



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection – Drinking Water Program
Coliform Bacteria Level 1 Assessment

RTCR-1

PWS ID#: _____ **PWS Name:** _____ **City/Town:** _____

System Type: COM NTNC TNC **Compliance Period:** Month _____ Year _____

Assessment Trigger Date: _____ **Date Assessment Completed:** _____

NOTE: Form to be completed based on data and documents available to the PWS and returned to MassDEP as soon as practical but no later than 30 days after the collection date of the sample that triggered the assessment

Section A: Review and evaluate all the listed elements typically found in a PWS. Check any potential causes of contamination identified or check “NA” if the section is not applicable to the PWS. **Each section requires a response.**

1. GENERAL **Issue identified:** YES NO

Have any of the following occurred prior to collecting bacteria samples?

- | | |
|--|---|
| <input type="checkbox"/> low/inadequate disinfectant residual | <input type="checkbox"/> pressure loss/inadequate pressure (<20 psi)* |
| <input type="checkbox"/> signs of vandalism/forced entry† | <input type="checkbox"/> visible indicators of unsanitary conditions |
| <input type="checkbox"/> water quality parameters out of range | <input type="checkbox"/> power loss |
| <input type="checkbox"/> system does not provide disinfection | |
| <input type="checkbox"/> other: | |

2. OPERATIONAL CHANGES **Issue identified:** YES NO

- | | | |
|---|---|-------------------------------------|
| <input type="checkbox"/> source added/removed | <input type="checkbox"/> operation/maintenance activities | <input type="checkbox"/> power loss |
| <input type="checkbox"/> other: | | |

3. SAMPLING SITES **Issue identified:** YES NO

- | | | |
|---|--|--|
| <input type="checkbox"/> unclean or unsuitable sample tap | <input type="checkbox"/> change in conditions at sample site | <input type="checkbox"/> hot water intrusion |
| <input type="checkbox"/> unapproved/alternate site | <input type="checkbox"/> POE/POU treatment identified | |
| <input type="checkbox"/> other: | | |

4. SAMPLING PROTOCOL **Issue identified:** YES NO

- | | | |
|---|---|---|
| <input type="checkbox"/> improper sample container | <input type="checkbox"/> sampler error | <input type="checkbox"/> auto sensing faucet/swivel-type faucet |
| <input type="checkbox"/> aerator was not removed | <input type="checkbox"/> inadequate tap flushing | <input type="checkbox"/> improper hold time/storage temperature |
| <input type="checkbox"/> lab indicates possible error | <input type="checkbox"/> change in sample collector | |
| <input type="checkbox"/> other: | | |

5. TREATMENT PROCESS **Issue identified:** YES NO NA

- | | | |
|---|--|---|
| <input type="checkbox"/> O & M procedures not followed | <input type="checkbox"/> unprotected by-pass in treatment process* | <input type="checkbox"/> inadequate disinfection |
| <input type="checkbox"/> turbidity measurements out of range | <input type="checkbox"/> filter or media contamination | <input type="checkbox"/> change in flow rates |
| <input type="checkbox"/> treatment added or changed | <input type="checkbox"/> interruption in treatment/power loss | <input type="checkbox"/> recent installation/repair |
| <input type="checkbox"/> phosphate barrels Cl ₂ less than 10 mg/L free chlorine residual (not applicable when the phosphate contains zinc) | | |
| <input type="checkbox"/> other: | | |

6. DISTRIBUTION SYSTEM **Issue identified:** YES NO NA

- | | | |
|---|--|--|
| <input type="checkbox"/> low flow/dead end | <input type="checkbox"/> main breaks | <input type="checkbox"/> operation of isolation valves resulting in breakage |
| <input type="checkbox"/> standing water/debris in valve vault | <input type="checkbox"/> leaks | <input type="checkbox"/> flushing of fire hydrants or blow-offs |
| <input type="checkbox"/> low disinfection residuals | <input type="checkbox"/> illegal use of hydrants | <input type="checkbox"/> improper operation of air-relief/air-vacuum valves |
| <input type="checkbox"/> known bio-film accumulation | <input type="checkbox"/> improper surge control | <input type="checkbox"/> installation of new mains or construction activity |
| <input type="checkbox"/> unprotected cross connection* | <input type="checkbox"/> booster pump failure | <input type="checkbox"/> fire fighting event/flushing/sheared hydrant |
| <input type="checkbox"/> improper operation of gate valves | | |
| <input type="checkbox"/> other: | | |

7. STORAGE TANKSIssue identified: YES NO NA

- | | |
|--|--|
| <input type="checkbox"/> recent work on tank | <input type="checkbox"/> evidence of contamination from animals |
| <input type="checkbox"/> low disinfectant residual | <input type="checkbox"/> presence of dead animals/insects |
| <input type="checkbox"/> lack of maintenance, cleaning, or inspection | <input type="checkbox"/> unauthorized access/signs of vandalism [†] |
| <input type="checkbox"/> standing water/debris in control vault | <input type="checkbox"/> hatch not sealed |
| <input type="checkbox"/> incorrect operation of level control valves/altitude valves/related appurtenances | <input type="checkbox"/> Tank(s) out of service |
| <input type="checkbox"/> tank design issues (overflow, vent, hatch, screen size, etc.) | <input type="checkbox"/> water age/inadequate turnover |
| <input type="checkbox"/> deterioration, rust, holes, or other breaches in vent, overflow pipe, access hatch, screens, ladders, etc.* | <input type="checkbox"/> unaddressed inspection findings |
| <input type="checkbox"/> other: | |

8. SOURCESIssue identified: YES NO NA

- | | |
|---|--|
| <input type="checkbox"/> damaged pitless adaptor | <input type="checkbox"/> well pit with standing water or evidence of flooding* |
| <input type="checkbox"/> flooding/run-off inundation* | <input type="checkbox"/> improper development/poorly maintained spring box |
| <input type="checkbox"/> missing/damaged grout seal | <input type="checkbox"/> defective/damaged well cap/well seal* |
| <input type="checkbox"/> recent work on pump | <input type="checkbox"/> damaged/unscreened vent* |
| <input type="checkbox"/> ground slopes towards well | <input type="checkbox"/> activities in Zone I and/or Zone II |
| <input type="checkbox"/> recent heavy rainfall/snowmelt | <input type="checkbox"/> unprotected opening in pump/pump assembly |
| <input type="checkbox"/> other: | |

* Indicates Groundwater Rule Significant Deficiency

[†] 310 CMR 22.15(9)(b)1.d. requires the discovery of malicious intent or an act of vandalism be reported to MassDEP within two hours.

Section B - Issue Description Use this space to describe the event and provide additional information on potential causes of contamination identified during the assessment. Include corresponding dates with your findings (attach additional pages if needed). Include dates of sample collection, disinfection, flushing, photographs showing system components, etc. with your findings.

Check if PWS did not find any causes for the contamination.

Section C - Corrective Action Taken or to be Taken Use this space to describe corrective actions completed, a proposed timetable for any corrective actions not already completed, and any interim measures the PWS plans to implement prior to the completion of any corrective actions, including specific milestone dates for doing so (attach additional pages if needed). Include photographs showing system components. Failure to meet milestone dates is subject to enforcement and public notice provisions.

