

## Name of Water Supply Zone - Pipers Ash zone

### Schedule 1 Parameters

	<i>Units</i>	<i>PCV</i>	<i>Number of Samples</i>	<i>Number of Samples &gt; PCV</i>	<i>% &gt; PCV</i>	<i>Number of Samples above Auth dep</i>	<i>% &gt; Auth dep</i>	<i>Min</i>	<i>Mean</i>	<i>Max</i>
COLOUR	mg/l Pt/Co	20	24	0	0	-	-	1.30	1.95	2.80
TURBIDITY	N.T.U.	4	24	0	0	-	-	<0.11	0.22	0.82
ODOUR (QUANTITATIVE)	DIL. NO.	3	24	0	0	-	-	0	0	0
TASTE (QUANTITATIVE)	DIL. NO.	3	24	0	0	-	-	0	0	0
HYDROGEN ION	pH value	9	24	0	0	-	-	7.22	7.65	8.20
SODIUM	mg Na/l	200	8	0	0	-	-	11.30	18.68	29.20
NITRATE	mg NO <sub>3</sub> /l	50	24	0	0	-	-	6.10	12.16	45.30
NITRITE IN ZONES	mg NO <sub>2</sub> /l	0.5	24	0	0	-	-	<0.004	0.009	0.019
NO <sub>3</sub> NO <sub>2</sub> CALCULATION		1	24	0	0	-	-	0.12	0.25	0.91
ALUMINIUM	ug Al/l	200	24	0	0	-	-	<5.30	11.10	18.00
IRON	ug Fe/l	200	24	0	0	-	-	7.00	26.92	146.00
MANGANESE	ug Mn/l	50	24	0	0	-	-	1.00	4.46	13.00
COPPER	mg Cu/l	2	8	0	0	-	-	<0.001	0.011	0.032
ARSENIC	ug As/l	10	8	0	0	-	-	<0.20	0.35	0.60
CADMIUM	ug Cd/l	5	8	0	0	-	-	<0.02	0.02	0.03
CHROMIUM	ug Cr/l	50	8	0	0	-	-	<0.20	0.28	0.60
NICKEL	ug Ni/l	20	8	0	0	-	-	0.60	1.01	1.80
LEAD	ug Pb/l	10	8	0	0	-	-	0.20	0.40	1.40
ANTIMONY	ug Sb/l	5	8	0	0	-	-	0.10	0.28	0.60
SELENIUM	ug Se/l	10	8	0	0	-	-	<0.30	0.46	1.10
P.A.H (TOTAL)	ug/l	0.1	8	0	0	-	-	0	<0.003	<0.004
E.COLI	CFU/100ml	0	60	0	0	-	-	N/A	N/A	N/A
ENTEROCOCCI	CFU/100ml	0	8	0	0	-	-	N/A	N/A	N/A
BENZO (a) PYRENE	ug/l	0.01	8	0	0	-	-	0	0.001	<0.002
TOTAL TRIHALOMETHANES	ug/l	100	8	0	0	-	-	12.30	19.06	26.20

### Indicator Parameters

	<i>Units</i>	<i>Specification</i>	<i>Number of samples</i>	<i>Number of samples &gt; specification</i>	<i>% &gt; Specification</i>	<i>Min</i>	<i>Mean</i>	<i>Max</i>
AMMONIUM	mg NH <sub>4</sub> /l	0.5	24	0	0	<0.01	0.01	0.03
TOTAL COLIFORMS	CFU/100ml	0	60	0	0	N/A	N/A	N/A
COLONY COUNTS(22C)	CFU/1ml	50	24	0	0	0	6	116
FREE CHLORINE	mg/l	0.05	60	0	0	<0.02	0.04	0.15
TOTAL CHLORINE	mg/l	10	60	0	0	<0.02	0.07	0.20
COLONY COUNTS(37C)	CFU/1ml	10	24	0	0	0	2	28

## Commentary on Water Quality

PAH (Total) calculated from the sum of Benzo (b) fluoranthene, Benzo (k) fluoranthene, Benzo ghi perylene and Indeno (1,2,3-Cd) Pyrene

Total Trihalomethanes calculated from the sum of Chloroform, Bromoform, Dibromochloromethane and Bromodichloromethane

Colony count specification is an internal limit, used to represent no significant change

The Company replaced 164 metres of mains and relined 1,342 metres of main during 2007

Treatment works supplying: Boughton TW  
Reservoirs supplying: Boughton Tower SR, Piper's Ash SR  
Estimated population: 20,426

There were no authorised departures or undertakings in this zone.

## Supply Points

### Name of Supply Point - Boughton supply point

Volume supplied: 23,930 m<sup>3</sup>/d

Name of water supply zones supplied by supply point: Pipers Ash zone, Newton zone, City zone and Saltney zone

### Schedule 1 Parameters

	Units	PCV	Number of Samples	Number of Samples > PCV	% > PCV	Number of Samples above Auth dep	% > Auth dep	Min	Mean	Max
FLUORIDE	mg F/l	1.5	8	0	0	-	-	<0.04	0.05	0.09
TOTAL CYANIDE	ug CNI	50	8	0	0	-	-	<0.40	1.45	6.40
MERCURY	ug Hg/l	1	8	0	0	-	-	<0.10	<0.14	<0.40
TOTAL PESTICIDE	ug/l	0.5	8	0	0	-	-	0	0.03	<0.04
BORON	mg B/l	1	8	0	0	-	-	<0.008	<0.020	0.027
TETRACHLOROMETHANE	ug/l	3	8	0	0	-	-	<0.05	<0.08	<0.10
SUM OF TETRAB AND TRICH	ug/l	10	8	0	0	-	-	0	<0.13	<0.20
1,2 DICHLOROETHANE	ug/l	3	8	0	0	-	-	<0.05	<0.13	<0.20
BENZENE	ug/l	1	8	0	0	-	-	<0.02	<0.04	<0.05
BROMATE	ug BrO3/l	10	8	0	0	-	-	<0.10	0.33	<0.50
ALDRIN	ug/l	0.03	8	0	0	-	-	<0.001	<0.006	<0.009
ATRAZINE	ug/l	0.1	8	0	0	-	-	<0.001	0.004	0.015
BROMOXYNIL	ug/l	0.1	8	0	0	-	-	<0.008	<0.009	<0.010
CHLOROTHALONIL	ug/l	0.1	8	0	0	-	-	<0.010	<0.010	<0.011
CLOPYRALID	ug/l	0.1	8	0	0	-	-	<0.010	0.011	0.019
DIAZINON	ug/l	0.1	8	0	0	-	-	<0.002	<0.003	<0.010
DIELDRIN	ug/l	0.03	8	0	0	-	-	<0.002	<0.004	<0.005
FENPROPIMORPH	ug/l	0.1	8	0	0	-	-	<0.007	<0.008	<0.010
FLUROXYRUR	ug/l	0.1	8	0	0	-	-	<0.004	0.010	0.025
HEPTACHLOR	ug/l	0.03	8	0	0	-	-	<0.001	<0.003	<0.005
HEPTACHLOR EPOXIDE	ug/l	0.03	8	0	0	-	-	<0.002	<0.005	<0.007
ISOPROTURON	ug/l	0.1	8	1	12.5	-	-	<0.002	0.019	0.110
LINURON	ug/l	0.1	8	0	0	-	-	<0.003	<0.009	<0.010
MECOPROP	ug/l	0.1	8	0	0	-	-	<0.004	0.007	<0.010
MCPA	ug/l	0.1	8	0	0	-	-	<0.003	0.010	0.013
MCPB	ug/l	0.1	8	0	0	-	-	<0.007	<0.008	<0.010
PROPETAMPHOS	ug/l	0.1	8	0	0	-	-	<0.002	<0.004	<0.010
TRIFLURALIN	ug/l	0.1	8	0	0	-	-	<0.007	<0.008	<0.010
2,4-DB	ug/l	0.1	8	0	0	-	-	<0.007	<0.008	<0.010
PENDIMETHALIN	ug/l	0.1	8	0	0	-	-	<0.010	<0.010	<0.010
TRICLOPYR	ug/l	0.1	8	0	0	-	-	<0.003	0.007	0.012
ASULAM	ug/l	0.1	8	0	0	-	-	<0.010	<0.016	<0.020
FLUSILAZOLE	ug/l	0.1	8	0	0	-	-	<0.004	<0.006	<0.010
CHLORMEQUAT	ug/l	0.1	8	0	0	-	-	<0.010	<0.066	<0.100
EPOXICONAZOLE	ug/l	0.1	8	0	0	-	-	<0.006	<0.008	<0.010

## Indicator Parameters

	<b>Units</b>	<b>Specification</b>	<b>Number of samples</b>	<b>Number of samples &gt; specification</b>	<b>% &gt; Specification</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>
SULPHATE	mg SO <sub>4</sub> /l	250	8	0	0	36.40	52.31	67.00
TOTAL ORGANIC CARBON	mgC/l	50	8	0	0	1.60	2.04	3.00
GLOSTRIDIUM PERFRINGENS	CFU/100ml	0	105	1	0.95	N/A	N/A	N/A
CONDUCTIVITY	uS/cm	2500	105	0	0	174	314	448
CHLORIDE	mg Cl/l	250	8	0	0	18.40	29.81	44.50
RADIO.ALPHA	Bq/l	0.1	8	0	0	<0.01	0.02	<0.03
RADIO.BETA	Bq/l	1	8	0	0	0.08	0.13	0.18

Specification for Total Organic Carbon is an internal limit, based on no abnormal change  
 Total Pesticides parameter is calculated from the sum of all pesticides analysed on any sample  
 Gross Alpha and Gross Beta specifications are used to ensure the Total Indicative Dose value of 0.1mSv/Year is not exceeded

Isoproturon was detected above the prescribed concentration value at Boughton treatment works. The treatment works was undergoing a refurbishment project when the failure occurred. This project is now complete and the new treatment works now includes granular activated carbon filters which can remove organic compounds such as isoproturon.