



Pinellas County Utilities
2003 Consumer Confidence Report
on Water Quality

Microbiological Contaminants																											
Pinellas County Utilities (PCU)							Desal WTP (DESALEFF)				Regional Surface Water WTP (RSWTPEFF)				Morris Bridge WTP (MBWTPEFF)				Lake Bridge Effluent (LBIPSEFF)				Cypress Creek WTP (CCWTPEFF)				
Contaminant and Unit of Measurement	MCLG	MCL	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage /Number		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage /Number		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage /Number		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage /Number		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage /Number		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage /Number		Likely Source of Contamination
Total Coliform Bacteria	0	*	1/03-12/03	No	3.4% positive samples		08/03	No	1		NA	NA	ND		NA	NA	ND		NA	NA	ND		NA	NA	ND		Naturally present in the environment

* For systems collecting at least 40 samples per month: presence of coliform bacteria in 5% or more of monthly samples. For systems collecting fewer than 40 samples per month: presence of coliform bacteria in one or more samples collected during a month.

Contaminant and Unit of Measurement	MCLG	MCL	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly No. of Positive Samples		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly No. of Positive Samples		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly No. of Positive Samples		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly No. of Positive Samples		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly No. of Positive Samples		Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly No. of Positive Samples		Likely Source of Contamination
Fecal coliform and E. coli	0	0	1/03-12/03	Yes	2 positive samples		NA	NA	NA		NA	NA	NA		NA	NA	NA		NA	NA	NA		NA	NA	NA		Human and animal waste

NOTE: Fecal Coliform/E.coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

ALSO see "A Note to Pinellas County Utilities Customers about Fecal coliform and E. coli Bacteria" on page 7

Contaminant and Unit of Measurement	MCLG	MCL	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Single Measure	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Single Measure	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Single Measure	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Single Measure	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Single Measure	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Single Measure	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	Likely Source of Contamination
Turbidity (NTU)	NA	TT	NA	NA	NA	NA	04/03	No	0.6	100	01/03	No	0.21	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Soil Runoff

NOTE: The result in the lowest monthly percentage column is the lowest monthly percentage of samples meeting the turbidity limits reported in the Monthly Operating Report.

Radiological Contaminants																											
Pinellas County Utilities (PCU)							Desal WTP (DESALEFF)				Regional Surface Water WTP (RSWTPEFF)				Morris Bridge WTP (MBWTPEFF)				Lake Bridge Effluent (LBIPSEFF)				Cypress Creek WTP (CCWTPEFF)				
Contaminant and Unit of Measurement	MCLG	MCL	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Alpha emitters (pCi/L)	0	15	03/02	No	2.2	U-2.2	08/03	No	0.8	NA	08/03	No	1.8	ND-1.8	08/03	No	4.8	ND-4.8	08/03	No	3.8	ND-3.8	08/03	No	1.8	ND-1.8	Erosion of natural deposits
Beta/photon emitters(mrem/yr)	0	4	NA	NA	NA	NA	08/03	No	2.1	1.9-2.1	05/03	No	3.7	3.3-3.7	08/03	No	2.0	ND-2.0	05/03	No	1.9	ND-1.9	08/03	No	9.3	2.1-9.3	Decay of natural and man-made deposits
Radium 226 or combined radium (pCi/L)	0	5	03/02	No	3.1	2.1-3.1	08/03	No	1	0.6-0.9	05/03	No	0.7	0.5-0.7	08/03	No	2.3	1.3-2.3	08/03	No	1.3	0.3-1.3	08/03	No	1.3	0.3-1.3	Erosion of natural deposits
Uranium (pCi/L)	0	30	NA	NA	NA	NA	NA	NA	ND	NA	08/03	No	0.2	0-0.2	08/03	No	0.4	ND-0.4	08/03	No	0.1	ND-0.1	08/03	No	0.3	ND-0.3	Erosion of natural deposits

NOTE: The USEPA considers 50 pCi/L to be the level of concern for beta particles.

Inorganic Contaminants																											
Contaminant and Unit of Measurement	MCLG	MCL	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Arsenic (ppb)	NA	50	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	08/03	No	1	NA	NA	NA	ND	NA	NA	NA	ND	NA	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	03/02	No	0.021	0.019-0.021	08/03	No	0.004	NA	08/03	No	0.011	NA	08/03	No	0.015	NA	08/03	No	0.014	NA	08/03	No	0.011	NA	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	NA	NA	NA	NA	NA	NA	ND	NA	08/03	No	3	NA	NA	NA	ND	NA	08/03	No	7	NA	08/03	No	4	NA	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	03/02	No	0.15	0.15	NA	NA	ND	NA	08/03	No	0.229	NA	NA	NA	ND	NA	08/03	No	0.246	NA	08/03	No	0.318	NA	Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories; Erosion of natural deposits
Lead (point of entry) (ppb)	NA	AL=15	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	08/03	No	1	NA	NA	NA	ND	NA	NA	NA	ND	NA	Residue from man-made pollution such as auto emissions and paint; Lead pipe, casing, and solder
Nickel (ppb)	NA	100	NA	NA	NA	NA	08/03	No	1	NA	08/03	No	6	NA	08/03	No	6	NA	08/03	No	2	NA	08/03	No	4	NA	Pollution from mining and refining operations; Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	10	10	04/03	No	0.28	0.28	NA	NA	ND	NA	11/03	No	0.373	0.2-0.373	NA	NA	ND	NA	08/03	No	0.4	0-0.4	08/03	No	0.486	0.05-0.486	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	NA	NA	NA	NA	08/03	No	16	NA	08/03	No	3	NA	08/03	No	4	NA	NA	NA	ND	NA	08/03	No	3	NA	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (ppm)	NA	160	03/02	No	14.7	9.57-14.7	08/03	No	44.5	NA	08/03	No	12.9	NA	08/03	No	15.4	NA	08/03	No	13.0	NA	08/03	No	26.7	NA	Salt water intrusion, leaching from soil

Synthetic Organic Contaminants including Pesticides and Herbicides																											
Contaminant and Unit of Measurement	MCLG	MCL	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Likely Source of Contamination
Dalapon (ppb)	200	200	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	ND	NA	05/03	No	2.1	ND-2.1	NA	NA	ND	NA	NA	NA	ND	NA	Runoff from herbicide used on rights of way



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			Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	

Total Trihalomethanes (TTHMs) and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters

For the following parameters monitored under Stage 1 D/DBP regulations, the level detected is the annual average of the quarterly averages: Bromate, Chloramines, Chlorine, Haloacetic Acids, and/or TTHM (MCL= 80 ppb). The Range of Results is the range of results (lowest to highest) at the individual sampling sites.
For TTHMs monitored under rules adopted before the Stage 1 D/DBP rules (MCL= 100 ppb), the level detected is the highest running annual average calculated quarterly. The Range of Results is the range of results (lowest to highest) at the individual sampling sites.

Bromate (ppb)	NA	10	NA	NA	NA	NA	NA	NA	NA	NA	1/03-12/03	No	<5 (avg)	ND-0.009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	By-product of drinking water disinfection
Disinfectant Residual (ppm)	NA	**	NA	NA	NA	NA	1/03-12/03	No	3.48	3.34-3.73	1/03-12/03	No	4.16	3.95-4.44	1/03-12/03	No	3.49	3.07-3.94	1/03-12/03	No	3.59	3.59-3.68	1/03-12/03	No	4.04	3.72-4.30	Water additive used to control microbes	
Haloacetic Acids (five) (HAA5) (ppb)	NA	60	NA	NA	NA	NA	1/03-12/03	No	3 (avg)	ND-9	1/03-12/03	No	13.85 (avg)	1.4-33	1/03-12/03	No	41.92(avg)	0.047-83.84	1/03-12/03	No	6.62 (avg)	1.3-15	1/03-12/03	No	8.275 (avg)	1.2-19	By-product of drinking water disinfection	
TTHM [Total trihalomethanes] (ppb)	NA	80/100	1/03-12/03	No	45	35-45	1/03-12/03	No	51.0 (avg)	ND-74.97	1/03-12/03	No	2.87 (avg)	ND-4.4	1/03-12/03	No	53.9 (avg)	30-92	1/03-12/03	No	14.86 (avg)	8.96-26.4	1/03-12/03	No	18.5(avg)	10.9-32	By-product of drinking water disinfection	

**MRDL=4.0 NOTE: The result in the Level Detected column for TTHMs is the highest of the four quarterly running annual averages of results from all sampling sites. The quarterly running annual averages were calculated during the first, second, third, and fourth quarters of 2003.

Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	MCLG	AL (Action Level)	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	Likely Source of Contamination
			6/03-12/03	No	0.74	2 sites above action level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Lead (tap water) (ppb)	0	15	1/03-5/03	No	4	3 sites above action level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Corrosion of household plumbing systems; Erosion of natural deposits
			6/03-12/03	No	3	0 sites above action level	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Secondary Contaminants

Contaminant and Unit of Measurement	MCLG	MCL	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	Likely Source of Contamination
Copper (ppm)	NGE	1	03/02	No	0.018	0.008-0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Corrosion byproduct and natural occurrence from soil leaching
Fluoride (ppm)	NGE	2	03/02	No	0.15	0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories; Erosion of natural deposits
Iron (ppm)	NGE	0.3	03/02	No	0.130	0.012-0.130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Natural occurrence from soil leaching
Manganese (ppm)	NGE	0.05	03/02	No	0.007	0.002-0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Natural occurrence from soil leaching
Odor threshold (threshold odor number)	NGE	3	03/02	No	1.4	U-1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Naturally occurring organics
Zinc (ppm)	NGE	5	03/02	No	0.018	0.004-0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Natural occurrence from soil leaching
Sulfate (ppm)	NGE	250	03/02	No	17	1-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Natural occurrence from soil leaching
Total Dissolved Solids (ppm)	NGE	500***	03/02	No	308	270-308	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Natural occurrence from soil leaching

***NOTE: TDS may be greater than 500 if no other MCL is exceeded.

Prepared by Pinellas County Utilities, March 2004, with reference to CCR data provided by Tampa Bay Water