

## WATER SUPPLIER RESPONSE AND CERTIFICATION FORM

Within 30 days of receipt of this inspection report, you must complete and submit this form if your system has Table A – Violations and/or Table B – Deficiencies. Attach a copy of the completed table(s) listing the date that the corrective action was/or will be taken and all other applicable documentation (310 CMR 22.04(12)). Note that items with future dates require you to submit documentation of work at the time of completion. If a specific form of documentation is not identified, an updated Summary of Findings Table, letter, or email addressed to the inspector that the deficiency has been corrected may be used.

The following corrective actions listed in the Summary of Findings Table A and/or Table B have been taken by the Public Water System. (Please check all that apply).

- ☐ My system has taken ALL of the corrective actions listed within the timeframes specified in the Summary of Findings.
- I have listed the completion date for each item within the table(s).
  - I have attached copies of supporting documentation as required.
- ☒ My system has taken SOME BUT NOT ALL of the corrective actions listed within the timeframes specified in the Summary of Findings.
- I have listed the actual or anticipated compliance date for each item within the table(s).
  - I have attached copies of supporting documentation as required.
  - I have attached a revised corrective action schedule establishing timelines for my system to address outstanding items and I will submit a written progress report each quarter (every 3 months) until all items have been addressed. I understand that my system may be subject to further enforcement.
- ☐ My system is UNABLE to comply with some or all of the corrective actions within the timeframes specified in the Summary of Findings. I understand that my system may be subject to further enforcement.
- An explanation is attached.

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  
Water Commissioner, Owner, Owner Representative or Other Responsible Party:

Signature: Paul Rafuse

Date: 7/11/17

Print Name: Paul Rafuse

Title: Superintendent

*Return this form, a copy the Summary of Findings and all attachments to:*

MassDEP  
BWR Drinking Water Program  
8 New Bond Street  
Worcester, MA 01606  
Attention: Emily Babbitt de Nicasio

## SUMMARY OF FINDINGS

### NOTICE OF NONCOMPLIANCE ENF# 00002447

#### TABLE A – VIOLATIONS

Please note that this document is also a Notice of Noncompliance (NON) pursuant to M.G.L. c.21A, §16 and 310 C.M.R. 5.00. Within 30 days of receipt of the NON and Summary of Sanitary Survey, you must fill-in the corrected date(s) and submit this form to MassDEP and the attached WATER SUPPLIER RESPONSE AND CERTIFICATION FORM, including all applicable attachments.

	Citation	TABLE A - CORRECTIVE ACTION	GWR Significant Deficiency†	Action Due Date*	Completion Date**
1.	310 CMR 22.22(2), 22.22(3), & 22.22(9)	Implement TWD's Cross-Connection Control Program (CCCP) and cross-connection policies as described in Section 19, <i>Cross Connection Control Program Rules &amp; Regulations</i> , of the Townsend Water Department Rules, Regulations and Rates to ensure that 18 Highland Street (Evan's on the Common) is surveyed for cross-connections. Submit documentation to MassDEP that the facility was surveyed and properly protected or that other appropriate measures were taken in accordance with TWD's CCCP. (XC-5)	N	30 SEP 2017	See Attached
2.	310 CMR 22.22(3)(d)	Develop a master cross-connection control device list that includes the facility name and address; facility type; degree of hazard; device type; make, model number, and size; and testing/repair history for all cross connection control devices within the PWS. Submit certification to MassDEP that TWD has developed its own master cross-connection control device list. (XC-10)	N	30 SEP 2017	See Attached
3.	310 CMR 22.22(2), 22.22(3)(h), & 22.22(13)(e)	Implement TWD's CCCP and cross-connection policies as described in Section 19, <i>Cross Connection Control Program Rules &amp; Regulations</i> , of the Townsend Water Department Rules, Regulations and Rates to ensure that all RPBP's, DCVAs, and PVBs that failed in 2016 are repaired and retested. Submit certification to MassDEP that all devices were repaired and retested or that other appropriate measures were taken in accordance with TWD's CCCP. (XC-11)	N	30 SEP 2017	See Attached
4.	310 CMR 22.22(3)(f)	Establish and maintain a cross connection education component for residential users that is distributed annually, e.g., through the annual Consumer Confidence Report (CCR). Submit a copy to MassDEP. (XC-14)	N	30 JUN 2017	See Attached
5.	310 CMR 22.04(14) & Guidelines Chapter 6	Develop a written alarm and interlock testing program and submit to MassDEP. (Attachment 1)	N	30 SEP 2017	See Attached

**TABLE B – DEFICIENCIES\*\*\***

MassDEP has made note of several items that do not reflect good water system practice; and, if left unresolved, could lead to problems that are more serious and may be elevated to violations in subsequent surveys. Due to the item's importance an action due date has been established.

	Citation	TABLE B - CORRECTIVE ACTION .	GWR Significant Deficiency	Action Due Date*	Completion Date**
1.	310 CMR 22.04(13) & Guidelines Chapter 12	Update the Emergency Response Plan (ERP) in accordance with 310 CMR 22.04(13) and Chapter 12 of the <i>Guidelines for Public Water Systems</i> . Submit a revised ERP checklist to MassDEP. (R-4)	N	30 SEP 2017	See Attached
2.	310 CMR 22.21(2)(a)8	Determine the discharge location and Underground Injection Control permit status for all PWS pump station floor drains. (S-4, S-5, and B-12)	N	30 SEP 2017	See Attached
3.	310 CMR 22.04(14) & Guidelines Chapter 6	Submit to MassDEP a schedule for installing/programming the required interlocks such that all chemical feed pumps are electrically locked out (de-energized) when the well pump is off, no flow is detected by the flow meter/flow switch, or the pH analyzer is in alarm. (T-10)	N	30 SEP 2017	See Attached
4.	310 CMR 22.04(7) & Guidelines Chapter 8	Begin documenting monthly tank inspections on the <i>PWS Monthly Storage Tank Inspection Log</i> . (AT-6)	N	30 SEP 2017	See Attached
5.	310 CMR 22.04(7) & Guidelines Chapter 8	Complete the remaining recommendations from the 2012 Highland Street Tank inspection report (i.e., blast/recoat the internal steel components of the overflow pipe), and have the tank cleaned and re-inspected. Submit the 2017 inspection report to MassDEP with a timeline for implementing any identified recommendations. (AT-7)	N	30 NOV 2017	See Attached
6.	310 CMR 22.04(7) & Guidelines Chapter 8	Complete the remaining recommendations from the 2014 Fitchburg Road Tank inspection report (i.e., seal the roof-shell joint), and have the tank cleaned and re-inspected. Also ensure that the new overflow is appropriately screened and discharges downward between 12 and 24 inches above grade. Submit the 2017 inspection report to MassDEP with a timeline for implementing any identified recommendations. (AT-7)	N	30 NOV 2017	See Attached
7.	310 CMR 22.19(6)	Submit to MassDEP a revised distribution map that reflects water main extensions and changes to RS 009, UR 9a, and DR 9b. In addition to coliform sampling locations, the plan must include all sources, pump stations, storage tanks, water lines (color-coded by size/material), pressure zones, and hydrants/valves. (D-3 & TC-6)	N	30 NOV 2017	See Attached
8.	310 CMR 22.19(1)	Submit a corrective action plan to MassDEP that addresses the potential for low/negative pressures in the West Elm/Jonathan Lane loop when the Main Street Pump Station is offline. (D-6)	N	30 SEP 2017	See Attached

	Citation	TABLE B - CORRECTIVE ACTION	GWR Significant Deficiency	Action Due Date*	Completion Date**
9.	310 CMR 22.04(7) & Guidelines Chapter 9	Begin implementing TWD's 2005 unidirectional flushing program, which provides for annual system-wide flushing. Submit certification to MassDEP that TWD is flushing the entire distribution system and exercising all gate valves each year. (D-8 & D-12)	N	31 DEC 2017	See Attached
10.	310 CMR 22.04(7) & Guidelines Chapter 9	Develop and implement a hydrant maintenance program in accordance with ANSI/AWWA G200-09. Submit certification to MassDEP that a program was developed and is being implemented. (D-16)	N	31 DEC 2017	See Attached
11.	310 CMR 22.22(3)	Submit to MassDEP a <i>Request for Public Water System Authorization to Delegate, Sub-delegate, Contract, or Sub-contract Cross Connection Surveyors Responsibilities</i> . (XC-4)	N	30 SEP 2017	See Attached
12.	310 CMR 22.16A(22)	Begin reporting sodium concentrations in the unregulated contaminants table of the annual CCR. (WQ-3)	N	30 JUN 2017	See Attached

\* If the time required to complete the action is greater than 3 months, submit quarterly progress reports and anticipated completion date.

\*\* If projected completion dates are included in the table, documentation must be submitted to the Department upon completion of all corrective actions.

\*\*\* MassDEP reserves the right to exercise its Order authority under M.G.L. Chapter 111, Section 160, or to take other appropriate action as permitted by law, in order to prevent the pollution and to secure the sanitary protection of the water supply and to ensure the delivery of a fit and pure water supply to all consumers, including without limitation if sufficient progress to meeting a recommended deadline is not achieved.

### TABLE C - RECOMMENDATIONS

MassDEP has included a list of recommendations you are encouraged to evaluate and follow in order to improve your system's ability to provide safe and pure drinking water. Failure to act on these recommendations may be elevated to deficiencies in subsequent surveys.

	Citation/Reference (if applicable)	TABLE C - RECOMMENDATIONS
1.	310 CMR 22.04(7) & Guidelines Chapter 7	MassDEP recommends that the Water Supplier install a hard wired back-up generator at the TWD main office (540 Main Street) where the principal SCADA equipment is located. MassDEP also recommends that hard-wired back-up generators or prepared electrical connections be installed at the Main Street Pump Station and the Cross Street Pump Station. (OM-7, OM-9)
2.		MassDEP recommends that the Water Supplier install carbon monoxide detectors in all pump houses that have an indoor emergency generator, auxiliary pump, or auxiliary pump motor. (OM-7)
3.	310 CMR 22.04(7) & Guidelines Chapter 7	MassDEP recommends that the Water Supplier test all back-up generators and auxiliary pumps/motors under load at least twice per year. (OM-8)
4.	310 CMR 22.04(7) & Guidelines Chapter 11	MassDEP recommends that the Water Supplier create an electronic system for logging customer complaints that captures the date, name, address, and nature of the complaint to readily identify trends and common issues. (R-8)



**TOWNSEND WATER DEPARTMENT**  
540 Main Street West Townsend, Massachusetts 01474

Nathan Mattila, Chairman

Lance Lewand, Vice Chairman

Michael MacEachern, Clerk

Paul L. Rafuse,  
Water Superintendent

(978) 597-2212  
Fax (978) 597-5611

July 12, 2017

MassDEP  
BWR Drinking Water Program  
8 New Bond Street  
Worcester, MA 01606  
Attention: Emily Babbitt de Nicasio

Re: Sanitary Survey Water Supplier Response And Certification Form For Corrective Action

Dear Mrs. Babbitt de Nicasio,

The following is a list of corrective actions that we have taken or plan to take that correspond to Table A-Violations and Table B-Deficiencies of the Townsend Water Departments Sanitary Survey Report dated June 9, 2017.

**Table A - VIOLATIONS -**

1. We have contacted our Cross Connection Surveyor/Device testing contractor and the Water Department plans to have the property surveyed with a recommendation for the proper backflow device submitted by the action due date. However, due to the size of the fire sprinkler system and the need for possible retrofitting and, the availability of the backflow device the actual installation of the device may not be completed by the due date.
2. The Water Department is in the process of transferring the data provided by our contractor to create a master cross connection control device list with all the fields required in an excel spreadsheet format so, information can be more readily available electronically as well. Will be completed by the action due date.
3. The main responsibility to get failed backflow devices repaired and retested falls upon the customer within the required time frame. We realize that the ultimate responsibility to follow up to assure failed devices have been repaired and retested falls upon the Water Department. However, limited resources in man power have made it difficult to follow up on the repair and retesting on unpredicted number of failed devices. Additional help that was budgeted for and approved at Town Meeting for three years was not allowed by the Board of Selectmen and Town Administrator. We intend to make the necessary organizational changes that will allow us to acquire additional help to assist in resolving this issue and in addition we intend to be more aggressive in enforcing the timeline for repairs and retests. Due to our normal backflow device testing schedule the next round of testing doesn't occur until August or September. Therefore, to assure all failed devices are repaired and retested within the regulated timeline we cannot assure this corrective action can be attained by the action due date. Therefore, we request an extension of the action due date to December 31, 2017.



4. We have included educational information on Cross-Connections in our annual Consumer Confidence Report (CCR) (Water Quality Report (WQR)) as required since 2013. We did not however, include it in our 2015 CCR because we replaced it with water conservation/restriction information. Effective immediately cross-connection educational information will be included in our annual CCR. *Completed June 30, 2017*
5. Each station is equipped with an alarm checklist that is acknowledged by the operator/s when alarms and critical alarms are checked and tested through our Supervisory Control and Data Acquisition (SCADA) system. Standard Operating Procedures (SOP's) are being updated and a SOP will be created for testing alarms and interlocks by the action due date.

**Table B - DEFICIENCIES -**

1. Updates to our Emergency Response Plan (ERP) will be completed by the action due date.
2. Superintendent spoke with Joe Cerutti at MassDEP Boston on 7/5/2017 re: Underground Injection Control (UIC) permitting and forms are being emailed and upon receiving will be filled out and submitted. Mr. Cerutti indicated that due to the back log of new UIC applications, review and approval may not be by the action due date.
3. The Water Department's electrician has been notified and the interlocks have been installed. *Completed July 12, 2017*
4. We will begin documenting monthly Tank inspections using the DEP forms. *Completed as of August 1, 2017*
5. The Water Department will schedule a cleaning and inspection of the Highland St. tank by the action due date and will consult with concrete tank specialist regarding the blasting of internal steel components of the overflow pipe. The sand blasting of the internal steel components of the overflow pipe will be costly to drain the tank and cause an interruption in operation by having the tank offline. For this reason we cannot assure this part of this deficiency will be completed by the action due date.
6. The remaining improvements will be completed on the Fitchburg Rd. tank before the end of July 2017. The Water Department awarded a contract to Atlas Painting and Sheeting to perform a total rehabilitation of the Fitchburg Rd. storage tank. Work began on May 22, 2017 and as of July 12, 2017 the work is completed. The inside of the tank just needs to be sprayed with chlorine and filled then tested. Therefore please consider this deficiency *completed as of July 21, 2017*.
7. The Water Department has changed Engineering firms and as such has an updated distribution map. In addition the Water Department is currently looking into through a partial grant updating our distribution maps and incorporating GIS layering to show mains, gates, service ties, pump stations, hydrants, storage tanks, sampling locations etc.. The Water Department will submit an updated distribution map with all the information required by the *November 30, 2017* action due date.
8. The Townsend Water Department will work with our consultants to develop an action plan to address the potential for low/negative pressures in the West Elm/Jonathan Ln. loop in the event the Main St. Station in West Townsend is offline. The Water Department is currently planning to replace the existing outdated natural gas backup pump with a new generator in the event of a power outage, the Main St. station can still be utilized to maintain adequate pressure in this area. If this satisfies the DEP as our action plan please consider this deficiency

*completed as of 7/11/2017.* To implement the corrective action would be a capital expense For this reason we cannot assure a corrective action would be completed by the September 30, 2017 action due date.

9. The Townsend Water Department has been and is currently implementing it's uni-directional flushing program. Lack of adequate staffing due to the Town's Board of Selectmen not allowing us to hire additional personnel despite having the funding and getting approval at Town meeting for three consecutive years, has prevented us from flushing the entire system annually and exercising all gates. Upon hiring an additional operator then, training and being over half way through the year we cannot assure that the Water Department will be able to flush the entire distribution system in accordance with our Uni-directional flushing plan in order to meet the action due date for this deficiency.
10. The Townsend Water Department has a hydrant maintenance plan to check for leaks, does the hydrant drain, check gaskets, etc.. Lack of adequate staffing due to the Town's Board of Selectmen not allowing us to hire additional personnel despite having the funding and getting approval at Town meeting for three consecutive years, has prevented us from properly checking ALL hydrants annually and, exercising all gates. Upon hiring an additional operator then, training and being over half way through the year we cannot assure that the Water Department will be able to check ALL hydrants within the distribution system in accordance with our hydrant maintenance program in order to meet the action due date for this deficiency.
11. The Request For Public Water System Authorization to Delegate, Sub-delegate, Contract, or Sub-contract Cross Connection Surveyor's Responsibilities is enclosed. *Completion Date: 7/11/2017*
12. The Townsend Water Department will begin reporting sodium concentrations in the unregulated contaminants table beginning with it's 2017 CCR. *Completion Date: 6/30/2018*

Sincerely,

A handwritten signature in cursive script, reading "Paul Rafuse".

Paul Rafuse, Superintendent  
Townsend Water Department