

CITY OF CLINTON
CLINTON WATER AND SEWER DEPARTMENT
P.O. BOX 277
CLINTON, AR 72031
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William Hinchey, Manager

Richard McCormac, Mayor

November 29, 2023

Thomas Harrington
Enforcement Analyst
Division of Environmental Quality
Office of Water Quality
5301 Northshore Drive
North Little Rock, AR 72118

RE: Mercury Minimization Plan Progress Report

Mr. Harrington:

We had ESC, Inc., and AIC now Eurofins test for mercury in our effluent last year and this year. Attached are copies of the test results for the samples taken by both companies. All sample results show the mercury levels to be less than 1.00 ug/L or 0.001 mg/L. We are below our limits.

However, we are in the process of getting updated information from the local hospital and dental offices concerning the amount of mercury used at their location and their disposal practices. We want to be able to reduce our mercury levels even more if possible.

If you have any questions or need any further information, please contact me at 501-745-4320.

Sincerely,



Jackie William Hinchey, Jr., Manager
Clinton Water and Sewer Department

ESC Results

Cd & Hg reported in µg/L - all others in mg/L or %

Site #		12/7/2022	12/14/2022	12/21/2022	12/28/2022	1/4/2023	1/11/2023	Average	Max.	Min.
1	Cd	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	Hg	0.00071	0.000813	0.00278	0.00103	0.000575	0.0005	0.001068	0.00278	0.0005
	CBOD							0	0	0
	TSS							0	0	0
	NH3-N							0	0	0
	DO							0	0	0
	FCB							0	0	0
	E Coli							0	0	0
	TP							0	0	0
	NO3 + NO2 - N							0	0	0
2	Cd	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	Hg	0.0072	0.00443	0.0192	0.0343	0.0216	0.0253	0.018672	0.0343	0.00443
3	Cd	0.78	0.54	0.5	0.59	1.44	0.5	0.725	1.44	0.5
	Hg	0.0443	0.0115	0.0519	0.158	0.00126	0.0655	0.05541	0.158	0.00126
4	Cd	0.5			0.52	0.56	0.5	0.52	0.56	0.5
	Hg	0.0184			0.0527	0.0243	0.0253	0.030175	0.0527	0.0184
5	Cd	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	Hg	0.000879	0.00109	0.0212	0.0277	0.00707	0.00816	0.011017	0.0277	0.000879

AIC (now Eurofins) Results

Cd & Hg reported in µg/L - all others in mg/L or %

Site #	Decont.	Eq. Blank	12/7/2022	12/14/2022	12/21/2022	12/28/2022	1/4/2023	1/11/2023	Average	Max.	Min.
1	Cd	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	Hg	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
2	Cd	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	Hg	0.0005	0.0005	0.0084	0.012	0.0005	0.0087	0.16	0.023888	0.16	0.0005
	BOD		300	16	76	540	20	54	167.6667	540	16
	TSS		550	22	20	780	30	36	239.6667	780	20
	TKN		25	5	10	89	5.3	12	24.38333	89	5
	TP		2.5	0.68	1.2	3	0.59	1.5	1.578333	3	0.59
3	Cd	0.5	0.79	3.3	0.5	0.79	0.84	0.75	0.99625	3.3	0.5
	Hg	0.0005	0.019	0.89	0.011	0.0005	0.38	0.17	0.183938	0.89	0.0005
	BOD		60	180	49	31	69	98	81.16667	180	31
	TSS		410	1500	78	190	530	300	501.3333	1500	78
	TKN		22	36	18	14	14	22	21	36	14
	TP		3.8	15	2	2.8	5.5	4.7	5.633333	15	2
4	Cd	0.5	0.5	0.5	0.61	0.61	0.65	0.54	0.55	0.65	0.5
	Hg	0.0005	0.0005	0.0005	0.0005	0.0005	0.067	0.0005	0.011583	0.067	0.0005
	CBOD		1500		1900	1900	2700	3100	2300	3100	1500
	TSS		650		1200	1200	1800	790	1110	1800	650
	TKN		130		280	280	150	180	185	280	130
	NH3-N		43		38	38	5.8	140	56.7	140	5.8
4	COD		2800		3800	3800	4600	4900	4025	4900	2800
	% solids		10.00%	3.30%	1.30%	9.80%	2.00%	0.60%	0.045	0.1	0.006
4	O&G		34.00%	0.20%	73.00%	2.10%	2.50%	23.00%	0.224667	0.73	0.002
5	Cd	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	Hg	0.0005	0.0005	0.0012	0.0005	0.0012	0.0059	0.0005	0.001563	0.0059	0.0005

Sampling Site Descriptions

The table below details the sampling sites chosen for analysis.

Site #	Site	Parameters Analyzed	Lab assigned for conducting Sampling & Analysis
Existing Auto-Sampler	WWTP Outfall 001 (using existing auto-sampler)	Required Permit Sampling for AR0048836 (includes Cd & Hg)	ESC
1	WWTP Outfall 001	Cd & Hg	AIC
	WWTP Outfall 001	Cd & Hg	ESC
	WWTP Outfall 001	Cd & Hg	DEQ
2	WWTP Influent	BOD, TSS, TKN, TP, Cd, & Hg	AIC
	WWTP Influent	Cd & Hg	ESC
	WWTP Influent	Cd & Hg	DEQ
3	Equalization Lagoon	BOD, TSS, TKN, TP, Cd, & Hg	AIC
	Equalization Lagoon	Cd & Hg	ESC
	Equalization Lagoon	Cd & Hg	DEQ
4	Industrial Park PS	TSS, O&G, CBOD, COD, NH3-N, TKN, Cd, & Hg	AIC
	Industrial Park PS	Cd & Hg	ESC
	Industrial Park PS	Cd & Hg	DEQ
Existing Grab	WTP Residuals Pond Outfall	Required Permit Sampling for ARG640085 (includes TSS, Diss. Al, and TRC)	ESC
5	WTP Residuals Pond Outfall	Cd & Hg	AIC
	WTP Residuals Pond Outfall	Cd & Hg	ESC
	WTP Residuals Pond Outfall	Cd & Hg	DEQ