

Lehigh County Authority
System Operations Review - October 2024
Presented: November 25, 2024

		<u>Oct-24</u>	<u>2024</u> <u>Totals***</u>	<u>2023 Totals</u>	<u>2022 Totals</u>
Recordable Safety Incidents*	Total LCA	1	2	33	7
Non-Recordable Safety Incidents	Total LCA	1	22		
Incident Types **	Injuries	2	13		
	Property Damage	0	11		
	Near Miss	0	0		

***Numbers adjusted to match current tracking methodology

* Recordable Safety Incidents are those that result in death, days away from work, restricted duty, medical treatment beyond first aid.

** Safety incidents may be categorized in more than one incident type.

<u>Year To Date Safety Incidents</u>		<u>Root Cause Analysis Completed</u>	<u>Corrective Actions Identified</u>	<u>Corrective Actions Completed</u>
		9	7	3
<u>Current Month Incidents</u>				
<u>Description</u>	<u>Date</u>	<u>Type</u>	<u>Root Cause(s)</u>	<u>Corrective Action(s)</u>
<u>Incident # 87</u> - Hit knee on guard rail	10/3/2024	Injury	Loose footing in work area	
<u>Incident # 88</u> - Inhaled muriatic acid fumes while cleaning	10/8/2024	Injury		Updated cleaning procedure/ instructed staff on new procedure

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Critical Activities	System	Description	Oct-24	2024 Totals	2023 Totals	Permit
			Daily Avg (MGD)	Daily Avg (MGD)	Daily Avg (MGD)	Daily Max (MGD)
Water Production	Allentown	Total	22.30	22.63	22.52	39.0
		Schantz Spring	6.19	6.96	6.93	9.0
		Crystal Spring	3.86	3.87	3.89	4.0
		Little Lehigh Creek	12.15	11.53	11.66	30.0
		Lehigh River	0.09	0.27	0.04	28.0
	Central Lehigh	Total	11.49	11.68	11.27	19.04 MGD Avg
		Feed from Allentown	7.14	6.95	7.28	7.0 MGD Avg 10.5 MGD Max
		Well Production (CLD)	4.35	4.72	3.98	8.54 MGD Avg
		Sum of all (12) other Suburban Water Systems	0.14	0.15	0.13	1.71 Sum of all wells
Wastewater Treatment		Kline's Island	28.09	34.52	32.24	40.0
		Pretreatment Plant	4.39	5.12	4.78	5.75 (design capacity)
		Sum of all (5) other Suburban WW Systems	0.15	0.20	0.19	0.36
			Oct-24	2024 Totals	2023 Totals	2022 Totals
Precipitation Totals (inches)			0.02	35.94	46.38	46.47
Compliance Reports Submitted to Allentown			26	243	280	277
Notices of Violation (NOVs)		(Allentown + Suburban)	1	4	3	4
Sanitary Sewer Overflows (SSOs)/Bypasses		(Allentown + Suburban)	0	17	24	18
Main Breaks Repaired		Allentown	1	21	8	34
		Suburban	4	12	12	15
Customer Service Phone Inquiries		(Allentown + Suburban)	1457	14346	11,221	10,539
Water Shutoffs for Non-Payment		(Allentown + Suburban)	161	1707	1,995	1,975
Injury Accidents		(Allentown + Suburban)	2	12	19	7
Emergency Declarations		Allentown	0	2 @ 228,181.55	2	(3) @ \$386,225.43
		Suburban	0	1 @ 56,662.50	0	(4) @ \$933,077.1
Significant Repairs/Upgrades:						
Description of Non-Compliance Events:						
On October 22, 2024, a NOV was received for a PFOS MCL exceedance in the Emmaus Consecutive Division. The NOV and latest public notification are included with this report.						
Other:						
On November 1, 2024, a drought watch was issued by PA DEP for Lehigh County. LCA requests all customers voluntarily reduce water use by 5-10%.						
On October 16, 2024 the Lead and Copper Rule Revisions became effective. The attached memo outlines the initial actions completed by LCA.						

	<p style="text-align: center;">Lehigh County Authority</p> <p style="text-align: center;">System Operations Review - October 2024</p> <p style="text-align: center;">Presented: November 25, 2024</p> <p style="text-align: right;">Page 3</p>				
Critical Activities	System	Description	Oct-24	2024 Totals	2023 Totals
Wastewater Compliance	Allentown	Bypass	0	3	4
		Bypass Volume	0	1,713,644	1,589,466
		Permit Exceedances	0	0	0
		Sanitary Sewer Overflows	0	5	6
		COA Issued NOVs	0	0	1
		Regulatory Agency issued NOVs	0	0	0
	Arcadia	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	0	0	3
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	1	0
	Heidelberg Heights	Bypass	0	4	8
		Bypass Volume	0	2,125,696	1,872,796
		Permit Exceedances	0	9	14
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Lynn	Bypass	0	2	1
		Bypass Volume	0	1,010,000	350,000
		Permit Exceedances	0	2	1
		Sanitary Sewer Overflows	0	0	0
		NOVs	0	0	0
	Sand Spring	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	6	37	39
		Sanitary Sewer Overflows	0	0	1
		NOVs	0	1	0
	Wynnewood	Bypass	0	0	0
		Bypass Volume	0	0	0
		Permit Exceedances	2	9	5
		Sanitary Sewer Overflows	0	3	3
		NOVs	0	0	0
Water Compliance	Allentown	Boil Water Advisories	0	0	2
	Central Lehigh	Boil Water Advisories	0	0	1
	Suburban Water Systems	Boil Water Advisories	0	1	3



10/22/2024

NOTICE OF VIOLATION

SENT VIA EMAIL: AndrewMoore@lehighcountyauthority.org

Andrew Moore
LCA Emmaus Consecutive, 3390075
PO Box 3348
Allentown, PA 18106-0348

Re: Exceedance of Drinking Water Maximum Contaminant Level Running Annual Average for PFOS

Dear Mr. Moore,

Our records indicate that the LCA Emmaus Consecutive System exceeded the Maximum Contaminant Level (MCL) for perfluorooctane sulfonate (PFOS) and/or perfluorooctanoic acid (PFOA) at Entry Point 100 during the monitoring period of 10/01/2024-12/31/2024. PFOS and PFOA samples were collected on 10/1/2024. The current running annual average (RAA) calculated from these results for Entry Point (EP) 100 is 67ng/L for PFOS and 13 ng/L for PFOA. The MCLs for PFOA and PFOS, in accordance with 25 Pa. Code § 109.202(a)(4)(ii), are as follows:

Contaminant	MCL (ng/L)	RAA (ng/L)
Perfluorooctane sulfonate (PFOS)	18	67
Perfluorooctanoic acid (PFOA)	14	13

A RAA value that exceeds the MCL is a violation of Title 25 Pa. Code, Chapter 109.30(16)(ix).

In response to this violation, DEP requests that you take the following actions to investigate and monitor your public water system:

1. Continue quarterly monitoring for PFOS and PFOA at EP 100 in accordance with the provisions of 25 Pa. Code § 109.301 (relating to general monitoring requirements). Quarterly monitoring should continue until the results from four consecutive quarters indicate levels are below the MCL *and* reduced monitoring is granted by the Department.
2. *As soon as possible*, but no later than 30 days from your PFOS and/or PFOA exceedance awareness date of 10/10/2024 issue Tier 2 Public Notification (PN) to your customers for this violation, in accordance with the provisions of 25 Pa. Code § 109.409 (relating to Tier 2 public notice). A template for Tier 2 PN for Exceeding the PFOS and/or PFOA MCL Form, PN Instructions for Exceeding the PFOS and/or PFOA MCL and PN certification form are enclosed. PN is due no later than 11/9/2024

3. Ensure that sample collection and analysis is conducted according to the requirements of the regulations, including analysis by an accredited laboratory using one of the approved methods specified in 25 Pa. Code § 109.304(f). Monitoring results are to be reported by the laboratory to the Drinking Water Electronic Laboratory Reporting system (DWELR) as sample type 'E'.
4. If any sample result exceeds the MCL for PFOS, PFOA or both, notify the Department within one hour of discovery.
5. Take necessary investigative actions to identify the cause(s) of the PFOS/PFOA contamination of your water supply source(s) and consult with DEP regarding any additional follow-up actions.

This Notice of Violation is neither an order nor any other final action of the Department of Environmental Protection. It neither impose nor waives any enforcement action available to the Department under any of its statutes. If the Department determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions or concerns, please feel free to contact me by email at sdoes@pa.gov or by telephone at 570-239-8441.

Sincerely,



Shelby Does
Sanitarian
Bureau of Safe Drinking Water

Enclosure: Tier 2 PN for Exceeding the PFOS and/or PFOA MCL Form, PN Instructions for Exceeding the PFOS and/or PFOA MCL and PN certification form

cc:

Michael Phillips, Sanitarian Supervisor, Bethlehem District Office (Via Email)
Todd Ostir, Environmental Group Manager, Northeast Regional Office (Via Email)
EP, SDW Tech Support (Via Email)
File



1053 SPRUCE RD * P.O. BOX 3348 * ALLENTOWN, PA 18106-0348
610-398-2503 * email: service@lehighcountyauthority.org
www.lehighcountyauthority.org

November 13, 2024

«Customer»
«c_cid_name2»
«c_addr_line1»
«c_addr_line2»
«c_cid_city», «c_cid_state» «c_cid_zip»

**EMMAUS CONSECUTIVE DIVISION CUSTOMERS
IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

**PERFLUOROOCTANE SULFONATE (PFOS) / PERFLUOROOCTANOIC ACID (PFOA)
MAXIMUM CONTAMINANT LEVEL (MCL) EXCEEDANCE**

**ESTE INFORME CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE SU AGUA POTABLE.
HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.**

**Water Purchased from the Borough of Emmaus Has Levels of Perfluorooctane sulfonate (PFOS)/
Perfluorooctanoic acid (PFOA) Above Drinking Water Standards**

Lehigh County Authority (LCA) purchases all water for Emmaus Consecutive Division customers from the Borough of Emmaus, and it is important for you to be aware of this water quality issue. LCA recently violated a drinking water standard. Although this incident was not an emergency, as our customers you have a right to know what happened and what we did to correct this situation.

LCA routinely tests drinking water for numerous contaminants. Results received on 10/10/2024 show PFOS and PFOA levels above the maximum contaminant level (MCL). Compliance with the drinking water MCL is based on the running annual average (RAA) of the four most recent quarters of test results. Sample results are in parts per trillion or **ppt**, equivalent to **one drop** in **20** Olympic-sized swimming pools. The current PFOS average is 62.12 ppt, which is above the MCL. The current PFOA average is 12.44 ppt, which is below the MCL. The MCL for PFOS is 18 ppt and the MCL for PFOA is 14 ppt.

Although the system average for PFOA is below the MCL, individual results may be higher or lower at any given time due to the mix of water supplies being used. The results displayed in the table below provide the individual sample results and distribution system locations.

Results Date	Site #	PFOA ppt	PFOS ppt	Location/Address
10/30/2024	701	7.41	4.75	182 Woodhaven Dr
10/11/2024	702	19.3	111	75 Chestnut Hill Road
10/30/2024	703	18.1	94.6	Camp St. between 3353 W Emaus Ave & 3368 Capitol St.
11/6/2024	704	5.37	5.97	Miriam by Chris Dr
10/11/2024	705	10.7	35.3	3501 Orchid Cir
10/30/2024	706	20.3	137	50 White Oak Ln
10/30/2024	707	12.1	65.4	Pike Rd by 3128 S 6th St
11/6/2024	708	5.01	7.69	4302 David Drive - Salem Ridge
10/30/2024	709	13.8	5.75	3461 S Cedar Crest Blvd, Lutheran Church

What are PFOS and PFOA?

PFOS and PFOA are chemicals that are part of a larger group referred to as perfluoroalkyl substances (PFAS). These are man-made chemicals and do not occur naturally in the environment. They have been used to make items that are resistant to water, grease, or stains such as cookware, carpets, food wrappers, and other packaging. They are also used in industrial processes and in firefighting foams. Since these substances are resistant to heat, water, and oil they persist in the environment and in the human body. Due to the prevalence of PFAS in consumer products, it is likely that most people have been exposed to these substances at some point.

Learn more about these chemicals on LCA's dedicated webpage:

<https://www.lehighcountyauthority.org/information-about-pfas/>.

What happened? What was done?

The Borough of Emmaus has determined the source of the PFOS and PFOA at the fire training facility and has taken action to address the problem, including shutting down a contaminated well. The Borough is working closely with PA DEP and is currently in the design phase of developing a treatment system.

To learn more about the corrective action plan visit the Borough of Emmaus website at

<https://www.emmauspa.gov/>.

What does this mean?

This is not an immediate risk. If it had been, you would have been notified immediately. However, exposure to PFOS and/or PFOA in excess of the MCL over many years may result in adverse health effects. Drinking water containing PFOS in excess of the MCL of 18 ppt may cause adverse health effects, including decreased immune response. Drinking water containing PFOA in excess of the MCL of 14 ppt may cause adverse health effects, including developmental effects (neurobehavioral and skeletal effects).

What should I do?

Talk to your doctor if you have health concerns related to this information. You do not need to use an alternative (e.g., bottled) water supply, per PA DEP.

What is LCA doing?

LCA is working with the Borough of Emmaus and PA DEP to be sure you receive information about water quality as this situation is being addressed. Quarterly sampling is being conducted throughout the distribution system by LCA and results will be shared with customers.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please contact the LCA Customer Care Team at 610-398-1444 or email us at service@lehighcountyauthority.org.

MEMORANDUM

Date: November 18, 2024

To: Liesel Gross, CEO
LCA Board of Directors

From: Andrew Moore, Director of Plant Operations
Subject: Lead Service Line Inventory

On October 30, 2024, the Environmental Protection Agency published the Lead and Copper Improvements (LCRI) in the Federal Register. The LCRI replaced the Lead and Copper Rule Revisions (LCRR), which became effective on October 16, 2024. The LCRR required water utilities to submit an inventory of service lines within the distribution system, utilizing classification methodology from the Pennsylvania Department of Environmental Protection. Letters informing each customer with a lead, galvanized, or unknown service line were required to be mailed by November 15, 2024. The classifications for each LCA system submitted to the DEP are as follows:

LCA System	Non-Lead	Unknown	Galvanized	Lead
Allentown	285	22,409	6,119	4,704
Arcadia West		40		
Beverly Hills		44		
Central Lehigh	12,907	6,377		
Clearview Farms		67		
Emmaus Consecutive		464		
Heidelberg Heights		182		
Madison Park		116		
Mill Creek		35		
North Whitehall	428	554		
Pine Lakes		60		
Upper Milford Central		100		
Washington Township		366		

Additionally, the LCRR required utilities serving a population greater than 50,000 to make the inventory available to the public. The LCA inventory can be found at www.lehighcountyauthority.com/leadfree.

LCA will continue to update the inventory through investigative means, which include canvassing, potholing, and routine maintenance.