

Notice of Statistically Significant Increases
and Statistically Significant Levels

Dallman and Lakeside Coal Combustion Residuals
Surface Impoundments

March 6, 2025

City Water, Light and Power
Springfield, Illinois



Prepared by:

Environmental, Health & Safety, CWLP

Notification of Statistically Significant Increases and Statistically Levels Above Groundwater Protection Standards

Pursuant to paragraph 268 of the Consent Agreement and Final Order (CAFO) effective January 14, 2025, provided herein is a single notice of Statistically Significant Increases (SSI) and Statistically Significant Levels (SSL) identified in the February 13, 2025 Groundwater Protection Standards Report (GWPS Report). The GWPS Report was prepared pursuant to paragraph 267 of the CAFO for the time period of January 1, 2022 through December 31, 2024.

Appendix III constituents exhibiting SSI over background are identified in the table below:

Well	Appendix III	Units	MCL	Background	2/16/22	5/31/22	8/23/22	11/8/22	1/26/23	4/11/23	7/6/23	10/25/23	2/21/24	5/9/24	8/12/24	11/11/24
AP-1	pH	S.U.	NA	6.70-7.87	6.57	6.58	6.65	6.68	6.6	6.52	6.51	6.71	6.51	6.31	6.7	6.54
AP-2	pH	S.U.	NA	6.70-7.87	6.43	6.43	6.45	6.52	6.46	6.44	6.4	6.57	6.41	6.21	6.58	6.41
AP-3	pH	S.U.	NA	6.70-7.87	6.6	6.58	6.6	6.65	6.58	6.64	6.53	6.69	6.55	6.36	6.2	6.48
AP-10	pH	S.U.	NA	6.70-7.87	6.54	6.69	6.7	6.76	6.58	6.68	6.57	6.82	6.65	6.54	6.53	6.73
G120	pH	S.U.	NA	6.70-7.87								6.78	6.47	6.65	6.81	6.55
AW1	pH	S.U.	NA	6.70-7.87								6.54	6.55	6.58	6.58	6.56
AP-1	Boron	mg/l	NA	1.497	22.3	23.1	22.1	21.4	23.2	21.2	22.5	21.7	23.5	22.7	22.9	23.6
AP-2	Boron	mg/l	NA	1.497	4.68	4.25	4.32	4.08	3.94	3.7	3.73	3.23	3.38	3.43	3.1	3.52
AP-3	Boron	mg/l	NA	1.497	15.8	14.7	14.8	14.6	14.5	14.3	14	15.2	14.8	14.5	14.6	14.9
AP-10	Boron	mg/l	NA	1.497	3.51	3.58	3.52	3.35	3.32	3.76	3.81	3.6	3.71	3.92	3.9	3.95
AP-14	Boron	mg/l	NA	1.497	23.1	23.3	21.8	21.3	21.3	23	22.6	22.1	21.6	22.3	20	21
G120	Boron	mg/l	NA	1.497								7.15	7.12	7.6	7.71	7.5
AW1	Boron	mg/l	NA	1.497								8.66	8.24	9.56	9.19	8.91
AP-1	Calcium	mg/l	NA	181.6	245	243	239	242	230	242	285	229	250	248	244	237
AP-2	Calcium	mg/l	NA	181.6	265	236	241	248	217	210	244	204	210	194	206	222
AP-14	Calcium	mg/l	NA	181.6	225	215	217	236	209	233	235	278	263	245	237	253
G120	Calcium	mg/l	NA	181.6								257	265	260	240	263
AW1	Calcium	mg/l	NA	181.6								197	203	208	186	193
RW-3	Chloride	mg/l	NA	12.3	29	31	31	30	29	31	28	31	27	28	29	25.1
AP-1	Chloride	mg/l	NA	12.3	55	59	44	61	58	60	36	53	54	29	59	52.1
AP-2	Chloride	mg/l	NA	12.3	36	35	34	34	36	37	54	40	39	36	39	35.1
AP-3	Chloride	mg/l	NA	12.3	42	42	47	55	60	59	51	57	54	53	55.9	59.5
AP-6	Chloride	mg/l	NA	12.3	35	38	25	31	27	31	28	33	30	33	37	34.5
AP-7	Chloride	mg/l	NA	12.3	64	66	36	58	45	70	39	60	42	43	50	62.1
AP-8	Chloride	mg/l	NA	12.3	26	28	27	26	26	26	25	25	24	26	35	23.2
AP-10	Chloride	mg/l	NA	12.3	28	29	28	28	27	28	28	27	27	27	30	25.7
AP-14	Chloride	mg/l	NA	12.3	49	52	59	65	59	71	73	89	82	83	92	94
G120	Chloride	mg/l	NA	12.3								40	39	39	41	37.4
AW1	Chloride	mg/l	NA	12.3								40	40	41	41	37.3
AP-7	Fluoride	mg/l	4	0.5	0.55	0.56	0.37	0.39	0.36	0.53	0.34	0.53	0.44	0.38	0.46	<0.5
AP-1	Sulfate	mg/l	NA	55.5	732	791	753	777	781	768	443	740	790	805	836	849
AP-2	Sulfate	mg/l	NA	55.5	583	532	545	643	485	462	795	380	393	411	417	440
AP-3	Sulfate	mg/l	NA	55.5	410	408	384	444	461	483	467	495	512	493	554	558
AP-10	Sulfate	mg/l	NA	55.5	86	86	87	96	96	100	100	91	96	100	108	89.4
AP-14	Sulfate	mg/l	NA	55.5	670	681	639	736	699	707	714	806	679	740	821	909
G120	Sulfate	mg/l	NA	55.5								555	503	560	534	565
AW1	Sulfate	mg/l	NA	55.5								384	369	416	406	388
AP-1	Total Dissolved Solids	mg/l	NA	609.21	1490	1550	1550	1540	1520	1540	1190	1360	1400	1490	1530	1640
AP-2	Total Dissolved Solids	mg/l	NA	609.21	1310	1270	1360	1310	1180	1100	1600	1020	1020	1040	1110	1160
AP-3	Total Dissolved Solids	mg/l	NA	609.21	882	942	1030	920	1040	984	990	1080	935	1040	1170	1160
AP-10	Total Dissolved Solids	mg/l	NA	609.21	740	752	755	730	778	756	725	732	745	720	796	790
AP-14	Total Dissolved Solids	mg/l	NA	609.21	1240	1340	1390	1380	1280	1330	1480	1440	1510	1480	1610	1840
G120	Total Dissolved Solids	mg/l	NA	609.21								1390	1320	1280	1450	1430
AW1	Total Dissolved Solids	mg/l	NA	609.21								1220	1120	1220	1190	1100

Appendix IV constituents exhibiting SSL over the GWPS are identified in the table below:

Well	Appendix IV	Units	MCL	Background	GWPS	2/16/22	5/31/22	8/23/22	11/8/22	1/26/23	4/11/23	7/6/23	10/25/23	2/21/24	5/9/24	8/12/24	11/11/24
RW-3	Arsenic	mg/l	0.01	0.0375	0.0375	0.178	0.138	0.11	0.142	0.169	0.145	0.0831	0.74	0.306	0.188	0.107	0.214
AP-7	Arsenic	mg/l	0.01	0.0375	0.0375	<0.025	0.0468	0.0376	<0.025	<0.025	0.0462	0.0412	0.075	0.0555	0.0395	0.0438	0.0947
AP-8	Arsenic	mg/l	0.01	0.0375	0.0375	0.0319	0.0352	0.0377	0.034	0.0336	0.0348	0.0513	0.0395	0.0426	0.0461	0.0414	0.0386
AW1	Arsenic	mg/l	0.01	0.0375	0.0375								0.208	0.16	0.156	0.129	0.168
AP-2	Cobalt	mg/l	0.006	0.0052	0.006	0.0102	0.0089	0.0115	0.0111	0.0091	0.0102	0.0085	0.0091	0.0068	0.0102	0.0073	0.0085
AP-3	Cobalt	mg/l	0.006	0.0052	0.006	<0.005	<0.005	<0.005	0.0054	<0.005	0.0054	<0.005	0.0051	<0.005	0.0065	0.0071	<0.005