

# **Boulder County LID – Eldorado Springs Wastewater Plant**

Operations Report

October 2021

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## **WWTP**

- Please see the attached results for the samples and flows collected from the WWTF.
- In October we verified that the auto sampler was set up to collect a flow paced composite sample. The results are extremely high and not likely to be correct. We are investigating how this could happen and will await the results of November to vet possibilities of incorrect sampling.
- The DO equipment is operational and working towards improving the TIN. This equipment has shown us some limitations of the existing facility and is currently being dialed in.

## **Collections system**

- A grinder was replaced at 52 Artesian on 10/28. This address has only had 1 replacement in 2018, although it has been replaced on Nov 1, with the pump that came out being beyond repair. The address has gone into alarm since and we called Ambient H2O to have them do a service call to assess the potential problem. There was not any conclusions as to why this grinder is continuously going into alarm. An hour meter was installed.
- 37 Eldorado Springs had a grinder replaced on Oct 28. This home has only had 2 replacements prior. The pump that was removed had been rebuilt twice.
- 32 Artesian was replaced on 10/28 for the second time in its life. The pump that was removed had only been rebuilt 2 times before.
- 192 Artesian had a grinder replaced on 11/9 for the second time in its life. The pump that was removed from this address had been rebuilt 3 times before.
- 152 Artesian was replaced on Nov 9 for the third time since 2011. The pump that had been removed had only been used in one other home.

**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-Oct	21-Sep	21-Aug	21-Jul	21-Jun	21-May	21-Apr	21-Mar	21-Feb	21-Jan	20-Dec	20-Nov
<b>INFLUENT - MONTHLY</b>												
Average Influent/Effluent Flow (MGD)	0.015314	0.01677	0.0178	0.0204	0.01618	0.0183	0.0148	0.018371	0.018914	0.017811	0.018146	0.0202
Maximum Influent/Effluent flow (MGD)	0.02397	0.0171	0.02	0.0182	0.01828	0.0216	0.020006	0.02275	0.021802	0.01886	0.02229	0.0209
Influent BOD (mg/L)	782	259	220	280	185	214	354	528	394	311	259	229
Influent BOD (#s/d)	122.09	34.93	36.70	39.96	27.22	34.80	51.05	80.95	55.33	48.76	38.77	35.16
Influent TSS (mg/L)	1305	494	174	369	294	79	488	409	494	338	374	218
Influent TKN (mg/L)	82.40	83.20	64.30	84.80	28.30	44.80	68.60	97.20	84.80	87.30	109.60	63.10
* Plant Capacity Hydraulic P (%)	47.86%	52.41%	55.63%	63.75%	50.56%	57.19%	46.25%	57.41%	59.11%	55.66%	56.71%	63.13%
* Plant Capacity Organic Q (%)	167.25%	47.85%	50.27%	54.73%	37.28%	47.68%	69.93%	110.90%	75.79%	66.80%	53.11%	48.16%
Day of sample Influent/Effluent Flow (MGD)	0.019	0.016	0.020	0.017	0.018	0.020	0.017	0.018	0.017	0.019	0.018	0.018
<b>EFFLUENT - MONTHLY</b>												
Temperature (Nov-Apr)												
Ammonia Nitrogen (mg/L)	0.56	0.05	0.12	0.63	0.66	10.21	22.65	0.19	0.44	0.42	0.89	0.34
Ammonia Nitrogen RA - See Tab	1.205	1.74	0.12	3.33	5.42	5.2	11.3825	0.32	0.485	0.28	0.515	0.37
TIN(mg/L) 10 max	12.32	24.5	20.78	1.76	1.22	11.07	23.11	2.26	7.33	4.44	8.69	14.69
TIN RA 1.5 Beginning 1/1/22	10.680	10.895	9.519	8.187	8.934	9.248	8.657	7.256	7.177	6.787	6.835	6.635
NO2+NO3 (mg/L)	11.76	24.45	20.66	1.14	0.56	0.86	0.46	2.07	6.88	4.02	7.8	14.34
Ecoli (876 ml) Geomean	1	1	1	1	1	1	1733	1	1	1	1	1
* Ecoli RA 127	158.45	158.45	158.45	158.45	158.64	158.64	158.64	404.25	404.25	404.25	404.33	404.33
pH (Minimum) 6.5	6.94	6.55	6.80	7.10	6.97	6.95	7.20	6.94	6.81	6.86	6.85	6.90
pH (Maximum) 9.0	7.72	7.88	7.20	8.06	7.40	7.51	7.78	7.42	7.13	7.30	7.08	7.49
Effluent TKN	0.60			4.50	5.90	16.10	23.60	3.10	3.80	2.90	1.00	1.10
* Average #'s Nitrate	1.84	3.30	3.45	0.16	0.08	0.14	0.07	0.32	0.97	0.63	1.17	2.20