

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

<b>3116000</b>	<b>GROVELAND WATER &amp; SEWER</b>	<b>GROVELAND</b>
<small>PWSID:</small>	<small>PWS Name:</small>	<small>City/Town:</small>
<input checked="" type="radio"/> COM <input type="radio"/> NTNC	<small>Monitoring Frequency:</small> <input checked="" type="radio"/> Quarterly <input type="radio"/> Annual or less	<small>Monitoring Type:</small> <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: **2017**   QUARTER:  Q1: Jan-Mar    Q2: Apr-Jun    Q3: Jul-Sep    Q4: Oct-Dec

Primary Operator Signature: *Thomas D. [Signature]*   Date: **10-8-18**

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

**A. CHLORINE RESIDUAL COMPLIANCE**

	Month	Year	# Samples	Monthly Avg (ppm)
Q1	January	2017	9	0.12
	February	2017	9	0.12
	March	2017	9	0.22
Q2	April	2017	9	0.12
	May	2017	9	0.13
	June	2017	9	0.13
Q3	July	2017	9	0.08
	August	2017	8	0.09
	September	2017	9	0.09
Q4	October	2017	9	0.07
	November	2017	9	0.12
	December	2017	9	0.12

Chlorine Running Annual Average (RAA): <small>(Average of 12 Monthly Averages)</small>	<b>0.12</b>
Chlorine MRDL (ppm)	<b>4.0</b>
Was Chlorine MRDL exceeded? <small>If Yes, then MRDL violation for period</small>	<b>NO</b>

\*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		
Fens Associates Salem St.					8/2/2017	13			13	13
Pentucket Jr. High Main St.					8/2/2017	9.5			9.5	9.5
<b>MCL = 80 (ppb)</b>		<b>Was OEL exceeded?*</b>		<b>NO</b>		<b>Was MCL exceeded?*</b>		<b>NO</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		
Fens Associates Salem St.					8/2/2017	ND				
Pentucket Jr. High Main St.					8/2/2017	ND				
<b>MCL = 60 (ppb)</b>		<b>Was OEL exceeded?*</b>		<b>NO</b>		<b>Was MCL exceeded?*</b>		<b>NO</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.

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GROVELAND WATER & SEWER

GROVELAND

PWSID:

PWS Name:

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								
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? <sup>1</sup> (MCL = 0.010 ppm)						
Qualify for Reduced Bromate Monitoring? (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. Average of this quarter and three prior consecutive quarterly averages at the same location.
<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:**