Boulder County LID - Eldorado Springs Wastewater Plant

Operations Report September 2022

Prepared by Gabby Begeman, ORC Water Professionals

WWTP

- Please see the attached results for the samples and flows collected from the WWTF.
- Effluent pump #1 has been replaced with the new ez-pull fitting that allow us to pull the pump without having to enter the tank.
- The electrical panel needs to be gone through by an electrician. There are many burned wires, defunct terminal blocks and a general servicing is due. ORC performed some of this work as a preventative measure to keep the pumps working, however we request that a competent electrician put eyes on it. We have scheduled this to occur in the coming week.

Collections system

• I have yet to dig up the vaults and assess the valves within.

Compliance

• ORC facilitated a compliance inspection with the State where a number of issues were found. See the attachment. We are working with the Artesian's, the manufacturer of the lift stations and the State to figure out what needs to happen. We have confirmed that this issue has been resolved with the state as we have provided them with the MOU.

ELDORADO SPRINGS WWTP

PERMIT# CO 0047651

Permitted Flow 0.032 (MGD)

Permitted Loading 73#/day

(cells highlighted contain formulas)

(to be completed by operator)

(to be completed by operator)														
Parameter	22-Sep	22-Aug	22-Jul	22-Jun	22-May	22-Apr	22-Mar	22-Feb	22-Jan	21-Dec	21-Nov	21-Oct	21-Sep	21-Aug
INFLUENT - MONTHLY														
Average Influent/Effluent Flow (MGD)	0.014	0.020	0.019	0.020	0.019	0.019	0.016	0.019	0.020738	0.0169	0.017547	0.015314	0.01677	0.0178
Maximum Influent/Effluent flow (MGD)	0.017	0.024	0.022	0.023	0.021	0.023	0.019	0.022	0.0234	0.0218	0.019627	0.02397	0.0171	0.02
Influent BOD (mg/L)	319	206	344	402	441	411	112	287	321	203	180	782	259	220
Influent BOD (#s/d)	45.23	34.34	50.05	56.81	69.03	59.64	15.88	52.66	50.87	27.33	25.48	122.09	34.93	36.70
Influent TSS (mg/L)	409	247	369	518	412	325	215	584	332	197	316	1305	494	174
Influent TKN (mg/L)	51.00	56.40	71.70	52.10	59.10	62.20	59.60	68.50	49.30	47.90	59.00	82.40	83.20	64.30
* Plant Capacity Hydraulic P (%) 80% min	43.75%	63.35%	58.43%	61.73%	59.38%	59.38%	50.00%	58.67%	64.81%	52.81%	54.83%	47.86%	52.41%	55.63%
* Plant Capacity Organic Q (%)	61.96%	47.03%	68.56%	77.82%	94.57%	81.70%	21.75%	72.14%	69.68%	37.43%	34.91%	167.25%	47.85%	50.27%
Day of sample Influent/Effluent Flow (MGD)	0.017	0.020	0.017	0.017	0.019	0.017	0.017	0.022	0.019	0.016	0.017	0.019	0.016	0.020
EFFLUENT - MONTHLY														
Ammonia Nitrogen (mg/L)	0.52	0.71	0.68	0.36	0.37	0.58	0.2	<0.03	0.17	0.71	0.03	0.56	0.05	0.12
Ammonia Nitrogen RA - See Tab	0.025	0.06	0.315	0.51	5.29	5.905	5.78875	0.235	0.295	0.8	0.185	1.205	1.74	4.71
TIN(mg/L) 10 max	11.33	3.71	2.98	0.57	0.84	5.42	10.38	11.45	8.64	13.46	11.52	12.32	24.5	20.78
TIN RA	9.243	9.026	9.287	9.358	9.524	9.632	9.887	9.509	9.142	8.991	8.692	8.662	8.375	8.178
NO2+NO3 (mg/L)	10.81	2.99	2.31	0.21	0.47	4.84	10.17	11.45	8.47	12.74	11.52	11.76	24.45	20.66
Ecoli (876 ml) Geomean Use actual on DMR	1	2	1	1	1	1	1	4	1	1	1	1	1	1
* Ecoli RA 127	73.33	73.33	73.38	73.38	73.38	274.92	274.92	274.92	274.79	274.83	274.83	274.83	274.83	274.83
pH (Minimum) 6.5	6.81	6.84	6.87	6.71	6.72	6.75	6.82	6.93	7.10	6.79	6.90	6.94	6.55	6.80
pH (Maximum) 9.0	7.26	7.28	7.57	7.31	7.54	7.70	7.71	8.15	7.57	7.26	7.11	7.72	7.88	7.20
Effluent TKN	1.20	2.60	2.50	1.10	1.90	2.20	2.00	0.10	1.00	0.10	0.10	0.60	<0.1	2.80
* Average #'s Nitrate	1.53	0.50	0.34	0.03	0.07	0.70	1.44	2.10	1.34	1.71	1.63	1.84	3.30	3.45