

Summary of Informational Micriconstituent Testing at Coral Springs Improvement District

Name	Units	WW Influent	WW Effluent	Water Influent	Water Effluent	Canals	Use
Acesulfame-K	ng/L	9,300	3100	27	ND	25	Calorie-free sugar substitute
Acetaminophen	ng/L	ND	ND	ND	ND	ND	Pain and fever relief
Amoxicillin	ng/L	4000	300	ND	ND	ND	Penicillin antibiotic
Atenolol	ng/L	560	320	5	ND	ND	High blood pressure/ beta-blocker
Atrazine	ng/L	29	38	6.8	ND	87	Pesticide
Caffeine by GCMS LLg	ng/L	13000	250	ND	ND	ND	Stimulant drug
Carbamazepine	ng/L	100	90	ND	ND	ND	Anticonvulsant drug
Cotinine	ng/L	780	78	ND	ND	15	A nicotine metabolite
DEET	ng/L	ND	200	11	ND	16	Active ingredient in insect repellents
Estradiol	ng/L	ND	ND	ND	ND	ND	Human sex hormone and steroid
Estrone	ng/L	6.9	33	ND	ND	ND	Estrogenic hormone
Ethlyn estraidol- 17 alpha	ng/L	ND	800	ND	ND	ND	Oral contraceptive pills
Fluxoetine	ng/L	27	23	ND	ND	ND	Antidepressant drug
Gemfibrozil	ng/L	430	210	ND	ND	ND	Lipid lowering drug
Ibuprofen	ng/L	3000	39	ND	ND	ND	Anti-inflammatory drug
Progesterone	ng/L	ND	ND	ND	ND	ND	Steroid hormone
Sulfamethoxazole	ng/L	ND	ND	ND	ND	ND	Bacteriostatic antibiotic
Testosterone	ng/L	ND	ND	11	ND	ND	Male hormone
Triclosan	ng/L	770	57	ND	ND	ND	Antibiotic
Trimethoprin	ng/L	92	ND	ND	ND	ND	Antibiotic
2,4-d	ng/L	ND	ND	ND	ND	6.8	Herbicide

Various microconstituents have been reported to occur in WWTP influent, effluents, surface water, ground water, reuse water, and drinking water, usually in the nanogram per liter (ng/L) a concentration of 1 ng/L is equivalent to one part per trillion (ppt)

1 ppt Analogies

1 square inch in 250 square miles, 1 second in nearly 32,000 years, 1 ounce in 7.5 billion gallons of water

The summary of the testing of CSID water, wastewater and canal system is listed above. While a range of products are present at low levels in the wastewater streams there are few contaminants in the water influent and the canals. The processed water effluent is completely free of any micro constituents. The full test results can be found at www.fladistricts.com. This informational testing is not a regulatory requirement and is for informational purposes.

Preliminary study results suggest that risks posed to healthy adult humans (and animals with similar physiology) by water-borne pharmaceutical residues is very low. <http://www.epa.gov/ppcp/>