

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

***MONITORING AND RESEARCH
DEPARTMENT***

REPORT NO. 26-20

***TUNNEL AND RESERVOIR PLAN McCOOK RESERVOIR ANNUAL
GROUNDWATER MONITORING REPORT FOR 2025***

May 2026

Protecting Our Water Environment



Metropolitan Water Reclamation District of Greater Chicago

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May 27, 2026

Mr. Matthew Maas
Division Manager
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Illinois Environmental Protection Agency
2520 W. Iles Avenue
Springfield, IL 62794

Dear Mr. Maas:

Subject: Transmittal of the Report "Tunnel and Reservoir Plan McCook Reservoir
Annual Groundwater Monitoring Report for 2025"

Please find attached the report entitled "Tunnel and Reservoir Plan McCook Reservoir Annual Groundwater Monitoring Report for 2025." The report was prepared for transmittal to the Illinois Environmental Protection Agency in accordance with the Chicagoland Underflow Plan McCook Reservoir Groundwater Monitoring and Analysis Plan.

If you have any questions or would like additional information, please contact Mr. Benjamin Morgan at (708) 588-3743 or MorganB@mwr.org.

Very truly yours,

Albert Cox, Ph.D.
Environmental Monitoring and Research Manager
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AC:lf
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**TUNNEL AND RESERVOIR PLAN McCOOK RESERVOIR ANNUAL
GROUNDWATER MONITORING REPORT FOR 2025**

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LIST OF ABBREVIATIONS

°C	degrees Celsius
Ag	silver
As	arsenic
B	boron
Ba	barium
Be	beryllium
CCD	Chicago City Datum
Cd	cadmium
CFU	colony forming units
Cl ⁻	chloride
CN	cyanide
Co	cobalt
COD	chemical oxygen demand
Cr	chromium
CSF	combined sewer flow
Cu	copper
District	Metropolitan Water Reclamation District of Greater Chicago
EC	electrical conductivity
F	fluorine
FC	fecal coliform
Fe	iron
Hg	mercury
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
MAP	Groundwater Monitoring and Analysis Plan
Mn	manganese
NH ₃ ⁻ -N	ammonia nitrogen
Ni	nickel
NO ₃ -N	nitrate nitrogen
P	phosphorus
Pb	lead
Ra	radium
Reservoir	Chicagoland Underflow Plan McCook Reservoir
Sb	antimony
Se	selenium
SO ₄ ²⁻	sulfate
TARP	Tunnel and Reservoir Plan
TDS	total dissolved solids
Tl	thallium
TL	tolerance limit
TOC	total organic carbon
USACE	United States Army Corps of Engineers
Zn	zinc

ACKNOWLEDGMENTS

The McCook Reservoir groundwater monitoring is conducted by the Monitoring and Research Department of the Metropolitan Water Reclamation District of Greater Chicago (District) under the Groundwater Monitoring and Analysis Plan prepared by the United States Army Corps of Engineers. Organic analyses were performed by Eurofins Environment Testing, inorganic analyses by the District's Analytical Laboratories Division, and fecal coliform analyses by the District's Analytical Bacteriology Laboratory. Special thanks to Ms. Mallory Coghlan and Mr. Bryan LaFlame for collecting samples, to Dr. Essam El-Naggar for help managing the monitoring, and to Ms. Laura Franklin for typing and formatting this report.

DISCLAIMER

Mention of proprietary equipment and chemicals in this report does not constitute endorsement by the Metropolitan Water Reclamation District of Greater Chicago.

TUNNEL AND RESERVOIR PLAN McCOOK RESERVOIR ANNUAL GROUNDWATER MONITORING REPORT FOR 2025

McCook Reservoir Site Description

The Chicagoland Underflow Plan McCook Reservoir (Reservoir), located within Lyons Township in western Cook County, is part of the Tunnel and Reservoir Plan (TARP). The Reservoir was designed to reduce flooding in the Chicago area by providing storage of combined sewer flow (CSF) during storms. The Reservoir construction has been divided into two phases. Phase I of the Reservoir is complete and has been in operation since January 2018. Phase II of the Reservoir is still under construction and is anticipated to begin operation in 2029. When the capacity of the sewer systems is exceeded, the CSF is conveyed to the Reservoir by the TARP tunnels for storage until it can be treated at the Stickney Water Reclamation Plant.

The groundwater protection system surrounding the Reservoir is designed to prevent exfiltration of CSF from the Reservoir to the surrounding groundwater during high-stage conditions and control seepage of groundwater into the Reservoir during low-stage conditions. The groundwater protection system consists of a double-row grout curtain that completely surrounds Phases I and II of the Reservoir to a depth of -320 ft Chicago City Datum (CCD). The grouted area has achieved permeabilities of less than 1 lugeon.

Groundwater Monitoring Program

A Groundwater Monitoring and Analysis Plan (MAP) (United States Army Corps of Engineers [USACE], 2014), including seven groundwater monitoring wells around the perimeter of the Reservoir ([Figure 1](#)), was developed by the USACE in coordination with the Metropolitan Water Reclamation District of Greater Chicago (District) and approved by the Illinois Environmental Protection Agency (IEPA) to monitor groundwater conditions and the performance of the groundwater protection system.

The objectives of the monitoring program as specified in the MAP are:

- To characterize local background groundwater quality by measuring Field, Routine, Organic, and Inorganic parameters prior to Reservoir operation.
- To assess potential exfiltration of CSF effluent into groundwater by measuring Field and Routine parameters while the Reservoir is in high-stage operation.
- To determine potential migration of groundwater contaminants into the Reservoir system from the surrounding area by measuring Field, Routine, Organic, and Inorganic parameters while the Reservoir is in low-stage operation.
- To evaluate long-term changes in groundwater quality associated with Reservoir operations.

FIGURE 1: McCook Reservoir Site and Monitoring Well Locations



To evaluate changes in groundwater quality, monitoring wells are installed 100 feet outside the grout curtain. However, due to physical constraints near the Reservoir where it would be impossible to install or access wells, some are located greater than 100 feet from the grout curtain. In the summer of 2016, a USACE investigation discovered that wells G-04 and G-05 exhibited signs of a compromised annular seal. These wells were re-drilled during fall 2017 and became operational for monitoring in November 2017.

Background Monitoring. Background monitoring began in the first quarter of 2016. Groundwater samples collected during the background monitoring program were analyzed for concentrations of organic and inorganic parameters and groundwater quality indicators based on Illinois Class I Potable Resource Groundwater standards constituents in 35 Illinois Administrative Code (IAC) 620.410 (Class I) and Illinois General Use Water Quality standards constituents in 35 IAC 302 B. Background monitoring results were used to determine upper tolerance limits (TLs) in each well for all measured groundwater quality parameters to enable future assessment of groundwater protection system efficacy. The TL for all parameters were established in 2019 using all background data and the statistical approaches recommended in the MAP. The details are documented in the Appendix of the 2018 McCook Reservoir annual report.

High-Stage/Fill Event Monitoring. High-stage monitoring is initiated when water elevation in the Reservoir exceeds -220 ft CCD. The initial high-stage/fill event threshold of -280 ft CCD was increased to -265 ft CCD in January 2018 and was increased again to -220 ft CCD in January 2022 to reflect the Reservoir operating conditions. During high-stage monitoring, samples are collected every 14 days until the Reservoir water elevation falls below -220 ft CCD. The intent of the high-stage monitoring is to measure groundwater quality when the Reservoir is under high positive (outward) gradients that have the potential to exfiltrate CSF water. For the current Phase I of the Reservoir operation during high-stage monitoring events, only wells G-01, G-02, G-03, G-04, and G-05 must be monitored. The measurements and analyses include four Field and nine Routine parameters as specified in Table 2 of the MAP.

Low-Stage Semiannual Monitoring. Low-stage monitoring is implemented on a semiannual basis to collect water quality data when the Reservoir is acting as a regional groundwater sink. Low-stage sampling requires that water elevation in the Reservoir be at or below the high-stage threshold elevation (-220 ft CCD). Low-stage samples can only be collected after low-stage operation has been maintained for at least four days to ensure that monitoring results are characteristic of the regional groundwater and do not reflect re-infiltration of groundwater constituents that exfiltrated during the high-stage operation. The first low-stage semiannual sampling occurs during the second quarter of each year (April–June), analyzing all eighty-one (81) Field, Routine, Organic, and Inorganic parameters as specified in Tables 2, 3, and 4 of the MAP. The second low-stage semiannual sampling occurs during the fourth quarter of each year (October–December), analyzing only the Field and Routine parameters. The two low-stage semiannual samplings require collecting samples from all seven wells.

This 2025 report of the groundwater monitoring program for the Reservoir presents field activities and analytical results for January 1 – December 31, 2025.

Monitoring Activities for 2025

During 2025, there were nine high-stage events at the Reservoir. Eight high-stage events lasted for less than two weeks, requiring one sampling per event. One high-stage event (the seventh of the year, occurring in August) lasted for 22 days, triggering two samplings. However, only one sampling could be conducted at each well during this event due to staffing limitations during a major TARP-wide fill event. The Reservoir operated at high stage for a total of 74 days in 2025. Water samples were collected and immediately analyzed in the field for pH and electrical conductivity, and water temperature and depth were recorded. Samples were packed in ice and transported to District laboratories for analysis of the nine Routine parameters.

The first low-stage semiannual monitoring sampling was conducted during the second quarter, on June 10 – 13, 2025, after the Reservoir had been at low stage for over four days. Water sample pH, electrical conductivity, temperature, and elevation were recorded in the field. Aliquots of each sample were packed in ice and transferred to Eurofins Environment Testing for analysis of Organic constituents in accordance with requirements specified in the MAP. Additional aliquots of each sample were packed in ice and taken to the District’s laboratories for analysis of Routine and Inorganic parameters.

The second semiannual sampling was conducted on December 9 – 10, 2025, following low-stage operation at the Reservoir for over four days. Field parameters for each water sample were measured. Water samples were packed in ice and brought to the District’s laboratories for analysis of Routine parameters. For both low-stage semiannual monitoring samplings, well G-07 could not be sampled due to malfunctioning of the pump attached to the well, likely due to increased wear and tear from ongoing blasting at the adjacent McCook Phase II quarrying site. Replacement of this pump is planned for after blasting at the site has ended.

Analytical Results for 2025

High-Stage/Fill Event Monitoring. All analytical results for all high-stage samples collected from wells G-01, G-02, G-03, G-04, and G-05 and the duplicate samples are reported in Tables 1 through 5, respectively. Analytical results that exceed Class I standards are shown in bold text in each table. Analytical results were compared to upper TLs based on the background monitoring data.

Total dissolved solids (TDS) exceeded the Class I standard in all samples from well G-01, one sample from well G-02, two samples from well G-03, and six samples from well G-05. The TDS exceedances in wells G-02 and G-05 also exceeded the upper TLs for those wells. Chloride concentrations exceeded the Class I standard in all samples from wells G-01 and G-03 but did not exceed the upper TLs for these wells. Sulfate exceeded the Class I standard in two samples from well G-05 but did not exceed the upper TL for this well.

There were a few exceedances of upper TLs for parameters that do not have established limits under the Class I standards. Total organic carbon (TOC) exceeded the upper TL in seven samples each from wells G-01 and G-02. The TOC was below reporting limits in the remaining two samples from both of those wells, but the laboratory reporting limit for these samples was higher than the upper TLs at these wells. Chemical oxygen demand (COD) exceeded the upper TL in two samples

TABLE 1: ANALYSIS OF GROUNDWATER SAMPLED FROM MONITORING WELL G-01 AT THE McCOOK RESERVOIR SITE DURING HIGH-STAGE OPERATION IN 2025

Fill Event	Sample Date	pH	EC mS/m	TDS	TOC	COD	Cl ⁻	SO ₄ ²⁻	Total P	NH ₃ -N	Hardness	FC CFU/100 mL	Temp. °C	Elevation ft CCD
				mg/L										
Class I Standard¹		6.5–9.0	NS²	1,200	NS	NS	200	400	NS	NS	NS	NS	NS	NS
Upper TL ³		5.3–8.1	586	3,845	2.7	40	1,280	730	0.13	2.8	1,607	<1	15.7	-106
1	01/02/25	6.8	240	1,472	11	46	379	385	0.18	4.3	866	<1	12.4	-109
1DUP	01/02/25	6.8	240	1,432	11	45	380	386	0.18	4.5	894	<1	12.4	-109
2	02/06/25	7.0	188	1,514	10	32	368	357	0.16	4.2	871	<1	12.4	-111
3	04/09/25	6.9	200	1,594	7	35	384	361	<0.15	3.6	935	<1	12.4	-107
4	06/26/25	6.8	206	1,590	7	29	379	358	<0.15	3.7	869	<1	12.7	-110
5	07/15/25	6.9	177	1,148	7	31	378	363	<0.15	3.6	891	<1	12.6	-109
6	07/29/25	6.9	186	1,538	6	28	369	347	<0.15	3.8	872	<1	12.5	-103
7	08/14/25	6.9	199	1,542	6	41	371	356	<0.15	3.8	907	<1	12.5	-108
8	10/13/25	6.9	194	1,544	<5	21	371	359	<0.15	3.7	894	<1	12.5	-107
8DUP	10/13/25	6.9	194	1,558	<5	25	368	357	<0.15	3.7	903	<1	12.5	-107
9	10/21/25	6.9	192	1,408	<5	<20	380	343	<0.15	4.1	878	<1	12.4	-108

¹Illinois Administrative Code (IAC) Title 35 Part 620.410 Class I Standards. Bold text indicates exceedance.

²No standard established by 35 IAC Part 620.410.

³For pH, upper and lower tolerance limits are shown.

TABLE 2: ANALYSIS OF GROUNDWATER SAMPLED FROM MONITORING WELL G-02 AT THE McCOOK RESERVOIR SITE DURING HIGH-STAGE OPERATION IN 2025

Fill Event	Sample Date	pH	EC mS/m	TDS	TOC	COD	Cl ⁻	SO ₄ ²⁻ mg/L	Total P	NH ₃ -N	Hardness	FC CFU/100 mL	Temp. °C	Elevation ft CCD
Class I Standard¹		6.5–9.0	NS²	1,200	NS	NS	200	400	NS	NS	NS	NS	NS	NS
Upper TL ³		5.7–8.1	182	1,214	4.3	31	383	207	0.68	2.2	791	<1	17.3	-69
1	01/02/25	6.8	149	1,448	8	46	190	152	0.62	1.9	1,570	<1	13.0	-84
2	02/04/25	7.0	122	962	8	31	182	156	0.46	1.8	1,093	<1	13.0	-84
2DUP	02/04/25	7.0	122	964	8	46	184	156	0.45	1.9	1,068	<1	13.0	-84
3	04/09/25	7.0	124	948	<5	25	193	158	0.32	1.9	829	<1	13.0	-83
4	06/26/25	6.9	133	1,020	5	30	186	149	<0.15	2.0	643	<3	13.6	-81
5	07/15/25	6.8	115	1,152	<5	<20	184	153	0.23	1.9	737	<1	13.7	-83
6	07/29/25	6.9	125	924	6	<20	184	144	0.20	1.9	575	<1	13.4	-83
7	08/14/25	6.9	127	956	7	28	182	142	<0.15	1.9	630	<1	13.3	-83
8	10/13/25	6.9	124	920	8	34	189	147	0.23	2.0	763	<1	13.3	-83
9	10/21/25	6.9	123	900	8	37	192	157	0.40	2.0	1,048	<1	13.1	-84
9DUP	10/21/25	6.9	123	896	8	37	191	157	0.37	2.0	1,015	<1	13.1	-84

¹Illinois Administrative Code (IAC) Title 35 Part 620.410 Class I Standards. Bold text indicates exceedance.

²No standard established by 35 IAC Part 620.410.

³For pH, upper and lower tolerance limits are shown.

TABLE 3: ANALYSIS OF GROUNDWATER SAMPLED FROM MONITORING WELL G-03 AT THE McCOOK RESERVOIR SITE DURING HIGH-STAGE OPERATION IN 2025

Fill Event	Sample Date	pH	EC mS/m	TDS	TOC	COD	Cl ⁻	SO ₄ ²⁻ mg/L	Total P	NH ₃ -N	Hardness	FC CFU/100 mL	Temp. °C	Elevation ft CCD
Class I Standard¹		6.5–9.0	NS²	1,200	NS	NS	200	400	NS	NS	NS	NS	NS	NS
Upper TL ³		5.7–8.4	312	1,826	19.3	93	618	167	0.24	32.0	570	<1	18.3	-95
1	01/08/25	6.9	215	1,180	10	37	392	160	<0.15	25	476	<1	13.7	-110
2	02/04/25	7.1	176	1,190	11	41	364	156	<0.15	23	513	<1	13.6	-106
3	04/10/25	7.1	173	1,204	10	46	383	159	<0.15	23	483	<1	14.0	-105
3DUP	04/10/25	7.1	173	1,200	10	52	383	161	<0.15	22	506	<1	14.0	-105
4	06/26/25	7.0	183	1,252	9	44	360	157	<0.15	23	479	<1	14.5	-21
5	07/17/25	7.0	176	1,122	9	34	349	154	<0.15	23	473	<1	14.3	-63
5DUP	07/17/25	7.0	176	1,240	9	46	349	154	<0.15	23	471	<1	14.3	-63
6	07/30/25	7.1	180	1,148	9	49	351	155	<0.15	22	477	<1	14.6	-103
7	08/29/25	7.0	183	1,134	7	52	357	155	<0.15	21	451	<1	14.1	-100
8	10/08/25	7.1	173	1,094	9	27	365	156	<0.15	22	517	<1	14.2	-41
9	10/21/25	7.1	171	1,158	10	37	364	162	<0.15	22	483	<1	13.9	-104

¹Illinois Administrative Code (IAC) Title 35 Part 620.410 Class I Standards. Bold text indicates exceedance.

²No standard established by 35 IAC Part 620.410.

³For pH, upper and lower tolerance limits are shown.

TABLE 4: ANALYSIS OF GROUNDWATER SAMPLED FROM MONITORING WELL G-04 AT THE McCOOK RESERVOIR SITE DURING HIGH-STAGE OPERATION IN 2025

Fill Event	Sample Date	pH	EC mS/m	TDS	TOC	COD	Cl ⁻	SO ₄ ²⁻ mg/L	Total P	NH ₃ -N	Hardness	FC CFU/100 mL	Temp. °C	Elevation ft CCD
Class I Standard¹		6.5–9.0	NS²	1,200	NS	NS	200	400	NS	NS	NS	NS	NS	NS
Upper TL ³		6.3–9.2	179	1,100	8.1	30	213	584	0.11	19.0	746	<1	17.0	-34
1	01/07/25	6.8	169	1,014	<5	26	171	302	<0.15	9.1	686	<1	15.3	-31
2	02/05/25	7.0	135	1,082	<5	25	164	297	<0.15	9.3	680	<1	15.1	-30
3	04/04/25	6.9	151	1,106	<5	33	169	300	<0.15	9.1	666	<1	14.7	-30
4	06/25/25	6.9	157	1,148	<5	<20	168	304	<0.15	9.5	664	<1	15.5	-28
4DUP	06/25/25	6.9	157	1,152	5	<20	168	303	<0.15	9.4	662	<1	15.5	-28
5	07/16/25	6.8	135	792	<5	<20	168	302	<0.15	9.3	664	<1	15.8	-28
6	07/31/25	7.0	150	1,148	<5	<20	169	304	<0.15	9.1	667	<1	15.1	-28
6DUP	07/31/25	7.0	150	1,164	<5	<20	169	303	<0.15	9.1	657	<1	15.1	-28
7	08/28/25	6.9	135	1,116	<5	20	167	304	<0.15	8.9	634	<1	15.5	-30
8	10/16/25	6.9	149	1,016	<5	<20	171	297	<0.15	9.6	682	<1	15.5	-33
9	10/22/25	6.9	136	1,110	<5	<20	173	298	<0.15	9.5	NRR ⁴	<1	14.9	-30

¹Illinois Administrative Code (IAC) Title 35 Part 620.410 Class I Standards. Bold text indicates exceedance.

²No standard established by 35 IAC Part 620.410.

³For pH, upper and lower tolerance limits are shown.

⁴No reportable result due to likely sample contamination.

TABLE 5: ANALYSIS OF GROUNDWATER SAMPLED FROM MONITORING WELL G-05 AT THE McCOOK RESERVOIR SITE DURING HIGH-STAGE OPERATION IN 2025

Fill Event	Sample Date	pH	EC mS/m	TDS	TOC	COD	Cl ⁻	SO ₄ ²⁻ mg/L	Total P	NH ₃ -N	Hardness	FC CFU/100 mL	Temp. °C	Elevation ft CCD
Class I Standard¹		6.5–9.0	NS²	1,200	NS	NS	200	400	NS	NS	NS	NS	NS	NS
Upper TL ³		6.3–9.4	219	1,200	29.8	102	159	499	0.32	6.6	738	<1	15.3	-38
1	01/08/25	6.8	174	1,180	<5.0	<20	186	417	<0.15	6.2	716	<1	14.5	-41
2	02/05/25	7.0	144	1,212	<5	<20	178	398	<0.15	6.2	785	<1	14.3	-34
3	04/04/25	6.9	162	1,242	<5	<20	189	426	<0.15	5.9	788	<1	14.5	-48
4	06/25/25	6.9	165	1,342	<5	<20	179	400	<0.15	6.0	798	<1	14.7	-36
5	07/16/25	6.9	141	1,264	<5	<20	175	396	<0.15	6.2	758	<1	14.6	-36
6	07/31/25	7.0	155	1,286	<5	<20	176	396	<0.15	6.2	742	<1	14.4	-36
7	08/28/25	6.9	161	1,256	<5	21	175	395	<0.15	5.9	708	<1	14.3	-35
7DUP	08/28/25	6.9	161	1,162	<5	20	177	399	<0.15	6.1	745	<1	14.3	-35
8	10/16/25	6.9	152	NRR ⁴	<5	<20	178	394	<0.15	6.4	773	<1	14.3	-40
9	10/22/25	6.9	153	1,198	<5	<20	184	396	<0.15	6.3	796	<1	14.2	-40

¹Illinois Administrative Code (IAC) Title 35 Part 620.410 Class I Standards. Bold text indicates exceedance.

²No standard established by 35 IAC Part 620.410.

³For pH, upper and lower tolerance limits are shown.

⁴No reportable result due to quality assurance/quality control failure.

from well G-01, four samples from well G-02, and one sample from well G-04. Total phosphorus (P) exceeded the upper TL in two samples from well G-01. Total P was below the reporting limit in all remaining samples from well G-01 and all samples from G-04, but the reporting limit was greater than the upper TLs at these wells. Ammonia exceeded the upper TL in all samples from well G-01. Hardness exceeded the upper TL in four samples from well G-02 and eight samples from well G-05. Groundwater elevation exceeded the upper TL during one event in well G-01, during three events in G-03, during all events in well G-04, and during five events in well G-05. Fecal coliform bacteria were not detected in any high-stage samples.

Low-Stage Semiannual Monitoring. All results for Field and Routine parameters for low-stage semiannual sampling and TLs for these parameters are reported in [Table 6](#). The results for Inorganic and Radioactive parameters are reported in [Table 7](#), and all associated upper TLs for parameters in [Table 7](#) are listed in [Table 8](#). The results for Organic parameters are reported in [Table 9](#), and all associated upper TLs for parameters in [Table 9](#) are listed in [Table 10](#). Analytical results that exceed the Class I standards are shown in bold text in [Tables 6, 7, and 9](#). Analytical results were compared to upper TLs based on the background monitoring data.

There were a few exceedances of Class I standards and upper TLs by Routine and Field parameters ([Table 6](#)). The TDS exceeded the Class I standard in both semiannual samples from well G-01 and in the first semiannual sample from well G-05. However, among these samples, it exceeded the upper TL only for well G-05. The chloride concentration exceeded the Class I standard in both semiannual samples from wells G-01 and G-03 but did not exceed the upper TLs for these wells.

There were a few exceedances of upper TLs among parameters without established Class I standards. The TOC exceeded the upper TLs in the first semiannual sample from well G-01 and the second semiannual sample from well G-02. The TOC was below the reporting limit in the remaining samples from those wells and both samples from well G-06, but the reporting limit was higher than the upper TLs for these wells. The COD did not exceed the upper TL in any well. The COD was below the reporting limit in both samples from well G-06, but the reporting limit was higher than the upper TL for this well. Total P did not exceed the upper TL in any well. Total P was below the reporting limit in all samples from wells G-01, G-04, and G-06, but the reporting limit was higher than the upper TLs for these wells. Ammonia exceeded the upper TL in both samples from well G-01 and the second semiannual samples from wells G-02 and G-05. Hardness exceeded the upper TL in the second semiannual sample from well G-02 and in both samples from well G-05. Groundwater elevation exceeded the upper TLs during the second semiannual event at well G-01, both events at well G-04, and the first event at well G-05. Fecal coliform bacteria were not detected in any sample.

Among the Inorganic parameters that are measured once per year during the first low-stage semiannual sampling event, boron exceeded the Class I standard in well G-06 ([Table 7](#)) but did not exceed the upper TL for this well ([Table 8](#)). Cobalt was below the reporting limit in all wells, but the reporting limit was greater than the Class I standard.

Among Organic parameters in groundwater collected during the first low-stage semiannual sampling ([Table 9](#)), only vinyl chloride in wells G-05 and G-06 exceeded the Class I standard, but it did not exceed the upper TLs for these wells. Atrazine, simazine, and bis(2-ethylhexyl)phthalate in all wells were below the reporting limit, but the reporting limits were higher than the Class I standards and the upper TLs for all wells.

TABLE 6: ANALYSIS OF ROUTINE PARAMETERS IN GROUNDWATER SAMPLED FROM EACH MONITORING WELL AT THE McCOOK RESERVOIR SITE DURING LOW-STAGE SEMIANNUAL SAMPLING IN JUNE AND DECEMBER 2025

Well	Sampling Event	Sample Date	pH	EC mS/m	TDS	TOC	COD	Cl ⁻	SO ₄ ²⁻ mg/L	Total P	NH ₃ -N	Hardness	FC CFU/100 mL	Temp. °C	Elevation ft CCD
Class I Standard¹			6.5–9.0	NS²	1,200	NS	NS	200	400	NS	NS	NS	NS	NS	NS
II	G-01	Upper TL ³	5.3–8.1	586	3,845	2.7	40	1,280	730	0.13	2.8	1,607	<1	15.7	-106
	1	06/11/25	6.9	214	1,596	8	31	366	359	<0.15	3	887	<1	12.6	-110
	2	12/10/25	6.9	219	1,382	<5	22	374	364	<0.15	4	912	<1	12.3	-104
	G-02	Upper TL	5.7–8.1	182	1,214	4.3	31	383	207	0.68	2.2	791	<1	17.3	-69
	1	06/11/25	6.9	136	920	<5	<20	178	147	<0.15	2.1	630	<1	13.7	-84
	2	12/09/25	6.9	111	864	5	22	189	133	0.29	2.2	810	<1	12.6	-94
	G-03	Upper TL	5.7–8.4	312	1,826	19.3	93	618	167	0.24	32.0	570	<1	18.3	-95
	1	06/12/25	7.1	197	1,176	9	35	347	146	<0.15	23.1	478	<1	14.4	-105
	2	12/10/25	7.2	187	1,114	9	38	349	151	<0.15	21.2	491	<1	13.9	-109
	2DUP	12/10/25	7.2	187	1,016	NRR ⁴	45	357	150	<0.15	21.1	477	<1	13.9	-109
	G-04	Upper TL	6.3–9.2	179	1,100	8.1	30	213	584	0.11	19.0	746	<1	17.0	-34
	1	06/10/25	6.9	160	1,134	<5	<20	161	293	<0.15	9.2	646	<1	15.3	-29
	2	12/09/25	6.9	145	1,036	<5	20	166	295	<0.15	9.0	682	<1	14.7	-33
	G-05	Upper TL	6.3–9.4	219	1,200	29.8	102	159	499	0.32	6.6	738	<1	15.3	-38
	1	06/10/25	6.9	168	1,226	<5	<20	171	387	<0.15	6.5	749	<1	14.4	-37
	2	12/09/25	6.9	162	1,146	<5	<20	171	384	<0.15	6.7	749	<1	14.0	-39
	G-06	Upper TL	6.0–7.9	176	1,324	3.8	17	147	392	0.081	3.7	804	<1	16.2	-13
	1	06/13/25	7.0	122	1,050	<5	<20	61	392	<0.15	3.0	687	<1	12.9	-23
	1DUP	06/13/25	7.0	122	1,064	<5	<20	61	391	<0.15	3.2	671	<1	12.9	-23
	2	12/09/25	7.0	118	924	<5	<20	57	388	<0.15	2.9	671	<1	12.9	-29

TABLE 6 (Continued): ANALYSIS OF ROUTINE PARAMETERS IN GROUNDWATER SAMPLED FROM EACH MONITORING WELL AT THE MCCOOK RESERVOIR SITE DURING LOW-STAGE SEMIANNUAL SAMPLING IN JUNE AND DECEMBER 2025

Well	Sampling Event	Sample Date	pH	EC mS/m	TDS	TOC	COD	Cl ⁻	SO ₄ ²⁻ mg/L	Total P	NH ₃ -N	Hardness	FC CFU/100 mL	Temp. °C	Elevation ft CCD
Class I Standard¹			6.5–9.0	NS²	1,200	NS	NS	200	400	NS	NS	NS	NS	NS	NS
G-07		Upper TL	5.8–7.8	536	2,856	12.2	62	558	610	4.3	192 ⁵	1,430	<1	20.3	-3
	1	NC ⁶	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
	2	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

¹Illinois Administrative Code Title (IAC) 35 Part 620.410 Class I Standards. Bold text indicates exceedance.

²No standard established by 35 IAC Part 620.410.

³For pH, upper and lower tolerance limits are shown.

⁴No reportable result due to quality assurance/quality control failure.

⁵McCook Reservoir site was previously unpaved biosolids lagoons. Elevated NH₃-N may reflect infiltration or drilling through old biosolids lagoon sediments.

⁶Sample could not be collected due to pump malfunction.

TABLE 7: ANALYSIS OF INORGANIC AND RADIOACTIVE PARAMETERS IN GROUNDWATER SAMPLED FROM EACH MONITORING WELL AT THE MCCOOK RESERVOIR SITE DURING THE FIRST LOW-STAGE SEMIANNUAL SAMPLING IN JUNE 2025

Parameter	Units	Class I Standard ¹	G-01	G-02	G-03	G-04	G-05	G-06	G-06DUP ²	G-07
Ag	mg/L	0.058	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	NC ³
As	"	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NC
B	"	2.0	0.527	0.382	0.743	1.75	1.72	2.68	2.71	NC
Ba	"	2.0	0.044	0.061	0.061	0.036	0.053	0.025	0.026	NC
Be	"	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NC
Cd	"	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NC
Co	"	0.0012	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NC
Cr	"	0.1	0.007	0.005	0.013	<0.004	<0.004	<0.004	<0.004	NC
Cu	"	0.5	<0.002	0.003	<0.002	<0.002	<0.002	0.002	0.011	NC
CN	"	0.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NC
F	"	4.0	0.337	0.275	0.489	0.430	0.362	0.377	0.374	NC
Fe	"	5.0	0.325	1.6	0.918	0.684	0.364	0.521	0.463	NC
Hg	"	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NC
Mn	"	0.15	0.021	0.045	0.022	0.010	0.022	0.008	0.007	NC
Ni	"	0.077	0.016	0.004	0.018	<0.002	<0.002	<0.002	<0.002	NC
NO ₃ ⁻ -N	"	10	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	NC
Pb	"	0.0075	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NC
Sb	"	0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NC
Se	"	0.02	<0.004	<0.004	<0.004	<0.004	0.005	<0.004	<0.004	NC
Tl	"	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NC
Zn	"	1.2	0.030	0.017	0.012	0.025	0.014	0.024	0.054	NC
Ra-226+228	pCi/L	5	3.75	1.84	3.64	2.40	3.59	2.78	1.99	NC

¹Illinois Administrative Code Title 35 Part 620.410 Class I Standards. Bold text indicates exceedance.

²Duplicate sample.

³Sample could not be collected due to pump malfunction.

TABLE 8: UPPER TOLERANCE LIMITS FOR INORGANIC AND RADIOACTIVE PARAMETERS IN EACH MONITORING WELL AT THE McCOOK RESERVOIR SITE ESTABLISHED BY BACKGROUND MONITORING PRIOR TO OPERATION IN JANUARY 2018

Parameter	Units	G-01	G-02	G-03	G-04	G-05	G-06	G-07
Ag	mg/L	0.025	0.025	0.025	0.025	0.025	0.025	0.025
As	"	0.0018	0.025	0.0028	0.0035	0.0027	0.025	0.0086
B	"	0.598	0.51	1.09	2.5	2.5	7.1	0.59
Ba	"	0.048	0.092	0.15	0.095	0.053	0.058	0.09
Be	"	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Cd	"	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Co	"	0.035	0.0081	0.0032	0.035	0.035	0.035	0.0048
Cr	"	0.025	0.633	0.13	0.035	0.035	0.035	0.035
Cu	"	0.0044	0.015	0.0095	0.0031	0.0025	0.0062	0.0074
CN	"	0.1	0.1	0.1	0.1	0.1	0.1	0.1
F	"	0.05	0.05	0.33	0.4	0.35	0.37	0.05
Fe	"	4.92	10.5	4.48	1.37	0.95	1.43	2.44
Hg	"	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Mn	"	0.099	0.103	0.21	0.036	0.026	0.021	0.012
Ni	"	0.011	0.25	0.065	0.0092	0.0062	0.05	0.01
NO ₃ ⁻ -N	"	1.08	0.075	0.075	0.075	0.075	0.075	0.075
Pb	"	0.00375	0.00375	0.0056	0.0077	0.00375	0.00375	0.00375
Sb	"	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Se	"	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Tl	"	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Zn	"	0.01	0.01	0.01	0.057	0.1	0.069	0.01
Ra-226+228	pCi/L	5.97	3.84	6.70	4.97	3.25	4.13	8.39

TABLE 9: ANALYSIS OF ORGANIC PARAMETERS IN GROUNDWATER SAMPLED FROM EACH MONITORING WELL AT THE MCCOOK RESERVOIR SITE DURING THE FIRST LOW-STAGE SEMIANNUAL SAMPLING IN JUNE 2025

Parameter	Class I Standard ¹	Max RL ²	G-01	G-02	G-03	G-04	G-05	G-06	G-06 DUP ³	G-07
-----mg/L-----										
Herbicides										
2,4-D	0.07	0.0019	<0.00096	<0.00098	<0.00099	<0.0019	<0.0019	<0.00095	<0.00096	NC ⁴
Silvex (2,4,5-TP)	0.05	0.0019	<0.00096	<0.00098	<0.00099	<0.0019	<0.0019	<0.00095	<0.00096	NC
Atrazine	0.003	0.0045	<0.0040	<0.0045	<0.0040	<0.0038	<0.0041	<0.0039	<0.0040	NC
Dalapon	0.2	0.0039	<0.0019	<0.0020	<0.0020	<0.0038	<0.0039	<0.0019	<0.0019	NC
Simazine	0.004	0.0056	<0.0050	<0.0056	<0.0050	<0.0047	<0.0051	<0.0049	<0.0050	NC
PCBs, Total	0.0005	0.00045	<0.00040	<0.00045	<0.00040	<0.00038	<0.00041	<0.00039	<0.00040	NC
Pesticides										
Alachlor	0.002	0.00045	<0.00040	<0.00045	<0.00040	<0.00038	<0.00041	<0.00039	<0.00040	NC
Aldicarb	0.003	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	NC
Carbofuran	0.04	0.0009	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	NC
Chlordane (technical)	0.002	0.00009	<0.000080	<0.000090	<0.000080	<0.000076	<0.000082	<0.000078	<0.000079	NC
Endrin	0.002	0.000045	<0.000040	<0.000045	<0.000040	<0.000038	<0.000041	<0.000039	<0.000040	NC
gamma-BHC (Lindane)	0.0002	0.000045	<0.000040	<0.000045	<0.000040	<0.000038	<0.000041	<0.000039	<0.000040	NC
Heptachlor	0.0004	0.000045	<0.000040	<0.000045	<0.000040	<0.000038	<0.000041	<0.000039	<0.000040	NC
Heptachlor epoxide	0.0002	0.000045	<0.000040	<0.000045	<0.000040	<0.000038	<0.000041	<0.000039	<0.000040	NC
Methoxychlor	0.04	0.00009	<0.000080	<0.000090	<0.000080	<0.000076	<0.000082	<0.000078	<0.000079	NC
Toxaphene	0.003	0.00045	<0.00040	<0.00045	<0.00040	<0.00038	<0.00041	<0.00039	<0.00040	NC
Volatile Organic Compounds										
1,1,1-Trichloroethane	0.2	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
1,1,2-Trichloroethane	0.005	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
1,1-Dichloroethene	0.007	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
1,2-Dichloroethane	0.005	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
1,2-Dichloropropane	0.005	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
1,2-Dibromo-3-Chloropropane	0.0002	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	NC
Ethylene Dibromide	0.00005	0.00001	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	NC
Benzene	0.005	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0039	0.0033	NC

TABLE 9 (Continued): ANALYSIS OF ORGANIC PARAMETERS IN GROUNDWATER SAMPLED FROM EACH MONITORING WELL AT THE MCCOOK RESERVOIR SITE DURING THE FIRST LOW-STAGE SEMIANNUAL SAMPLING IN JUNE 2025

Parameter	Class I Standard ¹	Max RL ²	G-01	G-02	G-03	G-04	G-05	G-06	G-06 DUP ³	G-07
-----mg/L-----										
Volatile Organic Compounds (Continued)										
Carbon tetrachloride	0.005	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
Chlorobenzene	0.1	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
cis-1,2-Dichloroethene	0.07	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0063	0.0063	NC
Ethylbenzene	0.7	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.0022	0.0016	NC
Methylene Chloride	0.005	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NC
Methyl tert-butyl ether	0.038	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
Styrene	0.1	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
Tetrachloroethene	0.005	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
Toluene	1.0	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.012	0.0085	NC
trans-1,2-Dichloroethene	0.1	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
Trichloroethene	0.005	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	NC
Vinyl chloride	0.002	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.0039	0.097	0.099	NC
Xylenes, Total	10	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.013	0.0089	NC
Semivolatile Organic Compounds										
1,2,4-Trichlorobenzene	0.07	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NC
1,2-Dichlorobenzene	0.6	0.00100	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
1,4-Dichlorobenzene	0.075	0.00100	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	NC
Benzo[a]pyrene	0.0002	0.00016	<0.00016	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00016	NC
Bis(2-ethylhexyl)phthalate	0.006	0.008	<0.0080	<0.0080	<0.0078	<0.0076	<0.0075	<0.0077	<0.0078	NC
Hexachlorocyclopentadiene	0.05	0.016	<0.016	<0.016	<0.016	<0.015	<0.015	<0.015	<0.016	NC
Pentachlorophenol	0.001	0.00097	<0.00048	<0.00049	<0.00050	<0.00094	<0.00097	<0.00048	<0.00048	NC
Phenolics, Total Recoverable	0.1	0.005	0.098	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NC

¹Illinois Administrative Code Title 35 Part 620.410 Class I Standards. Bold text indicates exceedance.

²Maximum Laboratory Reporting Limit for analyses of an analyte at all monitoring wells.

³Duplicate sample.

⁴Sample could not be collected due to pump malfunction.

TABLE 10: UPPER TOLERANCE LIMITS FOR ORGANIC PARAMETERS IN EACH MONITORING WELL AT THE MCCOOK RESERVOIR SITE ESTABLISHED BY BACKGROUND MONITORING PRIOR TO OPERATION IN JANUARY 2018

Parameter	G-01	G-02	G-03	G-04	G-05	G-06	G-07
-----mg/L-----							
Herbicides							
2,4-D	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Silvex (2,4,5-TP)	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Atrazine	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Dalapon	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Simazine	0.001	0.001	0.001	0.001	0.001	0.001	0.001
PCBs, Total	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Pesticides							
Alachlor	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Aldicarb	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Carbofuran	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Chlordane (technical)	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Endrin	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
gamma-BHC (Lindane)	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Heptachlor	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Heptachlor epoxide	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Methoxychlor	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Toxaphene	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Volatile Organic Compounds							
1,1,1-Trichloroethane	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
1,1,2-Trichloroethane	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025

TABLE 10 (Continued): UPPER TOLERANCE LIMITS FOR ORGANIC PARAMETERS IN EACH MONITORING WELL AT THE McCOOK RESERVOIR SITE ESTABLISHED BY BACKGROUND MONITORING PRIOR TO OPERATION IN JANUARY 2018

Parameter	G-01	G-02	G-03	G-04	G-05	G-06	G-07
-----mg/L-----							
Volatile Organic Compounds (Continued)							
1,1-Dichloroethene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
1,2-Dichloroethane	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
1,2-Dichloropropane	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
1,2-Dibromo-3-Chloropropane	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Ethylene Dibromide	0.000025	0.000025	0.000025	0.000025	0.000025	0.000025	0.000025
Benzene	0.0025	0.0025	0.0025	0.0025	0.0025	0.00057	0.0025
Carbon tetrachloride	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Chlorobenzene	0.001	0.001	0.001	0.001	0.001	0.001	0.001
cis-1,2-Dichloroethene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0130	0.0029
Ethylbenzene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Methylene Chloride	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Methyl tert-butyl ether	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Styrene	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Tetrachloroethene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Toluene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
trans-1,2-Dichloroethene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Trichloroethene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0011
Vinyl chloride	0.001	0.001	0.001	0.001	0.0052	0.203	0.001
Xylenes, Total	0.0025	0.0025	0.0025	0.0025	0.0022	0.0025	0.0025

TABLE 10 (Continued): UPPER TOLERANCE LIMITS FOR ORGANIC PARAMETERS IN EACH MONITORING WELL AT THE McCOOK RESERVOIR SITE ESTABLISHED BY BACKGROUND MONITORING PRIOR TO OPERATION IN JANUARY 2018

Parameter	G-01	G-02	G-03	G-04	G-05	G-06	G-07
-----mg/L-----							
Semivolatile Organic Compounds							
1,2,4-Trichlorobenzene	0.000025	0.000025	0.000025	0.000025	0.000025	0.000025	0.000025
1,2-Dichlorobenzene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
1,4-Dichlorobenzene	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Benzo[a]pyrene	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Bis(2-ethylhexyl) phthalate	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Hexachlorocyclopentadiene	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Pentachlorophenol	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Phenolics, Total	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025

REFERENCES

- Illinois Administrative Code Title 35, § 620.410 Groundwater Quality Standards for Class I: Potable Resource Groundwater (Amended at 36 Ill. Reg. 15206, effective October 5, 2012).
- United States Army Corps of Engineers (USACE). 2014. Chicago Underflow Plan McCook Reservoir Lyons Township, Illinois. Groundwater Monitoring and Analysis Plan. Amended July 2014. Approved by IEPA April 2015.