

Boulder County LID – Eldorado Springs Wastewater Plant
Operations Report
November 2020

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WWTP

- Please see the attached results for the samples and flows collected from the WWTF.
- The annual Status/Progress report is due to CDPHE with regards to the TIN limits. Please ensure that Wright Water is completing and submitting this document for the LID. ORC would like to be provided with copy of 2020 and 2019 status reports.

b. Activities to Meet TIN 2 year rolling average limitation - In order to meet TIN 2 year rolling average limitation, the following schedule are included in the permit.

Code	Event	Description	Due Date
CS011	Plan, Report, or Scope of Work	Submit a report describing the actions that will be taken to attain compliance with the limitation.	12/31/17
CS010	Status/Progress Report	Submit progress report summarizing the progress in actions taken to attain compliance with the limitation.	12/31/18
CS010	Status/Progress Report	Submit progress report summarizing the progress in actions taken to attain compliance with the limitation.	12/31/19
CS010	Status/Progress Report	Submit progress report summarizing the progress in actions taken to attain compliance with the limitation.	12/31/20
CS016	Complete Required Work	Complete all appropriate actions, which will allow the permittee to meet the limitation.	12/31/21

Vandalism - 11/10/2020

- Upon arrival at the WWTF, ORC noticed that the window air conditioner unit was out of the wall. The power was turned off to the main control panel, some wires were ripped out of the interior of the panel. The autosampler was taken apart and the plant was at maximum capacity ready to overflow.
- The Boulder County Sheriff was called and a verbal report was filed.
- ORC visited the plant later that day to find a valve box smashed and the plant not functional.
- ORC brought in electricians, controls and mechanical technicians who diagnosed the problems, replaced the broken equipment and rerouted the pulled out wires. The plant is now functioning correctly.
- The sheriff was again called and a formal report was filed.
- No additional vandalism has occurred after the initial incident.

Collection System

- Ambient H2O has recommended the Artesians install a quad pump station rather than a duplex unit. They are also requesting examples of auto-sampler units. I want to clarify what the intent for them to purchase an autosampler is? Where will it be stored? Under what circumstance will they be sampled?

Eldorado Springs WWTP (cells highlighted contain formulas)

Parameter	20-Dec	20-Nov	20-Oct	20-Sep	20-Aug	20-Jul	20-Jun	20-May	20-Apr	20-Mar	20-Feb	20-Jan	19-Dec
Average Influent/Effluent Flow (MGD)		0.0202	0.017167	0.016911	0.018469	0.01663	0.020489	0.028993	0.02416	0.0194	0.0165	0.017	0.0175
Maximum Influent/Effluent flow (MGD)		0.0209	0.022265	0.020842	0.01974	0.018864	0.02825	0.0347	0.02939	0.0244	0.0194	0.0183	0.0184
Average Influent BOD (mg/L)	259	229	343	347	354	333	453	359	381	193	291	219	386
* Average Influent BOD (#s/d)		35.16	49.26	54.12	55.05	52.39	65.76	38.17	63.55	20.35	39.32	29.59	47.97
Average Influent TSS (mg/L)	374	218	294	747	337	312	558	273	460	150	256	200	366
* Plant Capacity Flow P (%)		63.13%	53.65%	52.85%	57.72%	51.97%	64.03%	90.60%	75.50%	60.63%	51.56%	53.13%	54.69%
* Plant Capacity Loading Q (%)		48.16%	67.48%	74.13%	75.41%	71.77%	90.08%	52.29%	87.06%	27.88%	53.86%	40.53%	65.71%
Day of sample Influent/Effluent Flow (MGD)		0.018	0.017	0.019	0.019	0.019	0.017405	0.01275	0.020	0.013	0.016	0.016	0.015
Average Effluent BOD (mg/L)	6	2	2	6	5	5	2	7	10	5	4	5	2
Average Effluent TSS (mg/L)	7	6	8	14	12	12	7	6	6	13	9	14	6
* BOD % Removal		0.50%	0.42%	98.27%	98.59%	98.50%	99.56%	98.05%	97.38%	97.41%	98.63%	97.72%	99.48%
* TSS % Removal		97.25%	97.28%	98.13%	96.44%	96.15%	98.75%	97.80%	98.70%	91.33%	96.48%	93.00%	98.36%
Average Effluent Ammonia Nitrogen (mg/L)	0.89	0.34	1.85	3.43	9.3	1.8	0.05	0.19	0.115	0.45	0.53	0.14	0.14
TIN Monthly Rolling Average		6.635	6.310	5.982	7.119	8.370	8.573	9.268	13.902	13.240	13.990	14.594	16.456
TIN(mg/L)	8.69	14.69	9.36	6.13	9.975	4.67	4.57	3.43	11.53	1.31	2.65	5.02	6.28
NO2+NO3 (mg/L)	15.6	14.34	7.52	2.69	0.67	2.87	4.52	3.24	11.415	0.86	2.12	4.88	6.14
Ecoli (#/100 ml)	1	1	1	1	3	1	1	69.56	1	1	1	2	1
* Ecoli Rolling Annual Average		6.96	6.96	6.96	6.96	6.80	10.81	10.81	28.77	28.77	28.77	31.60	31.52
pH (Minimum)		6.90	6.75	6.78	6.82	6.81	6.59	6.54	6.80	6.83	6.81	6.72	6.87
pH (Maximum)		7.49	7.16	7.03	7.02	7.21	6.91	7.12	7.49	7.89	7.06	7.06	7.00
Ave Influent TKN	109.60	63.10	90.62	112.00	109.40	61.10	80.60	42.80	86.50	68.30	69.40	71.10	78.00
Ave Effluent TKN	1.00	1.10	1.90	4.80	13.70	1.80	0.03	1.10	1.15	1.90	1.70	1.20	1.10
* Average #'s Nitrate		2.20	1.08	0.42	0.10	0.45	0.66	0.34	1.90	0.09	0.29	0.66	0.76