

Boulder County LID – Eldorado Springs Wastewater Plant
Operations Report
February 2021

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WWTP

- Please see the attached results for the samples and flows collected from the WWTF.
- The box housing the vent valve that was damaged during the incident last year has been replaced.
- The UPS (uninterrupted power supply) has gone out and needs to be replaced. ORC will obtain and install a replacement.
- A number of floats have been replaced that were inoperable causing malfunctions of equipment.
- The junction box for the effluent basin has been replaced to allow for ease of operation and better contact of the wiring. The wiring has also been adjusted to allow for a lead/lag operation of the effluent pumps.

Collections system

- A false alarm for the grinder pump at 75 Fowler occurred. It has been operating well since it was reset.
- No other grinders have been replaced/repared in February.

ELDORADO SPRINGS WWTP

PERMIT# CO 0047651

Permitted Flow 0.032 (MGD)

Permitted Loading 73#/day

(cells highlighted contain formulas)

Parameter	21-Feb	21-Jan	20-Dec	20-Nov	20-Oct	20-Sep	20-Aug	20-Jul	20-Jun	20-May	20-Apr	20-Mar
INFLUENT - MONTHLY												
Average Influent/Effluent Flow (MGD)	0.018914	0.017811	0.018146	0.0202	0.017167	0.016911	0.018469	0.01663	0.020489	0.028993	0.02416	0.0194
Maximum Influent/Effluent flow (MGD)	0.021802	0.01886	0.02229	0.0209	0.022265	0.020842	0.01974	0.018864	0.02825	0.0347	0.02939	0.0244
Influent BOD (mg/L)	394	311	259	229	343	347	354	333	453	359	381	193
Influent BOD (#s/d)	55.33	48.76	38.77	35.16	49.26	54.12	55.05	52.39	65.76	38.17	63.55	20.35
Influent TSS (mg/L)	494	338	374	218	294	747	337	312	558	273	460	150
Influent TKN (mg/L)	84.80	87.30	109.60	63.10	90.62	112.00	109.40	61.10	80.60	42.80	86.50	68.30
* Plant Capacity Hydraulic P (%)	59.11%	55.66%	56.71%	63.13%	53.65%	52.85%	57.72%	51.97%	64.03%	90.60%	75.50%	60.63%
* Plant Capacity Organic Q (%)	75.79%	66.80%	53.11%	48.16%	67.48%	74.13%	75.41%	71.77%	90.08%	52.29%	87.06%	27.88%
Day of sample Influent/Effluent Flow (MGD)	0.017	0.019	0.018	0.018	0.017	0.019	0.019	0.019	0.017405	0.01275	0.020	0.013
EFFLUENT - MONTHLY												
Temperature (Nov-Apr)												
Ammonia Nitrogen (mg/L)	0.44	0.42	0.89	0.34	1.85	3.43	9.3	1.8	0.05	0.19	0.115	0.45
Ammonia Nitrogen RA - See Tab												
TIN(mg/L) 10 max	7.33	4.44	8.69	14.69	9.36	6.13	9.975	4.67	4.57	3.43	11.53	1.31
TIN RA 1.5 Beginning 1/1/22	7.177	6.787	6.835	6.635	6.310	5.982	7.119	8.370	8.573	9.268	13.902	13.240
NO2+NO3 (mg/L)	6.88	4.02	7.8	14.34	7.52	2.69	0.67	2.87	4.52	3.24	11.415	0.86
Ecoli (#/100 ml) use actual result on DMR	1	1	1	1	1	1	3	1	1	4838	1	1
* Ecoli RA 127	404.25	404.25	404.33	404.33	404.33	404.33	404.33	404.17	408.18	408.18	28.77	28.77
pH (Minimum) 6.5	6.81	6.86	6.85	6.90	6.75	6.78	6.82	6.81	6.59	6.54	6.80	6.83
pH (Maximum) 9.0	7.03	7.30	7.08	7.49	7.16	7.03	7.02	7.21	6.91	7.12	7.49	7.89
Effluent TKN	3.80	2.90	1.00	1.10	1.90	4.80	13.70	1.80	0.03	1.10	1.15	1.90
* Average #'s Nitrate	0.97	0.63	1.17	2.20	1.08	0.42	0.10	0.45	0.66	0.34	1.90	0.09
Effluent Arsenic (ug/L)		6.00									4.40	2.70
2YR Arsenic (ug/L)		4.28							4.08			
Effluent Copper (ug/L)		9.50									5.00	5.50
2YR Copper (ug/L)		11.35							16.43			
EFFLUENT - QUARTERLY												
highest in quarter												
Effluent BOD (mg/L) 30/45 mg/L	2	6	6	2	2	6	5	5	2	7	10	5
Effluent TSS (mg/L) 30/45 mg/L	5	16	7	6	8	14	12	12	7	6	6	13
* BOD % Removal	99.49%	98.07%	97.68%	99.13%	99.42%	98.27%	98.59%	98.50%	99.56%	98.05%	97.38%	97.41%
* TSS % Removal	98.99%	95.27%	98.13%	97.25%	97.28%	98.13%	96.44%	96.15%	98.75%	97.80%	98.70%	91.33%