

Massachusetts Department of Environmental Protection - Drinking Water Program Stage 2 Disinfection By-Products Rule (DBPR) Quarterly Compliance Worksheet

1281000	Springfield Water & Sewer Commission	Springfield & Ludlow
PWSID:	PWS Name:	City/Town:
<input checked="" type="radio"/> COM <input type="radio"/> NTNC	Monitoring Frequency: <input checked="" type="radio"/> Quarterly <input type="radio"/> Annual or less	Monitoring Type: <input checked="" type="radio"/> Routine <input type="radio"/> Reduced <input type="radio"/> Increased

CERTIFICATION: I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge.

YEAR: **2023** QUARTER: Q1: Jan-Mar Q2: Apr-Jun Q3: Jul-Sep Q4: Oct-Dec

Primary Operator Signature: _____ Date: _____

SYSTEMS USING CHLORINATION or CHLORAMINATION - COMPLETE TABLES A, B & C

A. CHLORINE RESIDUAL COMPLIANCE

	Month	Year	# Samples	Monthly Avg (ppm)
Q1	January	2023	308	0.71
	February	2023	277	0.61
	March	2023	314	0.61
Q2	April	2023	298	0.56
	May	2023	309	0.65
	June	2023	306	0.59
Q3	July	2023	308	0.71
	August	2023	311	0.64
	September	2023		
Q4	October	2022	305	0.69
	November	2022	299	0.73
	December	2022	308	0.75

Chlorine Running Annual Average (RAA): (Average of 12 Monthly Averages)	0.66
Chlorine MRDL (ppm):	4.0
Was Chlorine MRDL exceeded? If Yes, then MRDL violation for period.	NO

¹Note that you are required to notify MassDEP within 10 days of the end of the quarter of any DBPR MCL or MRDL violation. Tier 2 (30 day) Public Notification must also be conducted for all MCL and MRDL violations.

B. TTHM COMPLIANCE

Sample Location	Q1 (Jan - Mar)		Q2 (Apr - Jun)		Q3 (Jul - Sep)		Q4 (Oct - Dec)		OEL ¹ Q3	LRAA	
	Date	ppb	Date	ppb	Date	ppb	Date	ppb			
10081- Chapin St Pump Station	3/1/2023	49	6/5/2023	69	9/5/2023	71	12/1/2022	85	65	69	
10082 -1400 State St Vibra/PV Hospital	3/1/2023	37	6/5/2023	57	9/5/2023	61	12/1/2022	72	54	57	
10074 - 833 Page Blvd	3/1/2023	36	6/5/2023	53	9/5/2023	62	12/1/2022	72	53	56	
10089- 292 Main Street	3/1/2023	37	6/5/2023	55	9/5/2023	59	12/1/2022	71	53	56	
10083- North Main Fire Station	3/1/2023	35	6/5/2023	53	9/5/2023	56	12/1/2022	70	50	54	
10085 - Center Street Fire Station	3/1/2023	44	6/5/2023	64	9/5/2023	67	12/1/2022	78	61	63	
10086 - 1043 Sumner Ave	3/1/2023	41	6/5/2023	57	9/5/2023	63	12/1/2022	74	56	59	
10075- Catalina Pump Station	3/1/2023	42	6/5/2023	59	9/5/2023	68	12/1/2022	77	59	62	
MCL = 80 (ppb)		Was OEL exceeded?²				NO		Was MCL exceeded?¹		NO	

C. HAA5 COMPLIANCE

Sample Location	Q1 (Jan - Mar)		Q2 (Apr - Jun)		Q3 (Jul - Sep)		Q4 (Oct - Dec)		OEL ¹ Q3	LRAA	
	Date	ppb	Date	ppb	Date	ppb	Date	ppb			
10081- Chapin St Pump Station	3/1/2023	47	6/5/2023	39	9/5/2023	40	12/1/2022	38	42	41	
10082 -1400 State St Vibra/PV Hospital	3/1/2023	45	6/5/2023	54	9/5/2023	60	12/1/2022	66	55	56	
10074 - 833 Page Blvd	3/1/2023	45	6/5/2023	51	9/5/2023	65	12/1/2022	65	57	57	
10089- 292 Main Street	3/1/2023	46	6/5/2023	52	9/5/2023	59	12/1/2022	70	54	57	
10083- North Main Fire Station	3/1/2023	45	6/5/2023	54	9/5/2023	60	12/1/2022	67	55	57	
10085 - Center Street Fire Station	3/1/2023	51	6/5/2023	55	9/5/2023	62	12/1/2022	57	58	56	
10086 - 1043 Sumner Ave	3/1/2023	54	6/5/2023	54	9/5/2023	65	12/1/2022	77	60	63	
10075- Catalina Pump Station	3/1/2023	51	6/5/2023	59	9/5/2023	74	12/1/2022	71	65	64	
MCL = 60 (ppb)		Was OEL exceeded?²				YES		Was MCL exceeded?¹		YES	

D. IMPORTANT COMPLIANCE NOTES

- PWS has exceeded the OEL for TTHM and/OR HAA5 but is authorized to limit the scope of the OEL evaluation to reporting only. (Refer to letter regarding seasonal OEL exceedances)
- PWS has exceeded the OEL for TTHM and/OR HAA5 and must **complete and submit an Operational Evaluation Report** within 90 days of receipt of the analytical results (systems sampling quarterly only).
- PWS continues to qualify for reduced monitoring based on LRAAs of TTHM and HAA5 (and TOC if applicable)
- PWS **NO LONGER QUALIFIES** for reduced monitoring based on average concentrations of TTHM, HAA5 and/or TOC. (Refer to quarterly monitoring criteria on "Instructions" Tab)
- PWS has exceeded the MCL for TTHM or HAA5 during ANNUAL monitoring and therefore will be subject to **INCREASED monitoring** (quarterly dual sample sets at each location) until further notice.

²OELs apply to systems sampling quarterly only.

**Massachusetts Department of Environmental Protection - Drinking Water Program
Stage 2 Disinfection By-Products Rule (DBPR) Quarterly Compliance Worksheet**

PWSID: 1281000

PWS Name: Springfield Water & Sewer Commission

City/Town: Springfield & Ludlow

SURFACE OR GWUDI SYSTEMS >499 SEEKING OR ON REDUCED TTHM/HAA5 MONITORING - COMPLETE TABLE E

E.		Plant Name:		Plant 1		Plant 2		Plant 3		Plant 4	
		MONTH	YEAR	Monthly Avg (ppm)	Quarterly Avg (ppm)	Monthly Avg (ppm)	Quarterly Avg (ppm)	Monthly Avg (ppm)	Quarterly Avg (ppm)	Monthly Avg (ppm)	Quarterly Avg (ppm)
TOC (raw water)	Q1	January									
		February									
		March									
	Q2	April									
		May									
		June									
	Q3	July									
		August									
		September									
	Q4	October									
		November									
		December									
		Running Annual Average: (Average of last 4 quarterly averages)									

SYSTEMS USING OZONATION - COMPLETE TABLE F

F.		Plant Name:		Plant 1	Plant 2	Plant 3	Plant 4
		MONTH	YEAR	Monthly Avg (ppm)	Monthly Avg (ppm)	Monthly Avg (ppm)	Monthly Avg (ppm)
BROMATE (finished water)	Q1	January					
		February					
		March					
	Q2	April					
		May					
		June					
	Q3	July					
		August					
		September					
	Q4	October					
		November					
		December					
		Running Annual Average: (Average of last 12 monthly averages)					
		Was Bromate MCL Exceeded? ¹ (MCL = 0.010 ppm)					
		Quality for Reduced Bromate Monitoring? (RAA < 0.0025 ppm)					

DEFINITIONS

Monthly Average:	Average of all results within the current month.
Quarterly Average:	Average of three monthly averages.
Running Annual Average (RAA):	Average of one year of consecutive compliance periods, including the current one. 4 quarters (THM/HAA5 and TOC) or 12 months (Cl and Bromate).
Total # of Samples:	Total number of samples collected during the monitoring period.
Locational Running Annual Average (LRAA):	RAA from the <u>same</u> sample location. <i>Average of this quarter and three prior consecutive quarterly averages at the same location.</i>
Operational Evaluation Level (OEL):	Average of the two previous quarter's results and twice the current quarter's results

Note: Record and calculate all ND or < MDL results as the number 0 (zero).

COMMENTS: