



## State of New Jersey

PHILIP D. MURPHY  
McCabe Governor

SHEILA Y. OLIVER  
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CENTRAL BUREAU OF WATER COMPLIANCE & ENFORCEMENT  
Mail Code 44-03/P.O. BOX 420  
Trenton, NJ 08625-0420  
FAX: (609) 292-6450

CATHERINE R.  
Acting Commis:

March 29, 2018

### Hand Delivery

Andrew Pappachen, Water Utility Manager  
Trenton Water Works  
PO Box 528  
Trenton, NJ 08604

RE: Compliance Evaluation and Assistance Inspection  
Trenton Water Works  
PROGRAM INTEREST ID #: 1111001 and 5187  
PROGRAM: Water Supply and Water Allocation  
Compliance Activity # SCI 180001  
Trenton City, Mercer County

Dear Mr. Pappachen:

A Compliance Evaluation and Assistance Inspection of your facility was conducted on March 14, 2018 and March 19, 2018 by representatives of the Department. Please address any items or concerns noted on the comments section of the attached report.

The items noted below, in the attached report with a compliance status of "OC" or "ON" and in the attached Notice of Violation have placed your facility in violation of the Safe Drinking Water Act (N.J.S.A. 58:12A-1 et seq.), the Safe Drinking Water Act regulations (N.J.A.C. 7:10-1 et seq.), the New Jersey Water Supply & Wastewater Operators' Licensing Act (N.J.S.A. 58:11-64 et seq.), the Licensing of Water Supply and Wastewater Treatment System Operators regulations (N.J.A.C. 7:10A-1 et seq.), the Water Supply Management Act (58:1A-1 et seq.), the Water Supply Allocation Permits regulations (N.J.A.C. 7:19-1 et seq.).

### Significant Deficiencies Noted During Inspection:

- All current and outstanding violations that TWW has will be addressed under separate cover. These include actions required for the Lead Action Exceedance violation, Disinfection By-Product violation and monitoring and reporting violations. The Division of Water Supply

and Geoscience will also be addressing all Total Coliform Sampling Plan deficiencies under separate cover. Should TWW not address any/all deficiencies, the Department can take enforcement action against TWW.

- TWW has violations under their Water Allocation Permit which are addressed in the attached Notice of Violation. The annual unaccounted-for water report was submitted to the Department on 3/28/18, however the report fails to identify measure taken to reduce unaccounted for water to below 15%, it also does not identify areas of water loss, methods utilized for leak detection, leaks repaired, meters added/replaced, among others. TWW's current unaccounted-for water is at 32% based on the report provided to the Department. TWW must provide the Department with an action plan and schedule to reduce the unaccounted-for water within the system.
- TWW must also evaluate their intake logs and records submitted to the Department to address inconsistencies noted during the inspection.
- TWW currently has a W-4 licensed operator for their Distribution System, but if there are any changes TWW must fill out the 065 form with the new operator's information and provide the form to the Department.
- During the inspection, the Department found significant deficiencies after an evaluation of the Operation and Maintenance (O&M) at TWW. Specifically, the O&M of the Super Pulsator treatment units, the Chlorine Contact Tanks and the Filter Bed Media is deficient. The Department hereby requires TWW to immediately address these deficiencies to ensure the protection of human health, safety, welfare and the environment with the water produced by TWW. This violation is addressed in the attached Notice of Violation.

A written report concerning specific details of remedial measures to be instituted for these items, as well as an implementation timetable, must be submitted to this Bureau within thirty (30) calendar days of receipt of this correspondence.

You are advised that the above citations provide for substantial penalties in cases of rule or regulation violations. Therefore, your prompt attention to this matter is anticipated. Also be advised that TWW is still responsible for addressing all outstanding enforcement actions with the Department, which includes the Administrative Consent Order (ACO) effective 2/5/18 and effective Notices of Non-Compliance, in addition to the violations identified in this report.

Note that you may also review your inspection report as well as many other DEP reports online at [www.nj.gov/dep/inspections](http://www.nj.gov/dep/inspections). This website also gives you the opportunity to provide us feedback about our operations. We would appreciate your input and will share all results with you upon your completion of a survey.

If you have any questions concerning the attached report, contact me at (609) 273-9493.

Very truly yours,

Jessica R. Sponaugle  
Environmental Specialist II

Enclosure:  
Cover Letter  
FY18 Inspection Report  
Notice of Violation

c:

Ray Bukowski, Assistant Commissioner of Compliance and Enforcement  
Michele Putnam, Assistant Commissioner of Water Resource Management  
Richard T. Paull, Director of Water and Land Use Enforcement  
Patricia Gardner, Director of the Division of Water Supply and Geoscience

# Compliance Evaluation Summary (No Block/Lot)

Date Printed: 9/28/2022

**Activity:** SCI 180001 \*Standard Compliance Inspection (1111001)

**Title Description:** fy18

**Start Date/Time:** 03/14/2018 9:00 AM

**End Date/Time:** 03/14/2018 4:00 PM

**Program Interest:** TRENTON WATER WORKS  
1111001 (SAFE DRINKING WATER)  
RT 29,  
TRENTON CITY, MERCER COUNTY

**Mailing Address:** 333 CORTLAND ST Trenton NJ 08638

**Responsibility Entity(s)** **Program Interests included in Inspection:**

Trenton City Dpw 1111001 (Safe Drinking Water)

Trenton City Dpw 5187 (Water Allocation)

<b><u>Lead Investigator</u></b>	<b><u>Other Investigators</u></b>	<b><u>Persons Interviewed</u></b>	<b><u>Witnesses</u></b>
Sponaule, Jessica	Carson, Heather	Andrew Pappachen, Water Utility Manager, 201-401-3955 Merkle Cherry, Director of Public Works, 609-789-3830 Sean Semple, Assistant Director of Public Works, 609-414-0277 Bill Mitchell, Water Treatment Plant Superintendent/ L.O., 609-439-2657	Persons interviewed continued: Taya Brown-Humphrey, Assistant Superintendent TWW, 609-213-3238 Theresa Ponella, Senior Engineer TWW, 609-989-3218 Tim London, W-3 TWW
	Collins, Alissa		Persons interviewed continued: Taya Brown-Humphrey, Assistant Superintendent TWW, 609-213-3238 Theresa Ponella, Senior Engineer TWW, 609-989-3218 Tim London, W-3 TWW
	Giberson, Kevin		Persons interviewed continued: Taya Brown-Humphrey, Assistant Superintendent TWW, 609-213-3238 Theresa Ponella, Senior Engineer TWW, 609-989-3218 Tim London, W-3 TWW

MacDonald, James

Persons interviewed continued:  
 Taya Brown-Humphrey,  
 Assistant Superintendent  
 TWW, 609-213-3238  
 Theresa Ponella, Senior  
 Engineer TWW,  
 609-989-3218  
 Tim London, W-3 TWW

Myers, Jennifer

Persons interviewed continued:  
 Taya Brown-Humphrey,  
 Assistant Superintendent  
 TWW, 609-213-3238  
 Theresa Ponella, Senior  
 Engineer TWW,  
 609-989-3218  
 Tim London, W-3 TWW

Poonolly, Fillina

Persons interviewed continued:  
 Taya Brown-Humphrey,  
 Assistant Superintendent  
 TWW, 609-213-3238  
 Theresa Ponella, Senior  
 Engineer TWW,  
 609-989-3218  
 Tim London, W-3 TWW

Rizvi, Syed-Imteaz

Persons interviewed continued:  
 Taya Brown-Humphrey,  
 Assistant Superintendent  
 TWW, 609-213-3238  
 Theresa Ponella, Senior  
 Engineer TWW,  
 609-989-3218  
 Tim London, W-3 TWW

#### General Comments:

Two day inspection, 3/14/18 and 3/19/18.

There is an Administrative Consent Order (ACO) in effect for Trenton Water Works (TWW) under NEA180001-1111001 to address identified deficiencies in system operations, staffing, emergency response and to cover the finished water storage reservoir. Monthly progress reports are being submitted to NJDEP.

#### Past Milestones on ACO:

- 2/5/18-- TWW needed to hire 10 critical positions identified within the ACO. TWW executed 2 emergency contracts with Wade Trim (on 1/16/18) and Banc3 (on 1/25/18) to bring in 15 total staff
- 3/5/18-- TWW needed to hire 10 additional critical positions for a total of 20. TWW provided the Dept with a list of 23 new hires. It is noted that some of the critical staff positions were filled by personnel within TWW that qualified for the positions. TWW must be aware that their ACO requirement also calls for the full staffing of the water system by 2/5/19.

#### Upcoming ACO milestones:

- 3/30/18-- TWW must provide the Certification of Final Completion for the SCADA system upgrades and execute the system.(TWW explained and provided a report from the contractor on the SCADA project indicating that a Cert will not be possible due to a change order submitted for additional system upgrades. however this change order is not anticipated to have any impacts on day to day SCADA operations. TWW will need to provide the NJDEP a justification if this ACO milestone will not be met, and provide a description of the change work order.)

-4/5/18-- TWW must hire all 29 critical staffing positions identified in the ACO

-4/5/18-- TWW must notify the Dept of the feasibility of the NJ American Emergency Interconnection Phase II project

-4/30/18--TWW must secure a proposal for a Professional Engineer to evaluate the intake and complete preliminary designs.

It is TWW's responsibility to be aware of all upcoming milestones within the ACO, in addition to outstanding violation action items.

**Current/ Outstanding Violations:**

1. PEA160001 and PEA160002-- failure to take turbidity grab samples when Combined Filter Effluent (CFE) River East went down in February 2016, any enforcement actions regarding this violation will be addressed under separate cover.

2. PEA170005-- Lead Action Level Exceedance--Failed to submit the corrosion control treatment recommendation due 12/30/17, the source water treatment recommendation due 8/30/17, and list of lead services and replacement schedule due 10/21/17. Since not addressed, a treatment technique violation was created under PEA180004 and PEA180005 and failure to provide public notice (PN) is addressed under PEA 180007. All items under the new violations are missing, a referral to enforcement was established and any enforcement actions regarding these violations will be addressed under separate cover.

3. PEA170010 and PEA170011--Surface Water Treatment violation for CFE down 9/25/17-11/2/17, grab samples taken, records provided to the department, returned to compliance by Division of Water Supply.

4. PEA170012--Maximum Contaminant Level (MCL) violation for HAA5 and TTHM Disinfection By Products (DBPs) for 10/1/17-12/31/17. PN and remedial actions report received in timeframe, the system will return to compliance after remedial actions are implemented within the year timeframe and the sample averages are in compliance.

5. PEA180002-- Failure to collect all 50 alkalinity samples in the distribution system between 7/1/17-12/31/17. One sample taken in Jan 2018, any enforcement actions regarding this violation will be addressed under separate cover.

6. PEA180003--Failure to maintain chlorine contact time due to turbidity levels in Jan 2018, PN provided on time, remedial measures report and action report were due Feb 2018. TWW provided the documents late on 3/20/18. Currently reviewing compliance for this violation.

7. PEA180006--MCL violation for DBPs first quarter 2018. Currently being addressed by TWW. PN due 4/5/18.

**Inspection Attribute(s)**

**Quantity(s)**

Number of Attributes: 0

# Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCH180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: GSIN - General System Info New Feb 2018

Operating Status: No status specified.

Comments: See Appendix of Comments.

General System Info.	H <input type="checkbox"/>		Rules T
Indicate system contact person(s), phone number(s), and email address.	DC <input type="checkbox"/>	New contact for TWW under the Emergency Contract: Andrew Pappachen, Water Utility Manager Cell: 201-401-3955	Rules T
Are there any discrepancies between the current NJEMS General Inventory Report and the actual system's inventory?	Y <input type="checkbox"/>	Changes need to be made in the following sections: 1. Population 2. Interconnections 3. Storage Tanks 4. Treatment Plant Processes	Rules T
Does the owner of the water system contract with another entity to operate the water system? .	Y <input type="checkbox"/>	Currently under an emergency O&M contract with Wade Trim and Banc3 pursuant to their ACO requirement. Wade Trim is onsite and currently working to upgrade the polymer feed system and maintain the Mechanical Dewatering Facility (MDF). Banc3 is providing operators to work within the water treatment plant.	Rules T
Does the total population served change on a seasonal basis? If so, indicate when and total population served during these periods.	N <input type="checkbox"/>	no seasonal changes, but population needs to be changed to reflect estimate of 225,000 from 205, 000.	Rules T
When required, are the parameters analyzed using the appropriate analytical methods by laboratory(ies) certified in accordance with N.J.A.C. 7:18-1 et. seq.? . [N.J.A.C. 7:10- 5.3(b)]	IC <input type="checkbox"/>	Contract out for lab services through AGRA (#14013) for Lead and Copper, Nitrates , VOs and Inorganics, Trenton (#11133) also certified for some parameters including chlorine, turbidity, alkalinity and pH, J.R. Henderson (#15083) for DBPs and Total Organic Carbon (TOC).	Rules T
LICENSED OPERATOR.	H <input type="checkbox"/>		Rules T
Does the owner of the system employ a licensed operator(s) holding the appropriate VSWS, T and/or W class license(s) prescribed for this system?. [N.J.A.C. 7:10A- 1.10(a)]	IC <input type="checkbox"/>	New W-4 operator of record as of 3/12/18, John (Reno) Cassarini. Should Reno Cassarini no longer resume the role of W-4 operator of record, TWW must submit the 065 form for the operator change.	Rules T
Verify name(s), license(s) held, contact numbers and email address for the system's licensed operator(s).	IC <input type="checkbox"/>	L.O. on record during the time of inspection: T-4: Bill Mitchell (#0006714), 609-439-2657 W-4: Reno Cassarini (#0003665), 609- 989-3222	Rules T
How many hours per month is the licensed operator(s) on-site conducting duties pertaining to operation of the system? .	DC <input type="checkbox"/>	Reporting 35-40 hours for both the T-4 and W-4 operators.	Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

# Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: GSIN - General System Info New Feb 2018

Operating Status: No status specified.

Comments: See Appendix of Comments.

For T3/T4 systems is the licensed operator present for at least 35 hours a week?. [N.J.A.C. 7:10A- 1.10(g)]	IC <input type="checkbox"/>	T-4 operator onsite Mon-Fri shift, on call as well.	Rules  T
Name of backup operator and licenses held?.	DC <input type="checkbox"/>	T backup: Taya Brown Humphrey (T-4, #468606) W backup: Tim London (W-3, #551104)	Rules  T
Does the licensed operator conduct and document routine inspections and schedule preventative maintenance tasks which will be undertaken to ensure that the system is operated and maintained properly?. [N.J.A.C. 7:10A- 1.12(a)]	OC <input type="checkbox"/>	Failure of the licensed operator to ensure that the system is operated and maintained properly. During the inspection, significant deficiencies were noted regarding the O&M of the Super Pulsators, Chlorine Contact Tanks, and the filter bed media, all of which have the potential to impact water quality. The filter bed media needs to be evaluated to ensure functionality. It should be noted that TWW contracts out for pump maint, mixer maintenance, electrical testing, and calibrations.	Rules  T
Has the licensed operator developed a protocol to ensure employees conducting operation and maintenance of the water system are aware of and completing said operation and maintenance?. [N.J.A.C. 7:10A- 1.12(a)2i]	ON <input type="checkbox"/>	Failure of the licensed operator to ensure that each employee associated with the operation and maintenance of the system is aware of their responsibilities including in the event of an emergency. Need to develop a protocol to ensure the operators are aware of their roles and responsibilities within the water system. With the addition of two emergency contract companies as well as new/existing TWW staff, coordination and training efforts are ongoing at TWW. Need to establish and document ongoing trainings. This deficiency is addressed under the ACO requirement.	Rules  T
Did the licensed operator or owner of a Public Water Treatment System submit monthly operating reports in the manner required by the Department before the 10th day of the month following the month in which the data was collected?. [N.J.A.C. 7:10A- 1.12(d)]	IC <input type="checkbox"/>	T Reports submitted.	Rules  T
WATER SYSTEM OPERATIONS, MAINTENANCE & EMERGENCIES.	H <input type="checkbox"/>		Rules  T
Have there been any modifications or additions to any source, treatment or storage unit since the previous inspection? If so, were permits obtained prior to commencement of construction?. [N.J.A.C. 7:10-11.5(a)]	IC <input type="checkbox"/>	Permit obtained to switch out gas chlorine to sodium hypo, currently under construction. obtained a permit to cover the reservoir, construction not yet commenced.	Rules  T
Have any new or repaired components of source, treatment, storage and distribution mains been disinfected according to AWWA guidance prior to placing the components into service? . [N.J.A.C. 7:10-11.6(d)]	IC <input type="checkbox"/>	When needed for water main breaks.	Rules  T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No



# Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCII80001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: GSIN - General System Info New Feb 2018

Operating Status: No status specified.

Comments: See Appendix of Comments.

Was a CCC submitted to the Department for all issued permits at the completion of construction? . [N.J.A.C. 7:10-11.10]	IC <input type="checkbox"/>	No outstanding CCCs, will need to submit them when sodium hypo conversion project complete.	Rules T
Does the system have a program for inspecting and exercising valves? Are isolation valves maintained and exercised on a regular basis? Are all valves inventoried?.	N <input type="checkbox"/>	Have not exercised valves since 2014. Have a contract in place to address 6-24" valves in the Spring of 2018. Note that TWW must also be in compliance with the Water Quality Accountability Act and the requirements set forth with the ACO in regards to valve exercising, evaluation and replacement.	Rules T
Are all service connections metered, if the system serves 500 or more connections?. [N.J.A.C. 7:19- 6.5(a)5]	IC <input type="checkbox"/>		Rules T
Is auxiliary power equipment available for all indispensable source, pumping, and treatment units?. [N.J.A.C. 7:10-11.6(l)]	IC <input type="checkbox"/>	2 new NG generators at central pump station and reservoir gatehouse 1 diesel generator for the plant and redundant PSEG lines. Keep extra distribution system inventory at Cortland Street yard. Generators do not kick on immediately to prevent a surge, typically takes 30 min, but can vary. When plant is shutdown, the system is fed entirely by the reservoir.	Rules T
Did the purveyor notify the Department within 6 hours of any emergency that may tend to lessen the quality or pressure of delivered water or increase the likelihood of delivery of water that does not meet the standards?. [N.J.A.C. 7:10- 2.4(b)]	IC <input type="checkbox"/>	NJDEP is notified, however TWW needs to be more descriptive with notifications. These notifications are required for events which include, but are not limited to, power outages/surges, chemical feed pump failures/disruptions, turbidity events, mechanical maintenance that takes a basin or mixer offline, etc.	Rules T
Do all drinking water additives or water system components comply with the appropriate ANSI/NSF standards? . [N.J.A.C. 7:10- 8.2(b)]	IC <input type="checkbox"/>	Reviewed onsite, chemicals had ANSI/NSF label.	Rules T
Does the system maintain a boil water advisory log?.	Y <input type="checkbox"/>	Logs maintained at the plant and for the DS.	Rules T
Does the system maintain a log of events that may impact water quality?.	Y <input type="checkbox"/>		Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

## Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaule, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Reqt. Source Ref # Reqt. Type
-------------	---------------	---------------------	-------------------------------------

Subject Item: G SIN - General System Info New Feb 2018

Operating Status: No status specified.

Comments: See Appendix of Comments.

Did the purveyor provide public notice as required, by the state regulations? [N.J.A.C. 7:10- 7.4]	ON <input type="checkbox"/>	Deficient on Public Notice (PN) requirement for lead violation (treatment technique violation for not responding to 2017 violation, Tier 2 PN required. These deficiencies are addressed under PEA170005, PEA180004, PEA180005 and PEA180007. Also, phone numbers on PN goes to either lab or L.O. and sometimes go unanswered. NJDEP recommends that the phone number on the PN documents be to a phone number that is more available and can be readily answered to address all calls, discussed during inspection.	Rules T
Did the purveyor provide public notice in accordance with CFR 141.201 et seq. of the federal regulations?. [N.J.A.C. 7:10- 5.5(a)]	IC <input type="checkbox"/>	No RTCR violations in 2017, state is more strigent than federal regs.	Rules T
If the backwash water is discharged to sanitary sewer, is it discharged via an above-ground air gap and not through a direct connection and does the system have written approval from the appropriate sewerage authority to do so? [N.J.A.C. 7:10-11.14(e)]. [N.J.A.C. 7:10-11.14(e)4]	IC <input type="checkbox"/>	Filters backwashed roughly every 60 run hours. Backwashed to the Mechanical Dewatering Facility (MDF), not connected to sanitary. From MDF the water is returned to the head of the plant and solids are removed under TWW's NJPDES Residuals permit #NJ0240133.	Rules T
FINISHED WATER STORAGE.	H <input type="checkbox"/>		Rules T
Does the system have adequate total storage capacity? If not, does the water system have an effective storage waiver issued by the Department?. [N.J.A.C. 7:19- 6.7(b)]	IC <input type="checkbox"/>	Whitehorse Tank: 1 MG Mercerville Tank: 1 MG Lawrence Tank: 1 MG Ewing Tank: 1 MG Jones Farm Tank: 1.37 MG Hopewell Tank: 0.6 MG Reservoir: 100 MG, 78 MG usable.	Rules T
Has the interior of the storage tank(s) been cleaned/inspected in the last 5 years?.	Y <input type="checkbox"/>	Whitehorse Tank: interior in 2017 Mercerville Tank: within the past 3 years Lawrence Tank: summer 2017 Ewing Tank: interior 2016 Jones Farm Tank: 2016 Hopewell Tank: interior due 2018 annual corrosion control inspection of the interior of all tanks.	Rules T
Has the exterior of the tank been inspected/maintained in the last year?.	Y <input type="checkbox"/>	Whitehorse Tank: exterior in 2017 Mercerville Tank: painted in 2017 Lawrence Tank: painted in 2017 Ewing Tank: painted in 2017 Jones Farm Tank: 2016/ 2017 Hopewell Tank: 2016 annual corrosion control inspection of the exterior of all tanks.	Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

# Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: GSN - General System Info New Feb 2018

Operating Status: No status specified.

Comments: See Appendix of Comments.

Do the air vents, roof vents, overflow, and hatches have screens? . [N.J.A.C. 7:10-11.11(c)5]	IC <input type="checkbox"/>	Only the Jones Farma nd Lawrence Tanks were inspected during this onsite visit. Jones Farm: Yes Lawrence: Yes	Rules T
Are there visible problems with the foundation for the tank? (settling, cracks, deterioration etc.).	N <input type="checkbox"/>	None observed on either the Jones Farm tank or Lawrence tank	Rules T
Are there visible problems on the exterior coating of the tank? (rust, pitting, corrosion, leaks etc.).	N <input type="checkbox"/>	None observed on either the Jones Farm tank or Lawrence tank	Rules T
Do all tanks >100,000 gallons have an operable water level indicator? . [N.J.A.C. 7:10-11.11(a)6]	IC <input type="checkbox"/>		Rules T
Is a low level alarm present and functioning for all storage tanks?. [N.J.A.C. 7:10-11.11(a)5]	IC <input type="checkbox"/>		Rules T
INTERCONNECTIONS.	H <input type="checkbox"/>		Rules T
If the system is interconnected to any other water system via an interconnection of six inches or more in diameter, is there a written agreement specifying the conditions for its use and has said written agreement been approved by the Department?. [N.J.A.C. 7:19- 6.9(g)]	ON <input type="checkbox"/>	Deficiency addressed under timelines in the modified ACO effective 2/5/18.	Rules T
Does the system regularly purchase water under normal (non-emergent) operating conditions? If yes, indicate source(s) of interconnection(s), annual amounts (MGY), and months utilized.	N <input type="checkbox"/>	Sell to AQUA, volume now reflected on Water Utilization Reports, before instructed during the inspection, the water diverted to AQUA was not reflected.	Rules T
If the purveyor is a Class 2 (10,001-50,000 persons) or Class 3 (over 50,000 persons) purveyor, were interconnection flow tests conducted on an annual basis on all interconnections six inches or more in diameter? Were the results of such tests submitted to the Department by the end of each calendar year?. [N.J.A.C. 7:19- 6.9(d)]	ON <input type="checkbox"/>	Deficiency addressed under timelines in the modified ACO effective 2/5/18.	Rules T
DISTRIBUTION SYSTEM MONITORING, PLANS AND DOCUMENTATION.	H <input type="checkbox"/>		Rules T
If the system serves at least 10,000 people, did it analyze one iron and one manganese sample? Was one additional sample each taken for every 50,000 population served to a maximum of 5 samples each annually? (Not required for Non-Community Water Systems). [N.J.A.C. 7:10- 7.3(c)]	IC <input type="checkbox"/>	Take 5 samples/year.	Rules T
REVISED TOTAL COLIFORM RULE.	S <input type="checkbox"/>		Rules T

IC - In Compliance

ND - Compliance Not Determined

OC - Out of Compliance

NA - Not Applicable

NI - Not Inspected

PV - Potential Violation

NC - No Obvious Concern

ON - Out of Compliance, Non-referred

Y - Yes

N - No

DC - Data Collection

WN - Warning

## Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCII80001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Reqt. Source Ref # Reqt. Type
-------------	---------------	---------------------	-------------------------------------

Subject Item: GSIN - General System Info New Feb 2018

Operating Status: No status specified.

Comments: See Appendix of Comments.

Has the water purveyor developed a revised total coliform rule sample siting plan in accordance with the Federal Regulations 40 CFR 141.853?. [N.J.A.C. 7:10- 5.1]	ND <input type="checkbox"/>	Compliance Not Determined because the Total Coliform (TC) sampling plan was developed and submitted to the NJDEP for review. Deficiencies are noted, will be addressed under separate cover from the Division Water Supply. Should TWW not respond to the deficiencies, a Notice of Non-Compliance will be generated from the Division of Water Supply.	Rules T
Is the water purveyor collecting coliform samples at locations specified with the Revised Total Coliform Rule sample siting plan?. [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>	Reviewed Chain Of Custody (COCs) cards to verify.	Rules T
Are repeat sampling locations identified within the Revised Total Coliform Rule sample siting plan?. [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>	Identified in the plan.	Rules T
For surface water systems or ground water systems serving >4,900 people, are the routine coliform samples being collected at regular time intervals throughout each month?. [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>	Taken throughout the month, spread out appropriately. If multiple samples are taken from the same location it is spread out to 1 sample/ 3 different weeks.	Rules T
Are the Total Coliform Rule sample sites evenly distributed? .	N <input type="checkbox"/>	Will be addressed under separate cover. NJDEP recommends the installation of sample stations, something approved under the RTCR, to address areas that are not currently being sampled due to accessibility issues.	Rules T
LEAD & COPPER RULE.	S <input type="checkbox"/>		Rules T
Does the water system have a written lead and copper sampling plan that identifies a pool of targeted sampling sites which is sufficiently large to ensure that the water system can collect the number of lead and copper tap samples as required, whether on standard or reduced monitoring?. [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>	Available and approved by NJDEP on 12/8/16.	Rules T
For the most recent sampling event, did the water system sample from the targeted sampling pool identified in the lead and copper sampling plan? .	Y <input type="checkbox"/>	Sites verified.	Rules T
During the most recent lead and copper sampling event, did the water system submit Form BSDW-56 as notification for all sample site changes between monitoring periods in accordance with 40 CFR 141.90(a)(1)(v)?. [N.J.A.C. 7:10- 5.1]	NA <input type="checkbox"/>	No changes	Rules T
Does the water system have any lead service lines? If yes, were at least 50% of the sites sampled during the most recent sampling event from lead service lines?. [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>		Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

# Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Reqt. Source Ref # Reqt. Type
-------------	---------------	---------------------	-------------------------------------

Subject Item: GSIN - General System Info New Feb 2018

Operating Status: No status specified.

Comments: See Appendix of Comments.

If the system had lead service lines, does the system maintain an inventory of these lead service lines and update the inventory as they are replaced?.	ND <input type="checkbox"/>	Inventory of lead service lines was not reviewed during time of inspection, however due to TWW's Lead Action Level (LAL) exceedance, they must develop a plan to replace lead lines, and an inventory will then be received.	Rules T
Has the system developed a plan for replacing annually at least 7 percent of the initial lead service lines if corrosion control treatment is installed and the lead action level is exceeded? .	N <input type="checkbox"/>	Part of the Notice of Non-Compliance for the LAL exceedance, TWW is missing this, addressed in the Notice of Non-Compliance sent to TWW by the Division of Water Supply.	Rules T
Does the water system have a water quality parameter sampling plan, for monitoring water quality parameters under the lead and copper rule, that indicates sampling sites are representative of the entire distribution system?.	Y <input type="checkbox"/>	Distribution System: alkalinity 50 samples/ 6months pH 50 samples/6 months  Treatment Plant: alkalinity 1/2 wks pH 1/2 weeks total C 1/month	Rules T
If the system has corrosion control treatment, does the system have records of maintenance, and for chemical feed corrosion control system? Does the system maintain dosage records and purchasing records for the chemical?.	Y <input type="checkbox"/>	Have corrosion control, records and preventative maint to be addressed under ACO. Dosage logs available.	Rules T
STAGE 2 DBPR / Disinfection.	S <input type="checkbox"/>		Rules T
Is a chlorine residual taken for every total coliform sample? . [N.J.A.C. 7:10-5.1]	IC <input type="checkbox"/>	Reviewed COCs for TC samples to ensure residual is being taken, residual is noted on the COC. If residual is <.05 they take a Heterotrophic Plate Count (HPC), but not consistent in recording HPC result on the COC card. Reviewed log book for HPC samples.	Rules T
Is the water system ensuring the delivered water is microbiologically safe by disinfecting the water at the point of entry in compliance with the regulations found under N.J.A.C. 7:10-11.16 and maintaining a detectable chlorine residual in at least 95% of the monthly distribution system samples?. [N.J.A.C. 7:10- 4.1(a)]	IC <input type="checkbox"/>	All HPCs were <1 for non detectable chlorine residual samples.	Rules T
Has the water purveyor updated the Stage 2 DBPR plan following operation changes, or have they changed sampling locations only after approval was received by the Department? (40CFR141.622). [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>	System obtained NJDEP approval to change a sample location. The site referred to as ART4-Spiezle group was changed on 5/10/17 to the Sonoco station. The change was APPROVED by NJDEP, but TWW needs to update their plan to reflect changes.	Rules T
MCL VIOLATIONS.	H <input type="checkbox"/>		Rules T
Did the water supplier notify the Department of all MCL exceedances in a timely manner?. [N.J.A.C. 7:10- 5.4(c)]	IC <input type="checkbox"/>	Notified NJDEP.	Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

# Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: GSIN - General System Info New Feb 2018

Operating Status: No status specified.

Comments: See Appendix of Comments.

Did the water supplier take all necessary actions to return the water system to compliance within one year of receiving the results that caused an MCL violation to occur?. [N.J.A.C. 7:10- 5.7(a)]	ON <input type="checkbox"/>	Missing. Lead and Copper violation required actions. If TWW doesn't have another LAL exceedance for the first half of 2018, and because they didn't have an exceedance for 2nd half of 2017, the system will be returned to compliance for sampling only, still required to address missing action items. For DBP violation, TWW has until the end of 2018 to be free of another DBP violation to be returned to compliance for sampling, but not for the remedial action measures. Addressed under PEA1700012, PEA170005, PEA180004, PEA180005 and PEA180006.	Rules T
---	--------------------------------	--	------------

Subject Item: NSW1 - New Surface/ GUDI Water Treatment Rule & POE Mon. Req 01

Operating Status: No status specified.

Comments: See Appendix of Comments.

SURFACE / GUDI WATER TREATMENT RULE & POE MONITORING REQUIREMENTS 01.	IC <input type="checkbox"/>		Rules T
Indicate the Surface / GUDI Treatment Plant Facility ID number, local name and type of filtration (conventional, direct, or other).	DC <input type="checkbox"/>	RT 29 Treatment Plant, conventional treatment.	Rules T
Are transmission lines in place that can bypass treatment? If yes, since the last inspection has the system ever bypassed treatment? If yes, when and why? . [N.J.A.C. 7:10- 2.4(a)]	NA <input type="checkbox"/>	No piping in place to bypass treatment within the plant.	Rules T
DBP PRECURSOR REMOVALS.	H <input type="checkbox"/>		Rules T
Was a paired treated/source water TOC sample collected from the surface water treatment plant on a monthly basis in order to measure the DBP levels in accordance with 40 CFR141.132? . [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>	TOC samples analyzed by JR Henderson Labs, reviewed DBP Precursor Reports for 2017.	Rules T
Was the running annual average of monthly TOC removal results 1.0 or greater? (40CFR141.133(d)). [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>	2017: 1.32	Rules T
Was an alkalinity sample taken at the same time & location as the source water TOC sample? (40 CFR141.132). [N.J.A.C. 7:10- 5.1]	IC <input type="checkbox"/>	Alkalinity samples taken by TWW at source.	Rules T
Is chlorination the last treatment process in a treatment plant with multiple treatment processes? If no, is it allowed by a permit? . [N.J.A.C. 7:10-11.16(a)2]	IC <input type="checkbox"/>	Sodium hypochloride injection is last step, also added after Super Ps before the CT basin then flows to the filters.	Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

# Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: NSW1 - New Surface/ GUDI Water Treatment Rule & POE Mon. Req 01

Operating Status: No status specified.

Comments: See Appendix of Comments.

TREATEMENT PROCESSES.	H <input type="checkbox"/>		Rules T
Is the water system performing jar testing? If so at what frequency?.	Y <input type="checkbox"/>	Daily jar test, every shift and every 4 hours, run a flash mixer test every 2 hours, and run jar test every hour during a storm event. Have a zetameter also, charge analyzer is unreliable.	Rules T
When was the last time the active basin(s) (flocculation, sedimentation, etc.) were inspected/maintained?.	DC <input type="checkbox"/>	Out to bid to rehab both Chlorine Contact basins. Sand separator is down, act as just basins now, one of those basins is down, and before bringing it back online TWW must clean it out. There is a film growing on it. Super Pulsators aren't functioning properly, TWW was currently cleaning one during time of inspection, and they clean one basin every 6 months which results in one basin going up to 18-24 months before cleaning.	Rules T
Have any basins been taken out of service since last inspection for reasons other than routine maintenance?.	Y <input type="checkbox"/>	One chlorine contact basin is currently down because solids rake is broken and solids can't be removed. Online contact tank is also not removing solids effectively.	Rules T
Are basins free of cracks, peeling paint (in need of routine maintenance)?.	N <input type="checkbox"/>	Sand separator basin needs to be cleaned, contact basin needs to be cleaned once rake is fixed.	Rules T
FILTRATION.	H <input type="checkbox"/>		Rules T
Are any filters out of service?.	Y <input type="checkbox"/>	Filter 8E is down for a drain issue and 12 E is down due to an actuator issue. Actuator has been obtained so should be online again soon.  Filters run for about 60 run hours before backwashed.	Rules T
Type of filters (Gravity: constant or declining rate; Pressure; GAC; or Membrane: Pressure or vacuum).	DC <input type="checkbox"/>	Constant filter based on settled water level. No air scour	Rules T
Filter media type (single, dual, multi).	DC <input type="checkbox"/>	dual. anthracite sand	Rules T
When was the last time the filter media was replaced?.	DC <input type="checkbox"/>	NJDEP is requiring an evaluation/ replacement if needed based on eval, addressed in attached NOV.	Rules T
Dates that each filter was cored?.	DC <input type="checkbox"/>	5-10 years ago, records available if needed.	Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

# Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: NSW1 - New Surface/ GUDI Water Treatment Rule & POE Mon. Req 01

Operating Status: No status specified.

Comments: See Appendix of Comments.

TURBIDITY REMOVAL.	H <input type="checkbox"/>		Rules T
Did the water system calibrate turbidimeters as specified by the manufacturer (direct/conventional filtration only) [40 CFR141.174(a) & 40 CFR141.560]. [N.J.A.C. 7:10- 9.1]	IC <input type="checkbox"/>	Turbidimeters calibrated by ACS every 3 months, logs kept. Chlorine analyzers calibrated every 6 months by ACS	Rules T
Was continuous turbidity monitoring being conducted for combined filter effluent (CFE) and individual filter effluent (IFE)? . [N.J.A.C. 7:10- 9.6(a)]	ON <input type="checkbox"/>	One of the CFEs was down from 9/25/17-11/2/17. Addressed under PEA170010 and PEA170011. IFEs were never down for over 5 days, or they would turn bed off.	Rules T
Were all individual filter records maintained for at least 3 years in accordance with 40 CFR 141.571? (direct/conventional filtration only) . [N.J.A.C. 7:10- 9.1]	IC <input type="checkbox"/>		Rules T
Were IFE turbidity monitoring results recorded every 15 minutes in accordance with 40 CFR 141.174 and 40 CFR 141.560? (conventional/direct filtration only). [N.J.A.C. 7:10- 9.1]	IC <input type="checkbox"/>	Recorded on SCADA.	Rules T
Were turbidity measurements of the combined filter effluent (CFE) recorded at a minimum every 4 hours in accordance with 40 CFR 141.173 & 40 CFR 141.551? . [N.J.A.C. 7:10- 9.1]	ON <input type="checkbox"/>	Not when CFE down February 2016 which is addressed under PEA160001 and 160002. During the CFE event of Sept-Nov 2017, logs were provide to NJDEP in the After Action Report which demonstrated that TWW took hourly grab samples of the CFE.	Rules T
Were the recorded CFE turbidity measurements less than or equal to 0.3 NTU in at least 95% of the samples taken in any month in accordance with 40 CFR 141.173 & 40 CFR 141.551? . [N.J.A.C. 7:10- 9.2(a)3]	ON <input type="checkbox"/>	During CFE event Sept-Nov this could not be determined, thus addressed under PEA170010 and PEA170011.	Rules T
Were daily turbidity grab samples taken to verify the accuracy of all continuous turbidity analyzers/recorders? . [N.J.A.C. 7:10- 9.6(b)]	ON <input type="checkbox"/>	Not taken during the February 2016 event where a CFE went down. Typically take a grab every hour, protocols not followed during this event. Addressed under PEA160001 and PEA160002.	Rules T
If the turbidity monitoring device failed, did the water system take a grab sample at least once every four hours?. [N.J.A.C. 7:10- 9.6(b)]	ON <input type="checkbox"/>	Not taken during the February 2016 event where a CFE went down. Typically take a grab every hour, protocols not followed during this event. Addressed under PEA160001 and PEA160002.	Rules T
Were the CFE turbidity measurements reported monthly on the appropriate state forms? . [N.J.A.C. 7:10- 9.1]	IC <input type="checkbox"/>		Rules T
Was any recorded CFE sample greater than 1NTU? If yes, did the water system contact the state no later than the end of the next business day in accordance with 40 CFR 141.175 & 141.551? (conventional/direct filtration systems only) . [N.J.A.C. 7:10- 9.1]	IC <input type="checkbox"/>	TWW contacted NJDEP.	Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No



# Compliance Evaluation Report

Page 11 of 15

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

**Subject Item:** NSW1 - New Surface/ GUDI Water Treatment Rule & POE Mon. Req 01

**Operating Status:** No status specified.

**Comments:** See Appendix of Comments.

For systems with a population of 10,000 or greater did an individual filter exceed >0.5 NTU in two consecutive 15 minute measurements (after the first four hours of operation) or exceed >1.0 NTU in two consecutive 15 minute measurements (during any time of operation)? If so did the purveyor complete a filter profile within 7 days in accordance with 40 CFR 141.175?. [N.J.A.C. 7:10- 9.1]	IC <input type="checkbox"/>	Oct 30, 2017 incident went over 1 NTU, filter profile conducted and reviewed by NJDEP.	Rules T
Did the water system exceed >1.0 NTU in two consecutive 15 minute measurements (during any time of operation) in three consecutive months? If so did the purveyor produce an individual filter self-assessment report within 14 days in accordance with 40 CFR 141.75 & 40 CFR 141.563 [N.J.A.C. 7:10-9.1]. [N.J.A.C. 7:10- 9.1]	NA <input type="checkbox"/>		Rules T
Did the water system exceed > 2.0NTU (during any time of operation) in two consecutive months? If so, did the water purveyor conduct and report the results of a comprehensive performance evaluation within 90 days (for systems 10,000 or greater) or 120 days (for systems <10,000) in accordance with 40 CFR 141.175 & 40 CFR 141.563?. [N.J.A.C. 7:10- 9.1]	NA <input type="checkbox"/>		Rules T

**Subject Item:** WSNR - Water Supply - No response to Info Request

**Operating Status:** No status specified.

**Comments:** No comments added.

MCL VIOLATION REMEDIAL MEASURES REPORT.	IC <input type="checkbox"/>		Rules T
Did the Water Supply System adequately respond to the Department's written request for the submission of the MCL Violation Remedial Measures Report and copies of records required to be maintained related to compliance with New Jersey Safe Drinking Water Act, N.J.S.A. 58:12A-1 et. seq. and the promulgated regulations at N.J.A.C. 7:10-1 et. seq., and §1445 of the Federal Safe Drinking Water Act, and the promulgated regulations under the National Primary Drinking Water Regulations 40 CFR §141.31 and 40 CFR §141.33. [N.J.A.C. 7:10-5.1 et. seq.]. [N.J.A.C. 7:10- 5.1]	ON <input type="checkbox"/>	Missing remedial measure reports for LAL exceedance and DBP violation report due 4/9/18. For the Chlorine violation (PEA180003) the report was provided late on 3/20/18, was due Feb 2018.	Rules T
GENERAL REQUEST FOR INFORMATION.	IC <input type="checkbox"/>		Rules T
Did the Water Supply System adequately respond to the Department's written request for the submission of information and copies of records required to be maintained related to compliance with New Jersey Safe Drinking Water Act, N.J.S.A. 58:12A-1 et. seq. and the promulgated regulations at N.J.A.C. 7:10-1 et. seq., and §1445 of the Federal Safe Drinking Water Act, and the promulgated regulations under the National Primary Drinking Water Regulations at 40 CFR §141.31 and 40 CFR §141.33. [N.J.A.C. 7:10-5.1 et. seq.]. [N.J.A.C. 7:10- 5.1]	ON <input type="checkbox"/>	TWW did not provide the Department with all requested information pertaining to the Lead Action Level (LAL) exceedance, addressed under seperate cover.	Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

## Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCII80001 \*Standard Compliance Inspection

Lead Investigator: Sponaule, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: WXAP - Prenjems Water Allocation Permit

Operating Status: No status specified.

Comments: See Appendix of Comments.

WATER ALLOCATION PERMIT.	H <input type="checkbox"/>		Rules T
Did the person obtain a Water Allocation Permit or a Temporary Dewatering Permit prior to diverting water either from a single diversion source or from combined diversion sources at a rate in excess of 100,000 gallons of water per day?. [N.J.A.C. 7:19- 1.10]	IC <input type="checkbox"/>	#5187, effective 4/1/17	Rules T
Did the permittee submit an application for renewal of the current permit three months prior to the expiration of the permit?. [N.J.A.C. 7:19- 2.4(a)]	IC <input type="checkbox"/>	submitted 7/21/15	Rules T
Did the permittee divert water solely for purposes authorized by the permit?. [N.J.A.C. 7:19- 2.14(a)14]	IC <input type="checkbox"/>	public community water system	Rules T
OPERATION AND MAINTENANCE.	H <input type="checkbox"/>		Rules T
Did the permittee provide a totalizing flow meter for all diversion sources?. [N.J.A.C. 7:19- 2.14(a)4]	IC <input type="checkbox"/>	Flow is calculated using the totalizing flow meter and subtracting the recycled water flows from the MDF which are added before the totalizing flow meter.	Rules T
Did the permittee calibrate each meter at least once every five years?. [N.J.A.C. 7:19- 2.14(a)4]	OC <input type="checkbox"/>	Failure to calibrate each meter at least once every five years. Records not available indicating the Intake flow meter has been calibrated within the past 5 years.	Rules T
Did the permittee receive approval from the Bureau of Water Allocation prior to increasing the pumping equipment capacity?. [N.J.A.C. 7:19- 1.5(a)5]	OC <input type="checkbox"/>	Failure to receive approval from the Bureau of Water Allocation prior to increasing the pumping equipment capacity. TWW increased the intake pumps from 25 MGD to 30 MGD for all three pumps. The Department requested a major permit modification request, TWW did not submit such a request.	Rules T
If the facility is a Public Community Water System, did the permittee meter all existing services?. [N.J.A.C. 7:19- 6.5(a)5]	IC <input type="checkbox"/>	metered.	Rules T
Did the permittee protect each source from vandalism, tampering, and contamination at all times?. [N.J.A.C. 7:19- 2.14(c)]	IC <input type="checkbox"/>	surface water intake	Rules T
Did the permittee obtain written permission from the Department prior to a change in plans and specifications?. [N.J.A.C. 7:19- 2.14(a)]	ON <input type="checkbox"/>	See above OC for increasing pump capacity.	Rules T
Did the permittee keep a copy of the permit at the work site and exhibit it upon request?. [N.J.A.C. 7:19- 2.14(a)]	IC <input type="checkbox"/>		Rules T

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

# Compliance Evaluation Report

Page 13 of 15

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

### Subject Item: WXAP - Prenjems Water Allocation Permit

**Operating Status:** No status specified.

**Comments:** See Appendix of Comments.

Was a log book of month end meter readings for each diversion source maintained on site?. [N.J.A.C. 7:19- 2.14(a)]	ON <input type="checkbox"/>	Reviewed onsite, discrepancies with what was reported and what was reviewed by the Dept. TWW reported higher values than what was found, please reevaluate and resubmit if errors.	Rules T
Has the permittee complied with all of the specific conditions of the permit?. [N.J.A.C. 7:19- 2.14(a)]	ON <input type="checkbox"/>	TWW didn't apply for the requested permit modification within 120 days of the EDP, pursuant to their permit requirement.	Rules T
COMPLAINT INVESTIGATION, REPORTING AND MITIGATION.	H <input type="checkbox"/>		Rules T
Did the permittee investigate any valid complaints by users of wells or surface water supplies within the zone of influence of this diversion?. [N.J.A.C. 7:19- 2.14(a)11]	IC <input type="checkbox"/>	All water quality complaints recieved by TWW directly are sampled, logged.	Rules T
Did the permittee repair or replace any well or surface water supply that has been rendered unusable as a result of the permittee's diversions?. [N.J.A.C. 7:19- 2.14(a)11]	NA <input type="checkbox"/>		Rules T
WATER CONSERVATION AND DROUGHT MANAGEMENT PLAN.	H <input type="checkbox"/>		Rules T
Did the Water Allocation Permittee adopt and implement, to the satisfaction of the Department, a Water Conservation and Drought Management Plan as required by the permit?. [N.J.A.C. 7:19- 2.14(a)10]	OC <input type="checkbox"/>	Failure to adopt and implement, to the satisfaction of the Department, a Water Conservation and Drought Management Plan as required by the permit. Due on 9/30/17 and every 2 years after.	Rules T

### Subject Item: WSIN72380 - DELAWARE RIVER

**Operating Status:** No status specified.

**Comments:** No comments added.

Did the permittee divert water only from the approved source at the maximum rate specified in the permit?	N <input type="checkbox"/>	increased pump capacity.	WAP150001 2 L
---	-------------------------------	--------------------------	---------------------

### Subject Item: WSWA72381 - 5187 WA PERMIT - ALL DIVERSION SOURCES

**Operating Status:** No status specified.

**Comments:** No comments added.

Maximum Diversion Rate <= 52083.0 Gallons Per Minute. [N.J.A.C. 7:19- 2.14(a)2]	IC <input type="checkbox"/>		WAP150001 3 L
---	--------------------------------	--	---------------------

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

## Compliance Evaluation Report

Start Date: 3/14/2018

Activity: SCI180001 \*Standard Compliance Inspection

Lead Investigator: Sponaugle, Jessica

## 1111001 TRENTON WATER WORKS, Trenton City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Req. Source Ref # Req. Type
-------------	---------------	---------------------	-----------------------------------

Subject Item: WSWA72381 - 5187 WA PERMIT - ALL DIVERSION SOURCES

Operating Status: No status specified.

Comments: No comments added.

Water Diverted <= 1350.0 Million Gallons Per Month. [N.J.A.C. 7:19-2.14(a)2]	IC <input type="checkbox"/>	2016: highest in Sept, 912 MG 2017: highest in July and Oct with 868 million gallons, but reporting errors.	WAP150001 5 L
Water Diverted <= 16200.0 Million Gallons Per Year. [N.J.A.C. 7:19-2.14(a)2]	IC <input type="checkbox"/>	2016: 9686.9 MGY 2017: 7295 MGY	WAP150001 6 L
The permittee shall reduce unaccounted-for water to less than 15% by the expiration date of this permit. A detailed annual report shall be submitted outlining the measures taken to reduce the unaccounted-for water to below 15% and should include but not be limited to: identified areas of water loss; methods utilized for leak detection; leaks repaired; meters added/replaced, and updated annual unaccounted-for water calculations. In addition, copies of the AWWA Water Audit submittal to DRBC should be provided to the Bureau. This annual report shall be submitted Submit Report as Described: by January 31st of each year. [N.J.A.C. 7:19- 2]	OC <input type="checkbox"/>	TWW did not submit the annual report for 2017, was due 1/31/18.	WAP150001 16 S

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No

# Compliance Evaluation Report

## Subject Item Comments Appendix

### Subject Item: GSIN - General System Info New Feb 2018

**Operating Status:** No status specified.

**Comments:** General System Info Additional Comments:

- As of 3/19/18, coordination efforts are ongoing between Wade Trim, Banc3 and TWW operators. To ensure successful operation of the water system, TWW needs to develop a protocol to ensure the operators, laborers, water repairers, etc. are aware of their roles and responsibilities within the water system.
- TWW needs to re-evaluate training plans and protocols due to new employees and new responsibilities of staff within the water system. The current protocol is that operators are trained when they start their career at TWW and any changes to SOPs are given via "Memos", no continuous trainings are given. Need to establish an ongoing training program that trains day and night time operators.
- Treatment plant is still operating on a temporary sodium hypo system until building maintenance is complete.
- Onsite inspection of the Jones Farm Storage Tank and Lawrence Storage Tank. Lawrence tank is down due to a warranty repair, contractor didn't weld and seal properly, tank empty during time of inspection. Mercerville tank needs a new circulation mixer, like TWW needed for Whitehorse tank. This project is not out to bid yet. L.O. stated that Jones Farm and Hopewell tanks should be repainted in 2019.
- Onsite inspection of the reservoir, central pump station and the reservoir gatehouse. Reservoir gatehouse new chlorine feed system is fully installed and operational. They are keeping the temporary system onsite as a backup. Reservoir was full during time of inspections, no issues noted.

---

### Subject Item: NSW1 - New Surface/ GUDI Water Treatment Rule & POE Mon. Req 01

**Operating Status:** No status specified.

**Comments:** Surface Water Treatment Additional Comments:

- Ongoing study on the Super Pulsators because they are not functioning properly, potentially causing significant solids buildup in the CI contact tanks.
- One chlorine contact tank is currently down due to the solids rake being broken, has been down for 2 years. Online tank is having a problem removing solids effectively. Has the potential to impact water quality.
- 2 mixing basins are down, only operate 2 at a time
- smaller flash mixer down for service but the larger is online, only need 1 online at a time.

---

### Subject Item: WXAP - Prenjems Water Allocation Permit

**Operating Status:** No status specified.

**Comments:** Water Utilization Reports were not reflecting water diverted to Aqua, instructed TWW to resubmit with accurate reports and submit missing Oct-Dec 2017 report. TWW corrected the reports and submitted the missing report on 3/16/18.

---

IC - In Compliance  
PV - Potential Violation  
DC - Data Collection

ND - Compliance Not Determined  
NC - No Obvious Concern  
WN - Warning

OC - Out of Compliance  
ON - Out of Compliance, Non-referred

NA - Not Applicable  
Y - Yes

NI - Not Inspected  
N - No