

Notice of Statistically Significant Increases  
and Statistically Significant Levels

FGDS Development Unit 2 Landfill

June 13, 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 284 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 June 13, 2025 Updated Sampling Report and Confirmatory Sampling Report for the FGDS Development Unit 2 Landfill. The combined reports were prepared pursuant to paragraph 283 of the CAFO for the time period of October 2023, 2024, and the background sampling conducted in 2025. Monitoring well P07D was incorporated into the groundwater monitoring network in August 2024. No monitoring data for P07D is available before that date.

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

Well	Appendix III	Units	40 CFR 257 MCL	Background	257 GWPS	10/26/23	2/23/24	5/13/2024	8/12/24	11/11/24	2/21/25	3/18/25	4/24/25
AW2	Boron	mg/l	NA	0.13375	0.13375	<b>2.92</b>	<b>2.79</b>	<b>2.71</b>	<b>2.99</b>	<b>2.46</b>	<b>1.48</b>	<b>1.9</b>	<b>1.77</b>
P07D	Boron	mg/l	NA	0.13375	0.13375				<b>5.95</b>	<b>5.4</b>	<b>5.26</b>	<b>5.65</b>	<b>5.22</b>
G121	Boron	mg/l	NA	0.13375	0.13375	<b>3.09</b>	<b>3.3</b>	<b>3.48</b>	<b>3.04</b>	<b>3.68</b>	<b>3.54</b>	<b>3.05</b>	<b>3.65</b>
G122	Boron	mg/l	NA	0.13375	0.13375	<b>12</b>	<b>11.3</b>	<b>12.7</b>	<b>10.8</b>	<b>11.7</b>	<b>10.3</b>	<b>10.9</b>	<b>12</b>
P07D	Calcium	mg/l	NA	172.04	172.04				<b>205</b>	<b>189</b>	<b>179</b>	<b>195</b>	<b>175</b>
G121	Calcium	mg/l	NA	172.04	172.04	<b>180</b>	<b>189</b>	<b>188</b>	<b>164</b>	<b>191</b>	<b>169</b>	<b>186</b>	<b>173</b>
G122	Calcium	mg/l	NA	172.04	172.04	<b>252</b>	<b>251</b>	<b>260</b>	<b>225</b>	<b>246</b>	<b>220</b>	<b>250</b>	<b>241</b>
P07D	Sulfate	mg/l	NA	279.78	279.78				<b>332</b>	<b>305</b>	<b>287</b>	<b>298</b>	<b>283</b>
G121	Sulfate	mg/l	NA	279.78	279.78	<b>293</b>	<b>290</b>	<b>337</b>	<b>260</b>	<b>311</b>	<b>314</b>	<b>281</b>	<b>310</b>
G122	Sulfate	mg/l	NA	279.78	279.78	<b>554</b>	<b>532</b>	<b>588</b>	<b>523</b>	<b>547</b>	<b>510</b>	<b>499</b>	<b>537</b>
G121	Total Dissolved Solids	mg/l	NA	1024.52	1024.52	<b>1040</b>	<b>1000</b>	<b>990</b>	<b>936</b>	<b>1040</b>	<b>1240</b>	<b>1710</b>	<b>1240</b>
G122	Total Dissolved Solids	mg/l	NA	1024.52	1024.52	<b>1470</b>	<b>1270</b>	<b>1350</b>	<b>1380</b>	<b>1360</b>	<b>1320</b>	<b>2000</b>	<b>1200</b>

An Appendix III confirmed SSI is indicated in bold text and shaded cell

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

Well	Appendix IV	Units	40 CFR 257 MCL	Background	257 GWPS	10/26/23	2/23/24	5/13/2024	8/12/24	11/11/24	2/21/25	3/18/25	4/24/25
AW2	Arsenic	mg/l	0.01	0.001	0.01	<b>0.0266</b>	<b>0.0235</b>	<b>0.0219</b>	<b>0.018</b>	<b>0.013</b>	0.0017	0.0012	0.0014
P07D	Arsenic	mg/l	0.01	0.001	0.01				<b>0.0394</b>	<b>0.036</b>	<b>0.0276</b>	<b>0.0292</b>	<b>0.0262</b>
G121	Arsenic	mg/l	0.01	0.001	0.01	<b>0.0221</b>	<b>0.0173</b>	<b>0.015</b>	0.0084	<b>0.016</b>	<b>0.0169</b>	<0.001	<b>0.0145</b>

An Appendix IV confirmed SSL is indicated in bold text and shaded cell