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

1281000 PWSID:	Springfield Water & Sewer Commission PWS Name:	Springfield & Ludlow City/Town:		
● COM ○ NTNC	Monitoring Frequency:	Monitoring Type:   Reduced  Reduced		
CERTIFICATION: I certify under pelaw that I am the person authorize	ed to fill out	Q2: Apr-Jun		
this form and the information con herein is true, accurate and comp	lete to the			
	Primary Operator Signature:	Date:		

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

### A. CHLORINE RESIDUAL COMPLIANCE

	Month	Year	# Samples	Monthly Avg (ppm)	Quarterly Avg (ppm)			
	January	2019	308	0.74		Min# of Cl <sub>2</sub> distribution samples required per Month:	120	
Q1	February	2019	279	0.67	0.64	(Same location and frequency as TCR distribution sites).	120	
	March	2019	303	0.50		Minimum # of distribution complex tosted in any month:	279	
	April	2019	302	0.54		Minimum # of distribution samples tested in any month:		
Q2	May	2019	310	0.54	0.56	0.56	Collected < Minimum # of distribution samples?	NO
	June	2019	294	0.61		If Yes, then Failure to Monitor Violation for period.	NO	
	July	2018	302	0.66		Running Annual Average (RAA)	0.65	
Q3	August	2018	310	0.62	0.66	(Average of 4 Quarterly Averages):	0.05	
	September	2018	294	0.70		Chlorine MRDL (ppm):	4.0	
	October	2018	312	0.68		Chlorine MRDL (ppin).	4.0	
Q4	November	2018	301	0.76	0.74	Was Chlorine MRDL exceeded?	NO	
	December	2018	305	0.78		If Yes, then MRDL violation for period.	NO	

#### **B. TTHM COMPLIANCE**

Sample Location	Q1 (Jan - Mar)		Q2 (Apr - Jun)		Q3 (Jul - Sep)		Q4 (Oct - Dec)		OEL 1	LRAA
	Date	ppb	Date	ppb	Date	ppb	Date	ppb	Q4	LKAA
10081- Chapin St Pump Station	3/6/2019	52.7	6/3/2019	58.6	9/4/2018	74.0	12/6/2018	71.0	60.2	64.1
10082 -1400 State St Vibra/PV Hospital	3/6/2019	43.6	6/3/2019	54.1	9/4/2018	56.0	12/6/2018	52.0	51.0	51.4
10074 - 833 Page Blvd	3/6/2019	43.9	6/3/2019	51.3	9/4/2018	52.0	12/6/2018	50.0	49.1	49.3
10087- 322 Main Street	3/6/2019	43.2	6/3/2019	53.6	9/4/2018	54.0	12/6/2018	53.0	50.8	50.9
10083- North Main Fire Station	3/6/2019	42.4	6/3/2019	50.9	9/4/2018	56.0	12/6/2018	49.0	48.3	49.6
10085 - Center Street Fire Station	3/6/2019	49.4	6/3/2019	57.9	9/4/2018	65.0	12/6/2018	64.0	57.3	59.1
10086 - 1043 Sumner Ave	3/6/2019	46.6	6/3/2019	56.8	9/4/2018	58.0	12/6/2018	61.0	55.3	55.6
10075- Catalina Pump Station	3/6/2019	47.7	6/3/2019	57.4	9/4/2018	64.0	12/6/2018	67.0	57.4	59.0
	MCL = 8	CL = 80 (ppb) Was OEL exc			exceeded?'	NO		Was Mo	CL exceeded?:	NO

## C. HAA5 COMPLIANCE

Sample Location	Q1 (Jan - Mar)		Q2 (Apr - Jun)		Q3 (Jul - Sep)		Q4 (Oct - Dec)		OEL <sup>1</sup>	LRAA
Sample Location	Date	ppb	Date	ppb	Date	ppb	Date	ppb	Q2	LNAA
10081- Chapin St Pump Station	3/6/2019	57.3	6/3/2019	46.7	9/4/2018	63.0	12/6/2018	82.0	58.2	62.3
10082 -1400 State St Vibra/PV Hospital	3/6/2019	54.9	6/3/2019	71.0	9/4/2018	65.0	12/6/2018	93.0	72.5	71.0
10074 - 833 Page Blvd	3/6/2019	55.4	6/3/2019	68.0	9/4/2018	60.0	12/6/2018	89.0	70.1	68.1
10087- 322 Main Street	3/6/2019	64.7	6/3/2019	60.6	9/4/2018	57.0	12/6/2018	84.0	67.5	66.6
10083- North Main Fire Station	3/6/2019	68.2	6/3/2019	72.3	9/4/2018	60.0	12/6/2018	90.0	75.7	72.6
10085 - Center Street Fire Station	3/6/2019	70.0	6/3/2019	68.2	9/4/2018	49.0	12/31/2018	68.0	68.6	63.8
10086 - 1043 Sumner Ave	3/6/2019	66.6	6/3/2019	74.2	9/4/2018	57.0	12/6/2018	80.0	73.7	69.4
10075- Catalina Pump Station	3/6/2019	67.1	6/3/2019	67.0	9/4/2018	51.0	12/31/2018	68.0	67.3	63.3
	MCL = 6	0 (ppb)	Was OEL exceeded?'			YES		Was Mo	CL exceeded?:	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)

<sup>1</sup>OELs apply to systems sampling quarterly only.

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 <u>NO LONGER QUALIFIES</u> for reduced monitoring based on average concentrations of TTHM, HAA5 and/or TOC. (Refer to quarterly monitoring criteria on "Instructions" Tab)

Massachusetts Department of Environmental Protection - Drinking Water Program

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DEFINITIONS					
Monthly Average:	Average of all results within the current month.				
Quarterly Average:	Average of three monthly averages.				
Punning Annual Average (PAA)	Average of 4 quarters (12 consecutive months). Average of this quarter and three prior				
Running Annual Average (RAA):	consecutive quarterly averages.				
Total # of Samples:	Total number of samples collected during the monitoring period.				
Locational Punning Annual Average (LPAA):	RAA from the <u>same</u> sample location. Average of this quarter and three prior consecutive quarterly averages at the same location.				
Locational Running Annual Average (LRAA).	averages at the same location.				
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).	
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COM	IMENTS:	Center St. Fire Station and Catalina Pump Station were resampled because original samples were not valid due to quality control
OOM	IIIILITIO.	surrogate samples outside of control limits at testing laboratory.