) Total coliforms = 1 No./100.

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point

2018 WATER SUPPLY COMMENTARY

ZN0502 - Lough Fea Cookstown

The water supplied in this zone within the Mid Ulster council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017 except for the following parameter(s):-

Odour – three exceedances

One of the exceedances was likely due to being at the end of the distribution system, with little turnover of water leading to the water being stale. The second was fed directly from the clear water basin at the treatment works with no obvious reason for the exceedance. Resamples were all satisfactory. The other exceedance was determined to be due to contamination on the customer's premises.

Taste – two exceedances

One of the exceedances was likely due to being at the end of the distribution system, with little turnover of water leading to the water being stale. The second was fed directly from the clear water basin at the treatment works with no obvious reason for the exceedance. Resamples were all satisfactory.

WATER SUPPLY ZONE - ZN0502 - Lough Fea Cookstown

Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter	U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contravening PCV	% of samples contravening PCV	Concentration or value (all samples)		
							Min.	Mean	Max.
1,2 Dichloroethane	ug/l	S	8	8	0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	< 0.001
2,4-DB	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	ug Al/l	S	24	24	0	0.000	6.100	29.116	170.900
Ammonium	mg NH4/l	S	24	24	0	0.000	< 0.012	< 0.012	0.017
Antimony	ug/l Sb	S	8	8	0	0.000	0.060	0.107	0.215
Arsenic	ug/l As	S	8	8	0	0.000	< 0.300	< 0.300	< 0.300
Asulam	ug/l	AS	8	8	0	0.000	< 0.005	< 0.005	0.006
Bentazone	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Benzene	ug/l	S	8	8	0	0.000	< 0.020	< 0.020	< 0.020
Benzo(a)pyrene	ug/l	S	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Boron	mg/l B	S	8	8	0	0.000	0.001	0.002	0.005
Bromate	ug BrO3/l	S	8	8	0	0.000	< 0.300	< 0.300	< 0.300
Bromoxynil	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	0.004
Cadmium	ug/l Cd	S	8	8	0	0.000	< 0.010	< 0.010	0.013
Chloride	mg Cl/l	S	8	8	0	0.000	10.000	10.986	11.991
Chlorotoluron	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Chromium	ug/l Cr	S	8	8	0	0.000	0.110	0.171	0.253
Clopyralid	ug/l	AS	8	8	0	0.000	< 0.004	< 0.008	0.032
Clostridium perfringens (sulph red)	No./100 ml	AS	8	10	0	0.000	0.000	0.000	0.000
Colony Counts 22	No./1 ml	S	24	24	0	0.000	0.000	0.417	5.000
Colony Counts 37 (48hrs)	No./1 ml	S	24	24	0	0.000	0.000	0.167	3.000
Colour	mg/l Pt/Co	S	24	24	0	0.000	< 1.000	< 1.066	1.500
Conductivity	uS/cm 20 C	S	24	24	0	0.000	114.000	147.833	415.000
Copper	mg Cu/l	S	8	8	0	0.000	0.003	0.013	0.053
Cyanide	ug/l CN	AS	8	8	0	0.000	< 1.700	< 2.200	3.400
Dicamba	ug/l	AS	8	8	0	0.000	< 0.012	< 0.012	< 0.012
Dichlorprop	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Diiflufenican	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Diuron	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
E. coli	No./100 ml	S	60	60	0	0.000	0.000	0.000	0.000
Enterococci	No./100ml	S	8	8	0	0.000	0.000	0.000	0.000
Epoxiconazole	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	0.003
Fenpropimorph	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Fluoride	mg F/l	S	8	8	0	0.000	< 0.020	< 0.020	< 0.020
Fluroxypyr	ug/l	AS	8	8	0	0.000	< 0.005	< 0.005	0.007
Free - Residual disinfectant	mg Cl/l	S	60	60	0	0.000	0.060	0.545	1.100
Glyphosate	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Hydrogen Ion	pH value	S	24	24	0	0.000	7.040	7.271	7.600
Iron	ug Fe/l	S	24	24	0	0.000	< 2.000	< 39.824	160.900
Isoproturon	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Lead	ug Pb/l	S	8	8	0	0.000	< 0.100	< 0.183	0.713
Linuron	ug/l	AS	8	8	0	0.000	< 0.006	< 0.006	< 0.006
MCPA	ug/l	AS	8	8	0	0.000	< 0.001	< 0.002	0.010
MCPB	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	0.005
Manganese	ug Mn/l	S	24	24	0	0.000	< 0.100	< 1.123	7.420
Mecoprop	ug/l	AS	8	8	0	0.000	< 0.001	< 0.002	0.006
Mercury	ug/l Hg	S	8	8	0	0.000	< 0.010	< 0.019	0.080
Metalaxyl	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Metamitron	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Metoxuron	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Nickel	ug Ni/l	S	8	8	0	0.000	0.651	0.917	1.364
Nitrate	mg/l	S	8	8	0	0.000	< 0.400	< 0.591	1.700
Nitrite	mg/l	S	8	8	0	0.000	< 0.010	< 0.010	< 0.010
Odour	Diln No	S	24	25	3	12.000	0.000	0.720	8.000
PAH - Sum of four substances	ug/l	S	8	8	0	0.000	< 0.000	< 0.000	< 0.000
Pendimethalin	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Pesticides - Total Substances	ug/l	AS	8	8	0	0.000	< 0.050	< 0.050	< 0.050
Phorate	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Pirimicarb	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002

WATER SUPPLY ZONE - ZN0502 - Lough Fea Cookstown											
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.											
Parameter		U/A	No. of	No. of	PCV	No. Of	% of	Concentration or value			
		Freq.	samples	samples		samples	samples	(all samples)			
			per annum	taken in year	Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.	
Propachlor	ug/l	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004	
Propiconazole	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002	
Propyzamide	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002	
Prothioconazole	ug/l	AS	8	8		0	0.000	< 0.006	< 0.006	< 0.006	
Selenium	ug/l Se	S	8	8		0	0.000	< 0.200	< 0.204	0.228	
Sodium	mg Na/l	S	8	8		0	0.000	5.600	6.336	8.987	
Sulphate	mg SO4/l	S	8	8		0	0.000	26.757	29.008	30.818	
Taste	Diln No	S	24	24		2	8.333	0.000	0.333	5.000	
Tebuconazole	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002	
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200	
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100	
Total - Residual disinfectant	mg Cl/l	S	60	60		0	0.000	0.110	0.614	1.140	
Total Indicative Dose	mSv/year	AS	1	1		0	0.000	< 0.100	< 0.100	< 0.100	
Total Organic Carbon	mg C/l	S	8	8		0	0.000	0.796	1.323	2.200	
Total Trihalomethanes	ug/l	S	8	8		0	0.000	29.000	40.250	58.000	
Total coliforms	No./100 ml	S	60	60		0	0.000	0.000	0.000	0.000	
Triclopyr	ug/l	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004	
Tritium	Bq/l	AS	1	1		0	0.000	< 10.000	< 10.000	< 10.000	
Turbidity	NTU	S	24	24		0	0.000	< 0.100	< 0.149	0.450	

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 25682

This zone has a surface water source :R1302

PCV Exceedances:

Sample failed 20-MAR-2018 (ZN0502AE) Odour = 3 Diln No.

Sample failed 15-MAY-2018 (ZN0502AE) Odour = 7 Diln No.

Sample failed 22-AUG-2018 (ZN0502AE) Odour = 8 Diln No.

Sample failed 20-MAR-2018 (ZN0502AE) Taste = 3 Diln No.

Sample failed 15-MAY-2018 (ZN0502AE) Taste = 5 Diln No.

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point

2018 WATER SUPPLY COMMENTARY

ZN0504 - Moyola Unagh Mormeal

The water supplied in this zone within the Mid Ulster council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017 except for the following parameter(s):-

Iron – single exceedance

Investigations found that this exceedance was most likely caused by a disturbance of mains deposits from older iron mains, with resamples being satisfactory after flushing if required. NI Water has in place an extensive Mains Rehabilitation Programme, which favours mains replacement and zones are prioritised according to need. This programme will continue to maintain and improve the quality of water in your council area over the next few years.

WATER SUPPLY ZONE - ZN0504 - Moyola Unagh Mormeal
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter	U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven- ing PCV	% of samples contraven- ing PCV	Concentration or value (all samples)		
							Min.	Mean	Max.
1,2 Dichloroethane	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	AS	16	17		0	0.000	< 0.001	< 0.002	0.008
2,4-DB	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	S	24	24		0	0.000	13.000	25.615	35.980
Ammonium	S	24	24		0	0.000	0.012	< 0.012	< 0.012
Antimony	S	8	8		0	0.000	0.099	0.115	0.128
Arsenic	S	8	8		0	0.000	< 0.300	< 0.329	0.391
Asulam	AS	16	17		0	0.000	< 0.005	< 0.005	0.006
Bentazone	AS	16	17		0	0.000	< 0.001	< 0.001	< 0.007
Benzene	S	8	8		0	0.000	< 0.020	< 0.020	< 0.020
Benzo(a)pyrene	S	8	8		0	0.000	< 0.001	< 0.001	< 0.001
Boron	S	8	8		0	0.000	0.007	0.009	0.014
Bromate	S	8	8		0	0.000	< 0.300	< 0.331	0.550
Bromoxynil	AS	16	17		0	0.000	< 0.004	< 0.004	0.004
Cadmium	S	8	8		0	0.000	< 0.010	< 0.012	0.014
Chloride	S	8	8		0	0.000	20.328	24.217	26.894
Chlorotoluron	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.003
Chromium	S	8	8		0	0.000	0.160	0.371	0.783
Clopyralid	AS	16	17		0	0.000	< 0.004	< 0.009	0.033
Clostridium perfringens (sulph red)	AS	16	20		0	0.000	0.000	0.000	0.000
Colony Counts 22	S	24	24		0	0.000	0.000	0.625	14.000
Colony Counts 37 (48hrs)	S	24	24		0	0.000	0.000	0.042	1.000
Colour	S	24	24		0	0.000	< 1.000	< 1.116	1.560
Conductivity	S	24	24		0	0.000	307.000	377.958	439.000
Copper	S	8	8		0	0.000	0.003	0.020	0.068
Cyanide	AS	16	17		0	0.000	< 1.700	< 1.935	3.400
Dicamba	AS	16	17		0	0.000	< 0.012	< 0.012	< 0.012
Dichlorprop	AS	16	17		0	0.000	< 0.001	< 0.001	< 0.001
Diiflufenican	AS	16	17		0	0.000	< 0.003	< 0.003	0.004
Diuron	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
E. coli	S	60	60		0	0.000	0.000	0.000	0.000
Enterococci	S	8	8		0	0.000	0.000	0.000	0.000
Epoxiconazole	AS	16	17		0	0.000	< 0.002	< 0.002	0.003
Fenpropimorph	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
Fluoride	S	8	8		0	0.000	< 0.020	< 0.022	0.026
Fluroxypyr	AS	16	17		0	0.000	< 0.005	< 0.010	0.016
Free - Residual disinfectant	S	60	60		0	0.000	0.070	0.451	1.090
Glyphosate	AS	16	17		0	0.000	< 0.003	< 0.004	0.010
Hydrogen Ion	S	24	24		0	0.000	7.350	7.710	7.920
Iron	S	24	24		1	4.167	< 2.000	< 29.616	304.400
Isoproturon	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Lead	S	8	8		0	0.000	< 0.100	< 0.106	0.146
Linuron	AS	16	17		0	0.000	< 0.006	< 0.006	< 0.006
MCPA	AS	16	17		0	0.000	< 0.001	< 0.010	0.045
MCPB	AS	16	17		0	0.000	< 0.004	< 0.004	0.005
Manganese	S	24	24		0	0.000	0.230	2.302	36.820
Mecoprop	AS	16	17		0	0.000	< 0.001	< 0.004	0.014
Mercury	S	8	8		0	0.000	< 0.010	< 0.017	0.042
Metalaxyl	AS	16	17		0	0.000	< 0.004	< 0.004	< 0.004
Metamitron	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.004
Metoxuron	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.003
Nickel	S	8	8		0	0.000	1.472	1.976	2.931
Nitrate	S	8	8		0	0.000	< 0.400	< 1.832	4.400
Nitrite	S	8	8		0	0.000	< 0.010	< 0.010	< 0.010
Odour	S	24	24		0	0.000	0.000	0.000	0.000
PAH - Sum of four substances	S	8	8		0	0.000	< 0.000	< 0.000	< 0.000
Pendimethalin	AS	16	17		0	0.000	< 0.003	< 0.003	< 0.003
Pesticides - Total Substances	AS	16	17		0	0.000	< 0.050	< 0.055	0.089
Phorate	AS	16	17		0	0.000	< 0.004	< 0.004	< 0.005
Pirimicarb	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.003

WATER SUPPLY ZONE - ZN0504 - Moyola Unagh Mormeal										
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.										
Parameter		U/A	No. of	No. of	PCV	No. Of	% of	Concentration or value		
		Freq.	samples	samples		samples	samples	(all samples)		
			per annum	taken in year	Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.
Propachlor	ug/l	AS	16	17		0	0.000	< 0.004	< 0.004	< 0.005
Propiconazole	ug/l	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Propyzamide	ug/l	AS	16	17		0	0.000	< 0.002	< 0.002	< 0.002
Prothioconazole	ug/l	AS	16	17		0	0.000	< 0.006	< 0.006	< 0.006
Selenium	ug/l Se	S	8	8		0	0.000	< 0.200	< 0.306	0.399
Sodium	mg Na/l	S	8	8		0	0.000	13.539	17.795	22.000
Sulphate	mg SO4/l	S	8	8		0	0.000	< 2.000	< 65.705	90.893
Taste	Diln No	S	24	24		0	0.000	0.000	0.000	0.000
Tebuconazole	ug/l	AS	16	17		0	0.000	< 0.002	< 0.002	0.003
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
Total - Residual disinfectant	mg Cl/l	S	60	60		0	0.000	0.190	0.587	1.210
Total Indicative Dose	mSv/year	AS	2	3		0	0.000	< 0.100	< 0.100	< 0.100
Total Organic Carbon	mg C/l	S	8	8		0	0.000	1.600	2.336	3.000
Total Trihalomethanes	ug/l	S	8	8		0	0.000	37.000	51.000	69.000
Total coliforms	No./100 ml	S	60	60		0	0.000	0.000	0.000	0.000
Triclopyr	ug/l	AS	16	17		0	0.000	< 0.004	< 0.004	0.008
Tritium	Bq/l	AS	2	3		0	0.000	< 10.000	< 10.000	< 10.000
Turbidity	NTU	S	24	24		0	0.000	0.100	0.150	0.380

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 13371

This zone has a surface water source :R1301

PCV Exceedances:

Sample failed 05-JUL-2018 (ZN0504AE) Iron = 300 ug Fe/.

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point

2018 WATER SUPPLY COMMENTARY

ZN0705 - Lough Macrory Beragh

The water supplied in this zone within your council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017.

WATER SUPPLY ZONE - ZN0705 - Lough Macrory Beragh
 Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter	U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven- ing PCV	% of samples contraven- ing PCV	Concentration or value (all samples)		
							Min.	Mean	Max.
1,2 Dichloroethane	ug/l	S	8	8	0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	< 0.001
2,4-DB	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	ug Al/l	S	24	24	0	0.000	< 1.000	< 7.927	19.000
Ammonium	mg NH4/l	S	24	24	0	0.000	< 0.012	< 0.012	< 0.012
Antimony	ug/l Sb	S	8	8	0	0.000	0.023	0.031	0.049
Arsenic	ug/l As	S	8	8	0	0.000	< 0.300	< 0.300	< 0.300
Asulam	ug/l	AS	8	8	0	0.000	< 0.005	< 0.005	< 0.005
Bentazone	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Benzene	ug/l	S	8	8	0	0.000	< 0.020	< 0.020	< 0.020
Benzo(a)pyrene	ug/l	S	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Boron	mg/l B	S	8	8	0	0.000	0.001	0.002	0.004
Bromate	ug BrO3/l	S	8	8	0	0.000	2.100	2.600	3.300
Bromoxynil	ug/l	AS	8	8	0	0.000	< 0.004	< 0.005	0.009
Cadmium	ug/l Cd	S	8	8	0	0.000	< 0.010	< 0.010	< 0.010
Chloride	mg Cl/l	S	8	8	0	0.000	12.872	14.340	16.696
Chlorotoluron	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Chromium	ug/l Cr	S	8	8	0	0.000	0.113	0.175	0.311
Clopyralid	ug/l	AS	8	8	0	0.000	< 0.004	< 0.005	0.016
Clostridium perfringens (sulph red)	No./100 ml	AS	8	11	0	0.000	0.000	0.000	0.000
Colony Counts 22	No./1 ml	S	24	24	0	0.000	0.000	0.000	0.000
Colony Counts 37 (48hrs)	No./1 ml	S	24	24	0	0.000	0.000	0.042	1.000
Colour	mg/l Pt/Co	S	24	24	0	0.000	< 1.000	< 1.083	2.100
Conductivity	uS/cm 20 C	S	24	24	0	0.000	130.000	156.646	370.000
Copper	mg Cu/l	S	8	8	0	0.000	0.001	0.010	0.066
Cyanide	ug/l CN	AS	8	8	0	0.000	< 1.700	< 1.813	2.500
Dicamba	ug/l	AS	8	8	0	0.000	< 0.012	< 0.012	< 0.012
Dichlorprop	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Diiflufenican	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Diuron	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
E. coli	No./100 ml	S	36	36	0	0.000	0.000	0.000	0.000
Enterococci	No./100ml	S	8	8	0	0.000	0.000	0.000	0.000
Epoxiconazole	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Fenpropimorph	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Fluoride	mg F/l	S	8	8	0	0.000	< 0.020	< 0.020	< 0.020
Fluroxypyr	ug/l	AS	8	8	0	0.000	< 0.005	< 0.006	0.012
Free - Residual disinfectant	mg Cl/l	S	36	36	0	0.000	0.060	0.553	0.900
Glyphosate	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	0.004
Hydrogen Ion	pH value	S	24	24	0	0.000	7.390	7.580	7.770
Iron	ug Fe/l	S	24	24	0	0.000	< 2.000	< 10.359	29.700
Isoproturon	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Lead	ug Pb/l	S	8	8	0	0.000	< 0.100	< 0.109	0.171
Linuron	ug/l	AS	8	8	0	0.000	< 0.006	< 0.006	< 0.006
MCPA	ug/l	AS	8	8	0	0.000	< 0.001	< 0.004	0.009
MCPB	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Manganese	ug Mn/l	S	24	24	0	0.000	< 0.100	< 0.252	0.470
Mecoprop	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Mercury	ug/l Hg	S	8	8	0	0.000	< 0.010	< 0.022	0.086
Metalaxyl	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Metamitron	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Metoxuron	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Nickel	ug Ni/l	S	8	8	0	0.000	0.490	0.577	0.669
Nitrate	mg/l	S	8	8	0	0.000	< 0.400	< 1.132	1.938
Nitrite	mg/l	S	8	8	0	0.000	< 0.010	< 0.010	< 0.010
Odour	Diln No	S	24	25	2	8.000	0.000	0.320	4.000
PAH - Sum of four substances	ug/l	S	8	8	0	0.000	< 0.000	< 0.000	< 0.000
Pendimethalin	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Pesticides - Total Substances	ug/l	AS	8	8	0	0.000	< 0.050	< 0.050	< 0.050
Phorate	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Pirimicarb	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002

WATER SUPPLY ZONE - ZN0705 - Lough Macrory Beragh											
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.											
Parameter		U/A	No. of	No. of	PCV	No. Of	% of	Concentration or value			
		Freq.	samples	samples		samples	samples	(all samples)			
			per annum	taken in year	Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.	
Propachlor	ug/l	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004	
Propiconazole	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002	
Propyzamide	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002	
Prothioconazole	ug/l	AS	8	8		0	0.000	< 0.006	< 0.006	< 0.006	
Selenium	ug/l Se	S	8	8		0	0.000	< 0.200	< 0.209	0.250	
Sodium	mg Na/l	S	8	8		0	0.000	8.280	9.447	11.025	
Sulphate	mg SO4/l	S	8	8		0	0.000	21.399	26.814	35.590	
Taste	Diln No	S	24	24		0	0.000	0.000	0.000	0.000	
Tebuconazole	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002	
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200	
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100	
Total - Residual disinfectant	mg Cl/l	S	36	36		0	0.000	0.150	0.646	1.020	
Total Indicative Dose	mSv/year	AS	1	1		0	0.000	< 0.100	< 0.100	< 0.100	
Total Organic Carbon	mg C/l	S	8	9		0	0.000	0.780	1.073	1.310	
Total Trihalomethanes	ug/l	S	8	8		0	0.000	16.000	30.125	46.000	
Total coliforms	No./100 ml	S	36	36		0	0.000	0.000	0.000	0.000	
Triclopyr	ug/l	AS	8	8		0	0.000	< 0.004	< 0.004	0.005	
Tritium	Bq/l	AS	1	1		0	0.000	< 10.000	< 10.000	< 10.000	
Turbidity	NTU	S	24	24		0	0.000	< 0.100	< 0.120	0.390	

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 11969

This zone has a surface water source :R4523

PCV Exceedances:

Sample failed 06-AUG-2018 (ZN0705AE) Odour = 4 Diln No.

Sample failed 08-OCT-2018 (ZN0705AE) Odour = 4 Diln No.

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point

2018 WATER SUPPLY COMMENTARY

ZN0706 - Lough Macrory Killyclogher

The water supplied in this zone within your council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017.

WATER SUPPLY ZONE - ZN0706 - Lough Macrory Killiclogher

Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter	U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven- ing PCV	% of samples contraven- ing PCV	Concentration or value (all samples)		
							Min.	Mean	Max.
1,2 Dichloroethane	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	AS	24	24		0	0.000	< 0.001	< 0.001	0.002
2,4-DB	AS	24	24		0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	S	24	24		0	0.000	1.350	15.379	129.400
Ammonium	S	24	24		0	0.000	< 0.012	< 0.012	0.015
Antimony	S	8	8		0	0.000	0.030	0.035	0.041
Arsenic	S	8	8		0	0.000	< 0.300	< 0.339	0.521
Asulam	AS	24	24		0	0.000	< 0.005	< 0.006	0.016
Bentazone	AS	24	24		0	0.000	< 0.001	< 0.001	< 0.001
Benzene	S	8	8		0	0.000	< 0.020	< 0.020	< 0.020
Benzo(a)pyrene	S	8	8		0	0.000	< 0.001	< 0.001	< 0.001
Boron	S	8	8		0	0.000	< 0.001	< 0.002	0.005
Bromate	S	8	8		0	0.000	1.000	2.038	2.700
Bromoxynil	AS	24	24		0	0.000	< 0.004	< 0.004	0.009
Cadmium	S	8	8		0	0.000	< 0.010	< 0.012	0.025
Chloride	S	8	8		0	0.000	12.588	13.810	16.667
Chlorotoluron	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Chromium	S	8	8		0	0.000	0.160	0.244	0.496
Clopyralid	AS	24	24		0	0.000	< 0.004	< 0.005	0.025
Clostridium perfringens (sulph red)	AS	24	29		0	0.000	0.000	0.000	0.000
Colony Counts 22	S	24	24		0	0.000	0.000	0.083	2.000
Colony Counts 37 (48hrs)	S	24	24		0	0.000	0.000	0.000	0.000
Colour	S	24	24		0	0.000	< 1.000	< 1.168	2.440
Conductivity	S	24	24		0	0.000	140.000	149.558	171.400
Copper	S	8	8		0	0.000	< 0.001	< 0.004	0.007
Cyanide	AS	24	24		0	0.000	< 1.700	< 2.271	3.700
Dicamba	AS	24	24		0	0.000	< 0.012	< 0.012	< 0.012
Dichlorprop	AS	24	24		0	0.000	< 0.001	< 0.001	< 0.001
Diiflufenican	AS	24	24		0	0.000	< 0.003	< 0.003	< 0.003
Diuron	AS	24	24		0	0.000	< 0.003	< 0.003	< 0.003
E. coli	S	60	60		0	0.000	0.000	0.000	0.000
Enterococci	S	8	8		0	0.000	0.000	0.000	0.000
Epoxiconazole	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Fenpropimorph	AS	24	24		0	0.000	< 0.003	< 0.003	< 0.003
Fluoride	S	8	8		0	0.000	< 0.020	< 0.020	< 0.020
Fluroxypyr	AS	24	24		0	0.000	< 0.005	< 0.006	0.016
Free - Residual disinfectant	S	60	60		0	0.000	0.060	0.439	0.840
Glyphosate	AS	24	24		0	0.000	< 0.003	< 0.004	0.025
Hydrogen Ion	S	24	24		0	0.000	7.450	7.703	8.040
Iron	S	24	24		1	4.167	< 2.000	< 53.668	1018.00
Isoproturon	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Lead	S	8	8		0	0.000	< 0.100	< 0.193	0.781
Linuron	AS	24	24		0	0.000	< 0.006	< 0.006	< 0.006
MCPA	AS	24	24		0	0.000	< 0.001	< 0.006	0.067
MCPB	AS	24	24		0	0.000	< 0.004	< 0.004	< 0.004
Manganese	S	24	24		0	0.000	0.210	2.369	44.160
Mecoprop	AS	24	24		0	0.000	< 0.001	< 0.002	0.010
Mercury	S	8	8		0	0.000	0.010	0.013	0.030
Metalaxyl	AS	24	24		0	0.000	< 0.004	< 0.004	< 0.004
Metamitron	AS	24	24		0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	AS	24	24		0	0.000	< 0.003	< 0.003	< 0.003
Metoxuron	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Nickel	S	8	8		0	0.000	0.404	0.548	0.776
Nitrate	S	8	8		0	0.000	0.521	1.161	1.652
Nitrite	S	8	8		0	0.000	< 0.010	< 0.010	< 0.010
Odour	S	24	24		0	0.000	0.000	0.000	0.000
PAH - Sum of four substances	S	8	8		0	0.000	< 0.000	< 0.000	< 0.000
Pendimethalin	AS	24	24		0	0.000	< 0.003	< 0.003	< 0.003
Pesticides - Total Substances	AS	24	24		0	0.000	< 0.050	< 0.053	0.087
Phorate	AS	24	24		0	0.000	< 0.004	< 0.004	< 0.004
Pirimicarb	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002

WATER SUPPLY ZONE - ZN0706 - Lough Macrory Killiclogher										
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.										
Parameter		U/A	No. of	No. of	PCV	No. Of	% of	Concentration or value		
		Freq.	samples	samples		samples	samples	(all samples)		
			per annum	taken in year	Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.
Propachlor	ug/l	AS	24	24		0	0.000	< 0.004	< 0.004	< 0.004
Propiconazole	ug/l	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Propyzamide	ug/l	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Prothioconazole	ug/l	AS	24	24		0	0.000	< 0.006	< 0.006	< 0.006
Selenium	ug/l Se	S	8	8		0	0.000	0.197	0.225	0.288
Sodium	mg Na/l	S	8	8		0	0.000	4.800	8.571	9.699
Sulphate	mg SO4/l	S	8	8		0	0.000	< 2.000	< 25.117	33.000
Taste	Diln No	S	24	24		0	0.000	0.000	0.000	0.000
Tebuconazole	ug/l	AS	24	24		0	0.000	< 0.002	< 0.002	< 0.002
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
Total - Residual disinfectant	mg Cl/l	S	60	60		0	0.000	0.120	0.536	0.930
Total Indicative Dose	mSv/year	AS	3	3		0	0.000	< 0.100	< 0.100	< 0.100
Total Organic Carbon	mg C/l	S	8	7		0	0.000	0.947	1.331	1.800
Total Trihalomethanes	ug/l	S	8	8		0	0.000	22.000	40.875	67.000
Total coliforms	No./100 ml	S	60	60		0	0.000	0.000	0.000	0.000
Triclopyr	ug/l	AS	24	24		0	0.000	< 0.004	< 0.005	0.021
Tritium	Bq/l	AS	3	3		0	0.000	< 10.000	< 10.000	< 10.000
Turbidity	NTU	S	24	24		0	0.000	0.100	0.227	2.810

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 23716

This zone has a surface water source :R4513

PCV Exceedances:

Sample failed 05-APR-2018 (ZN0706AE) Iron = 1000 ug Fe.

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point

2018 WATER SUPPLY COMMENTARY

ZN0802 - Killyhevlin Enniskillen

The water supplied in this zone within your council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017.

WATER SUPPLY ZONE - ZN0802 - Killyhevlin Enniskillen

Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter	U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven- ing PCV	% of samples contraven- ing PCV	Concentration or value (all samples)		
							Min.	Mean	Max.
1,2 Dichloroethane	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	AS	8	8		0	0.000	< 0.001	< 0.001	0.003
2,4-DB	AS	8	8		0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	S	52	52		0	0.000	7.520	29.869	84.350
Ammonium	S	52	52		0	0.000	< 0.012	< 0.012	< 0.012
Antimony	S	8	8		0	0.000	0.051	0.067	0.079
Arsenic	S	8	8		0	0.000	< 0.300	< 0.424	0.635
Asulam	AS	8	8		0	0.000	< 0.005	< 0.005	< 0.005
Bentazone	AS	8	8		0	0.000	< 0.001	< 0.001	< 0.001
Benzene	S	8	8		0	0.000	< 0.020	< 0.020	0.022
Benzo(a)pyrene	S	8	8		0	0.000	< 0.001	< 0.001	< 0.001
Boron	S	8	8		0	0.000	0.007	0.009	0.013
Bromate	S	8	8		0	0.000	0.790	1.524	2.300
Bromoxynil	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004
Cadmium	S	8	8		0	0.000	< 0.010	< 0.010	< 0.010
Chloride	S	8	8		0	0.000	17.514	19.643	20.568
Chlorotoluron	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Chromium	S	8	8		0	0.000	0.180	0.365	0.627
Clopyralid	AS	8	8		0	0.000	< 0.004	< 0.006	0.017
Clostridium perfringens (sulph red)	AS	8	12		0	0.000	0.000	0.000	0.000
Colony Counts 22	S	52	52		0	0.000	0.000	0.404	11.000
Colony Counts 37 (48hrs)	S	52	52		0	0.000	0.000	0.115	3.000
Colour	S	52	52		0	0.000	< 1.000	< 1.311	2.890
Conductivity	S	52	52		0	0.000	363.000	419.596	460.000
Copper	S	8	8		0	0.000	0.001	0.002	0.004
Cyanide	AS	8	8		0	0.000	< 1.700	< 1.950	3.100
Dicamba	AS	8	8		0	0.000	< 0.012	< 0.012	< 0.012
Dichlorprop	AS	8	8		0	0.000	< 0.001	< 0.001	< 0.001
Diiflufenican	AS	8	8		0	0.000	< 0.003	< 0.003	< 0.003
Diuron	AS	8	8		0	0.000	< 0.003	< 0.003	< 0.003
E. coli	S	192	192		0	0.000	0.000	0.000	0.000
Enterococci	S	8	8		0	0.000	0.000	0.000	0.000
Epoxiconazole	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Fenpropimorph	AS	8	8		0	0.000	< 0.003	< 0.003	0.003
Fluoride	S	8	8		0	0.000	0.031	0.042	0.054
Fluroxypyr	AS	8	8		0	0.000	< 0.005	< 0.005	< 0.005
Free - Residual disinfectant	S	192	192		0	0.000	0.090	0.447	0.940
Glyphosate	AS	8	8		0	0.000	< 0.003	< 0.003	< 0.003
Hydrogen Ion	S	52	52		0	0.000	7.510	8.169	8.540
Iron	S	52	52		0	0.000	4.800	21.357	120.000
Isoproturon	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Lead	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
Linuron	AS	8	8		0	0.000	< 0.006	< 0.006	< 0.006
MCPA	AS	8	8		0	0.000	0.005	0.013	0.020
MCPB	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004
Manganese	S	52	52		0	0.000	0.440	2.985	18.070
Mecoprop	AS	8	8		0	0.000	< 0.001	< 0.002	0.006
Mercury	S	8	8		0	0.000	< 0.010	< 0.029	0.123
Metalaxyl	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004
Metamitron	AS	8	8		0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	AS	8	8		0	0.000	< 0.003	< 0.003	< 0.003
Metoxuron	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Nickel	S	8	8		0	0.000	0.991	1.285	1.654
Nitrate	S	8	8		0	0.000	0.743	2.134	4.500
Nitrite	S	8	8		0	0.000	< 0.010	< 0.010	< 0.010
Odour	S	52	52		0	0.000	0.000	0.000	0.000
PAH - Sum of four substances	S	8	8		0	0.000	< 0.000	< 0.000	< 0.000
Pendimethalin	AS	8	8		0	0.000	< 0.003	< 0.003	< 0.003
Pesticides - Total Substances	AS	8	8		0	0.000	< 0.050	< 0.050	< 0.050
Phorate	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004
Pirimicarb	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002

WATER SUPPLY ZONE - ZN0802 - Killyhevlin Enniskillen										
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.										
Parameter		U/A	No. of	No. of	PCV	No. Of	% of	Concentration or value		
		Freq.	samples	samples		samples	samples	(all samples)		
			planned	taken in	Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.
			per annum	year						
Propachlor	ug/l	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004
Propiconazole	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Propyzamide	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Prothioconazole	ug/l	AS	8	8		0	0.000	< 0.006	< 0.006	< 0.006
Selenium	ug/l Se	S	8	8		0	0.000	0.199	0.277	0.404
Sodium	mg Na/l	S	8	8		0	0.000	18.000	23.270	36.489
Sulphate	mg SO4/l	S	8	8		0	0.000	94.028	110.958	120.000
Taste	Diln No	S	52	52		0	0.000	0.000	0.000	0.000
Tebuconazole	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
Total - Residual disinfectant	mg Cl/l	S	192	192		0	0.000	0.130	0.568	1.070
Total Indicative Dose	mSv/year	AS	1	1		0	0.000	< 0.100	< 0.100	< 0.100
Total Organic Carbon	mg C/l	S	8	7		0	0.000	1.490	2.501	3.500
Total Trihalomethanes	ug/l	S	8	8		0	0.000	26.000	56.000	88.000
Total coliforms	No./100 ml	S	192	192		0	0.000	0.000	0.000	0.000
Triclopyr	ug/l	AS	8	8		0	0.000	< 0.004	< 0.004	0.005
Tritium	Bq/l	AS	1	1		0	0.000	< 10.000	< 10.000	< 10.000
Turbidity	NTU	S	52	52		0	0.000	0.110	0.183	0.470

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 80001

This zone has a surface water source :R4701

PCV Exceedances:

Water Quality was satisfactory

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point

2018 WATER SUPPLY COMMENTARY

ZN1102 - Seagahan Armagh

The water supplied in this zone within your council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017.

WATER SUPPLY ZONE - ZN1102 - Seagahan Armagh

Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter	U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven- ing PCV	% of samples contraven- ing PCV	Concentration or value (all samples)		
							Min.	Mean	Max.
1,2 Dichloroethane	ug/l	S	8	8	0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	ug/l	AS	8	8	0	0.000	< 0.001	< 0.003	0.009
2,4-DB	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	ug Al/l	S	36	36	0	0.000	< 1.000	< 10.642	31.820
Ammonium	mg NH4/l	S	36	36	0	0.000	< 0.012	< 0.012	< 0.012
Antimony	ug/l Sb	S	8	8	0	0.000	0.089	0.102	0.126
Arsenic	ug/l As	S	8	8	0	0.000	< 0.300	< 0.332	0.416
Asulam	ug/l	AS	8	8	0	0.000	< 0.005	< 0.005	< 0.005
Bentazone	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	0.005
Benzene	ug/l	S	8	8	0	0.000	< 0.020	< 0.020	< 0.020
Benzo(a)pyrene	ug/l	S	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Boron	mg/l B	S	8	8	0	0.000	0.003	0.007	0.014
Bromate	ug BrO3/l	S	8	8	0	0.000	< 0.300	< 0.300	< 0.300
Bromoxynil	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Cadmium	ug/l Cd	S	8	8	0	0.000	< 0.010	< 0.011	0.014
Chloride	mg Cl/l	S	8	8	0	0.000	22.212	23.724	26.699
Chlorotoluron	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Chromium	ug/l Cr	S	8	8	0	0.000	0.129	0.299	0.688
Clopyralid	ug/l	AS	8	8	0	0.000	< 0.004	< 0.009	0.037
Clostridium perfringens (sulph red)	No./100 ml	AS	8	10	0	0.000	0.000	0.000	0.000
Colony Counts 22	No./1 ml	S	36	36	0	0.000	0.000	1.111	20.000
Colony Counts 37 (48hrs)	No./1 ml	S	36	36	0	0.000	0.000	0.028	1.000
Colour	mg/l Pt/Co	S	36	36	0	0.000	< 1.000	< 1.344	2.640
Conductivity	uS/cm 20 C	S	36	36	0	0.000	324.000	372.306	438.000
Copper	mg Cu/l	S	8	8	0	0.000	0.003	0.017	0.059
Cyanide	ug/l CN	AS	8	8	0	0.000	< 1.700	< 4.863	9.600
Dicamba	ug/l	AS	8	8	0	0.000	< 0.012	< 0.014	0.027
Dichlorprop	ug/l	AS	8	8	0	0.000	< 0.001	< 0.001	< 0.001
Diiflufenican	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Diuron	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
E. coli	No./100 ml	S	96	96	0	0.000	0.000	0.000	0.000
Enterococci	No./100ml	S	8	8	0	0.000	0.000	0.000	0.000
Epoxiconazole	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Fenpropimorph	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Fluoride	mg F/l	S	8	8	0	0.000	< 0.020	< 0.020	0.022
Fluroxypyr	ug/l	AS	8	8	0	0.000	0.011	0.015	0.023
Free - Residual disinfectant	mg Cl/l	S	96	96	0	0.000	< 0.050	< 0.537	1.510
Glyphosate	ug/l	AS	8	9	0	0.000	< 0.003	< 0.018	0.083
Hydrogen Ion	pH value	S	36	36	0	0.000	7.040	7.439	7.870
Iron	ug Fe/l	S	36	36	0	0.000	< 2.000	< 16.905	107.700
Isoproturon	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Lead	ug Pb/l	S	8	8	0	0.000	< 0.100	< 0.190	0.639
Linuron	ug/l	AS	8	8	0	0.000	< 0.006	< 0.006	< 0.006
MCPA	ug/l	AS	8	8	0	0.000	0.003	0.023	0.076
MCPB	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Manganese	ug Mn/l	S	36	36	0	0.000	< 0.100	< 0.675	1.700
Mecoprop	ug/l	AS	8	8	0	0.000	0.006	0.015	0.039
Mercury	ug/l Hg	S	8	8	0	0.000	< 0.010	< 0.016	0.038
Metalaxyl	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Metamitron	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Metoxuron	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002
Nickel	ug Ni/l	S	8	8	0	0.000	0.246	1.710	2.272
Nitrate	mg/l	S	8	8	0	0.000	< 0.400	< 3.820	8.400
Nitrite	mg/l	S	8	8	0	0.000	< 0.010	< 0.010	< 0.010
Odour	Diln No	S	36	36	0	0.000	0.000	0.000	0.000
PAH - Sum of four substances	ug/l	S	8	8	0	0.000	< 0.000	< 0.000	< 0.000
Pendimethalin	ug/l	AS	8	8	0	0.000	< 0.003	< 0.003	< 0.003
Pesticides - Total Substances	ug/l	AS	8	8	0	0.000	< 0.050	< 0.085	0.200
Phorate	ug/l	AS	8	8	0	0.000	< 0.004	< 0.004	< 0.004
Pirimicarb	ug/l	AS	8	8	0	0.000	< 0.002	< 0.002	< 0.002

WATER SUPPLY ZONE - ZN1102 - Seagahan Armagh										
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.										
Parameter		U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contraven	% of samples contraven	Concentration or value (all samples)		
					Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.
Propachlor	ug/l	AS	8	8		0	0.000	< 0.004	< 0.004	< 0.004
Propiconazole	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Propyzamide	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Prothioconazole	ug/l	AS	8	8		0	0.000	< 0.006	< 0.006	< 0.006
Selenium	ug/l Se	S	8	8		0	0.000	< 0.200	< 0.297	0.369
Sodium	mg Na/l	S	8	8		0	0.000	22.721	39.676	57.190
Sulphate	mg SO4/l	S	8	8		0	0.000	< 2.000	< 61.531	91.280
Taste	Diln No	S	36	36		0	0.000	0.000	0.000	0.000
Tebuconazole	ug/l	AS	8	8		0	0.000	< 0.002	< 0.002	< 0.002
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
Total - Residual disinfectant	mg Cl/l	S	96	96		0	0.000	0.120	0.720	1.800
Total Indicative Dose	mSv/year	AS	1	1		0	0.000	< 0.100	< 0.100	< 0.100
Total Organic Carbon	mg C/l	S	8	7		0	0.000	1.540	2.323	3.440
Total Trihalomethanes	ug/l	S	8	8		0	0.000	29.000	48.625	63.000
Total coliforms	No./100 ml	S	96	96		1	1.042	0.000	0.042	4.000
Triclopyr	ug/l	AS	8	8		0	0.000	< 0.004	< 0.014	0.024
Tritium	Bq/l	AS	1	1		0	0.000	< 10.000	< 10.000	< 10.000
Turbidity	NTU	S	36	36		0	0.000	< 0.100	< 0.145	0.360

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 37940

This zone has a surface water source :R2514

PCV Exceedances:

Sample failed 26-NOV-2018 (ZN1102AE) Total coliforms = 4 No./100.

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point

2018 WATER SUPPLY COMMENTARY

ZS0809 - Castor Bay Dungannon

The water supplied in this zone within the Mid Ulster council area complied with all the physical-chemical and microbiological standards laid down in the Water Supply (Water Quality) Regulations (Northern Ireland) 2017 except for the following parameter(s):-

Iron – single exceedance

Investigations found that this exceedance was most likely caused by a disturbance of mains deposits from older iron mains, with resamples being satisfactory after flushing if required. NI Water has in place an extensive Mains Rehabilitation Programme, which favours mains replacement and zones are prioritised according to need. This programme will continue to maintain and improve the quality of water in your council area over the next few years.

WATER SUPPLY ZONE - ZS0809 - Castor Bay Dungannon

 Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.

Parameter	U/A & Freq.	No. of samples planned per annum	No. of samples taken in year	PCV	No. Of samples contravening PCV	% of samples contravening PCV	Concentration or value (all samples)		
							Min.	Mean	Max.
1,2 Dichloroethane	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
2,4-D	AS	24	25		0	0.000	< 0.001	< 0.004	0.014
2,4-DB	AS	24	25		0	0.000	< 0.003	< 0.003	< 0.003
Aluminium	S	52	52		0	0.000	10.760	32.078	140.800
Ammonium	S	52	52		0	0.000	< 0.012	< 0.012	0.014
Antimony	S	8	8		0	0.000	0.120	0.132	0.148
Arsenic	S	8	8		0	0.000	< 0.300	< 0.365	0.452
Asulam	AS	24	25		0	0.000	< 0.005	< 0.005	< 0.005
Bentazone	AS	24	25		0	0.000	< 0.001	< 0.001	< 0.007
Benzene	S	8	8		0	0.000	< 0.020	< 0.020	< 0.020
Benzo(a)pyrene	S	8	8		0	0.000	< 0.001	< 0.001	< 0.001
Boron	S	8	8		0	0.000	< 0.001	< 0.009	0.014
Bromate	S	8	8		0	0.000	< 0.300	< 0.365	0.570
Bromoxynil	AS	24	25		0	0.000	< 0.004	< 0.004	< 0.004
Cadmium	S	8	8		0	0.000	< 0.010	< 0.012	0.016
Chloride	S	8	8		0	0.000	25.055	26.507	27.942
Chlorotoluron	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002
Chlorpyrifos	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002
Chromium	S	8	8		0	0.000	< 0.100	< 0.316	0.638
Clopyralid	AS	24	25		0	0.000	< 0.004	< 0.010	0.048
Clostridium perfringens (sulph red)	AS	24	35		0	0.000	0.000	0.000	0.000
Colony Counts 22	S	52	52		0	0.000	0.000	7.365	264.000
Colony Counts 37 (48hrs)	S	52	52		0	0.000	0.000	0.135	3.000
Colour	S	52	52		0	0.000	< 1.000	< 1.246	3.100
Conductivity	S	52	52		0	0.000	356.000	395.673	444.000
Copper	S	8	8		0	0.000	0.004	0.024	0.080
Cyanide	AS	24	25		0	0.000	< 1.700	< 1.700	< 1.700
Dicamba	AS	24	25		0	0.000	< 0.012	< 0.012	0.016
Dichlorprop	AS	24	25		0	0.000	< 0.001	< 0.001	0.005
Diiflufenican	AS	24	25		0	0.000	< 0.003	< 0.003	0.004
Diuron	AS	24	25		0	0.000	< 0.003	< 0.003	< 0.003
E. coli	S	168	168		0	0.000	0.000	0.000	0.000
Enterococci	S	8	8		0	0.000	0.000	0.000	0.000
Epoxiconazole	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002
Fenpropimorph	AS	24	25		0	0.000	< 0.003	< 0.003	< 0.003
Fluoride	S	8	8		0	0.000	< 0.020	< 0.021	0.024
Fluroxypyr	AS	24	25		0	0.000	< 0.005	< 0.011	0.020
Free - Residual disinfectant	S	168	168		0	0.000	< 0.050	< 0.417	0.930
Glyphosate	AS	24	25		0	0.000	< 0.003	< 0.005	0.035
Hydrogen Ion	S	52	52		0	0.000	7.250	7.587	8.270
Iron	S	52	52		1	1.923	< 2.000	< 20.918	211.800
Isoproturon	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002
Lead	S	8	8		0	0.000	< 0.100	< 0.213	0.742
Linuron	AS	24	25		0	0.000	< 0.006	< 0.006	< 0.006
MCPA	AS	24	25		0	0.000	< 0.001	< 0.014	0.031
MCPB	AS	24	25		0	0.000	< 0.004	< 0.004	< 0.004
Manganese	S	52	52		0	0.000	0.220	1.997	20.100
Mecoprop	AS	24	25		0	0.000	< 0.001	< 0.006	0.052
Mercury	S	8	8		0	0.000	< 0.010	< 0.021	0.059
Metalaxyl	AS	24	25		0	0.000	< 0.004	< 0.004	< 0.004
Metamitron	AS	24	25		0	0.000	< 0.003	< 0.003	< 0.003
Metazachlor	AS	24	25		0	0.000	< 0.003	< 0.003	< 0.003
Metoxuron	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002
Metribuzin	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002
Nickel	S	8	8		0	0.000	1.142	1.962	2.464
Nitrate	S	8	8		0	0.000	< 0.400	< 1.806	4.773
Nitrite	S	8	8		0	0.000	< 0.010	< 0.010	< 0.010
Odour	S	52	52		0	0.000	0.000	0.000	0.000
PAH - Sum of four substances	S	8	8		0	0.000	< 0.000	< 0.000	0.002
Pendimethalin	AS	24	25		0	0.000	< 0.003	< 0.003	< 0.003
Pesticides - Total Substances	AS	24	25		0	0.000	< 0.050	< 0.059	0.099
Phorate	AS	24	25		0	0.000	< 0.004	< 0.004	< 0.004
Pirimicarb	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002

WATER SUPPLY ZONE - ZS0809 - Castor Bay Dungannon										
Printed On 16-JAN-2019 : NI Water : Period 01-JAN-2018 to 31-DEC-2018 incl.										
Parameter		U/A	No. of	No. of	PCV	No. Of	% of	Concentration or value		
		Freq.	samples	samples		samples	samples	(all samples)		
			per annum	taken in year	Auth Dep	ing PCV	ing PCV	Min.	Mean	Max.
Propachlor	ug/l	AS	24	25		0	0.000	< 0.004	< 0.004	< 0.004
Propiconazole	ug/l	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002
Propyzamide	ug/l	AS	24	25		0	0.000	< 0.002	< 0.002	< 0.002
Prothioconazole	ug/l	AS	24	25		0	0.000	< 0.006	< 0.006	< 0.006
Selenium	ug/l Se	S	8	8		0	0.000	< 0.200	< 0.346	0.491
Sodium	mg Na/l	S	8	8		0	0.000	18.159	21.226	25.362
Sulphate	mg SO4/l	S	8	8		0	0.000	65.274	78.727	92.498
Taste	Diln No	S	52	52		0	0.000	0.000	0.000	0.000
Tebuconazole	ug/l	AS	24	25		0	0.000	< 0.002	< 0.002	0.003
Tetrachloroethene/Trichloroethene - S	ug/l	S	8	8		0	0.000	< 0.200	< 0.200	< 0.200
Tetrachloromethane	ug/l	S	8	8		0	0.000	< 0.100	< 0.100	< 0.100
Total - Residual disinfectant	mg Cl/l	S	168	168		0	0.000	0.120	0.617	1.230
Total Indicative Dose	mSv/year	AS	1	2		0	0.000	< 0.100	< 0.100	< 0.100
Total Organic Carbon	mg C/l	S	8	8		0	0.000	1.500	2.530	3.670
Total Trihalomethanes	ug/l	S	8	8		0	0.000	36.000	52.625	71.000
Total coliforms	No./100 ml	S	168	168		0	0.000	0.000	0.000	0.000
Triclopyr	ug/l	AS	24	25		0	0.000	< 0.004	< 0.005	0.009
Tritium	Bq/l	AS	1	2		0	0.000	< 10.000	< 10.000	< 10.000
Turbidity	NTU	S	52	52		0	0.000	0.100	0.199	0.690

Commentary on Water Quality:

A: Supply point authorisation for pesticides and related products.

Population of zone = 76884

This zone has a surface water source :R2308

PCV Exceedances:

Sample failed 13-SEP-2018 (ZS0809AE) Iron = 210 ug Fe/.

Notes:

PCV = Prescribed Concentration or Value

U = Undertaking

S = Standard Sampling Frequency

R = Reduced Sampling Frequency

A = Authorised Supply Point