



# Compliance Determination for Filtered Systems - Monthly Report

## I. PWS INFORMATION:

PWSID#: 0244001 PWS Name: RANDOLPH-HOLBROOK JOINT WATER PWS Town: RANDOLPH  
 Treatment Plant Name: RANDOLPH WATER PLANT Reporting Period → Month: JUNE Year: 2022

## II. TURBIDITY PERFORMANCE CRITERIA:

1.	Monthly Turbidity (95%) NTU Limit - The turbidity level of a system's filtered water must be less than or equal to the Monthly Turbidity NTU Limit in at least 95% of the measurements taken each month for the filtration technology used, otherwise SWTR TT Violation (Tier 2).	
<u>180</u>	= A	Total # of filtered water turbidity measurements for month (SWTR - Form F)
<u>180</u>	= B	Total # of filtered water turbidity measurements less than or equal to the specified limits for the filtration technology used. (SWTR - Form F)
<u>100</u>	= (B / A) × 100	The percentage of turbidity measurements meeting the Monthly Turbidity 95% NTU Limit.

2.	Max Day NTU Limit - The turbidity level of a system's filtered water must at no time exceed the Max Day NTU Limit for the filtration technology used, otherwise SWTR TT Violation (Tier 2).	
Record the date and turbidity value for any measurements exceeding the Max Day NTU. Check box <input checked="" type="checkbox"/> if "None"		
Date:	Value	Date Reported to DEP
For each day the Max Day NTU limit is exceeded, the DEP must be notified by the end of the next business day. SWTR TT Violation (Tier 2). If DEP is not consulted within 24 hours then it is a SWTR TT (Tier 1) violation requiring public notification within 24 hours.		

## III. DISINFECTION PERFORMANCE CRITERIA:

1.	Point-of-Entry Minimum Disinfectant Residual Criteria - Residual Disinfectant concentration cannot be < 0.2 mg/L for more than 4 hours. SWTR TT Violation (Tier 2).												
Minimum Disinfectant Residual at Point-of-Entry to Distribution System:													
Day	Cl <sub>2</sub> mg/l	Day	Cl <sub>2</sub> mg/l	Day	Cl <sub>2</sub> mg/l	Day	Cl <sub>2</sub> mg/l	Day	Cl <sub>2</sub> mg/l	Day	Cl <sub>2</sub> mg/l	Day	Cl <sub>2</sub> mg/l
1	<u>1.73</u>	6	<u>1.74</u>	11	<u>1.76</u>	16	<u>1.66</u>	21	<u>1.72</u>	26	<u>1.69</u>	31	
2	<u>1.83</u>	7	<u>1.60</u>	12	<u>1.70</u>	17	<u>1.80</u>	22	<u>1.85</u>	27	<u>1.82</u>		Residual Measured <input checked="" type="checkbox"/> Free Cl <sub>2</sub> <input type="checkbox"/> Total Cl <sub>2</sub> <input type="checkbox"/> Combined Cl <sub>2</sub>
3	<u>1.76</u>	8	<u>1.85</u>	13	<u>1.68</u>	18	<u>1.69</u>	23	<u>1.99</u>	28	<u>1.68</u>		
4	<u>1.58</u>	9	<u>1.76</u>	14	<u>1.80</u>	19	<u>1.77</u>	24	<u>1.87</u>	29	<u>1.90</u>		
5	<u>1.58</u>	10	<u>1.80</u>	15	<u>1.50</u>	20	<u>1.55</u>	25	<u>1.81</u>	30	<u>2.00</u>		
If at any time the residual falls below 0.2 mg/l in the water entering the distribution system, the supplier of water must notify the Department as soon as possible, but no later than by the end of the next business day. The supplier of water also must notify the Department by the end of the next business day whether or not the residual was restored to at least 0.2 mg/l within four hours.													
Date(s) Residual < 0.2 mg/l	Duration of Low Level (hrs.)	Date Reported to DEP	Date(s) Residual < 0.2 mg/l	Duration of Low Level (hrs.)	Date Reported to DEP								

2.	Distribution System Disinfectant Residual Criteria - Residual Disinfectant concentration (V) cannot be undetectable in greater than 5% of samples in a month, for any two consecutive months. SWTR TT Violation (Tier 2). Chlorine residuals must be measured at the same time and location as total coliform <u>distribution routine &amp; repeat</u> samples. If no residual is detected, an HPC sample must be collected and analyzed.		
Total # of HPC samples taken during month: <u>66</u>		# HPC sites > 500/mL: <u>0</u>	# HPC sites ≤ 500/mL: <u>66</u>
<u>70</u>	= a	# of sites where Cl <sub>2</sub> residual measurements were made, whether a residual was detected or not (should be the same # of sites reported on your monthly DBPR Cl <sub>2</sub> residual report)	
<u>0</u>	= b	# of sites HPC samples were analyzed <i>instead</i> of Cl <sub>2</sub> residual measurements	
<u>0</u>	= c	# of sites where no Cl <sub>2</sub> residual was detected and no HPC sample was analyzed	
<u>0</u>	= d	# of sites where no Cl <sub>2</sub> residual was detected and HPC > 500 CFU/mL	
<u>0</u>	= e	# of sites where no Cl <sub>2</sub> residual measurement was made and HPC > 500 CFU/mL	
Water in the distribution system with a heterotrophic bacteria concentration (HPC) less than or equal to 500/mL, is deemed to have a detectable disinfectant residual for purposes of determining compliance with this requirement. When analyzed, report HPC results on your monthly DEP Bacteriological Report.			
$V = \frac{(c+d+e)}{(a+b)} \times 100$	This Month % V = <u>0</u>	Previous Month % V = <u>0</u>	Is V > 5% for 2 months? <input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true,

PWS Authorized Signature:

*William Cookery* 7-17-2022  
Chief Operator



Massachusetts Department of Environmental Protection - Drinking Water Program  
 TURBIDITY DATA SHEET FOR FILTERED SYSTEMS

SWTR  
F

PWS INFORMATION

PWSID#: 4244001 PWS Name: RANDOLPH-HOLBROOK JOINT WATER PWS Town: RANDOLPH  
 Treatment Plant Name: RANDOLPH WATER PLANT Reporting Period → Month: JUNE Year: 2022

GLOBAL REPORTING

Filtered Water Turbidity Measured: (check only one)  Combined Filter Effluent  Individual Filter Effluent  Clearwell  Plant Effluent  
 Filtration Technology:  Conventional  Direct  Alternative  Slow Sand  Diatomaceous Earth  
 Monthly Turbidity (95%) NTU Limit = 0.3 Max Day Turbidity NTU Limit = 1  
 Monthly Turbidity (95%) NTU Limit = 1 Max Day Turbidity NTU Limit = 5

Day	Max Filtered Water Turbidity Result (NTU)	Number of Turbidity Measurements	Number of Turbidity Measurements < Monthly (95%) NTU Limit	Number of Turbidity Measurements > Max Day NTU Limit
	.05	6	6	0
	.03	6	6	0
	.03	6	6	0
	.04	6	6	0
	.05	6	6	0
	.06	6	6	0
	.05	6	6	0
	.06	6	6	0
	.06	6	6	0
	.06	6	6	0
	.04	6	6	0
	.06	6	6	0
	.09	6	6	0
	.07	6	6	0
	.06	6	6	0
	.12	6	6	0
	.06	6	6	0
	.05	6	6	0
	.06	6	6	0
	.06	6	6	0
	.06	6	6	0
	.06	6	6	0
	.07	6	6	0
	.08	6	6	0
	.07	6	6	0
	.05	6	6	0
	.08	6	6	0
	.09	6	6	0
	.07	6	6	0
	.04	6	6	0
Totals		180	180	0

May be used by systems serving less than 10,000 persons, subject to DEP approval.  
 Enter the Maximum Filtered Water Turbidity Result recorded each day, at the 4<sup>th</sup> hour or other approved interval.  
 Enter the Total # of Turbidity measurements taken for each day. Measurements must be taken at a minimum of 4-hour intervals (i.e. 6 readings per day).  
 For continuous monitors count each 4-hour period as 1 measurement. Record the actual turbidity result at the specified interval of time. Do not average turbidity measurements. If DEP approved, 15-minute readings (i.e. 96 readings per day) may be submitted. Filtered turbidity data must be kept on file for DEP review.  
 Out of the # of turbidity measurements taken and recorded in the previous column, enter the number of turbidity measurements that were less than or equal to the Monthly (95%) NTU Limit for the filtration technology used.  
 If at any time the filtered turbidity Max Day NTU Limit is exceeded, the DEP must be notified no later than the end of the next business day. For each exceedance, record the turbidity value(s) and date(s) on SWTR - Form G

PWS Authorized Signature: [Signature]  
 Date: 7-4-2022 Title: Chief Plant Operator



Massachusetts Department of Environmental Protection - Drinking Water Program  
 CT Determination for Filtered Systems

SWTR  
 I

I. PWS INFORMATION:

PWSID#: 4244001 PWS Name: Randolph-Holliston Joint Water PWS Town: Randolph  
 Treatment Plant Name: Randolph Water Plant Reporting Period → Month: JUNE Year: 2022  
 Disinfectant<sup>1</sup>: Chlorine Gas/Fetter Eff. Sequence of Application:  1<sup>st</sup>  2<sup>nd</sup>  3<sup>rd</sup>  4<sup>th</sup>  5  6<sup>th</sup>

II. DAILY REPORTING: All measurements taken during peak hourly flow.

Day	Peak Hourly Flow <sup>2</sup> (gpm)	Disinfectant Concentration <sup>3</sup> C (mg/L)	Disinfectant Contact Time <sup>4</sup> T (min.)	CT calc (= C x T)	pH <sup>5</sup>	Water Temp <sup>6</sup> (°C)	CT <sup>7</sup> 99.9	Inactivation Ratio <sup>8</sup> (CT calc / CT 99.9)	Inactivation Ratio <sup>9</sup> < 1.0
1	2,400	1.73	50	86.5	6.25	17.7	17	5.1	<input type="checkbox"/> Yes
2	2,400	1.83	50	91.5	6.10	17.2	17	5.4	<input type="checkbox"/> Yes
3	2,400	1.76	50	88	6.15	16.7	17	5.2	<input type="checkbox"/> Yes
4	2,400	1.58	50	79	6.15	16.3	17	4.7	<input type="checkbox"/> Yes
5	2,400	1.58	50	79	6.20	16.8	17	4.7	<input type="checkbox"/> Yes
6	2,400	1.74	50	87	6.10	17.5	17	5.1	<input type="checkbox"/> Yes
7	2,400	1.60	50	80	6.25	19.7	17	4.7	<input type="checkbox"/> Yes
8	2,400	1.85	50	92.5	6.05	19.4	17	5.4	<input type="checkbox"/> Yes
9	2,400	1.76	50	88	6.10	20.4	17	5.2	<input type="checkbox"/> Yes
10	2,400	1.80	50	90	6.10	20.0	17	5.3	<input type="checkbox"/> Yes
11	2,400	1.76	50	88	6.15	19.3	17	5.2	<input type="checkbox"/> Yes
12	2,400	1.70	50	85	6.00	19.9	17	5.0	<input type="checkbox"/> Yes
13	2,400	1.68	50	84	6.10	19.6	17	4.9	<input type="checkbox"/> Yes
14	2,400	1.80	50	90	6.05	19.7	17	5.3	<input type="checkbox"/> Yes
15	2,400	1.50	50	75	6.20	19.0	17	4.4	<input type="checkbox"/> Yes
16	2,400	1.66	50	83	6.25	19.7	17	4.9	<input type="checkbox"/> Yes
17	2,400	1.80	50	90	6.30	20.6	17	5.3	<input type="checkbox"/> Yes
18	2,400	1.69	50	84.5	6.25	19.5	17	5.0	<input type="checkbox"/> Yes
19	2,400	1.77	50	88.5	6.10	19.0	17	5.2	<input type="checkbox"/> Yes
20	2,400	1.55	50	77.5	6.15	18.2	17	4.6	<input type="checkbox"/> Yes
21	2,400	1.72	50	86	6.05	18.4	17	5.1	<input type="checkbox"/> Yes
22	2,400	1.85	50	92.5	6.00	18.0	17	5.4	<input type="checkbox"/> Yes
23	2,400	1.99	50	99.5	6.15	18.4	17	5.9	<input type="checkbox"/> Yes
24	2,400	1.87	50	93.5	6.05	18.5	17	5.5	<input type="checkbox"/> Yes
25	2,400	1.81	50	90.5	6.10	18.9	17	5.3	<input type="checkbox"/> Yes
26	2,400	1.69	50	84.5	6.15	19.5	17	5.0	<input type="checkbox"/> Yes
27	2,400	1.82	50	91	6.00	19.0	17	5.4	<input type="checkbox"/> Yes
28	2,400	1.68	50	84	6.10	19.6	17	4.9	<input type="checkbox"/> Yes
29	2,400	1.90	50	95	6.20	19.8	17	5.6	<input type="checkbox"/> Yes
30	2,400	2.00	50	100	6.20	20.0	17	5.9	<input type="checkbox"/> Yes
31			50						<input type="checkbox"/> Yes

- Use a separate form for each disinfectant/sampling point. Enter disinfectant and sequence position, e.g. "ozone/1<sup>st</sup>" or "ClO<sub>2</sub>/3<sup>rd</sup>". If more than one disinfectant sampling point, you must also complete SWTR Form H and calculate the cumulative inactivation ratio SUM (CTcalc/CT99.9) to determine compliance.
- Peak hourly flow means the highest pumpage hour during the day, not the absolute peak flow at any instant.
- The residual disinfectant concentration(s) ("C") of the water before or at the first customer must be measured each day during peak hourly flow.
- The disinfectant contact time(s) ("T") must be determined for each day during peak hourly flow. The time T used in calculating CT, is the time it takes the water, during peak hourly flow, to move between the point of disinfection application and the point at which the residual is measured.
- If the system uses free chlorine, the pH of the disinfected water must be measured at least once per day at each chlorine residual disinfectant concentration sampling point during peak hourly flow.
- The temperature of the disinfected water must be measured at least once per day at each residual disinfectant concentration sampling point during peak hourly flow.
- Use Inactivation Tables at 310 CMR 22.20A Tables 1.1 – 1.6, 2.1 and/or 3.1
- The inactivation ratio (CTcalc/CT99.9) is determined before or at the first customer during peak hourly flow and if the (CTcalc/CT99.9) is < 1.0, the 99.9% *Giardia lamblia* inactivation requirement has not been achieved.
- More than one "Yes" response above may indicate a SWTR Treatment Technique violation (Tier 2).

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.

PWS Authorized Signature: William Cooksey  
 Date: 7-4-2022 Title: Chief Operator



Massachusetts Department of Environmental Protection – Drinking Water Program  
**CHEMICAL ADDITION REPORT – 310 CMR 11.15(4) Chemical Addition Reporting Requirements**

C-ADD

**I. PWS Information** - Refer to MassDEP "Chemical Addition Report Guidance and Instructions" for details.

PWS Name <sup>1</sup> :	RANDOLPH-HOLBROOK JW	Town <sup>1</sup> :	RANDOLPH-Holbrook	PWSID <sup>1</sup> :	424001
Treatment Plant Name <sup>2</sup> :	RANDOLPH WATER PLANT	Treatment Plant ID# <sup>2</sup> :	4244001-01T	Reporting Period <sup>3</sup> :	JUNE 2022
				Month	Year

**II. Chemical & Operational Information**

Chemical Name <sup>4</sup> :	POLYALUMINIUM CHLORIDE	Purchased Strength <sup>5</sup> :	1.0	Target Range/min <sup>12</sup> :	14
Manufacturer <sup>6</sup> :	HOLLAND COMPANY	Purchased Density (lbs/gal) <sup>9</sup> :	10.3	Target Dose <sup>13</sup> :	18
Product Name <sup>6</sup> :	PCH-180	Dilution Factor or Mix Ratio <sup>10</sup> :	NA	Alarm Setting (low) <sup>14</sup> :	NA
Reason for Adding Chemical <sup>7</sup> :	COAGULATION	NSF Approved (Y/N) <sup>11</sup> :	Y	Alarm Setting (high) <sup>14</sup> :	NA
		Date of last anti-siphon valve inspection/replacement <sup>15</sup> :			

**III. Daily Reporting** Note: Water quality data reported on C-ADD form may be considered for compliance purposes.

Day	Treated Water <sup>16</sup>		Measured Chemical Used		Calculated Chemical Used (lbs) <sup>18</sup>	Chemical Dosage <sup>19</sup> (mg/L)	Parameters Measured <sup>20</sup> , Results, Units and Method <sup>20</sup> - (Grab or Continuous (A) analyzer) <sup>21</sup>			O&M Notes/Comments <sup>22</sup>
	<input type="checkbox"/> Gallons <input checked="" type="checkbox"/> MG	Volume <sup>17</sup> (gal/day)	Weight <sup>17</sup> (lbs/day)	a. RAW PH DAILY AVG EG <input type="checkbox"/> A			b. <input type="checkbox"/> G <input type="checkbox"/> A	c. <input type="checkbox"/> G <input type="checkbox"/> A		
1	2.9	144			1,483	20			7.00	
2	2.8	150		1,545	22	7.00				
3	2.8	126		1,298	18	7.10				
4	2.8	88		906	13	7.00				
5	2.8	62		639	9	7.05				
6	2.8	80		824	12	6.95				
7	2.8	100		1,030	15	6.95				
8	2.8	110		1,133	16	7.00				
9	2.8	117		1,205	17	7.05				
10	2.8	108		1,112	16	6.90				
11	2.8	125		1,288	18	7.00				
12	2.8	110		1,133	16	6.90				
13	2.8	120		1,236	18	7.05				
14	2.1	80		824	16	7.00				
15	2.8	117		1,205	17	6.95				PLANT DOWN FOR BASIN CLEANING
16	2.8	96		989	14	6.90				
17	2.8	76		783	11	7.10				
18	2.8	70		721	10	7.05				
19	3.1	90		927	12	7.00				
20	3.1	135		1,391	18	6.90				
21	2.8	147		1,514	21	7.00				
22	2.7	138		1,421	21	7.00				
23	2.8	137		1,411	20	6.90				
24	2.7	123		1,267	19	6.90				
25	3.1	152		1,566	20	6.80				
26	3.0	128		1,318	17	6.85				
27	3.3	125		1,288	15	6.90				
28	3.0	120		1,236	16	6.85				
29	2.7	137		1,411	21	7.00				
30	2.8	134		1,380	20	7.05				
31										
Total	Indicate total # of days the residual was off-target for the month (from Section II) Monthly Target Summary <sup>23</sup> :									

\*Describe result (daily average, min/max, instantaneous reading, grab, etc), sample location (entry-point, before/after filters, tanks, etc.) and instrumentation used (SCADA, chart recorder, test kit, bench, etc.)<sup>20</sup>:

a. Raw Ph, Daily Average, Test Kit

b. \_\_\_\_\_

c. \_\_\_\_\_

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.

PWS Authorized Person - Signature & Date<sup>24</sup>:

William Cookerly 7-4-2022

Print Name: William Cookerly Title: Chief Operator



Massachusetts Department of Environmental Protection – Drinking Water Program  
**CHEMICAL ADDITION REPORT – 310 CMR 11.15(4) Chemical Addition Reporting Requirements**

**C-ADD**

PWS Information - Refer to MassDEP "Chemical Addition Report Guidance and Instructions" for details.					
PWS Name <sup>1</sup> :	RANDOLPH-HOLBROOK JOINT WATER	Town <sup>1</sup> :	RANDOLPH-HOLBROOK	PWSID <sup>1</sup> :	424001
Treatment Plant Name <sup>2</sup> :	RANDOLPH WATER PLANT	Treatment Plant ID# <sup>2</sup> :	4244001-01T	Reporting Period <sup>2</sup> :	JUNE 2022 Month Year

II. Chemical & Operational Information					
Chemical Name <sup>4</sup> :	CHLORINE	Purchased Strength <sup>5</sup> :	1.0	Target Range/min <sup>12</sup> :	0.20
Manufacturer <sup>4</sup> :	AXIALL, LLC	Purchased Density (lbs/gal) <sup>9</sup> :	12.3	Target Dose <sup>13</sup> :	NA
Product Name <sup>4</sup> :	CHLORINE	Dilution Factor or Mix Ratio <sup>10</sup> :	NA	Alarm Setting (low) <sup>14</sup> :	1.0
Reason for Adding Chemical <sup>7</sup> :	DISINFECTANT	NSF Approved (Y/N) <sup>11</sup> :	Y	Alarm Setting (high) <sup>14</sup> :	3.0
		Date of last anti-siphon valve inspection/replacement <sup>15</sup> :			

III. Daily Reporting Note: Water quality data reported on C-ADD form may be considered for compliance purposes.

Day	Treated Water <sup>16</sup>	Measured Chemical Used		Calculated Chemical Used (lbs) <sup>18</sup>	Chemical Dosage <sup>19</sup> (mg/L)	Parameters Measured <sup>6</sup> , Results, Units and Method <sup>20</sup> - (G)rab or Continuous (A)nalyzer <sup>21</sup>			O&M Notes/Comments <sup>22</sup>	
	<input type="checkbox"/> Gallons <input checked="" type="checkbox"/> MG	Volume <sup>17</sup> (gal/day)	Weight <sup>17</sup> (lbs/day)			a. FREE CL <sup>23</sup> DAILY AVG	b. FREE CL <sup>23</sup> DAILY MIN/MAX	c.		<input type="checkbox"/> G <input type="checkbox"/> A
1	2.9		86		3.6	1.96	1.73			
2	2.8		104		4.4	2.06	1.83			
3	2.8		87		3.7	2.01	1.76			
4	2.8		87		3.7	1.83	1.58			
5	2.8		90		3.9	1.84	1.58			
6	2.8		94		4.0	1.97	1.74			
7	2.8		92		3.9	1.92	1.60			
8	2.8		93		4.0	1.95	1.85			
9	2.8		81		3.5	1.94	1.76			
10	2.8		81		3.5	2.01	1.80			
11	2.8		84		3.6	1.99	1.76			
12	2.8		78		3.3	1.91	1.70			
13	2.8		79		3.4	1.91	1.68			
14	2.1		58		3.3	1.88	1.80		PLANT DOWN FOR BASIN CLEANING	
15	2.8		88		3.8	1.79	1.50			
16	2.8		95		4.1	1.92	1.66			
17	2.8		94		4.0	2.04	1.80			
18	2.8		88		3.8	1.88	1.69			
19	3.1		98		3.8	1.98	1.77			
20	3.1		90		3.5	2.03	1.55			
21	2.8		92		3.9	2.06	1.72			
22	2.7		92		4.1	2.04	1.85			
23	2.8		91		3.9	2.22	1.99			
24	2.7		90		4.0	2.15	1.87			
25	3.1		97		3.8	2.14	1.81			
26	3.0		95		3.8	2.21	1.69			
27	3.3		93		3.4	2.06	1.82			
28	3.0		92		3.7	2.09	1.68			
29	2.7		92		4.1	2.12	1.90			
30	2.8		95		4.1	2.16	2.00			
31										
Total	Indicate total # of days the residual was off-target for the month (from Section II) Monthly Target Summary <sup>23</sup> :									

*Describe result (daily average, min/max, instantaneous reading, grab, etc), sample location (entry-point, before/after filters, tanks, etc.) and instrumentation used (SCADA, chart recorder, test kit, bench, etc.) <sup>20</sup> :		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.	
a. Daily Average, Free Chlorine, Finished Water, Grab Sample	PWS Authorized Person - Signature & Date <sup>24</sup> :		William Cookerly 7-4-2022
b. Daily Minimum, Free Chlorine, Finished Water, Test Kit	Print Name:		William Cookerly
c.	Title:		Chf Operator



Massachusetts Department of Environmental Protection – Drinking Water Program  
**CHEMICAL ADDITION REPORT – 310 CMR 11.15(4) Chemical Addition Reporting Requirements**

C-ADD

**I. PWS Information** - Refer to MassDEP "Chemical Addition Report Guidance and Instructions" for details.

PWS Name <sup>1</sup> :	RANDOLPH-HOLBROOK JW	Town <sup>1</sup> :	RANDOLPH-HOLBROOK	PWSID <sup>1</sup> :	424001
Treatment Plant Name <sup>2</sup> :	RANDOLPH WATER PLANT	Treatment Plant ID# <sup>2</sup> :	4244001-0TT	Reporting Period <sup>3</sup> :	JUNE 2022
				Month	Year

**II. Chemical & Operational Information**

Chemical Name <sup>4</sup> :	CALCIUM HYDROXIDE	Purchased Strength <sup>5</sup> :	0.85	Target Range/min <sup>12</sup> :	NA
Manufacturer <sup>6</sup> :	CARMEUSE LIME & STONE	Purchased Density (lbs/gal) <sup>9</sup> :	18.7	Target Dose <sup>13</sup> :	NA
Product Name <sup>7</sup> :	HYDRATED LIME	Dilution Factor or Mix Ratio <sup>10</sup> :	NA	Alarm Setting (low) <sup>14</sup> :	NA
Reason for Adding Chemical <sup>8</sup> :	PH ADJUSTMENT	NSF Approved (Y/N) <sup>11</sup> :	Y	Alarm Setting (high) <sup>14</sup> :	NA
		Date of last anti-siphon valve inspection/replacement <sup>15</sup> :			
		NA			

**III. Daily Reporting** Note: Water quality data reported on C-ADD form may be considered for compliance purposes.

Day	Treated Water <sup>16</sup>		Measured Chemical Used <sup>17</sup>		Calculated Chemical Used (lbs) <sup>18</sup>	Chemical Dosage <sup>19</sup> (mg/L)	Parameters Measured <sup>20</sup> , Results, Units and Method <sup>20</sup> - (G) Grab or Continuous (A) Analyzer <sup>20</sup>			O&M Notes/Comments <sup>22</sup>
	<input type="checkbox"/> Gallons <input checked="" type="checkbox"/> MG	Volume <sup>17</sup> (gal/day)	Weight <sup>17</sup> (lbs/day)	Chemical Dosage <sup>19</sup> (mg/L)			a. Finished Ph	b.	c.	
							<input checked="" type="checkbox"/> G <input type="checkbox"/> A	<input type="checkbox"/> G <input type="checkbox"/> A	<input type="checkbox"/> G <input type="checkbox"/> A	PWS note any equipment breakdown, off-line status, changes in purchased product or batch mixing day, measured parameters or dosages that are out of target range, etc.
1	2.6		100	4.6	6.80					
2	2.6		100	4.6	6.80					
3	2.5		100	4.8	6.60					
4	2.5		100	4.8	6.50					
5	2.7		100	4.4	6.50					
6	2.7		100	4.4	6.60					
7	2.7		100	4.4	6.50					
8	2.6		100	4.6	6.60					
9	2.5		100	4.8	6.70					LIME LINE, PLUGGED
10	2.5		100	4.8	6.25					- Flushing out.
11	2.5		100	4.8	6.75					
12	2.6		100	4.6	6.60					
13	2.7		100	4.4	6.70					
14	1.5		50	4.8	6.75					PLANT DOWN FOR BASIN CLEANING
15	2.7		100	4.4	6.70					
16	2.7		100	4.4	6.75					
17	2.7		100	4.4	6.75					
18	2.6		100	4.6	6.80					
19	2.6		100	4.6	6.80					
20	2.7		100	4.4	6.75					
21	2.5		100	4.8	6.80					
22	2.6		100	4.6	6.85					
23	2.6		100	4.6	6.85					
24	2.7		100	4.4	6.70					
25	2.8		100	4.3	6.70					
26	2.8		100	4.3	6.75					
27	2.8		100	4.3	6.70					
28	2.8		100	4.3	6.80					
29	2.6		100	4.6	6.85					
30	2.6		100	4.6	6.85					
31			100							
Total	Indicate total # of days the residual was off-target for the month (from Section II) Monthly Target Summary <sup>23</sup> :									

\*Describe result (daily average, min/max, instantaneous reading, grab, etc), sample location (entry-point, before/after filters, tanks, etc.) and instrumentation used (SCADA, chart recorder, test kit, bench, etc.)<sup>20</sup>:

a. Finished Water Ph, Daily Average Test Kit  
 b.  
 c.

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.

PWS Authorized Person - Signature & Date<sup>24</sup>:  
 William Cookery 7-4-2022  
 Print Name: William Cookery  
 Title: Chief Operator



Massachusetts Department of Environmental Protection – Drinking Water Program  
**CHEMICAL ADDITION REPORT – 310 CMR 11.15(4) Chemical Addition Reporting Requirements**

C-ADD

**I. PWS Information** - Refer to MassDEP "Chemical Addition Report Guidance and Instructions" for details.

PWS Name <sup>1</sup> :	RANDOLPH-HOLBROOK JW	Town <sup>1</sup> :	RANDOLPH-HOLBROOK	PWSID <sup>1</sup> :	424001
Treatment Plant Name <sup>2</sup> :	RANDOLPH WATER PLANT	Treatment Plant ID# <sup>2</sup> :	4244001-01T	Reporting Period <sup>2</sup> :	JUNE 2022 Month Year

**II. Chemical & Operational Information**

Chemical Name <sup>4</sup> :	SODIUM BISULFATE	Purchased Strength <sup>6</sup> :	10-15	Target Range/min <sup>12</sup> :	NA
Manufacturer <sup>5</sup> :	CARUS CORPORATION	Purchased Density (lbs/gal) <sup>9</sup> :	12.03	Target Dose <sup>13</sup> :	NA
Product Name <sup>5</sup> :	CARUS 3350	Dilution Factor or Mix Ratio <sup>10</sup> :	0.33	Alarm Setting (low) <sup>14</sup> :	NA
Reason for Adding Chemical <sup>7</sup> :	CORROSION INHIBITOR	NSF Approved (Y/N) <sup>11</sup> :	Y	Alarm Setting (high) <sup>14</sup> :	NA
		Date of last anti-siphon valve inspection/replacement <sup>15</sup> :	NA		

**III. Daily Reporting** Note: Water quality data reported on C-ADD form may be considered for compliance purposes.

Day	Treated Water <sup>16</sup>	Measured Chemical Used		Calculated Chemical Used (lbs) <sup>18</sup>	Chemical Dosage <sup>19</sup> (mg/l)	Parameters Measured <sup>20</sup> , Results, Units and Method <sup>20</sup> - (G)rab or Continuous (A)nalyzer <sup>21</sup>			O&M Notes/Comments <sup>22</sup>
	<input type="checkbox"/> Gallons <input checked="" type="checkbox"/> MG	Volume <sup>17</sup> (gal/day)	Weight <sup>17</sup> (lbs/day)			a. FINISHED PH <input checked="" type="checkbox"/> G <input type="checkbox"/> A	b. <input type="checkbox"/> G <input type="checkbox"/> A	c. <input type="checkbox"/> G <input type="checkbox"/> A	
1	2.6		50		2.3	6.80			
2	2.6		50		2.3	6.80			
3	2.5		50		2.4	6.60			
4	2.5		50		2.4	6.50			
5	2.7		50		2.2	6.50			
6	2.7		50		2.2	6.60			
7	2.7		50		2.2	6.50			
8	2.6		50		2.3	6.60			
9	2.5		50		2.4	6.20			* LIMB LINE PLUGGED -
10	2.5		50		2.4	6.25			- FLUSHING OUT.
11	2.5		50		2.4	6.75			
12	2.6		50		2.3	6.60			
13	2.7		50		2.2	6.70			
14	1.5		30		2.4	6.75			PLANT DOWN FOR BASIN CLEANING
15	2.7		50		2.2	6.70			
16	2.7		50		2.2	6.75			
17	2.7		50		2.2	6.75			
18	2.6		50		2.3	6.80			
19	2.6		50		2.3	6.80			
20	2.7		50		2.2	6.75			
21	2.5		50		2.4	6.80			
22	2.6		50		2.3	6.85			
23	2.6		50		2.3	6.85			
24	2.7		50		2.2	6.70			
25	2.8		50		2.1	6.70			
26	2.8		50		2.1	6.75			
27	2.8		50		2.1	6.70			
28	2.8		50		2.1	6.80			
29	2.6		50		2.3	6.85			
30	2.6		50		2.3	6.85			
31			50						

Total: \_\_\_\_\_ Indicate total # of days the residual was off-target for the month (from Section II) Monthly Target Summary<sup>23</sup>:

\*Describe result (daily average, min/max, instantaneous reading, grab, etc), sample location (entry-point, before/after filters, tanks, etc.) and instrumentation used (SCADA, chart recorder, test kit, bench, etc.)<sup>20</sup>.

a. Finished Ph. Daily Average; Test Kit  
 b.  
 c.

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.

PWS Authorized Person - Signature & Date<sup>24</sup>:  
 William Coakley 7-4-2022  
 Print Name: William Coakley Title: Chief Operator



# DBPR TT Compliance Report

## I. PWS INFORMATION

PWS ID #: 4244001 City/Town: RANDOLPH  
 PWS Name: RANDOLPH-HOLBROOK JOINT WATER PWS Class: COM  NTNC  TNC

DEP LOCATION (LOC) ID#	DEP Location Name	Date Collected	Collected By
<u>015/10300</u>	<u>RAW WATER/COMBINED FILTER EFFLUENT</u>	<u>6-6-2022</u>	<u>Kevin Potter</u>
SAMPLE NOTES			

## II. COMPLIANCE CALCULATIONS

Month	# of Paired Samples	A: % Removal of TOC <sup>1</sup>	B: Required % Removal of TOC <sup>2</sup>	Met Alternative Compliance Criteria	Alternative Criteria Result(s) <sup>3</sup> (See Below)	A ÷ B <sup>4</sup>
7-21	1	42	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.20
8-21	1	46	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.31
9-21	1	43	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.23
10-21	1	45	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.29
11-21	1	43	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.23
12-21	1	43	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.23
1-22	1	39	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.17
2-22	1	36	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.03
3-22	1	63	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.80
4-22	1	43	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.23
5-22	1	49	35	<input type="checkbox"/> YES <input type="checkbox"/> NO		1.40
6-22	1	31	35	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		1.00
				<input type="checkbox"/> YES <input type="checkbox"/> NO		
Sum of Past 12 Months:						<u>15.12</u>
Compliance Value (Sum of Past 12 Months/ 12):						<u>1.26</u>

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.

PWS Authorized Signature: William Corbett  
 Date: 7-14-2022

Mail ONE copy of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

<sup>1</sup> Percent Removal:  $(1 - (\text{Treated Water TOC} \div \text{Raw Water TOC})) \times 100$ . If > 1 paired sample sets in any month report the average of all individual percent TOC removals (Example: % TOC Removal = (Average of Set 1 + Average of Set 2) ÷ 2).  
<sup>2</sup> From table at 310 CMR 22.07E(10)(b)2.  
<sup>3</sup> As listed at 310 CMR 22.07E(10)(a)2 and 310 CMR 22.07E(10)(a)3, summarized as follows:

Alternative Compliance Criteria	Code Value	Result(s) to Report (RAA - Running Annual Average)
Source Water TOC < 2.0 mg/L	SWTOC	RAA of source water TOC
Treated Water < 2.0 mg/L	TWTOC	RAA of treated water TOC
Source Water TOC < 4.0 mg/L AND Alkalinity > 60 mg/L (as CaCO <sub>3</sub> ) AND TTHM/HAA5 ≤ 0.040/0.030 mg/L	COMBO	RAA of source water TOC, RAA of source water alkalinity, RAA of TTHM and HAA5
TTHM/HAA5 ≤ 0.040/0.030 mg/L AND only using chlorine	TTHM/HAA5	RAA of TTHM and HAA5
Source Water SUVA ≤ 2.0 L/mg-m	SWSUVA	RAA of treated water SUVA
Treated Water SUVA ≤ 2.0 L/mg-m	TWSUVA	RAA of treated water SUVA
Softening that lowers alkalinity to < 60 mg/L (as CaCO <sub>3</sub> )	SOFT60	RAA of treated water alkalinity
Softening that removes ≥ 10 mg/L (as CaCO <sub>3</sub> ) of hardness	SOFT10	RAA of hardness (as CaCO <sub>3</sub> ) removal

Note: All supplemental measurements and calculations used to meet the alternative criteria must be attached to this report.

<sup>4</sup> For any month where the system met an alternative compliance criteria a value of 1.0 may be inserted.

DEP REVIEW STATUS (Initial & Date)	Review Comments
<input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved _____	



Total Organic Carbon (TOC) Report doc rev 12/2020

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: 4244001 City / Town: RANDOLPH
PWS Name: RANDOLPH HOLBROOK WATER BOARD PWS Class: COM [x] NTNC [ ] TNC [ ]

Table with columns: DEP LOCATION (LOC) ID#, DEP Location Name, Sample Information, Date Collected, Collected By. Includes rows for Great Pond WTP - Raw Water and Combined Filter Effluent.

II. ANALYTICAL LABORATORY INFORMATION:

Primary Lab MA Cert. #: M-MA022 Primary Lab Name: Analytical Balance Subcontracted?(Y/N) Y
Analysis Lab MA Cert. #: M-R1002 Analysis Lab Name: ESS

Table for TOC Analyzed by (check one): PWS or Lab. Samples Acidified? Yes or No. Columns: TOC Result (mg/L), Result Qualifier, MDL (mg/L), MRL (mg/L), Dilution Factor, Lab Method, Date Analyzed, Primary Lab Sample ID#, Analytical Lab or PWS Sample ID#.

Surface or GWUDI systems >= 500 persons. Monthly source (raw) water TOC sampling is required at each surface/GWUDI source to qualify for and remain on reduced THM/HAA5 monitoring. Each source must maintain a running annual average source (raw) water TOC level of <= 4.0 mg/L (calculated quarterly). TOC analysis does not require the use of a Massachusetts or EPA certified laboratory.

Table for Alkalinity Analyzed by (check one): PWS or Lab. Columns: ALKALINITY Result (mg/L as CaCO3), Result Qualifier, MDL (mg/L), MRL (mg/L), Dilution Factor, Lab Method, Date Analyzed, Primary Lab Sample ID#, Analytical Lab or PWS Sample ID#.

If using conventional filtration - Raw water alkalinity must be measured at the same time as the raw water TOC sample is collected. Alkalinity analysis does not require the use of a Massachusetts or EPA certified laboratory

Table for LAB SAMPLE COMMENTS. Columns: LAB SAMPLE COMMENTS, Result Qualifier, Result Qualifier Description.

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. Primary Certified Operator or Primary Lab Director Signature: Laurel Stoddard Date: 6/16/2022

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the

DEP REVIEW STATUS (Initial & Date)
[ ] Accepted [ ] Disapproved
Review Comments
[ ] WQTS Data Entered



**CERTIFICATE OF ANALYSIS**

Chris Pelleteri  
Randolph - Holbrook Joint Water Board  
50 North Franklin Street  
Holbrook, MA 02343

Project Name: DOC SUVA  
Work Order Number: A2F0232  
Date Received: 06/06/2022

Sampled By: Kevin Patten  
Location: Raw Water

Date Sampled: 6/6/22 9:30  
Matrix: Surface Water

**RESULTS OF ANALYSIS**

Parameter	Analytical Method	Date Analyzed	Units	Detection Limit	DW MCL/ Recommended Limit #	Result
<i>Test Parameters</i>				LAB-ID#: <b>A2F0232-01</b>		
Dissolved Organic Carbon (Average)	5310B	6/8/2022	mg/L	0.500	—	3.57
SUVA	4153	6/8/2022	/100 ml	N/A	—	0.0146
UV 254	5910B	6/7/2022	abs/cm	0.002	—	0.053

Sampled By: Kevin Patten  
Location: Combined Filter Effluent Grab

Date Sampled: 6/6/22 9:30  
Matrix: Drinking Water

**RESULTS OF ANALYSIS**

Parameter	Analytical Method	Date Analyzed	Units	Detection Limit	DW MCL/ Recommended Limit #	Result
<i>Test Parameters</i>				LAB-ID#: <b>A2F0232-02</b>		
Dissolved Organic Carbon (Average)	5310B	6/8/2022	mg/L	0.500	—	3.76
SUVA	4153	6/8/2022	/100 ml	N/A	—	0.0207
UV 254	5910B	6/7/2022	abs/cm	0.002	—	0.078

NA = Not Applicable  
ND = Not Detected  
< = Less Than  
> = Greater Than

Approved By: *Lanely Stoddard*

**Work Order Narrative:**

No unusual observations noted.

**Subcontracted Analyses:**

ESS Laboratory - Cranston, RI (M-RI002)

Dissolved Organic Carbon 5310B; UVA 254

**REVIEWED**  
By mgargasz at 10:45 am, Jun 15, 2022



**Massachusetts Department of Environmental Protection - Drinking Water Program**  
**TURBIDITY - INDIVIDUAL FILTER MONITORING**  
 For Conventional or Direct Filtered Systems

SWTR  
J

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**I. PWS INFORMATION**

PWS ID#: 4244001 PWS Name: RANDOLPH-HOLBROOK JOINT WATER PWS Town: Randolph  
 Treatment Plant Name: RANDOLPH WATER PLANT Reporting Period: Month: Jun Year: 2022  
 Total # of Filters at Treatment Plant<sup>1</sup>: 8

**II. MONTHLY REPORTING**

Filtered Water Turbidity Measured:  Individual Filter Effluent (IFE) or  Combined Filter Effluent (CFE)<sup>2</sup>  
 Analytical Method:  SM 2130B  EPA 180.1  GLI Method 2 (Great Lakes)

1.	<p><b>Was each filter monitored continuously?</b>          If continuous monitoring equipment is installed and if it functioned continuously throughout the month, the correct answer is "yes". If continuous monitoring equipment is not installed or did not function continuously throughout the month, the correct answer is "no".</p>	No
2.	<p><b>Were measurements recorded every 15 minutes?</b>          If measurements on each filter were performed throughout the month and the measurements were recorded every 15 minutes when water was being filtered, the correct answer is "yes". If there was a failure in any continuous monitor, the correct answer is "no".</p>	No
3.	<p><b>Was there a failure of continuous turbidity monitoring equipment?</b>          If grab samples were obtained due to an equipment failure, the correct answer is "yes". If there was no equipment failure during the month, the correct answer is "no". Systems serving a population of at least 10,000 must conduct grab samples every 4 hours in lieu of continuous monitoring, but for no more than 5 working days following the failure of equipment. Systems serving a population less than 10,000 may use grab samples for up to 14 working days.</p> <p>List filter # and date(s) grab samples collected: _____          Comment: _____</p>	Yes
4.	<p><b>Were individual filter levels greater than 1.0 NTU in two consecutive measurements?</b>          If "yes", systems serving a population of at least 10,000 must produce a filter profile within 7 days of the exceedance or report the obvious reason for the exceedance in the table below. The filter profile is not required to be submitted unless requested, only report that the filter profile has been done. Systems serving a population less than 10,000 shall report exceedance information in the table below.</p> <p>List date(s) a filter profile was produced: _____</p>	Yes <i>SEE NOTES</i>
5.	<p><b>Were individual filter levels greater than 0.5 NTU in two consecutive measurements after the filter has been online for more than 4 hours?</b>          If "yes", systems serving a population of at least 10,000 must produce a filter profile within 7 days of the exceedance or report the obvious reason for the exceedance in the table below. The filter profile is not required to be submitted unless requested, only report that the filter profile has been done. <i>Systems that serve a population less than 10,000 have no required action.</i></p> <p>List date(s) a filter profile was produced: _____</p>	Yes <i>SEE NOTES</i>
6.	<p><b>Were individual filter levels greater than 1.0 NTU in two consecutive measurements in three consecutive months?</b>          If "yes", the system must conduct a self-assessment of the filter within 14 days of the exceedance. The system is to report that a self-assessment has been completed. Systems with 2 filters that monitor CFE in lieu of IFE must do both filters. <i>Refer to 310 CMR 22.20D(6)(b)(2) and 310 CMR 22.20F(7)(d)(2) for required filter self-assessment report content.</i></p> <p>List date(s) a filter self-assessment was triggered: _____          Report(s) completed: _____</p>	No
7.	<p><b>Were individual filter levels greater than 2.0 NTU in two consecutive measurements in two consecutive months?</b>          If "yes", systems serving a population of at least 10,000 must schedule a Comprehensive Performance Evaluation (CPE) within 30 days of the exceedance and submit the report within 90 days. A system serving a population less than 10,000 must schedule a CPE within 60 days of the exceedance and submit the report within 120 days.</p> <p>List date(s) the CPE was triggered: _____</p>	No

For each "Yes" response to question #4, #5, #6, or #7 above: Report the following information in the table below.

Filter #	Turbidity Result (NTU)	Date	Reason for Exceedance (if known) <small>Attach additional documents as necessary for detailed explanations.</small>
# 1	0.68, 1.05	6-13	EQUIPMENT FAILURE, # 2 NOT RECORDING AT ALL, TOOK GRAB SAMPLES (0.09, 0.09) TOOK FILTER OFF LINE. # 1 FILTER RECORDING, CLEANED VIAL, RECORDING INACCURATELY, GRAB SAMPLES (0.10, 0.11) TOOK FILTER OFF LINE. AS OF 7-15-2022, STILL WAITING ON PARTS TO OBTAIN PARTS FOR SERVICE CALL. BOTH FILTERS REMAIN OFF LINE. NO ONE'S ALLOWED IN PIPE GALLEY BY THEMSELVES FOR GRAB SAMPLES ON MY WATCH.
# 2	0.49	6-13	

(B.C)



Massachusetts Department of Environmental Protection - Drinking Water Program  
 TURBIDITY - INDIVIDUAL FILTER MONITORING  
 For Conventional or Direct Filtered Systems

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III. DAILY REPORTING

Day	Filter Number 1		Filter Number 2		Filter Number 3		Filter Number 4	
	<sup>3</sup> Max Day NTU	<sup>4</sup> Max after 4 Hours NTU	<sup>3</sup> Max Day NTU	<sup>4</sup> Max after 4 Hours NTU	<sup>3</sup> Max Day NTU	<sup>4</sup> Max after 4 Hours NTU	<sup>3</sup> Max Day NTU	<sup>4</sup> Max after 4 Hours NTU
1	0.127000	0.127000	0.127000	0.155000	0.029000	0.073000	0.098000	0.134000
2	0.126000	0.182000	0.126000	0.162000	0.033000		0.105000	
3	0.132000		0.132000		0.029000	0.041000	0.101000	0.110000
4	0.131000	0.230000	0.133000	0.149000	0.033000	0.061000	0.106000	0.121000
5	0.154000	0.235000	0.160000	0.200000	0.051000	0.085000	0.129000	0.175000
6	0.174000	0.284000	0.171000	0.252000	0.080000		0.159000	
7	0.184000		0.184000		0.047000	0.077000	0.124000	0.153000
8	0.181000	0.185000	0.184000	0.207000	0.038000	0.045000	0.140000	0.131000
9	0.197000	0.297000	0.199000	0.235000	0.033000	0.041000	0.121000	0.156000
10	0.225000	0.273000	0.228000	0.264000	0.037000		0.129000	
11	0.253000		0.253000		0.054000	0.042000	0.126000	0.149000
12	0.253000	0.260000	0.260000	0.312000	0.034000	0.056000	0.129000	0.140000
13	0.680000	0.398000	0.300000	0.493000	0.035000	0.051000	0.136000	0.146000
14	1.050000	1.330000			0.034000	0.045000	0.141000	0.176000
15	1.940000	1.940000			0.047000	0.089000	0.185000	
16	1.440000	1.440000			0.050000		0.068000	0.145000
17	1.560000				0.045000	0.153000	0.069000	0.167000
18	1.560000	1.560000			0.045000	0.071000	0.072000	0.132000
19	2.100000	2.100000			0.045000	0.151000	0.072000	0.113000
20	2.670000	2.670000	2.670000	2.670000	0.029000	0.040000	0.060000	0.067000
21	2.340000	2.340000	2.340000	2.340000	0.033000		0.063000	
22	2.340000		2.340000		0.028000	0.049000	0.061000	0.070000
23	2.250000	2.250000	2.250000	2.250000	0.029000	0.080000	0.062000	0.085000
24					0.028000	0.082000	0.064000	0.091000
25					0.028000	0.140000	0.067000	0.179000
26					0.034000	0.075000	0.079000	
27					0.040000		0.078000	0.086000
28					0.030000	0.048000	0.073000	0.075000
29					0.031000	0.204000	0.075000	0.076000
30					0.033000	0.055000	0.075000	0.117000
31								

- Systems shall conduct continuous turbidity monitoring of the filter effluent for each individual filter at the filtration facility and record turbidity measurements every 15-minutes. Record the actual turbidity result at the specified interval of time. Do not average turbidity measurements. Individual filter turbidity records must be retained for 3 years and kept on file for MassDEP review.
- Systems serving less than 10,000: If the treatment system has only one or two filters, the supplier may conduct continuous monitoring of the CFE turbidity in lieu of individual filter effluent (IFE) turbidity monitoring. If there are two filters, a continuous turbidity monitor can be installed on the combined filter effluent. If a CFE problem appears, follow-up action must then be completed on both filters.
- Enter the highest daily 15-minute interval turbidity measurement recorded for the filter specified.
- Enter the highest daily 15-minute interval turbidity measurement recorded at the end of the first four hours of continuous filter operation after the filter has been backwashed or otherwise taken offline.

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.

PWS Authorized Signature:

*William Coakley*

Date: 7/6/2022

Title: Chief Plant Operator

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.



Massachusetts Department of Environmental Protection - Drinking Water Program  
 TURBIDITY - INDIVIDUAL FILTER MONITORING  
 For Conventional or Direct Filtered Systems

SWTR  
J

III. DAILY REPORTING

Day	Filter Number 5		Filter Number 6		Filter Number 7		Filter Number 8	
	<sup>3</sup> Max Day NTU	<sup>4</sup> Max after 4 Hours NTU	<sup>3</sup> Max Day NTU	<sup>4</sup> Max after 4 Hours NTU	<sup>3</sup> Max Day NTU	<sup>4</sup> Max after 4 Hours NTU	<sup>3</sup> Max Day NTU	<sup>4</sup> Max after 4 Hours NTU
1	0.039000		0.033000		0.035000	0.093000	0.101000	0.128000
2	0.037000	0.095000	0.027000	0.087000	0.035000	0.133000	0.100000	0.172000
3	0.037000	0.061000	0.028000	0.048000	0.036000	0.065000	0.105000	0.135000
4	0.042000	0.064000	0.039000	0.050000	0.049000		0.118000	
5	0.073000		0.061000		0.047000	0.069000	0.118000	0.133000
6	0.065000	0.090000	0.059000	0.084000	0.067000	0.097000	0.156000	0.171000
7	0.046000	0.068000	0.037000	0.061000	0.077000	0.059000	0.115000	0.145000
8	0.039000	0.064000	0.032000	0.038000	0.045000		0.124000	
9	0.041000		0.034000		0.037000	0.071000	0.111000	0.143000
10	0.037000	0.066000	0.028000	0.049000	0.036000	0.052000	0.112000	0.139000
11	0.035000	0.063000	0.031000	0.045000	0.034000	0.071000	0.116000	0.149000
12	0.040000	0.071000	0.032000	0.047000	0.042000		0.135000	
13	0.135000		0.034000		0.071000	0.049000	0.123000	0.143000
14	0.040000	0.067000	0.033000	0.050000	0.036000	0.059000	0.124000	0.139000
15	0.042000	0.129000	0.031000	0.080000	0.038000	0.094000	0.139000	0.203000
16	0.046000	0.132000	0.038000	0.104000	0.046000	0.159000	0.142000	0.253000
17	0.047000	0.191000	0.038000	0.125000	0.184000	0.105000	0.140000	0.204000
18	0.048000	0.121000	0.038000	0.094000	0.046000	0.163000	0.150000	
19	0.045000	0.179000	0.035000	0.162000	0.051000		0.138000	0.245000
20	0.045000		0.039000		0.041000	0.080000	0.135000	0.386000
21	0.032000	0.062000	0.024000	0.061000	0.061000	0.052000	0.129000	0.173000
22	0.033000	0.066000	0.023000	0.047000	0.030000	0.115000	0.125000	0.164000
23	0.032000	0.132000	0.025000	0.063000	0.033000		0.131000	
24	0.032000	0.078000	0.028000		0.032000	0.123000	0.124000	0.194000
25	0.034000		0.024000	0.067000	0.031000	0.112000	0.125000	0.194000
26	0.033000	0.115000	0.026000	0.061000	0.033000	0.098000	0.129000	0.203000
27	0.038000	0.257000	0.031000	0.034000	0.033000	0.047000	0.129000	0.146000
28	0.033000	0.047000	0.027000	0.028000	0.031000	0.070000	0.131000	0.244000
29	0.040000	0.050000	0.025000	0.114000	0.033000	0.098000	0.138000	
30	0.036000	0.084000	0.029000	0.054000	0.036000		0.136000	0.195000
31								

- Systems shall conduct continuous turbidity monitoring of the filter effluent for each individual filter at the filtration facility and record turbidity measurements every 15-minutes. Record the actual turbidity result at the specified interval of time. Do not average turbidity measurements. Individual filter turbidity records must be retained for 3 years and kept on file for MassDEP review.
- Systems serving less than 10,000: If the treatment system has only one or two filters, the supplier may conduct continuous monitoring of the CFE turbidity in lieu of individual filter effluent (IFE) turbidity monitoring. If there are two filters, a continuous turbidity monitor can be installed on the combined filter effluent. If a CFE problem appears, follow-up action must then be completed on both filters.
- Enter the highest daily 15-minute interval turbidity measurement recorded for the filter specified.
- Enter the highest daily 15-minute interval turbidity measurement recorded at the end of the first four hours of continuous filter operation after the filter has been backwashed or otherwise taken offline.

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.

PWS Authorized Signature: \_\_\_\_\_

Date: 7/6/2022

Title: Chief Plant Operator

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.



Massachusetts Department of Environmental Protection - Drinking Water Program  
**CHLORINE/CHLORAMINES - MONTHLY REPORT**

CI

**I. PWS INFORMATION:**

PWS ID #: **4133000** PWS Name: **TOWN OF HOLBROOK** City/Town: **HOLBROOK** Class: COM  NTNC  TNC

**II. ANALYTICAL INFORMATION:** Refer to your MassDEP Coliform Sampling Plan and/or DBPR monitoring plan to help complete this section.

Type Measured:  Free Chlorine  Total Chlorine  Combined Analytical Method: SM 4500-Cl:  D  E  F  G  H  I ASTM D1263-86

Notes:

DEP APPROVED SAMPLE SITE INFORMATION <sup>1</sup>		CHLORINE RESULT <sup>2</sup> (mg/L)	COLLECTION AND ANALYSIS <sup>3</sup>		COLLECTED AND ANALYZED BY:
DEP Sample Type <sup>4</sup>	DEP Location Code # <sup>1</sup>		DATE	TIME	
RS	001	.85	6/1/2022	07:20	J. Maclane
RS	004	.97	6/1/2022	08:00	J. Maclane
RS	008E	.06	6/1/2022	09:00	J. Maclane
RS	006	.44	6/1/2022	07:45	J. Maclane
RS	001	.85	6/6/2022	07:18	T. Duggan
RS	004	.95	6/6/2022	08:15	T. Duggan
RS	008E	.05	6/6/2022	08:50	T. Duggan
RS	006	.41	6/6/2022	07:50	T. Duggan
RS	001	.78	6/13/2022	06:30	T. Duggan
RS	004	1.02	6/13/2022	07:40	T. Duggan
RS	008E	.03	6/13/2022	08:15	T. Duggan
RS	006	.50	6/13/2022	07:10	T. Duggan
RS	001	.92	6/22/2022	06:35	T. Duggan
RS	004	1.16	6/22/2022	07:35	T. Duggan
RS	008E	.03	6/22/2022	08:00	T. Duggan
RS	006	.24	6/22/2022	07:08	T. Duggan
RS	001	.97	6/27/2022	06:22	T. Duggan
RS	004	1.14	6/27/2022	07:32	T. Duggan
RS	008E	.04	6/27/2022	08:02	T. Duggan
RS	006	.53	6/27/2022	07:01	T. Duggan

<sup>1</sup> DEP Sample Type, Location Code#, and DEP Approved Sample Site Location must correspond to the same information on your DEP Total Coliform Sampling Plan.

<sup>2</sup> SWTR systems: HPC must be collected at distribution sites with zero chlorine residual and results reported on the DEP Bacteriological Monthly Report form and on the appropriate SWTR Form.

<sup>3</sup> Collection and Analysis: Chlorine residual shall be measured in the field (immediately upon collection) at the same time and location in the distribution system as total coliforms are sampled. Record ND values as 0 (zero).

<sup>4</sup> Sample Type: RS-Routine Distribution Sample, RO-Original Site Repeat, UR-Upstream Repeat, DR-Downstream Repeat, AR-Additional Repeat, or SS-Special Sample (as determined by DEP).

<sup>5</sup> All DISTRIBUTION samples taken and analyzed shall be included in determining compliance, even if that number is greater than the minimum required. If you collect repeat coliform samples within the distribution system during the month, you must also measure for a detectable chlorine residual at the repeat sites and include these samples. DO NOT include raw water (RW) or plant tap (PT) chlorine residual samples in your calculations.

**III. COMPLIANCE REPORTING:** Total # of Samples Collected for Month<sup>5</sup>: **70** Average Chlorine Result of All Samples For Month<sup>5</sup> (mg/L): **0.97**

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.

Primary Certified Operator Signature and Date: *William Goherty* 7-6-2022

DEP Review Status:  Accepted  Disapproved  Review Comments:



Massachusetts Department of Environmental Protection - Drinking Water Program  
**CHLORINE/CHLORAMINES - MONTHLY REPORT**

CI

**I. PWS INFORMATION:**

PWS ID #: **4244000** PWS Name: **RANDOLPH WATER DEPARTMENT** City/Town: **RANDOLPH** Class: COM  NTNC  TNC   
 II. ANALYTICAL INFORMATION: Refer to your MassDEP Coliform Sampling Plan and/or DBPR monitoring plan to help complete this section.  
 Type Measured:  Free Chlorine  Total Chlorine  Combined Chlorine Analytical Method: SM 4500-Cl:  D  E  F  G  H  I ASTM D1253-86   
 Notes:

DEP Sample Type <sup>1</sup>	DEP Location Code # <sup>1</sup>	DEP APPROVED SAMPLE SITE INFORMATION <sup>1</sup>		CHLORINE RESULT <sup>2</sup> (mg/L)	COLLECTION AND ANALYSIS <sup>3</sup> :		COLLECTED AND ANALYZED BY:
		DEP Approved SAMPLE LOCATION <sup>1</sup>	DEP Approved SAMPLE LOCATION <sup>1</sup>		DATE	TIME	
RS	003	TOWER HILL SCHOOL - ADAMS STREET		1.23	6/1/22	10:30AM	A. PIERRE-LOUES
RS	004	JFK SCHOOL - 20 HURLEY DRIVE		1.22		9:30AM	
RS	005	MARTIN E. YOUNG - 30 LOU COURTNEY DRIVE		.93		8:00AM	
RS	006	COMFORT INN - 1374 NORTH MAIN STREET		1.69		11:30AM	
RS	008	COMMUNITY MIDDLE SCHOOL - 225 HIGH ST		1.50		11:00AM	
RS	011	MOBIL STATION - 93 MAZZEO DRIVE		.92		9:30AM	
RS	012	7 - 11 FOOD SHOP - 675 NORTH STREET		.89		8:30AM	
RS	014 AE	AXP AUTO - 317 NORTH MAIN ST		1.39		9:00AM	
RS	016	OAK GROVE STANDPIPE		.79		10:00AM	
RS	017	SOUTH MAIN STREET STANDPIPE		.64		8:15AM	

<sup>1</sup> DEP Sample Type, Location Code#, and DEP Approved Sample Site Location must correspond to the same information on your DEP Total Coliform Sampling Plan.  
<sup>2</sup> SWTR systems: HPC must be collected at distribution sites with zero chlorine residual and results reported on the DEP Bacteriological Monthly Report form and on the appropriate SWTR Form.  
<sup>3</sup> Collection and Analysis: Chlorine residual shall be measured in the field (immediately upon collection) at the same time and location in the distribution system as total coliforms are sampled. Record ND values as 0 (zero).  
<sup>4</sup> Sample Type: RS-Routine Distribution Sample, RO-Original Site Repeat, UR-Upstream Repeat, DR-Downstream Repeat, AR-Additional Repeat, or SS-Special Sample (as determined by DEP).  
<sup>5</sup> All DISTRIBUTION samples taken and analyzed shall be included in determining compliance, even if that number is greater than the minimum required. If you collect repeat coliform samples within the distribution system during the month, you must also measure for a detectable chlorine residual at the repeat sites and include these samples. DO NOT include raw water (RW) or plant tap (PT) chlorine residual samples in your calculations.

**III. COMPLIANCE REPORTING:** Total # of Samples Collected for Month<sup>5</sup>: **70** Average Chlorine Result of All Samples For Month<sup>5</sup> (mg/L): **0.94**  
 In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.  
 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.  
 Primary Certified Operator Signature and Date: *William Looney* 7-6-2022  
 DEP Review Status:  Accepted  Disapproved Review Comments:



Massachusetts Department of Environmental Protection - Drinking Water Program  
**CHLORINE/CHLORAMINES - MONTHLY REPORT**

CI

**I. PWS INFORMATION:**

PWS ID #: **4244000** PWS Name: **RANDOLPH WATER DEPARTMENT** City/Town: **RANDOLPH** Class: COM  NTNC  TNC

**II. ANALYTICAL INFORMATION:** Refer to your MassDEP Coliform Sampling Plan and/or DBPR monitoring plan to help complete this section.

Type Measured:  Free Chlorine  Total Chlorine  Combined Chlorine Analytical Method: SM 4500-Cl:  D  E  F  G  H  I ASTM D1253-86

Notes:

DEP Sample Type, <sup>4</sup>	DEP Location Code # <sup>1</sup>	DEP APPROVED SAMPLE SITE INFORMATION <sup>1</sup>		CHLORINE RESULT <sup>2</sup> (mg/L)	COLLECTION AND ANALYSIS <sup>3</sup> :		COLLECTED AND ANALYZED BY:
		DEP Approved SAMPLE LOCATION <sup>1</sup>	DEP Approved SAMPLE LOCATION <sup>1</sup>		DATE	TIME	
RS	003	TOWER HILL SCHOOL - ADAMS STREET		1.22	6/6/22	10:00 AM	A. PIERRE-LOUIS
RS	004	JFK SCHOOL - 20 HURLEY DRIVE		1.17		7:30 AM	
RS	005	MARTIN E. YOUNG - 30 LOU COURTNEY DRIVE		.69		8:00 AM	
RS	006	COMFORT INN - 1374 NORTH MAIN STREET		1.54		11:00 AM	
RS	008	COMMUNITY MIDDLE SCHOOL - 225 HIGH ST		1.27		10:30 AM	
RS	011	MOBIL STATION - 93 MAZZEO DRIVE		.91		9:30 AM	
RS	012	7 - 11 FOOD SHOP - 675 NORTH STREET		.55		8:30 AM	
RS	014 AE	AXP AUTO - 317 NORTH MAIN ST		1.26		9:00 AM	
RS	016	OAK GROVE STANDPIPE		.45		10:15 AM	
RS	017	SOUTH MAIN STREET STANDPIPE		.62		8:15 AM	

<sup>1</sup> DEP Sample Type, Location Code#, and DEP Approved Sample Site Location must correspond to the same information on your DEP Total Coliform Sampling Plan.  
<sup>2</sup> SWTR systems: HPC must be collected at distribution sites with zero chlorine residual and results reported on the DEP Bacteriological Monthly Report form and on the appropriate SWTR Form.  
<sup>3</sup> Collection and Analysis: Chlorine residual shall be measured in the field (immediately upon collection) at the same time and location in the distribution system as total coliforms are sampled. Record ND values as 0 (zero).  
<sup>4</sup> Sample Type: RS-Routine Distribution Sample, RO-Original Site Repeat, UR-Upstream Repeat, DR-Downstream Repeat, AR-Additional Repeat, or SS-Special Sample (as determined by DEP).  
<sup>5</sup> All DISTRIBUTION samples taken and analyzed shall be included in determining compliance, even if that number is greater than the minimum required. If you collect repeat coliform samples within the distribution system during the month, you must also measure for a detectable chlorine residual at the repeat sites and include these samples. DO NOT include raw water (RW) or plant tap (PT) chlorine residual samples in your calculations.

**III. COMPLIANCE REPORTING:** Total # of Samples Collected for Month<sup>5</sup>: **70** Average Chlorine Result of All Samples For Month<sup>5</sup> (mg/L): **0.94**

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eBEP) deadline is the same as above.

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.

Primary Certified Operator Signature and Date: *William Corbett* 7-6-2022

DEP Review Status:  Accepted  Disapproved  Review Comments:



**Massachusetts Department of Environmental Protection - Drinking Water Program  
CHLORINE/CHLORAMINES - MONTHLY REPORT**

CI

**I. PWS INFORMATION:**

PWS ID #: **4244000** PWS Name: **RANDOLPH WATER DEPARTMENT** City/Town: **RANDOLPH** Class: COM  NTNC  TNC

**II. ANALYTICAL INFORMATION:** Refer to your MassDEP Coliform Sampling Plan and/or DBPR monitoring plan to help complete this section.

Type Measured:  Free Chlorine  Total Chlorine  Combined Chlorine Analytical Method: SM 4500-Cl:  D  E  F  G  H  I ASTM D1253-86

Notes:

DEP Sample Type <sup>1</sup>	DEP Location Code # <sup>1</sup>	DEP APPROVED SAMPLE SITE INFORMATION <sup>1</sup>		CHLORINE RESULT <sup>2</sup> (mg/L)	COLLECTION AND ANALYSIS <sup>3</sup> :		COLLECTED AND ANALYZED BY:
		DEP Approved SAMPLE LOCATION <sup>1</sup>	DEP Approved SAMPLE LOCATION <sup>1</sup>		DATE	TIME	
RS	003	TOWER HILL SCHOOL - ADAMS STREET		1.03	6-12-22	9:55 AM	JASON PETERSON
RS	004	JFK SCHOOL - 20 HURLEY DRIVE		1.15		7:30 AM	
RS	005	MARTIN E. YOUNG - 30 LOU COURTNEY DRIVE		0.80		8:20 AM	
RS	006	COMFORT INN - 1374 NORTH MAIN STREET		1.70		10:40 AM	
RS	008	COMMUNITY MIDDLE SCHOOL - 225 HIGH ST		1.10		10:15 AM	
RS	011	MOBIL STATION - 93 MAZZEO DRIVE		0.81		9:20 AM	
RS	012	7 - 11 FOOD SHOP - 675 NORTH STREET		0.36		8:00 AM	
RS	014 AE	AXP AUTO - 317 NORTH MAIN ST		1.27		8:50 AM	
RS	016	OAK GROVE STANDPIPE		0.66		9:40 AM	
RS	017	SOUTH MAIN STREET STANDPIPE		0.56		8:30 AM	

<sup>1</sup> DEP Sample Type, Location Code#, and DEP Approved Sample Site Location must correspond to the same information on your DEP Total Coliform Sampling Plan.  
<sup>2</sup> SWTR systems: HPC must be collected at distribution sites with zero chlorine residual and results reported on the DEP Bacteriological Monthly Report form and on the appropriate SWTR Form.  
<sup>3</sup> Collection and Analysis: Chlorine residual shall be measured in the field (immediately upon collection) at the same time and location in the distribution system as total coliforms are sampled. Record ND values as 0 (zero).  
<sup>4</sup> Sample Type: RS-Routine Distribution Sample, RO-Original Site Repeat, UR-Upstream Repeat, DR-Downstream Repeat, AR-Additional Repeat, or SS-Special Sample (as determined by DEP).  
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**III. COMPLIANCE REPORTING:** Total # of Samples Collected for Month<sup>5</sup>: **70** Average Chlorine Result of All Samples For Month<sup>5</sup> (mg/L): **0.94**

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

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.

Primary Certified Operator Signature and Date: *William Corbett* 7-6-2022

DEP Review Status:  Accepted  Disapproved  Review Comments:



Massachusetts Department of Environmental Protection - Drinking Water Program  
**CHLORINE/CHLORAMINES - MONTHLY REPORT**

CI

**I. PWS INFORMATION:**

PWS ID #: **4244000** PWS Name: **RANDOLPH WATER DEPARTMENT** City/Town: **RANDOLPH** Class: COM  NTNC  TNC

**II. ANALYTICAL INFORMATION:** Refer to your MassDEP Coliform Sampling Plan and/or DBPR monitoring plan to help complete this section.

Type Measured:  Free Chlorine  Total Chlorine  Combined Chlorine Analytical Method: SM 4500-Cl:  D  E  F  G  H  I ASTM D1253-86

Notes:

DEP Sample Type <sup>1,4</sup>	DEP Location Code # <sup>1</sup>	DEP APPROVED SAMPLE SITE INFORMATION <sup>1</sup>		CHLORINE RESULT <sup>2</sup> (mg/L)	COLLECTION AND ANALYSIS <sup>3</sup> :		COLLECTED AND ANALYZED BY:
		DEP Approved SAMPLE LOCATION <sup>1</sup>	DATE		TIME		
RS	003	TOWER HILL SCHOOL - ADAMS STREET	6/22/22	1.58	10:00 AM		A. PIERRE - LOUIS
RS	004	JFK SCHOOL - 20 HURLEY DRIVE		1.36	7:30 AM		
RS	005	MARTIN E. YOUNG - 30 LOU COURTNEY DRIVE		.93	8:00 AM		
RS	006	COMFORT INN - 1374 NORTH MAIN STREET		1.87	11:00 AM		
RS	008	COMMUNITY MIDDLE SCHOOL - 225 HIGH ST		1.63	10:30 AM		
RS	011	MOBIL STATION - 93 MAZZEO DRIVE		1.61	11:30 AM		
RS	012	7 - 11 FOOD SHOP - 675 NORTH STREET		1.58	8:30 AM		
RS	014 AE	AXP AUTO - 317 NORTH MAIN ST		1.62	9:00 AM		
RS	016	OAK GROVE STANDPIPE		.52	9:45 AM		
RS	017	SOUTH MAIN STREET STANDPIPE		.67	8:20 AM		

<sup>1</sup> DEP Sample Type, Location Code#, and DEP Approved Sample Site Location must correspond to the same information on your DEP Total Coliform Sampling Plan.  
<sup>2</sup> SWTR systems: HPC must be collected at distribution sites with zero chlorine residual and results reported on the DEP Bacteriological Monthly Report form and on the appropriate SWTR Form.  
<sup>3</sup> Collection and Analysis: Chlorine residual shall be measured in the field (immediately upon collection) at the same time and location in the distribution system as total coliforms are sampled. Record ND values as 0 (zero).  
<sup>4</sup> Sample Type: RS-Routine Distribution Sample, RO-Original Site Repeat, UR-Upstream Repeat, DR-Downstream Repeat, AR-Additional Repeat, or SS-Special Sample (as determined by DEP).  
<sup>5</sup> All DISTRIBUTION samples taken and analyzed shall be included in determining compliance, even if that number is greater than the minimum required. If you collect repeat coliform samples within the distribution system during the month, you must also measure for a detectable chlorine residual at the repeat sites and include these samples. DO NOT include raw water (RW) or plant tap (PT) chlorine residual samples in your calculations.

**III. COMPLIANCE REPORTING:** Total # of Samples Collected for Month<sup>5</sup>: **70** Average Chlorine Result of All Samples For Month<sup>5</sup> (mg/L): **0.94**

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

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.

Primary Certified Operator Signature and Date: *[Signature]* 7-6-2022

DEP Review Status:  Accepted  Disapproved  Review Comments:



Massachusetts Department of Environmental Protection - Drinking Water Program  
**CHLORINE/CHLORAMINES - MONTHLY REPORT**

CI

I. PWS INFORMATION:

PWS ID #: **4244000** PWS Name: **RANDOLPH WATER DEPARTMENT** City/Town: **RANDOLPH** Class: COM  NTNC  TNC   
 II. ANALYTICAL INFORMATION: Refer to your MassDEP Coliform Sampling Plan and/or DBPR monitoring plan to help complete this section.  
 Type Measured:  Free Chlorine  Total Chlorine  Combined Chlorine Analytical Method: SM 4500-Cl:  D  E  F  G  H  I ASTM D1253-86

Notes:

DEP Sample Type <sup>1,4</sup>	DEP Location Code # <sup>1</sup>	DEP APPROVED SAMPLE SITE INFORMATION <sup>1</sup>		CHLORINE RESULT <sup>2</sup> (mg/L)	COLLECTION AND ANALYSIS <sup>3</sup> :		COLLECTED AND ANALYZED BY:
		DEP Approved SAMPLE LOCATION <sup>1</sup>	DATE		TIME		
RS	003	TOWER HILL SCHOOL - ADAMS STREET	6/27/22	1.36	10:00 AM		A. PIERRE - LOUIS
RS	004	JFK SCHOOL - 20 HURLEY DRIVE		1.24	7:30 AM		
RS	005	MARTIN E. YOUNG - 30 LOU COURTNEY DRIVE		.70	8:00 AM		
RS	006	COMFORT INN - 1374 NORTH MAIN STREET		1.79	11:00 AM		
RS	008	COMMUNITY MIDDLE SCHOOL - 225 HIGH ST		1.46	10:30 AM		
RS	011	MOBIL STATION - 93 MAZZEO DRIVE		1.04	9:30 AM		
RS	012	7 - 11 FOOD SHOP - 675 NORTH STREET		.55	9:00 AM		
RS	014 AE	AXP AUTO - 317 NORTH MAIN ST		1.37	8:30 AM		
RS	016	OAK GROVE STANDPIPE		.79	8:45 AM		
RS	017	SOUTH MAIN STREET STANDPIPE		.71	8:15 AM		

<sup>1</sup> DEP Sample Type, Location Code#, and DEP Approved Sample Site Location must correspond to the same information on your DEP Total Coliform Sampling Plan.  
<sup>2</sup> SWTR systems: HPC must be collected at distribution sites with zero chlorine residual and results reported on the DEP Bacteriological Monthly Report form and on the appropriate SWTR Form.  
<sup>3</sup> Collection and Analysis: Chlorine residual shall be measured in the field (immediately upon collection) at the same time and location in the distribution system as total coliforms are sampled. Record ND values as 0 (zero).  
<sup>4</sup> Sample Type: RS-Routine Distribution Sample, RO-Original Site Repeat, UR-Upstream Repeat, DR-Downstream Repeat, AR-Additional Repeat, or SS-Special Sample (as determined by DEP).  
<sup>5</sup> All DISTRIBUTION samples taken and analyzed shall be included in determining compliance, even if that number is greater than the minimum required. If you collect repeat coliform samples within the distribution system during the month, you must also measure for a detectable chlorine residual at the repeat sites and include these samples. DO NOT include raw water (RW) or plant tap (PT) chlorine residual samples in your calculations.

III. COMPLIANCE REPORTING: Total # of Samples Collected for Month<sup>5</sup>: **70** Average Chlorine Result of All Samples For Month<sup>5</sup> (mg/L): **0.94**  
 In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.  
 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.  
 Primary Certified Operator Signature and Date: *William Corbett* 7-6-2022  
 DEP Review Status:  Accepted  Disapproved Review Comments:



Massachusetts Department of Environmental Protection - Drinking Water Program  
**Disinfection Byproducts Rule Compliance Report** - DBPR

I. PWS INFORMATION: Please refer to your DBPR Monitoring Plan to help complete this form.

PWS ID #: 4244001 City/Town: RANDOLPH  
 PWS Name: RANDOLPH-HOLBROOK JOINT WATER PWS Class: COM  NTNC  TNC   
 Monitoring Period (YEAR): 2022 Monitoring Period (QUARTER):  Q1 (Jan-Mar)  Q2 (Apr-Jun)  Q3 (Jul-Sep)  Q4 (Oct-Dec)

II. FOR SYSTEMS USING CHLORINATION

**A. Trihalomethanes (TTHM)**  
 Total Number of TTHM Samples: \_\_\_\_\_ Quarterly Average: \_\_\_\_\_ µg/L  
 Was the Running Annual Average MCL (80 µg/L) exceeded? Yes  No  Running Annual Average: \_\_\_\_\_ µg/L

**B. Haloacetic Acids (HAA5)**  
 Total Number of HAA5 Samples: \_\_\_\_\_ Quarterly Average: \_\_\_\_\_ µg/L  
 Was the Running Annual Average MCL (60 µg/L) exceeded? Yes  No  Running Annual Average: \_\_\_\_\_ µg/L

**C. Chlorine/Chloramines**  

Total Number of Samples:	Month 1:	<u>66</u>	APR MAY JUNE Monthly Averages: (report all 3 months per quarter)	<u>1.27</u> mg/L	Quarterly Average:	<u>1.13</u> mg/L
	Month 2:	<u>66</u>		<u>1.17</u> mg/L		
	Month 3:	<u>70</u>		<u>0.94</u> mg/L		
Was the Running Annual Average MRDL (4.0 mg/L) exceeded? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Running Annual Average: <u>1.21</u> mg/L		

**D. Total Organic Carbon - raw (TOC)** (Required for SW or GWUDI systems >499 seeking or approved to reduce THM/HAA5 monitoring.) Plant Name: \_\_\_\_\_  
 (Attach additional sheet(s) to report more than 1 plant)

Total Number of Samples:	Month 1:	_____	Monthly Averages: (report all 3 months per quarter)	_____ mg/L	Quarterly Average:	_____ mg/L
	Month 2:	_____		_____ mg/L		
	Month 3:	_____		_____ mg/L		
Was the (4.0 mg/L) threshold exceeded? Yes <input type="checkbox"/> No <input type="checkbox"/>				Running Annual Average: _____ mg/L		

III. FOR SYSTEMS USING OZONATION (Attach additional sheet(s) to report more than 1 plant)

**E. Bromate (treated)** Plant Name: \_\_\_\_\_  

Total Number of Samples:	Month 1:	_____	Monthly Averages: (report all 3 months per quarter)	_____ mg/L	Quarterly Average:	_____ mg/L
	Month 2:	_____		_____ mg/L		
	Month 3:	_____		_____ mg/L		
Was the Running Annual Average MCL (0.010 ug/l) exceeded? Yes <input type="checkbox"/> No <input type="checkbox"/>				Running Annual Average: _____ mg/L		

**F. Bromide (raw)** Plant Name: \_\_\_\_\_  
 Required for systems seeking or approved to reduce Bromate monitoring

Total Number of Samples:	Month 1:	_____	Monthly Averages: (report all 3 months per quarter)	_____ mg/L	Quarterly Average:	_____ mg/L
	Month 2:	_____		_____ mg/L		
	Month 3:	_____		_____ mg/L		
Was the (0.05 mg/l) threshold exceeded? Yes <input type="checkbox"/> No <input type="checkbox"/>				Running Annual Average: _____ mg/L		

IV. FOR SYSTEMS USING CHLORINE DIOXIDE (Report compliance information on your Chlorine Dioxide (Daily Samples) Report)

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.

Primary Certified Operator Signature: William Cooley Date: 7-6-2022

**DEFINITIONS**

MONTHLY AVERAGE:	Monthly average = average of all results within the current month.
QUARTERLY AVERAGE:	Quarterly Average = average result of all locations sampled during monitoring period
RUNNING ANNUAL AVERAGE:	Running Annual Average = Average of 4 quarters. Average of this quarter and three prior consecutive quarterly averages (for systems on quarterly monitoring)
TOTAL NUMBER OF SAMPLES:	Total number of samples collected during the monitoring period.

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

Submit one copy of this form each quarter to your DEP regional office (by Jan 10<sup>th</sup>, April 10<sup>th</sup>, July 10<sup>th</sup>, and Oct 10<sup>th</sup> of each year)

DEP REVIEW STATUS (Initial & Date)	Review Comments
<input type="checkbox"/> Accepted _____ <input type="checkbox"/> Disapproved _____	