

Boulder County LID – Eldorado Springs Wastewater Plant

Operations Report

November 2021

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WWTP

- Please see the attached results for the samples and flows collected from the WWTF.
- In November the influent readings are within the normal ranges.
- The DO equipment is assisting in achieving a more consistent effluent, however proving increasingly difficult to meet the standard below 10. Fluidyne has provided ORC with a number of strategies to develop a better understanding of the system to hopefully achieve consistent effluent.

Collections system

- The grinder at 52 Artesian continues to go into alarm. The hour meter suggests normal usage on the motor, however the unit continuously alarms. ORC recommends replacing the control panel and checking the check valve as next steps. A new control panel will need to be ordered to facilitate this effort.

ELDORADO SPRINGS WWTP

PERMIT# CO 0047651

Permitted Flow 0.032 (MGD)

Permitted Loading 73#/day

(cells highlighted contain formulas)

(to be completed by operator)

Parameter	21-Nov	21-Oct	21-Sep	21-Aug	21-Jul	21-Jun	21-May	21-Apr	21-Mar	21-Feb	21-Jan	20-Dec
INFLUENT - MONTHLY												
Average Influent/Effluent Flow (MGD)	0.017547	0.015314	0.01677	0.0178	0.0204	0.01618	0.0183	0.0148	0.018371	0.018914	0.017811	0.018146
Maximum Influent/Effluent flow (MGD)	0.019627	0.02397	0.0171	0.02	0.0182	0.01828	0.0216	0.020006	0.02275	0.021802	0.01886	0.02229
Influent BOD (mg/L)	180	782	259	220	280	185	214	354	528	394	311	259
Influent BOD (#s/d)	25.48	122.09	34.93	36.70	39.96	27.22	34.80	51.05	80.95	55.33	48.76	38.77
Influent TSS (mg/L)	316	1305	494	174	369	294	79	488	409	494	338	374
Influent TKN (mg/L)	59.00	82.40	83.20	64.30	84.80	28.30	44.80	68.60	97.20	84.80	87.30	109.60
* Plant Capacity Hydraulic P (%)	54.83%	47.86%	52.41%	55.63%	63.75%	50.56%	57.19%	46.25%	57.41%	59.11%	55.66%	56.71%
* Plant Capacity Organic Q (%)	34.91%	167.25%	47.85%	50.27%	54.73%	37.28%	47.68%	69.93%	110.90%	75.79%	66.80%	53.11%
Day of sample Influent/Effluent Flow (MGD)	0.017	0.019	0.016	0.020	0.017	0.018	0.020	0.017	0.018	0.017	0.019	0.018
EFFLUENT - MONTHLY												
Ammonia Nitrogen (mg/L)	0.09	0.56	0.05	0.12	0.63	0.66	10.21	22.65	0.19	0.44	0.42	0.89
Ammonia Nitrogen RA - See Tab	0.185	1.205	1.74	0.12	3.33	5.42	5.2	11.3825	0.32	0.485	0.28	0.515
TIN(mg/L) 10 max	11.52	12.32	24.5	20.78	1.76	1.22	11.07	23.11	2.26	7.33	4.44	8.69
NO2+NO3 (mg/L)	11.52	11.76	24.45	20.66	1.14	0.56	0.86	0.46	2.07	6.88	4.02	7.8
Ecoli (876 ml) Geomean	1	1	1	1	1	1	1	1733	1	1	1	1
* Ecoli RA 127	158.45	158.45	158.45	158.45	158.45	158.64	158.64	158.64	404.25	404.25	404.25	404.33
pH (Minimum) 6.5	6.90	6.94	6.55	6.80	7.10	6.97	6.95	7.20	6.94	6.81	6.86	6.85
pH (Maximum) 9.0	7.08	7.72	7.88	7.20	8.06	7.40	7.51	7.78	7.42	7.13	7.30	7.08
Effluent TKN	0.10	0.60			4.50	5.90	16.10	23.60	3.10	3.80	2.90	1.00
* Average #'s Nitrate	1.63	1.84	3.30	3.45	0.16	0.08	0.14	0.07	0.32	0.97	0.63	1.17
EFFLUENT - 2X/YEAR												
Effluent Arsenic (ug/L)			3.70								6.00	
2YR Arsenic (ug/L)			4.53								4.28	
Effluent Copper (ug/L)			24.70								9.50	
2YR Copper (ug/L)			16.15								11.35	

