

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

<b>1281000</b>	<b>Springfield Water &amp; Sewer Commission</b>	<b>Springfield &amp; Ludlow</b>
<b>PWSID:</b>	<b>PWS Name:</b>	<b>City/Town:</b>
<input checked="" type="radio"/> COM <input type="radio"/> NTNC	<b>Monitoring Frequency:</b> <input checked="" type="radio"/> Quarterly <input type="radio"/> Annual or less	<b>Monitoring Type:</b> <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: **2022** 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	2022	304	0.72
	February	2022	279	0.77
	March	2022	311	0.73
Q2	April	2022	298	0.81
	May	2022	302	0.75
	June	2022	315	0.69
Q3	July	2022	307	0.75
	August	2022	311	0.80
	September	2022	302	0.69
Q4	October	2022	305	0.69
	November	2022	299	0.73
	December	2022		

Chlorine Running Annual Average (RAA): (Average of 12 Monthly Averages)	<b>0.74</b>
Chlorine MRDL (ppm):	<b>4.0</b>
Was Chlorine MRDL exceeded? If Yes, then MRDL violation for period.	<b>NO</b>

<sup>1</sup>Note 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 <sup>1</sup> Q4	LRAA	
	Date	ppb	Date	ppb	Date	ppb	Date	ppb			
10081- Chapin St Pump Station	3/3/2022	87	6/2/2022	90	9/6/2022	89	12/1/2022	85	<b>87</b>	<b>88</b>	
10082 -1400 State St Vibra/PV Hospital	3/3/2022	59	6/2/2022	83	9/6/2022	76	12/1/2022	72	76	73	
10074 - 833 Page Blvd	3/3/2022	77	6/2/2022	76	9/6/2022	72	12/1/2022	72	73	74	
10089- 292 Main Street	3/3/2022	73	6/2/2022	74	9/6/2022	73	12/1/2022	71	72	73	
10083- North Main Fire Station	3/3/2022	77	6/2/2022	75	9/6/2022	70	12/1/2022	70	71	73	
10085 - Center Street Fire Station	3/3/2022	83	6/2/2022	87	9/6/2022	87	12/1/2022	78	<b>83</b>	<b>84</b>	
10086 - 1043 Sumner Ave	3/3/2022	86	6/2/2022	80	9/6/2022	78	12/1/2022	74	77	80	
10075- Catalina Pump Station	3/3/2022	87	6/2/2022	87	9/6/2022	80	12/1/2022	77	80	<b>83</b>	
<b>MCL = 80 (ppb)</b>		Was OEL exceeded? <sup>2</sup>				<b>YES</b>	Was MCL exceeded? <sup>1</sup>		<b>YES</b>		

### C. HAA5 COMPLIANCE

Sample Location	Q1 (Jan - Mar)		Q2 (Apr - Jun)		Q3 (Jul - Sep)		Q4 (Oct - Dec)		OEL <sup>1</sup> Q4	LRAA	
	Date	ppb	Date	ppb	Date	ppb	Date	ppb			
10081- Chapin St Pump Station	3/3/2022	107	6/2/2022	72	9/6/2022	55	12/1/2022	38	51	<b>69</b>	
10082 -1400 State St Vibra/PV Hospital	3/3/2022	109	6/2/2022	77	9/6/2022	81	12/1/2022	66	<b>73</b>	<b>84</b>	
10074 - 833 Page Blvd	3/3/2022	107	6/2/2022	71	9/6/2022	63	12/1/2022	65	<b>66</b>	<b>77</b>	
10089- 292 Main Street	3/3/2022	104	6/2/2022	82	9/6/2022	84	12/1/2022	70	<b>77</b>	<b>84</b>	
10083- North Main Fire Station	3/3/2022	114	6/2/2022	79	9/6/2022	84	12/1/2022	67	<b>74</b>	<b>85</b>	
10085 - Center Street Fire Station	3/3/2022	113	6/2/2022	79	9/6/2022	70	12/1/2022	57	<b>66</b>	<b>79</b>	
10086 - 1043 Sumner Ave	3/3/2022	118	6/2/2022	78	9/6/2022	85	12/1/2022	77	<b>79</b>	<b>90</b>	
10075- Catalina Pump Station	3/3/2022	114	6/2/2022	88	9/6/2022	70	12/1/2022	71	<b>75</b>	<b>85</b>	
<b>MCL = 60 (ppb)</b>		Was OEL exceeded? <sup>2</sup>				<b>YES</b>	Was MCL exceeded? <sup>1</sup>		<b>YES</b>		

### 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.

<sup>2</sup>OELs apply to systems sampling quarterly only.

**Massachusetts Department of Environmental Protection - Drinking Water Program  
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1281000  
PWSID:

Springfield Water & Sewer Commission  
PWS Name:

Springfield & Ludlow  
City/Town:

**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									
		<b>Running Annual Average:</b> (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					
		<b>Running Annual Average:</b> (Average of last 12 monthly averages)					
		<b>Was Bromate MCL Exceeded? <sup>1</sup></b> (MCL = 0.010 ppm)					
		<b>Quality for Reduced Bromate Monitoring?</b> (RAA < 0.0025 ppm)					

**DEFINITIONS**

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