State of New Jersey

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Governor

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Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
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BOB MARTIN
Commissioner

July 24, 2017

Via Email Only

Re: **Final Discharge to Surface Water (DSW) Consolidated Master General Permit Renewal**
Category: BPW – Potable Water Treatment Plant General Permit
NJPDES Permit No. NJ0129500
NJPDES Master General Permit Program Interest
Trenton City, Mercer County

Dear Interested Parties:

Enclosed is a **final** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. Notice of the draft action appeared in five newspapers to represent all applicable New Jersey Counties and was published in the Department's May 3, 2017 DEP Bulletin. The public comment period closed on June 5, 2017.

No written comments were received on the draft action during the comment period. Therefore, the right by you, or any third party, to contest the permit conditions in an adjudicatory hearing has been waived pursuant to N.J.A.C. 7:14A-15.13. However, as explained below, the Department has made minor changes to the conditions specified in the final permit for two facilities.

Based on email correspondence dated May 17, 2017 from Michael Cannon, Production Supervisor, New Jersey American Water, and Licensed Operator for the Raritan Millstone WTP (NJG0000965), it came to the Department's attention that the permittee had erroneously reported free chlorine data instead of the required total residual chlorine data for Chlorine Produced Oxidants (CPO) at DSN003A during the existing permit cycle. Therefore, the Department recalculated the CPO Water Quality Based Effluent Limitations (WQBELs) using the corrected data provided by the permittee in an email correspondence dated May 25, 2017. Thus, the newly calculated monthly average CPO limitation at this outfall changed from 0.31 mg/L to 0.51 mg/L in the final permit; whereas, the daily maximum limitation remained the same at 1.07 mg/L.

Additionally, based on effluent data, and in consideration of the fact that the actual volume of discharge at two outfalls (DSNs 001A and 002A) at Butler Water Department (NJG0025721) is orders of magnitude lower than the reported flows, the monitoring frequency for Total Suspended Solids (TSS) at these outfalls has been decreased from 1/Month to 1/Quarter in the final permit.

The above changes are reflected in the facility and outfall specific Permit Summary Tables (PSTs) included as an attachment to this document. Consistent with the requirements specified in the PSTs, individual authorizations will be issued for twenty-two facilities following the issuance of the Final Master BPW Permit Renewal, where the renewal authorizations will become effective on October 1, 2017. Pursuant to N.J.A.C. 7:14A-2.8(a), the existing permit conditions will continue to remain in full force and effect until the permit renewal becomes effective.

The facilities covered under this General BPW Permit Renewal and their corresponding counties are listed in the table below:

	NJPDES #	Facility Name	Facility County
1	NJG0133965	Alpha Borough – Well #3	Warren
2	NJG0034924	Atlantic Highlands WTP	Monmouth
3	NJG0025721	Butler Water Department	Morris
4	NJG0035742	City of Salem WTP	Salem
5	NJG0098540	Clyde Potts WTP	Morris
6	NJG0029190	Freehold Borough WTP	Monmouth
7	NJG0004731	Green Street WTP	Burlington
8	NJG0031887	Harbor Road WTP	Monmouth
9	NJG0029548	Hartford Road WTP	Burlington
10	NJG0068705	Heron Avenue WTP	Salem
11	NJG0109266	Mansfield WTP	Burlington
12	NJG0136603	Morris Lake WTP	Sussex
13	NJG0062111	North Jersey District Water Supply Commission (NJDWSC)	Passaic
14	NJG0063711	Pequannock WTP	Passaic
15	NJG0000965	Raritan Millstone WTP	Somerset
16	NJG0001198	Robert Frost Water Treatment Facility (Well #10)	Mercer
17	NJG0025453	Shorelands Water Company, Inc., Treatment Plant #1	Monmouth
18	NJG0025461	Shorelands Water Company, Inc., Treatment Plant #2	Monmouth
19	NJG0064271	Taylortown Filter Plant	Morris
20	NJG0035190	Township of North Brunswick WTP	Somerset
21	NJG0068730	Water Street WTP	Salem
22	NJG0062693	Woodlane WTP	Burlington

As per N.J.A.C. 7:14A-4.2(e)3, any facility planning to continue discharging after the expiration date of an existing NJPDES permit shall file an application for renewal at least 180 calendar days prior to the expiration of the existing permit.

All monitoring shall be conducted in accordance with 1) the Department's "Field Sampling Procedures Manual" applicable at the time of sampling (N.J.A.C. 7:14A-6.5(b)4), and/or 2) the method approved by the Department in Part IV of the permit. The Field Sampling Procedures Manual is available at http://www.nj.gov/dep/srp/guidance/fspm/.

Please note, on October 22, 2015, the U.S. Environmental Protection Agency (EPA) promulgated the final National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule (see Federal Register 80:204 p. 64064). This rule requires entities regulated under the Clean Water Act NPDES program to report certain information electronically instead of filing paper reports. Consistent with this rule, please be advised that the existing reporting requirements contained within your permit have been moved and/or modified. Please refer to Part II of your permit for further details regarding the new reporting requirements. To view the final rule, please visit https://www.gpo.gov/fdsys/pkg/FR-2015-10-22/pdf/2015-24954.pdf. Information on how to enroll in electronic reporting may be obtained from the Department's website at www.nj.gov/dep/dwq/mrf.htm.

If you have questions or comments regarding this final action, please contact any member of the BPW Team, Michele Christopher (Michele.Christopher@dep.nj.gov), Bela Mankad (Bela.Mankad@dep.nj.gov), or Johnathan Lakhicharran (Johnathan.Lakhicharran@dep.nj.gov) by email or by phone at (609) 292-4860.

Sincerely,

Melisse Carasia Auriti, Section Chief
Bureau of Surface Water Permitting

Enclosures
cc: Permit Distribution List
Masterfile #: 39609; PI #: 50577

Table of Contents for the Final Permit

This permit package contains the following items below:

(#1) Alpha Borough Well #3 – NJG0133965

Facility Description

Source Water: Ground water from one well
Discharge Frequency: 001A is intermittent, discharging backwash once every one and a half to two days for one hour (45,000 total gallons). No discharge since September 2015.
Additives: None present in backwash water.
WCR Parameters: The monitoring frequency for 001A is once per year.

Receiving Waterbody Information

Receiving Water: Pohatcong Creek via public storm sewer and unnamed tributary
Receiving Water Classification: FW2-TM (C1)
Hydraulic Unit Code (HUC) 14: 02040105140070
Water Quality Impairments: Total Phosphorus

OUTFALL 001A

Backwash water from the cation exchanger used to treat for calcium and magnesium in ground water

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2013 – 8/2015	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.0087 0.0095	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	Days/Month	Monthly Total	12	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	--	--	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	7.59 52 **(1)** 15/12	20 25	20 25	1/Month	Composite
pH	s.u.	Instant Min. Instant Max.	6.2 **(2)** 8.42	6.0 9.0	6.0 9.0	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.065 0.411**(3)** 23/3	MR MR	MR MR	1/6 Months	Composite
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Composite
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	>100 **(4)**	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Data summary does not include results for June 2013 (3270 mg/L) and July 2013 (75 mg/L) as they are considered outliers.
(2) Data summary does not include results for June 2013 (3.48 s.u.) as it is considered an outlier.
(3) Data summary does not include results for May 2013 (2.02 mg/L) as it is considered an outlier.
(4) Acute WET data consists of three data points all >100% dated 9/2015, 4/2015 and 11/2014.

(#2) Atlantic Highlands WTP – NJG0034924

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent, almost daily for 30 minutes
Additives: Aluminum sulfate and Lime
WCR Parameters: The monitoring frequency is once per five years.

Receiving Waterbody Information

Receiving Water: Many Mind Creek
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030104060060
Water Quality Impairments: Chlordane, DDT, Mercury, and PCBs in Fish Tissue; Dissolved Oxygen, Total Phosphorus, Arsenic

OUTFALL 001A
Filter backwash and sludge supernatant from stainless steel storage tanks; finished water is used to backwash the filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 – 3/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.10 **(1)** 0.87	MR MR	MR MR	Continuous	Metered
Duration of Discharge	Days/Month	Monthly Total	107 **(2)**	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	--	MR	MR	1/Month	Calculated
pH	s.u.	Instant Min. Instant Max.	6.5 8.0	6.0 9.0	6.0 9.0	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	6 14 5/3	20 40	20 40	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.1 <0.1 0/8	MR MR	MR MR **(3)**	1/Quarter	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	2.6 5.4 8/0	MR MR	MR MR	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.26 1.0 5/3	MR MR	MR MR	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	>100 (**4**)	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) DMR data appears to be erroneously reported; the permittee's application indicates that the current effluent flow is 0.012 MGD.
(2) In existing permit "Duration of Discharge" was reported as Days/6 Months.
(3) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(4) Only 1 data point was submitted with the application (dated 12/4/07).

(#3) Butler Water Department - NJG0025721

Facility Description for Outfalls 001A, 002A and 003A

Source Water: Kakeout (Butler) Reservoir
Discharge Frequency: **001A**: intermittent, **002A**: intermittent; **003A**: To date, NO DISCHARGE.
Additives: Alum (aluminum sulfate), Caustic Soda, Chlorine, Orthopolyphosphate
WCR Parameters: For 001A, 002A, and 003A, the WCR monitoring frequency is once per year.

Receiving Waterbody Information

Receiving Water: **001A & 002A**: Stone House Brook; **003A**: Butler Reservoir
Receiving Waters Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030103050070
Water Quality Impairments: Temperature

OUTFALL 001A

Backwash from four dual media (anthracite and sand) filters (using finished water) via two unlined lagoons

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.03 **(1)** 0.096 **(1)**	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Month	Monthly Total	148 **(2)**	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(3)**	--	--	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	3.1 7.3 8/1	20 40	20 40	1/Quarter	Grab
pH	s.u.	Instant Min. Instant Max.	6.5 7.1	6.0 9.0	6.0 9.0	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.062 0.1 **(4)** 7/8	MR 0.17	MR 0.17 **(5)**	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.14 0.23 8/1	1.5 3.0	1.5 3.0	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Composite
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	>100 **(6)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Reported flow values represent flows discharged to the lagoons and are based on data provided by the permittee via email for the monitoring period of April 2014 through September 2016.
(2) In existing permit "Duration of Discharge" was reported as Days/6 Months.
(3) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(4) Data summary does not include results for March 2015 (0.8 mg/L) as it is considered an outlier.
(5) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(6) Two WET data values of >100% were submitted, dated May 24, 2012 and July 17, 2016.

(#3) Butler Water Department - NJG0025721 (continued)

OUTFALL 002A

Decant water from two lined lagoons (which consists of slurry from the iron and suspended solids removal unit)

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 – 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.25 **(1)** 0.09 **(1)**	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	Days/Month	Monthly Total	166 **(2)**	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(3)**	--	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	3.0 6.8 **(4)** 13/2	20 40	20 40	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	17.97 28.8 **(4)** 7/1	MR MR	MR MR	1/Quarter	Grab
pH	s.u.	Instant Min. Instant Max.	6.4 7.0	6.0 9.0	6.0 9.0	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.14 0.503 **(4)** 3/15	1.5 3.0	1.5 3.0	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Composite
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	>100 **(5)**	MR	MR	1/5 Years	Composite

OUTFALL 003A

Overflow from (2) potable water storage tanks (no discharge to date.)

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 – 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(3)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
-- No data available

(1) Reported flow values represent what is being discharged to the lagoon, not the stream. Note that average flow is reported as being greater than maximum which appears to be a reporting error.
(2) In existing permit "Duration of Discharge" was reported as Days/6 Months.
(3) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(4) Data summary does not include results for March 2015 (COD 496 mg/L, Iron 44.5 mg/L, and TSS 1208 mg/L), as these values are considered to be outliers.
(5) Two WET data values of >100% were submitted, dated August 24, 2012 and September 15, 2015.

(#4) City of Salem WTP- NJG0035742

Facility Description for Outfalls 001A and 002A

Source Water: Ground water
Discharge Frequency: Intermittent, no discharge has occurred since April 2012.
Additives: Klenphos (zinc orthophosphate), Chlorine
WCR Parameters: For 001A and 002A, is established at once per year.

Receiving Waterbody Information

Receiving Water: Unnamed tributary to Keasbeys Creek
Receiving Water Classification: FW2-NT/SE1
Hydraulic Unit Code (HUC) 14 for 001A: 02040206040040
Hydraulic Unit Code (HUC) 14 for 002A: 02040206040020
Water Quality Impairments for 001A and 002A: PCBs in Fish Tissue

OUTFALL 001A

Filter backwash & clarifier blowdown via 2 settling lagoons; Finished water is used to backwash the filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 – 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR **(2)**	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
-- No Data Available
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#4) City of Salem WTP- NJG0035742 (continued)

OUTFALL 002A Filter Backwash & Clarifier Blowdown via 2 settling lagoons; No discharge, only used when Lagoon #1 is out of service to be cleaned; Finished water is used to backwash the filters.							
PARAMETER	**UNITS**	**AVERAGING PERIOD**	**WASTEWATER DATA 4/2012 – 9/2016**	**EXISTING LIMITS**	**FINAL LIMITS**	**FINAL MONITORING FREQUENCY**	**SAMPLE TYPE**
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR **(2)**	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
-- No Data Available
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#5) Clyde Potts WTP – NJG0098540

Facility Description

Source Water: Clyde Potts Reservoir
Discharge Frequency: Continuous
Additives: Not applicable (finished water is not discharged).
WCR Parameters: This monitoring frequency is established at once per 5 years.

Receiving Waterbody Information

Receiving Water: 001A to Harmony Brook
Receiving Water Classification: FW2-TP (**C1**)
Hydraulic Unit Code (HUC) 14: 02030103020010
Water Quality Impairments: Arsenic, Temperature

OUTFALL 001A

Wastewater generated during the chemical cleaning cycle of the membrane filters, stormwater, overflow from the Clyde Potts Reservoir, diverted stream flow and seepage water from the Reservoir toe drains and filter blankets.
Mid-process water is used to clean membrane filters before the addition of additives.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 – 9/2016	EXISTING LIMITS	INITIAL LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.25 **(1)** 2.5	MR MR	MR MR	MR MR	1/Day	Measured
Duration of Discharge	Days/Month	Monthly Total	91 **(2)**	MR	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(3)**	--	--	MR	MR	1/Month	Calculated
pH	s.u.	Instant Min. Instant Max.	6.3 7.6	6.0 9.0	6.0 9.0	6.0 9.0	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	6.9 16 8/10	20 25	20 25	20 25	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	15.3 23 10/8	MR 50	MR 50	MR 50	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<5.0 - <10.0 <5.0 - <15.0 0/18	10 15	10 15	10 15	1/6 Months	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.02 **(4)** 0.02 1/16	MR 0.051	MR 0.051	MR 0.051 **(5)**	1/Month	Grab
Thallium, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	-- 1.12 2/2	-- MR	MR MR	MR MR	1/6 Months	Grab
Chronic WET, IC25 (*Ceriodaphnia dubia*)	% effluent	Minimum	24.9 **(6)**	MR	MR **(7)**	40	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Flow data is for the period of January 2014 through December 2016, which was provided by the permittee via email on February 8, 2017.
(2) In existing permit "Duration of Discharge" was reported as Days/Quarter.
(3) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(4) Data summary does not include results for October 2013 (0.93 mg/L), as this value is considered to be an outlier.
(5) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(6) WET Data consists of four data points 75%, >100%, 24.9%, and >100% dated 8/25/2015, 8/22/2014, 8/9/2013, and 8/8/2012 respectively.
(7) A compliance schedule for Chronic WET of 36 months has been included for this facility.

Other Information:

002A discharges to the Clyde Potts Reservoir, but this discharge does not include monitoring requirements because the discharge consists of unfiltered and physically filtered reservoir water withdrawn from the Clyde Potts Reservoir and returned directly to the reservoir with no addition of pollutants.

(#6) Freehold Borough WTP - NJG0029190

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent (1-2 times a year, 2-3 days each time)
Additives: Lime, Sodium Hypochlorite, Fluoride, Polyphosphate (does not contain any zinc)
WCR Parameters: This monitoring frequency is established at once per 5 years.

Receiving Waterbody Information

Receiving Water: McGellaird's Brook
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030105150020
Water Quality Impairments: No known impairment

OUTFALL 001A

Backwash resulting from dewatering iron sludge from sludge drying beds. Finished water is used to backwash the filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 – 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.003 0.009 **(1)**	MR MR	MR MR	1/Discharge	Calculated **(2)**
Duration of Discharge	Days/6 Months	6 Month Total	3	MR	MR	1/6 Months	Calculated
Total Flow	Million Gallons	6 Month Total **(3)**	0.016	MR	MR	1/6 Months	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	3.5 6 2/5	20 40	20 40	1/6 Months	Grab
pH	s.u.	Instant Min. Instant Max.	6.9 8.5	6.0 9.0	6.0 9.0	1/6 Months	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.094 0.2 4/3	MR MR	MR MR **(4)**	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.24 0.24 1/6	MR MR	MR MR	1/6 Months	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.19 0.3 4/3	MR MR	MR MR	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.08 0.08 1/6	MR MR	MR MR	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	>100 **(5)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) DMR Data was found to be erroneously reported; this corrected data was provided by the permittee in a phone conversation on January 17, 2017.
(2) Flow is calculated by equating the square footage of the sludge drying bed and measuring the distance it falls in a 24-hour period.
(3) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(4) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(5) Acute WET data consisted of a single data value of >100%, which was reported on the DMR for the time period of 4/2012 – 9/2012.

(#7) Green Street WTP - NJG0004731

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent (2 times a week; discharge duration is approximately 3 hours each time)
Additives: Sodium Hypochlorite, Caustic soda, Zinc Phosphate
WCR Parameters: The monitoring frequency is retained at once per five years.

Receiving Waterbody Information

Receiving Water: North Branch of Rancocas Creek
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02040202040050
Water Quality Impairments: PCBs in Fish Tissue; Arsenic, Total Phosphorus

OUTFALL 001A

Filter Backwash via lagoon; Finished water is used to backwash the filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.0431 0.388	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	Days/Month	Monthly Total	7	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(1)**	0.27	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	8.13 39.0 6/48	20 40	20 40	1/Quarter	Grab
pH	s.u.	Instant Min. Instant Max.	6.19 8.92	6.0 9.0	6.0 9.0	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.09 0.48 6/48	MR MR	MR MR **(2)**	1/Quarter	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.536 3.70 46/8	1.5 3.0	1.5 3.0	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	111.7 423.0 14/40	MR MR	MR MR	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.13 0.77 40/14	MR MR	MR MR	1/Quarter	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	31.32 154 **(3)** 34/20	MR MR	MR MR	1/Quarter	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	>100 **(4)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(3) Data summary does not include results for August 2013 (620 µg/L) as it is considered an outlier.
(4) The Acute WET data consists of one data value of >100%, dated September 16, 2016.

(#8) Harbor Road WTP – NJG0031887

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent
Additives: Lime
WCR Parameters: This monitoring frequency is retained at once per five years.

Receiving Waterbody Information

Receiving Water: Deep Run
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030105160010
Water Quality Impairments: Dissolved Oxygen

OUTFALL 001A

Filter backwash via lagoons; Raw water is used to backwash the filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.01 0.04	MR MR	MR MR	1/Discharge	Calculated **(1)**
Duration of Discharge	Days/Month	Monthly Total	18	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(2)**	0.19	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	11 40 28/19	20 40	20 40	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6 8.9	6.0 9.0	6.0 9.0	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	17.96 167 33/15	MR MR	MR MR	1/Quarter	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	15.9 182 48/0	MR MR	MR MR	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	252 1344 44/3	MR MR	MR MR	1/6 Months	Grab
Bromodichloromethane	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	-- --	-- --	MR MR	1/Year	Grab
Chlorodibromomethane	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	-- --	-- --	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	-- 258 1/0	-- --	MR MR	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	>100 **(3)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Flow is calculated using the pumping rate of the filter backwash pumps.
(2) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(3) WET data value consists of one data value of >100%, dated January 6, 2015.

(#9) Hartford Road WTP – NJG0029548

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent, Backup Plant, discharged once in August 2009.
Additives: Lime, Chlorine
WCR Parameters: This monitoring frequency is established at once per year.

Receiving Waterbody Information

Receiving Water: Kendles Run
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02040202080030
Water Quality Impairments: PCBs in Fish Tissue; Arsenic, E. coli, Total Phosphorus

OUTFALL 001A
Filter Backwash, Floor Drain in the Lime Room, and 4 sump pumps via lagoons.
Finished water is used to backwash the filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 0.1	MR 0.1 **(2)**	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#10) Heron Avenue WTP – NJG0068705

Facility Description

Source Water: Well water: wells #3 & #6
Discharge Frequency: Backup plant, no discharge since February 2002.
Additives: Zinc Orthophosphate, Chlorine (gas), Sodium Hypochlorite, Lime, Aluminum Sulfate, polymers
WCR Parameters: This monitoring frequency is established at once per year.

Receiving Waterbody Information

Receiving Water: Delaware River Zone 5
Receiving Water Classification: Zone 5
Hydraulic Unit Code (HUC) 14: 02040206040030
Water Quality Impairments: PCBs in Fish Tissue

OUTFALL 001B

Filter backwash (using finished water) & clarifier blowdown (to 2 unlined lagoons & then recycled to head of plant).

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR **(2)**	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg.	NODI	MR	MR	1/Year	Grab
Iron, Total Recoverable	mg/L	Daily Max	NODI	MR	MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max	NODI NODI	MR MR	MR MR	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max	NODI NODI	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Mysidopsis bahia)*	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No discharge
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#11) Mansfield WTP – NJG0109266

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent (no discharge since October 2006)
Additives: Zinc Orthophosphate, Chlorine
WCR Parameters: This monitoring frequency is established at once per year.

Receiving Waterbody Information

Receiving Water: Unnamed tributary to Craft's Creek
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02040201090020
Water Quality Impairments: PCBs in Fish Tissue; Arsenic, E. coli

OUTFALL 001A

Well blow-offs from four supply wells, sand drying bed underdrains, finished water tank emergency overflow, greensand filter backwash, and stormwater.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	Continuous	Metered
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max.	NODI NODI	25 MR	25 MR	1/Year	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.5 8.5	6.5 8.5	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 0.018	MR 0.018 **(2)**	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Radium-226, Total	PCi/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Radium-226 & Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#12) Morris Lake WTP – NJG0136603

Facility Description

Source Water: Morris Lake
Discharge Frequency: Almost continuous (daily 2-3 batches/hour @ ~1400 gallons/ batch)
Additives: Sodium Hypochlorite and Sodium Bisulfite, Zinc Orthophosphate, Hydrofluorosilicic Acid, Sodium Carbonate
WCR Parameters: This monitoring frequency is established at once per year.

Receiving Waterbody Information

Receiving Water: Morris Lake
Receiving Water Classification: FW2-NT **(C1)**
Hydraulic Unit Code (HUC) 14: 02020007010010
Water Quality Impairments: No known impairment

OUTFALL 001A

Membrane filter backwash and self-cleaner backwash (using finished water).

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.07 **(1)** 0.77	MR MR	MR MR	Continuous	Metered
Duration of Discharge	Days/Month	Monthly Total	30	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(2)**	2.15	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	11.4 33 54/0	20 40	20 40	1/Month	Grab
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	8.3 17 54/0	15 MR	15 MR	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6.6 6.9	6.5 8.5	6.5 8.5	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	1.84 6.6 23/31	10 15	10 15	1/Quarter	Grab
Copper, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	15.5 28.2 7/47	MR MR	MR MR	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.1 <0.1 0/54	MR 0.018	MR 0.018 **(3)**	1/Month	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	55 69 2/7	MR MR	MR MR	1/Quarter	Grab
Chronic WET IC25 (*Pimephales promelas)*	% effluent	Minimum	26.6 **(4)**	61	61	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Monthly average Flow is based on discussion with the Permittee and correction of data reported for 8/2013 and 4/2015.
(2) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(3) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(4) Chronic WET data consists of ten data points; four values of >100% dated 3/2016, 3/2014, 3/2013, and 9/2012; two values of 97.5% dated 9/2015 and 3/2015; one value of 95.6% dated 12/2016; one value of 85.7% dated 9/2014; one value of 78.7% dated 9/2013; and one value of 26.6% dated 10/2016.

(#13) North Jersey District Water Supply Commission (NJDWSC) – NJG0062111

Facility Description for Outfall 002A and 003A

Source Water: Wanaque Reservoir
Discharge Frequency: Once per day for 6 to 12 hours
Additives: Hypochlorite, Aluminum based coagulant, Polymer, Permanganate (used infrequently)
WCR Parameters: This monitoring frequency is retained at once per six months at outfalls 002A and 003A.

Receiving Waterbody Information

Receiving Water for 002A: Wanaque Reservoir
Receiving Water for 003A: Unnamed tributary to Posts Brook
Receiving Water Classification for 002A: FW2-TM (**C1**)
Receiving Water Classification for 003A: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14 for 002A: 02030103070070
Hydraulic Unit Code (HUC) 14 for 003A: 02030103070070
Water Quality Impairments for 002A and 003A: Temperature

OUTFALL 002A

Effluent from the decant tower in the lagoon consists of both major and minor contributory waste streams. Major contributory waste streams include: centrate from the sludge centrifuge operation; equalization tank 3 overflow - which contains settling basin discharge via claritrac units; and Residual Treatment Facility supernatant and decant from the storage tanks. The lagoon also receives stormwater runoff from a 16 acre watershed and 10 surface acres. Minor contributory waste streams include: overflow from an upland holding pond; building sumps; and storm drains. Filter backwash is normally recycled back to the head of the water treatment plant.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 8/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.42 1.94	MR MR	MR MR	Continuous	Metered
Duration of Discharge	Days/Month	Monthly Total	29	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(1)**	12.8	MR	MR	1/Month	Calculated
pH	s.u.	Instant Min. Instant Max.	6.32 7.6	6.0 9.0	6.0 9.0	1/Month	Grab
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	12.4 31.5 53/0	25 MR	25 MR	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	13.2 28 53/0	20 25	20 25	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.1 0.1 2/51	MR MR	MR MR **(2)**	1/Month	Grab
Chloroform	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	36 66 53/0	MR 68	MR 68	1/Month	Grab
Bromodichloromethane	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	-- 4.326 5/3	-- --	MR MR	1/Quarter	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	21132 42590 9/0	MR MR	MR MR	1/6 Months	Grab
Chronic Toxicity, IC25 *(Ceriodaphnia dubia)*	% effluent	Minimum	1.6 **(3)**	55	55	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(3) Chronic WET data consists of nine data points; three values of 2% dated 6/2016, 12/2015, and 8/2014; three values of 1.6% dated 11/2013, 6/2013, 8/2012; one value of 4% dated 9/2015; one value of 9.8% dated 2/2013; and one value of 25% dated 3/2015.

(#13) NJDWSC – NJG0062111 (continued)

OUTFALL 003A

Effluent consists of overflow from the lagoon and contains the same inflows as described for DSN002A, which rarely occurs. However, there is a small leak of approximately 1.2 gallons per minute which is continual, and is believed to be due to a fracture in the pipe which runs under the berm.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	INITIAL LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.0024 0.0058	MR MR	MR MR	MR MR	Continuous	Measured
Duration of Discharge	Days/Month	Monthly Total	30	MR	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(1)**	0.073	MR	MR	MR	1/Month	Calculated
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	7.5 27.4 53/0	25 MR	25 MR	25 MR	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	7.8 18 53/0	20 40	20 40	20 40	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.1 <0.1 0/53	MR MR	MR MR	MR MR **(2)**	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6.22 7.2	6.0 9.0	6.0 9.0	6.0 9.0	1/Month	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	14852 20900 9/0	MR MR	MR MR	MR MR	1/6 Months	Grab
Chronic Toxicity, IC25 *(Ceriodaphnia dubia)*	% effluent	Minimum	4 **(3)**	55	55 **(4)**	61	1/ 6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(3) Chronic WET data consists of nine data points; 4%, 5%, 33%, 34%, 23%, 31.4%, 17.4%, 12.8% and 17.2% dated 6/2016, 12/2015, 9/2015, 3/2015, 8/2014, 11/2013, 6/2013, 2/2013, and 8/2012 respectively.
(4) A compliance schedule for Chronic WET of 36 months has been included for this facility.

(#14) Pequannock WTP – NJG0063711

Facility Description

Source Water: Charlotteburg Reservoir
Discharge Frequency: 001A varies depending on rainfall, 002A NODI, 003A NODI, 004A NODI, 005A every Day (~1025 gpd)
Additives: Aluminum Sulfate, Liquefied Chlorine, Polyaluminum Chloride, Lime, Sodium Silicate, Polymers
WCR Parameters: This monitoring frequency is established at once per five years for 005A, and once per year for outfalls 001A, 002A, 003A and 004A.

Receiving Waterbody Information

Receiving Water: DSN001A discharges to the Charlotteburg Reservoir; DSN002A- DSN005A discharge to the Pequannock River
Receiving Water Classification: Charlotteburg Reservoir- FW2-TM (**C1**); Pequannock River - FW2-TP (**C1**)
Hydraulic Unit Code (HUC) 14 for 001A: 02030103050050
Hydraulic Unit Code (HUC) 14 for 002A: 02030103050060
Hydraulic Unit Code (HUC) 14 for 003A: 02030103050060
Hydraulic Unit Code (HUC) 14 for 004A: 02030103050060
Hydraulic Unit Code (HUC) 14 for 005A: 02030103050060
Water Quality Impairments for 001A: Arsenic and Dissolved Oxygen
Water Quality Impairments for 002A, 003A, 004A, 005A: No known impairments

OUTFALL 001A
Emergency overflow of supernatant from the sludge lagoon.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max	0.001 0.075	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	Days/Month	Monthly Total	42 **(1)**	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(2)**	--	--	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	9 18 8/0	20 25	20 25	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6.1 6.35	6.0 9.0	6.0 9.0	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<1-<5.1 <1-<5.1 0/8	10 15	10 15	1/6 Months	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.01 <0.01 0/8	MR 0.01	MR 0.01 **(3)**	1/Quarter	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	89.1 **(4)**	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) In existing permit "Duration of Discharge" was reported as Days/6 Months.
(2) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(3) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(4) One WET data value submitted, dated April 2014.

(#14) Pequannock WTP – NJG0063711 (continued)

OUTFALL 002A

INACTIVE 002A: Emergency overflow from the coagulation tank.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Average Daily Max	NODI NODI	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 25	20 25	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	NODI NODI	10 15	10 15	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 0.01	MR 0.01 **(2)**	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

OUTFALL 003A

INACTIVE 003A: Emergency overflow from the clear well.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Average Daily Max	NODI NODI	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 25	20 25	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	NODI NODI	10 15	10 15	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 0.01	MR 0.01 **(2)**	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#14) Pequannock WTP – NJG0063711 (continued)

OUTFALL 004A

INACTIVE 004A: Emergency overflow from the "wastewater" holding tanks.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Average Daily Max	NODI NODI	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	--	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 25	20 25	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	NODI NODI	10 15	10 15	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 0.01	MR 0.01 **(2)**	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

OUTFALL 005A

Screen backwash (every 4 to 6 hours) using raw water where each discharge lasts for 6 minutes.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	INITIAL LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Average Daily Max	0.0025 0.0025	MR MR	MR MR	MR MR	Continuous	Calculated
Duration of Discharge	Days/Month	Monthly Total	30 **(3)**	MR	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(1)**	--	--	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	5 21 49/5	20 25	20 25	20 25	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6 7.4	6.0 9.0	6.0 9.0	6.0 9.0	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	1.5 2.4 8/46	10 15	10 15	10 15	1/6 Months	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.01 <0.01 0/54	MR 0.01	MR 0.01 **(2)**	MR 0.01 **(2)**	1/Quarter	Grab
Chronic WET IC25 (*Ceriodaphnia dubia*)	% effluent	Minimum	19.5 **(4)**	MR	MR **(5)**	61	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(3) Duration of discharge was reported on the DMR as a half hour each day.
(4) Chronic WET data consisted of the following data values: 10/2012 (19.5%),10/2013 (34.9%), 12/2014 (>100%), 11/2015 (>100%) and 11/2016 (>100%).
(5) A compliance schedule for Chronic WET of 36 months has been included for this facility.

(#15) Raritan Millstone WTP – NJG0000965

Facility Description

Source Water: Raritan River
Discharge Frequency: 001A has not discharged since 2002, 003A discharges daily, and 004A has not discharged to date per departments records.
Additives: Sodium Hypochlorite, Aluminum Sulfate, Fluoride, Phosphoric Acid, Sulfuric Acid, Polymers, Potassium Permanganate
WCR Parameters: This monitoring frequency is once per year for all outfalls.

Receiving Waterbody Information

Receiving Water: Raritan River via a ditch
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14 for 001A: 02030105080030
Hydraulic Unit Code (HUC) 14 for 002A: 02030105120140
Hydraulic Unit Code (HUC) 14 for 003A: 02030105120140
Water Quality Impairments for 001A: pH
Water Quality Impairments for 002A and 003A: Arsenic, Benzene, Total Phosphorus, TSS

OUTFALL 001A
Emergency bypass from 2 concrete basins; no discharge since 2002.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR **(2)**	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	2000 4000	2000 4000	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#15) Raritan Millstone WTP – NJG0000965 (continued)

OUTFALL 003A

Screen spray backwash (using raw river water and city water), 10-minute cycle performed once every one to two weeks in the summer and two to three times per day in the winter.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	INITIAL LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	1.05 **(1)** 6.3	MR MR	MR MR	MR MR	Continuous	Metered
Duration of Discharge	Days/Month	Monthly Total	30	MR	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(2)**	29.4	MR	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	3.9 25.8 46/8	20 40	20 40	20 40	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	1.24 **(1)** 2.6 50/4	MR MR	MR MR **(3)**	0.51 1.07 **(4)**	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6.7 8.7	6.0 9.0	6.0 9.0	6.0 9.0	1/Month	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	198.5 760 52/2	2000 4000	2000 4000	2000 4000	1/Month	Grab
Bromodichloromethane	µg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	MR MR	1/6 Months	Grab
Chlorodibromomethane	µg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	MR MR	1/6 Months	Grab
Phosphorus, Total **(5)**	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.51 1.12 30/24	MR MR	MR MR	MR MR	1/Quarter	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% effluent	Minimum	>100 **(6)**	MR	MR	MR	1/5 Years	Composite

OUTFALL 004A

Filter backwash, only if not recycled back through the treatment process.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	Continuous	Metered
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(2)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR **(4)**	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	2000 4000	2000 4000	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
-- No Data Available
(1) On February 2013 the facility installed a meter to monitor flow, flow and CPO data are from 2/2013 to 9/2016.
(2) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(3) A compliance schedule for CPO of 36 months has been included for this facility.
(4) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(5) Facility is located within the Deferred area of the Raritan TMDL; therefore, no limits were calculated. See Fact Sheet for more details.
(6) Only one WET data value submitted, dated March 24, 2016.

(#16) Robert Frost Treatment Facility (Well #10) – NJG0001198

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent, occurs once per day to once per three days and lasts one to three hours
Additives: Hypochlorite, Fluoride, Zinc Polyphosphate, and Potassium permanganate
WCR Parameters: This monitoring frequency is established at once per five years.

Receiving Waterbody Information

Receiving Water: Pond Run
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02040105240040
Water Quality Impairments: TSS, Turbidity

OUTFALL 001B

Filter backwash held in concrete lined basin, finished water is used to backwash greensand filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 9/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.034 0.075	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	Days/Month	Monthly Total	9	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(1)**	0.28	MR	MR	1/Month	Calculated
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.99 1.7 24/18	25 MR	25 MR	1/6 Months	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	2.4 7.5 29/14	20 40	20 40	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6.63 7.48	6.0 9.0	6.0 9.0	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	<0.01 - <0.1 <0.01 - <0.1	MR 0.018	MR 0.018 **(2)**	1/Month	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.076 0.400 8/1	MR MR	MR MR	1/ 6 Months	Grab
Copper, Total Recoverable	µg/L	Monthly Avg. Daily Max.	<2 - <10 <2 - <10	MR MR	MR MR	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	0.488 0.80	MR MR	MR MR	1/ 6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	37.3 104	MR MR	MR MR	1/ 6 Months	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	72.8 72.8 1/8	MR MR	MR MR	1/ 6 Months	Grab
Nickel, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	-- 130 1/7	-- --	MR MR	1/Year	Grab
Radium-226, Total	PCi/L	Monthly Avg. Daily Max.	0.413 0.460	MR MR	MR MR	1/Year	Grab
Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	0.931 2.16	MR MR	MR MR	1/Year	Grab
Radium-226 + 228, Total	PCi/L	Monthly Avg. Daily Max.	1.25 2.49	MR MR	MR MR	1/Year	Grab
NOAEC (*Ceriodaphnia dubia*)	% effluent	Minimum	>100 **(3)**	100	100	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(3) WET data consists of nine data points all >100% dated 7/2016, 10/2015, 4/2015, 10/2014, 4/2014, 10/2013, 4/2013, 10/2012, and 6/2012.

(#17) Shorelands Water Company, Inc., Treatment Plant #1 – NJG0025453

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent, supernatant from lagoons containing filter backwash is usually returned to the head of the plant.
Additives: Sodium Hypochlorite, Sodium Hydroxide, Stern Pac (Aluminum Sulfate), Zinc Orthophosphate
WCR Parameters: This monitoring frequency is retained at once per five years.

Receiving Waterbody Information

Receiving Water: East Creek
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030104060040
Water Quality Impairments: Chlordane, DDT, Mercury, and PCBs in Fish Tissue; Enterococci

OUTFALL 001B
Supernatant from lagoons containing filter backwash; Finished water is used to backwash the filters

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.014 0.007 **(1)**	MR MR	MR MR	1/Discharge	Calculated **(2)**
Duration of Discharge	Days/Year	Yearly Total	2 **(3)**	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(4)**	0.014	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	<4.0 <4.0	20 40	20 40	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	7.5 7.5	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.07 0.07	MR MR	MR MR **(5)**	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	<0.100 <0.100	MR MR	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	<15 <15	MR MR	MR MR	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	<0.050 <0.050	MR MR	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	20.3 20.3	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% effluent	Minimum	59 **(6)**	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Daily Max is lower than Monthly Average.
(2) Flow is calculated by a bucket and stopwatch method.
(3) This facility discharged only twice during the entire five-year permit cycle.
(4) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(5) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(6) Acute WET data consisted of a single data value of 59%, dated October 13, 2015.

(#18) Shorelands Water Company, Inc., Treatment Plant #2 - NJG0025461

Facility Description

Source Water: Well water

Discharge Frequency: **001B:** filter backwash is usually returned to the head of the plant. Discharge has occurred 3 times in the past five years. **002B:** Water from drainage pipes underlying sludge drying beds is usually recycled to the head of the plant

Additives: Sodium Hypochlorite, Lime, Stern Pac (Aluminum Sulfate), Zinc Orthophosphate

WCR Parameters: The monitoring frequency for 001B is established at once per five years and for 002B is retained at once per five years

Receiving Waterbody Information

Receiving Water: East Creek

Receiving Water Classification: FW2-NT (C2)

Hydraulic Unit Code (HUC) 14: 02030104060040

Water Quality Impairments: Chlordane, DDT, Mercury, and PCBs in Fish Tissue; Enterococci

OUTFALL 001B

Filter Backwash and Clarifier Blowdown via lagoons; Finished water is used to backwash the filters

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.012 0.012	MR MR	MR MR	1/Discharge	Calculated **(1)**
Duration of Discharge	Days/Year	Yearly Total	3 **(2)**	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(3)**	0.036	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<4 <4 0/1	20 40	20 40	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	8 8	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.05 0.05 1/0	MR 0.09	MR 0.09 **(4)**	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.123 0.123 1/0	MR MR	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<15 <15 0/1	MR MR	MR MR	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.05 <0.05 0/1	MR MR	MR MR	1/Year	Grab
Bromodichloromethane	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	-- --	-- --	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<20 <20 0/1	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% effluent	Minimum	47 **(5)**	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

-- No data available

(1) Flow is calculated by a bucket and stopwatch method.

(2) This facility discharged three times over the entire five-year permit cycle.

(3) Averaging Period for Total Flow is based on the DMR Reporting Frequency.

(4) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(5) Acute WET data consisted of a single data value of 47%, dated October 13, 2015.

(#18) Shorelands Water Company, Inc., Treatment Plant #2 - NJG0025461 (continued)

OUTFALL 002B

Water from drainage pipes underlying sludge drying beds is usually recycled to the head of the plant; therefore, discharge is intermittent in nature

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.001 0.005	MR MR	MR MR	1/Discharge	Calculated **(1)**
Duration of Discharge	Days/6 Month	6 Month Total	24	MR	MR	1/6 Months	Calculated
Total Flow	Million Gallons	6 Month Total **(2)**	0.0243	MR	MR	1/6 Months	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<4.0 <4.0 0/4	20 40	20 40	1/6 Months	Grab
pH	s.u.	Instant Min. Instant Max.	7.6 8.1	6.0 9.0	6.0 9.0	1/6 Months	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.0175 0.02 4/0	MR 1.27	MR 1.27 **(3)**	1/6 Months	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.187 0.187 1/3	MR MR	MR MR	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<15 <15 0/4	MR MR	MR MR	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.050 <0.050 0/4	MR MR	MR MR	1/6 Months	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<20 <20 0/4	MR MR	MR MR	1/6 Months	Grab
Thallium, Total Recoverable	µg/L	Monthly Avg. Daily Max.	-- 5.9 **(4)**	-- --	MR MR	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% effluent	Minimum	>100 **(5)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No Data Available
(1) Flow is calculated by a bucket test method.
(2) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(3) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(4) Monitoring for Thallium was included on the once per permit cycle WCR in the existing permit.
(5) Acute WET data consisted of a single data value of >100%, dated October 13, 2015.

(#19) Taylortown Filter Plant - NJG0064271

Facility Description

Source Water: Boonton Reservoir
Discharge Frequency: Intermittent; (1) GAC filter backwash (24,000 GPD in ~8 minutes, 1 time/day; (2) potential emergency bypass of reservoir water; (3) clear well overflow (highly unlikely)
Additives: Orthophosphate, Aluminum Sulfate, Chlorine (gas & tablets)
WCR Parameters: The monitoring frequency is established at once per five years.

Receiving Waterbody Information

Receiving Water: North Valhalla Brook via publicly owned storm sewer
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030103030160
Water Quality Impairments: No Impairments

OUTFALL 001A

GAC filter backwash (using finished water), possible emergency bypass of reservoir water, & possible clear well overflow

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.0252 0.055	MR MR	MR MR	Continuous	Metered
Duration of Discharge	Days/Month	Monthly Total	17	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(1)**	8.67	MR	MR	1/Month	Calculated
pH	s.u.	Instant Min. Instant Max.	5.65 7.61	6.0 9.0	6.0 9.0	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	12.7 60.0 26/24	50 75	50 75	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	7.85 53.0 20/30	20 40	20 40	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.05 - <0.1 <0.05 - <0.1 0/9	MR MR	MR MR **(2)**	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.044 0.1 8/1	MR MR	MR MR	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% effluent	Minimum	>100 **(3)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(3) Acute WET data consisted of a single data value of >100%, dated March 2016.

(#20) Township of North Brunswick WTP – NJG0035190

Facility Description for all Outfalls

Source Water for all outfalls: Delaware and Raritan Canal

Discharge Frequency: 001A is intermittent but almost continuous, occurs four times per hour for a few minutes; 005A is dependent on rain events; 006A would only discharge in an emergency situation

Additives: For 005A and 006A only, Sodium Hypochlorite, Polyphosphate, Polyaluminum Chloride, Polymers, Caustic (Sodium Hydroxide)

WCR Parameters: The monitoring frequencies for 001A is retained at once per five years. 005A and 006A are established at once per year.

Receiving Waterbody Information

Receiving Water: All outfalls discharge to the Delaware and Raritan Canal

Receiving Water Classification: FW2-NT (C2)

Hydraulic Unit Code (HUC) 14: 02030105110110

Water Quality Impairments: Arsenic, Total Phosphorus

OUTFALL 001A

Water from the pipe gallery sump pumps, meter pit, and some storm water runoff from on-site paved areas.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.00064 0.0014	MR MR	MR MR	1/Month	Calculated **(1)**
Duration of Discharge	Days/Month	Monthly Total	30	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(2)**	0.02	MR	MR	1/Month	Calculated
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	11.9 37.0 31/22	MR 50	MR 50	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	6.2 13 10/43	20 40	20 40	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	4.1 5.3 2/51	10 15	10 15	1/6 Months	Grab
pH	s.u.	Instant Min. Instant Max.	6.2 8.4	6.0 9.0	6.0 9.0	1/Month	Grab
Bromodichloromethane	µg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/Year	Composite
Chronic WET, IC25 (*Ceriodaphnia dubia)*	% effluent	Minimum	7.4 **(3)**	MR	MR	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

-- No data available

(1) Process water flow is calculated from the pumping rate of the sump pump and a pump curve. Stormwater is calculated using the drainage area and rainfall totals.

(2) Averaging Period for Total Flow is based on the DMR Reporting Frequency.

(3) Chronic WET data consist of four data points of 70% (4/2016), 30% (4/2015), 7.4% (4/2014), and 58.6% (4/2013).

(#20) Township of North Brunswick WTP – NJG0035190 (continued)

OUTFALL 005A Backwash holding tank emergency overflow and storm water. Filters are backwashed using potable water. Backwash is generally recycled, will only be discharged via 005A in an emergency situation.							
PARAMETER	**UNITS**	**AVERAGING PERIOD**	**WASTEWATER DATA 4/2012 - 9/2016**	**EXISTING LIMITS**	**FINAL LIMITS**	**FINAL MONITORING FREQUENCY**	**SAMPLE TYPE**
Flow	MGD	Monthly Avg. Daily Max.	0.001 0.03	MR MR	MR MR	1/Discharge	Calculated **(1)**
Duration of Discharge	Days/Year	Yearly Total	1 **(2)**	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(3)**	--	--	MR	1/Year	Calculated
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<4.1 <4.1 0/1	MR 50	MR 50	1/Year	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	6.5 6.5	20 40	20 40	1/Year	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.65 <0.65 0/1	10 15	10 15	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	6.9 6.9	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.01 <0.01 0/1	MR 0.02	MR 0.02 **(4)**	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.95 0.95 1/0	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 *(Ceriodaphnia dubia)*	% effluent	Minimum	--	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) Flow is calculated based on the flow rate in drainage lines. Stormwater is calculated using the drainage area and rainfall totals.
(2) This outfall discharged once during the five-year permit cycle.
(3) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(4) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#20) Township of North Brunswick WTP – NJG0035190 (continued)

OUTFALL 006A Clear well storage tank overflow.							
PARAMETER	**UNITS**	**AVERAGING PERIOD**	**WASTEWATER DATA 4/12 - 9/16**	**EXISTING LIMITS**	**FINAL LIMITS**	**FINAL MONITORING FREQUENCY**	**SAMPLE TYPE**
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Discharge	Calculated **(1)**
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(2)**	NODI	MR	MR	1/Year	Calculated
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 50	MR 50	1/Year	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	NODI NODI	10 15	10 15	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 0.02	MR 0.02 **(3)**	1/Year	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
(1) Flow shall be calculated using clear well tank volume and time duration of overflow.
(2) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(3) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

Additional Information for Outfalls 002A, 003A and 004:

002A: Inactivated

This outfall was eliminated from the permit when DSN005A and DSN006A were created. DSN002A was a sampling point that was closer to the end of the pipe. However, the water level in the D&R Canal has gone up and samples at DSN002A included ambient water along with wastewater, so the monitoring point was moved further back into the pipe and became DSN005A. However, DSN005A now samples before the clear well overflow enters the discharge so DSN006A covers the clear well overflow discharge, which would only occur in an emergency.

003A: No requirements (Intake Screen Washwater)

No monitoring or limitations are needed at this outfall since the discharge consists of only intake screen washwater which is discharged to the same waterbody from which it is withdrawn.

004A: Inactivated

This outfall was removed from the permit as a result of the permittee's request on 5/18/11.

(#21) Water Street WTP – NJG0068730

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent; no Discharge since 1996; backwash stored in lagoons is usually recycled to the head of the plant.
Additives: Sodium Hypochlorite, Lime, Alum Sulfate, Polyphosphate (Klenphos)
WCR Parameters: This monitoring frequency is established at once per year.

Receiving Waterbody Information

Receiving Water: Delaware River
Receiving Water Classification: Zone 5 (Saline)
Hydraulic Unit Code (HUC) 14: 02040206020010
Water Quality Impairments: Mercury and PCBs in Fish Tissue

OUTFALL 001A

Filter backwash and clarifier blowdown from unlined lagoons; finished water is used to backwash the filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	Days/Year	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total **(1)**	NODI	MR	MR	1/Year	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Year	Grab
pH	s.u.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 0.1	MR 0.1 **(2)**	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Mysidopsis Bahia*)	% effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
(1) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#22) Woodlane WTP – NJG0062693

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent, one to two times per week
Additives: Hypochlorite, Sodium Hydroxide, and Zinc Orthophosphate
WCR Parameters: This monitoring frequency is retained at once per five years.

Receiving Waterbody Information

Receiving Water: Unnamed Tributary to Barker's Brook
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02040201100030
Water Quality Impairments: E. coli

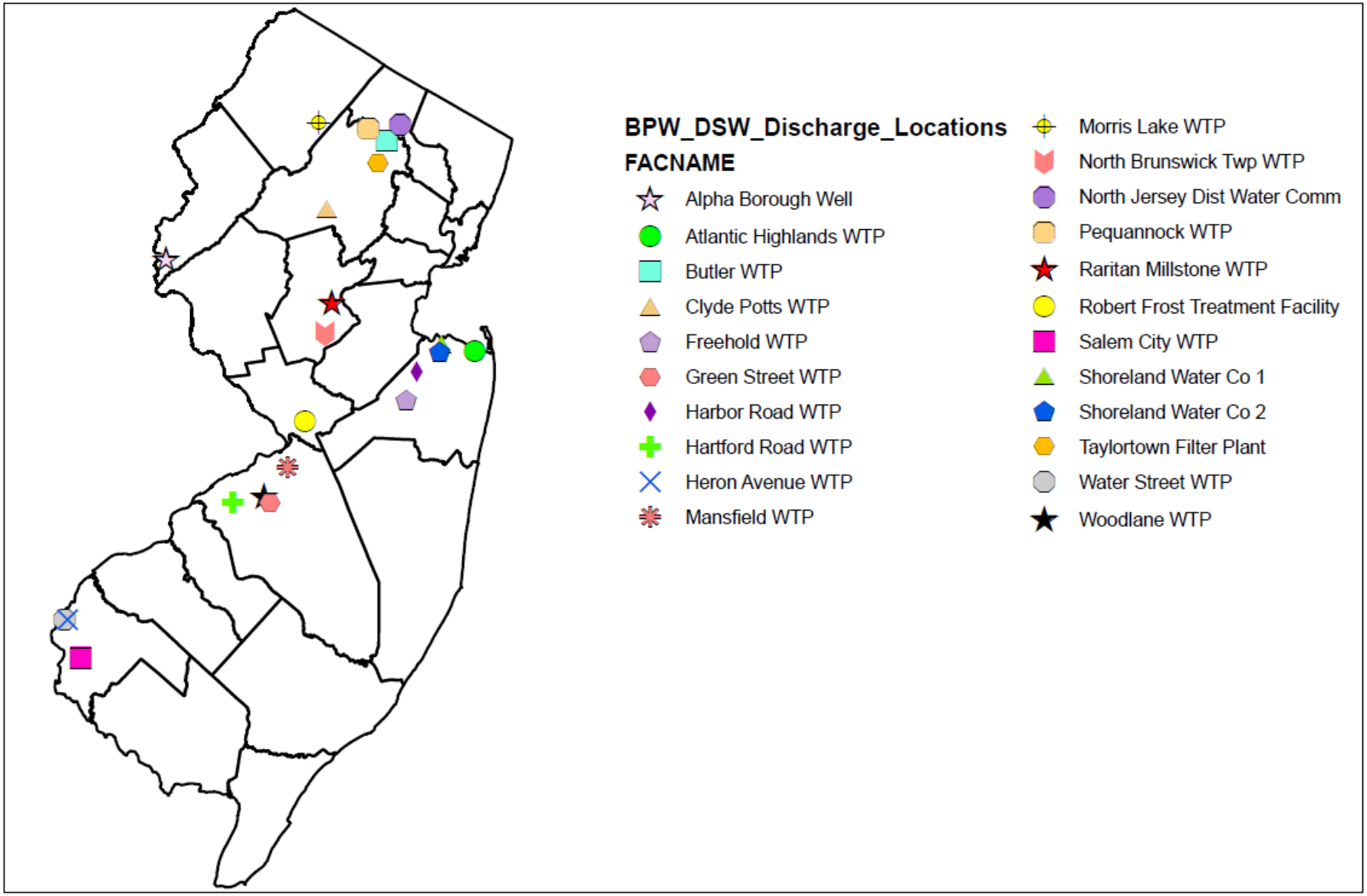
OUTFALL 001A

Filter backwash; Finished water is used to backwash the greensand filters then discharged via a lagoon.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2012 - 9/2016	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.04 0.29 **(1)**	MR MR	MR MR	1/Discharge	Metered
Duration of Discharge	Days/Month	Monthly Total	9	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(2)**	0.38	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	3.56 7	20 40	20 40	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6.6 8.9	6.0 9.0	6.0 9.0	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.03 0.09	MR 0.01	MR 0.01 **(3)**	1/Month	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	0.14 2.0	MR MR	MR MR	1/6 Months	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	0.6 4.1	1.5 3.0	1.5 3.0	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	54.2 333	MR MR	MR MR	1/6 Months	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	52.1 301	MR MR	MR MR	1/Quarter	Grab
Radium-226, Total	PCi/L	Monthly Avg. Daily Max.	0.39 0.5	MR MR	MR MR	1/Year	Grab
Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	1.02 1.66	MR MR	MR MR	1/Year	Grab
Radium-226 & Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	1.41 1.94	MR MR	MR MR	1/Year	Grab
Acute WET (*Ceriodaphnia dubia)*	% effluent	Minimum	>100 **(4)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Reported flow values represent flow to the onsite lagoon not through the outfall.
(2) Averaging Period for Total Flow is based on the DMR Reporting Frequency.
(3) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(4) Acute WET Data consists of one data point of >100%, dated September 16, 2016.



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USGS Topographical Map
BPW Facility State Map
New Jersey

0 15 30 60 Miles

NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJ0129500

Final: Surface Water Master General Permit Renewal

Permittee:
NJPDES Master General Permit Program Interest
Category BPW
Per Individual Notice of Authorization
Division of Water Quality
Mail Code 401-02B
P.O. Box 420, 401 East State Street
Trenton, NJ 08625-0420

Property Owner:
NJPDES Master General Permit Program Interest
Category BPW
Per Individual Notice of Authorization
Division of Water Quality
Mail Code 401-02B
P.O. Box 420, 401 East State Street
Trenton, NJ 08625-0420

Location Of Activity:
NJPDES Master General Permit Program Interest
Category BPW
Per Individual Notice of Authorization
Division of Water Quality
Mail Code 401-02B
P.O. Box 420, 401 East State Street
Trenton, NJ 08625-0420

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
BPW – Potable Water Treatment Plant (GP)	July 24, 2017	October 1, 2017	September 30, 2022

By Authority of:
Commissioner's Office

DEP AUTHORIZATION
Melisse Carasia Auriti, Section Chief
Bureau of Surface Water Permitting
Water Pollution Management Element
Division of Water Quality

(Terms, conditions and provisions attached hereto)

PART I
GENERAL REQUIREMENTS:
NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.

b. General Conditions

Penalties for Violations	N.J.A.C. 7:14-8.1 et seq.
Incorporation by Reference	N.J.A.C. 7:14A-2.3
Toxic Pollutants	N.J.A.C. 7:14A-6.2(a)4i
Duty to Comply	N.J.A.C. 7:14A-6.2(a)1 & 4
Duty to Mitigate	N.J.A.C. 7:14A-6.2(a)5 & 11
Inspection and Entry	N.J.A.C. 7:14A-2.11(e)
Enforcement Action	N.J.A.C. 7:14A-2.9
Duty to Reapply	N.J.A.C. 7:14A-4.2(e)3
Signatory Requirements for Applications and Reports	N.J.A.C. 7:14A-4.9
Effect of Permit/Other Laws	N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
Severability	N.J.A.C. 7:14A-2.2
Administrative Continuation of Permits	N.J.A.C. 7:14A-2.8
Permit Actions	N.J.A.C. 7:14A-2.7(c)
Reopener Clause	N.J.A.C. 7:14A-6.2(a)10
Permit Duration and Renewal	N.J.A.C. 7:14A-2.7(a) & (b)
Consolidation of Permit Process	N.J.A.C. 7:14A-15.5
Confidentiality	N.J.A.C. 7:14A-18.2 & 2.11(g)
Fee Schedule	N.J.A.C. 7:14A-3.1
Treatment Works Approval	N.J.A.C. 7:14A-22 & 23

c. Operation And Maintenance

Need to Halt or Reduce not a Defense	N.J.A.C. 7:14A-2.9(b)
Proper Operation and Maintenance	N.J.A.C. 7:14A-6.12

d. Monitoring And Records

Monitoring	N.J.A.C. 7:14A-6.5
Recordkeeping	N.J.A.C. 7:14A-6.6
Signatory Requirements for Monitoring Reports	N.J.A.C. 7:14A-6.9

e. Reporting Requirements

Planned Changes	N.J.A.C. 7:14A-6.7
Reporting of Monitoring Results	N.J.A.C. 7:14A-6.8
Noncompliance Reporting	N.J.A.C. 7:14A-6.10 & 6.8(h)
Hotline/Two Hour & Twenty-four Hour Reporting	N.J.A.C. 7:14A-6.10(c) & (d)
Written Reporting	N.J.A.C. 7:14A-6.10(e) &(f) & 6.8(h)
Duty to Provide Information	N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
Schedules of Compliance	N.J.A.C. 7:14A-6.4
Transfer	N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.

i. Surface Water Quality Standards N.J.A.C. 7:9B-1

ii. Water Quality Management Planning Regulations N.J.A.C. 7:15

B. General Conditions

1. Scope

a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

2. Permit Renewal Requirement

a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.

b. Submit a complete permit renewal application: 180 days before the expiration date.

3. Notification of Non-Compliance

a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).

b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Notification of Changes

a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.

b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

5. Access to Information

a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access/copy any records that must be kept under the conditions of this permit.

6. Operator Certification

a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.

i. Notifications shall be submitted to:
NJDEP
Bureau of Licensing & Pesticides Operations
Mail Code 401-04E
P.O. Box 420
Trenton, New Jersey 08625-0420
(609) 984-6507

b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

7. Operation Restrictions

a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condtion for water or waste, except as specifically authorized by a valid NJPDES permit.

8. Standard Reporting Requirements - Monitoring Report Forms (MRFs)

a. MRFs shall be electronically submitted to the Department via the Department's Electronic MRF submission service.

b. MRF data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee.

c. MRFs shall be submitted at the frequencies identified in Part III of this permit.

d. All MRFs shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.

e. The highest ranking official may delegate responsibility to certify the MRFs in his or her absence. Authorizations for other individuals to certify shall be made in accordance with N.J.A.C. 7:14A-4.9(b).

f. Monitoring results shall be submitted in accordance with the current NJPDES Monitoring Report Form Reference Manual and any updates thereof.

g. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.

h. If, for a monitored location, there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results by checking the "No Discharge this monitoring period" box on the paper or electronic version of the monitoring report submittal form.

9. Standard Reporting Requirements - Electronic Submission of NJPDES Information

a. Effective December 21, 2020, the below identified documents and reports, if required to be submitted by this permit, shall be electronically submitted to the NJDEP via the Department's designated Electronic Submission Service.

i. General permit authorization requests (i.e. RFAs)

ii. General permit termination/revocation requests

PART III
LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
BPW- Potable Plant Discharge	Varies		BPW - Potable Water Treatment Plant (GP)

Location Description

Effluent samples should be taken after all treatment (where applicable) and just prior to discharge to the receiving water.

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: at the frequency that will be specified in each individual authorization.

Comments:

Actual permit conditions and DMR reporting requirements will be specified for each individual authorization when issued. All are at least as stringent as the conditions contained below, and contain several additional parameters with varied monitoring frequencies. The receiving stream classifications vary among the individual facilities.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 10/01/2017 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Calculated
January thru December	QL	***	***		***	***	***			
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	1/Month	Measured
January thru December	QL	***	***		***	***	***			
Flow, Total (Mon. Period)	Effluent Gross Value	REPORT Monthly Total	*****	MGAL	*****	*****	*****	*****	1/Month	Calculated
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: at the frequency that will be specified in each individual authorization.

Comments:

Actual permit conditions and DMR reporting requirements will be specified for each individual authorization when issued. All are at least as stringent as the conditions contained below, and contain several additional parameters with varied monitoring frequencies. The receiving stream classifications vary among the individual facilities.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 10/01/2017 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	20 Monthly Average	40 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Potable Water Treatment Plant (GP)

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.

b. The permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136 unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.

c. When more than one test procedure is approved for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 136, 122.21(e)(3), and 122.44(i)(1)(iv).

The permittee shall utilize analytical methods for chlorine produced oxidants (CPO) that can achieve results at or below the Required Quantitation Level (RQL) specified in PART III. If a more sensitive test method is approved in 40 CFR Part 136 and a CPO value lower than the listed RQL can be achieved, then the RQL is no longer applicable and the most sensitive test method must be used. If the permittee and/or contract laboratory determines that the quantitation level for CPO will not be as sensitive as the RQL specified in PART III, the permittee must submit a justification of such to the Office of Quality Assurance.

An RQL of 0.02 mg/L is specified in Part III of this permit for CPO only. Since the WQBELs for some facilities are less than the RQL of 0.02 mg/L the RQL will serve as a compliance point for any CPO limitations that are below it.

d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.

e. All monitoring shall be conducted as specified in Part III.

f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported with the Monitoring Report Forms.

g. If annual and semi-annual wastewater testing is specified, it shall be conducted in a different quarter of each year so that tests are conducted in each of the four permit quarters of the permit cycle. Testing may be conducted during any month of the permit quarters.

h. Based on the nature of the operations at the facilities covered under this Master BPW Permit, the parameter Flow, In Conduit or Thru Treatment Plant is intended for the reporting of the final volume of wastewater discharged to the receiving stream. Due to the intermittent nature of the discharge from these facilities, monitoring and reporting for two additional parameters, "Duration of Discharge" and "Total Flow" are also included in this permit. Duration of Discharge is the number of days a discharge occurs during the monitoring period specified in the individual authorization and shall be reported as the total number of days for that monitoring period. Therefore, if more than one discharge occurs in a day, it should only be counted as one day towards the total for that monitoring period. Total Flow is the sum of the flows from each discharge event during a monitoring period and shall be reported as a total in million gallons for that monitoring period.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit, 3) all data used to complete the application for a NJPDES permit, and 4) monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.

b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

C. REPORTING

1. Please see Part II, Section B, Standard Reporting Requirements

D. SUBMITTALS

1. Standard Submittal Requirements

a. The permittee shall amend the Operation & Maintenance Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.

E. FACILITY MANAGEMENT

1. Discharge Requirements

a. The permittee shall discharge at the location(s) specified in PART III of the individual authorization.

b. The permittee shall not discharge foam or cause foaming of the receiving water that: 1) Forms objectionable deposits on the receiving water, 2) Forms floating masses producing a nuisance, or 3) Interferes with a designated use of the waterbody.

c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.

d. The discharge shall not exhibit a visible sheen.

2. Applicability of Discharge Limitations and Effective Dates

a. Surface Water Discharge Monitoring Report (DMR) Form Requirements

i. (If a three year compliance schedule is included for the individual authorization- Part III) This permit includes multiple phases for "initial" and "final." The "initial" phase limits are effective from the effective date of the permit (EDP) to EDP + 36 months. The "final" limits will become effective beginning EDP + 36 months.

b. Wastewater Characterization Report (WCR) Form Requirements

i. The final effluent monitoring conditions in Part III of the individual authorization apply for the full term of this permit action.

3. Operation, Maintenance and Emergency Conditions

a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation and Maintenance Manual.

b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with N.J.A.C. 7:14A-6.12(d).

4. Acute Toxicity Testing Requirements (applicable only if an acute toxicity requirement is specified in Part III)

a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.

b. Acute toxicity tests shall be conducted using the test species and method identified in Part III of the individual authorization.

c. Any test that does not meet the specifications of N.J.A.C. 7:18, laboratory certification regulations, must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.

d. LC50 - Lethal Concentration - Concentration of effluent that is lethal to 50% of the test organisms, as compared to the control.

e. NOAEC (No Observable Adverse Effect Concentration): The lowest concentration of effluent where survival in the test group is not significantly different from the control. This is always set at 100% effluent.

f. The permittee shall submit an Acute Methodology Questionnaire within 60 days of commencement of discharge or of any change in laboratory.

g. Submit an acute whole effluent toxicity test report along with your Discharge Monitoring Reports within twenty-five days after the end of every monitoring period (as specified in the individual authorization) during which an acute whole effluent toxicity test was performed. These toxicity tests shall be performed according to the frequency specified in the individual General Permit Authorization. The permittee shall submit toxicity test results on the appropriate forms.

i. Test reports shall be submitted to:
NJDEP
Mail Code 401-02B
Bureau of Surface Water Permitting
P.O. Box 420
Trenton, New Jersey 08625-0420

5. Chronic Toxicity Testing Requirements (applicable only if a chronic toxicity requirement is specified in Part III)

a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.

b. Chronic toxicity tests shall be conducted using the test species and method identified in Part III of this permit.

c. Any test that does not meet the specifications contained in the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Program" document must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.

d. IC25 - Inhibition Concentration - Concentration of effluent which has an inhibitory effect on 25% of the test organisms for the monitored effect, as compared to the control (expressed as percent effluent).

e. Test results shall be expressed as the IC25 for each test endpoint. Where a chronic toxicity testing endpoint yields IC25's from more than one test endpoint, the most sensitive endpoint will be used to evaluate effluent toxicity.

f. The permittee shall submit a Chronic Methodology Questionnaire within 60 days of commencement of discharge or of any change in laboratory.

g. Submit a chronic whole effluent toxicity test report along with your Discharge Monitoring Reports within twenty-five days after the end of every monitoring period (as specified in the individual authorization) during which a chronic whole effluent toxicity test was performed. These toxicity tests shall be performed according to the frequency specified in the individual General Permit Authorization. The permittee shall submit toxicity test results on appropriate forms.

i. Test reports shall be submitted to:
NJDEP
Mail Code 401-02B
Bureau of Surface Water Permitting
P.O. Box 420
Trenton, New Jersey 08625-0420

6. Toxicity Reduction Implementation Requirements (TRIR) (applicable only if a whole effluent toxicity limit is specified in Part III)

a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the toxicity limit specified in Part III of the individual authorization.

i. If the exceedence of the toxicity limit is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.

b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limits in Part III. The monitoring frequency for toxicity testing shall be increased to semi-monthly (i.e. every two months). Up to 12 additional tests may be required.

i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the toxicity limit.

ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit in Part III, the permittee shall repeat Toxicity Reduction Implementation Requirements.

c. The permittee shall initiate a preliminary toxicity identification (PTI) upon the fourth exceedence of the toxicity limit specified in Part III during toxicity characterization.

i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.

ii. As appropriate, the PTI shall include:
(1) treatment plant performance evaluation,
(2) evaluation of chemical use and processes at the facility, and
(3) an evaluation of incidental facility procedures and chemical spill disposal which may contribute to effluent toxicity.

iii. The permittee shall submit a Preliminary Toxicity Identification Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a CTI.

d. The permittee must demonstrate compliance with the WET limitation in four consecutive WET tests to satisfy the requirements of the Toxicity Reduction Investigation Requirements. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.

e. The permittee shall initiate a Comprehensive Toxicity Investigation (CTI) if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the toxicity limit in Part III can not be made.

i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.

ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the toxicity limit in Part III , a Comprehensive Toxicity Investigation Workplan must be prepared and submitted within 90 days.

iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.

iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.

f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.

i. The permittee shall satisfy the requirements of the Toxicity Reduction Implementation Requirements and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the toxicity limit in Part III in four consecutive toxicity tests.

ii. If the implemented corrective measures do not result in consistent compliance with the toxicity limit in Part III, the permitee shall submit a plan for resuming the CTI.

F. CONDITIONS FOR MODIFICATION

1. Notification Requirements

a. For new discharges, the permittee shall notify the Department that a tag to mark the location of the outfall pipe has been installed consistent with N.J.A.C. 7:14A-6.2(a)9.

2. Causes for Modification

a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.

b. For discharges where a new chronic whole effluent toxicity limit is imposed: The Department may issue a minor modification to the affected individual authorization, further deferring the effective date of the chronic whole effluent toxicity limitation if a facility is implementing the Toxicity Reduction Implementation Requirements (TRIR) in Part IV of this permit.

G. OPERATIONAL ISSUES

1. Operational Requirements

a. Samples taken in compliance with the specified monitoring requirements shall be taken at the discharge outfall(s) specified in Part III of this permit authorization at the nearest accessible point after final treatment but prior to actual discharge.

2. Use of Chemical Addition Agents

a. If a permittee proposes addition of any chemical agents which may be found in the discharge due to their presence in backwash water, the permittee must obtain permission from the Department in writing prior to use of such compounds.

b. The permittee shall submit a letter to the Department describing the use of such chemical addition agents, including information pertaining to dosage rates and frequency of dosage, and shall also include a material safety data sheet for the product(s).

c. This letter shall be submitted to the Bureau of Surface Water Permitting, at the address indicated in the cover letter. The Department will then evaluate the submittal and notify the permittee in writing as to whether the compound can be utilized under the conditions of the individual authorization under the permit. Please note that N.J.A.C. 7:14A-22.4(a)7 does not require a treatment works approval (TWA) modification for chemical addition where it is used for purposes of improving treatment system performance.

3. Third Party Storm Sewers

a. If the permittee proposes to discharge or discharges through an off-site public or private storm drainage system, please note that this permit to discharge does not exempt, nor shall be construed to exempt, the permittee from compliance with rules, regulations, policies, and/or laws lodged in any agency or subdivision of the state having legal jurisdiction over the storm sewer system proposed for use as a wastewater conveyance.

4. Revocation of an Individual Authorization under the Permit.

a. If the permittee has permanently ceased its discharge to surface water, the permittee can request revocation of its individual authorization under the permit. The permittee can obtain the necessary revocation forms by accessing www.state.nj.us/dep/dwq or by contacting the Department's Office of Permit Management at (609) 984-4428. The permittee can also contact the appropriate Regional Enforcement Office for further guidance on closure proceedings.

b. Upon receipt of an administratively complete revocation request, the Department will verify with the appropriate Regional Enforcement Office that the discharge has ceased and that the treatment works has undergone closure, in conformance with N.J.A.C. 7:14A-23.34. The Department will then revoke such individual authorization by preparing a copy of the individual authorization page showing the revocation date of the individual authorization and sending such to the permittee. However, the Department will not revoke an individual authorization if the Site Remediation Program disagrees that revocation is appropriate.

APPENDIX A:

CHRONIC TOXICITY TESTING SPECIFICATIONS

FOR USE IN THE NJPDES PERMIT PROGRAM

Version 3.0

May 2017

TABLE OF CONTENTS

Notice: Mention of trade names or commercial products do not constitute endorsement or recommendation for use.

I. AUTHORITY AND PURPOSE

These methods specifications for the conduct of whole effluent chronic toxicity testing are established under the authority of the NJPDES permitting program, N.J.A.C. 7:14A-6.5(a)2 and 40 CFR 136, for discharges to waters of the State. The methods referenced herein are included by reference in 40 CFR 136, Table 1.A. and, therefore, constitute approved methods for chronic toxicity testing. The information contained herein serves to clarify testing requirements and outline and implement the interlaboratory Standard Reference Toxicant Program until specific chronic requirements are incorporated into the laboratory certification regulations under N.J.A.C. 7:18. As such these methods are intended to be used to determine compliance with discharge permits issued under the authority of the NJPDES permit program. Tests are to be conducted in accordance with the general conditions and method specifications (test organism specific) contained in this document. All other conditions and specifications can be found in 40 CFR 136 and USEPA methodologies.

Until a subchapter on chronic toxicity testing within the regulations governing the certification of laboratories and environmental measurements (N.J.A.C. 7:18) becomes effective, tests shall be conducted in conformance with the methodologies as designated herein and contained in 40 CFR 136. The laboratory performing the testing shall possess certification for the applicable chronic methodologies incorporated by reference through the laboratory certification program established under N.J.A.C. 7:18, as required by N.J.A.C. 7:9B-1.5(c)5.

These methods are incorporated into discharge permits as enforceable permit conditions. Each discharge permit will specify in Parts III&IV of the permit, the test species specific methods from this document that will be required under the terms of the discharge permit. Although the test species specific methods for each permit are determined on a case-by-case basis, the purpose of this methods document is to assure consistency among dischargers and to provide certified laboratories with information on the universe of tests to be utilized so that they can make the necessary preparations, including completing the required Standard Reference Toxicant testing. Please note that these methodologies are required for compliance testing only. Facilities and/or laboratories conducting testing under the requirements of a Toxicity Identification Evaluation or for informational purposes are not bound by these methods.

This document constitutes the fifth version of the NJDEP's interim chronic methodologies. This version contains no significant changes to the test methods themselves.

II. GENERAL CONDITIONS

A. LABORATORY SAFETY, GLASSWARE, ETC.

All safety procedures, glassware cleaning procedures, etc., shall be in conformance with 40 CFR 136 and USEPA's "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms" and N.J.A.C. 7:18.

B. TEST CONCENTRATIONS / REPLICATES

All testing is to be performed with a minimum of five effluent concentrations plus a dilution water control. A second reference water control is optional when a dilution water other than culture water is used. The use of both a 0.5 or 0.75 dilution factor is acceptable for the selection of test concentrations. The Department recommends the use of the 5 standard dilutions plus a dilution water control to cover the entire range of effluent test concentrations e.g. 0%, 6.25%, 12.5%, 25%, 50%, 100%.

The number of replicates used in the test must, at a minimum, satisfy the specifications of the applicable methods contained herein. Increased data sensitivity can be obtained by increasing the number of replicates equally among test concentrations and thus an increased number of replicates is acceptable. Further, the use of nonparametric statistical analysis requires a minimum of four replicates per test concentration. If the data for any particular test is not conducive to parametric analyses and if less than four replicates were included, the test may not be considered acceptable for compliance purposes.

The use of single concentration tests consisting of the permit limitation as a concentration and a control is not permitted for compliance purposes, but may be used by a permittee in the conduct of a Toxicity Investigation Evaluation (TIE) or for information gathering purposes. Such a test would be considered a "pass" if there was no significant difference in test results, using hypothesis testing methods.

C. DILUTION WATER

1. Marine and Estuarine Waters

A high quality natural water, such as the Manasquan River Inlet is strongly recommended as the dilution water source for chronic toxicity testing with marine and estuarine organisms. The use of the receiving water as the dilution water source is not required. Saline waters prepared with hypersaline brine and deionized water may also be used as dilution water. Hypersaline brines shall be prepared from a high quality natural seawater and shall not exceed a concentration of 100 ppt. The type of dilution water for a permittee may not be changed without the prior approval of the Department.

The standard test salinity shall be 25 ppt. Since most effluents are freshwater based, in most cases it will be necessary to adjust the salinity of the test concentrations to the standard test salinity.

2. Fresh Waters

A high quality natural water, such as Round Valley Reservoir (if access is allowed) or Lake Hopatcong, is recommended as the dilution water source for chronic toxicity testing with freshwater organisms. It is not required to perform the toxicity testing with the receiving water as dilution water. Tests performed with reconstituted water or up to 20% Diluted Mineral Water (DMW) as dilution water is acceptable. For testing with *Ceriodaphnia dubia*, the addition of 5 μg/l selenium (2 μg/l selenium with natural water) and 1 μg/l vitamin B12 is recommended (Keating and Dagbusan, 1984: Keating, 1985 and 1988). The source of a dilution water for a permittee may not be changed without the prior approval of the Department through the completion of a Whole

Effluent toxicity testing methodology questionnaire. Reconstituted water and DMW should be prepared with Millipore Super Q^{R} or equivalent, meet the requirements of N.J.A.C. 7:18-6 and should be aerated a minimum of 24 hrs prior to use, but not supersaturated.

D. EFFLUENT SAMPLE COLLECTION

Effluent samples shall be representative of the discharge being regulated. For each discharge serial number (DSN), the effluent sampling location shall be the same as that specified in the NJPDES permit for other sampling parameters unless an alternate sampling point is specified in the NJPDES discharge permit. For continuous discharges, effluent sampling shall consist of 24 hour composite samples consisting either of equal volumes taken once every hour or of a flow-proportionate composite sample, unless otherwise approved by the Department. Unless otherwise specified, three samples shall be collected as specified above, preferably one every other day. The first sample should be used for test initiation and the first renewal. The second sample for the next two renewals. The third sample should be used for the final three renewals. For the *Selenastrum* test, a single sample shall be collected not more than 24 hours prior to test initiation. In no case, shall more than 36 hours' elapse between collection and first use of the sample. It is acceptable to collect samples more frequently for chronic WET testing and if samples are collected daily for acute toxicity testing conducted concurrently, available samples may be used to renew the test solutions as appropriate.

For all other types of discharges, effluent sampling shall be conducted according to specifications contained within the discharge permit, methodology questionnaire, or as otherwise specified by the Department. The use of grab samples or other special sampling procedures may be approved by the Department based on time of occurrence and duration of intermittent discharge events.

If a municipal discharger has concerns that the concentrations of ammonia and/or chlorine in an effluent are adequate to cause violations of the permit limit for chronic toxicity testing, the permittee should conduct analyses, as specified in USEPA's toxicity investigation methods documents, to illustrate the relationship between chronic effluent toxicity and chlorine and/or ammonia as applicable. This data may then be submitted to the Department as justification for a request to use modified test procedures, which account for ammonia and/or chlorine toxicity, in future chronic toxicity tests. The Department may, where adequate justification exists, permit the adjustment of these pollutants in the effluent sample if discharge limits for these pollutants are contained in the NJPDES permit and those permit limitations are adequate for the protection of water quality. Any proposed modified test procedures to adjust effluent chlorine and/or ammonia shall be approved by the Department prior to use of those test procedures for any compliance testing.

Except for filtration through a 2 mm or larger screen or an adjustment to the standard test salinity, no other adjustments to the effluent sample shall be made without prior written approval by the Department. When a laboratory adjusts a freshwater effluent salinity and the pH of the test concentration changes more than 0.5 pH units from the initial pH, the laboratory shall readjust the pH of the test concentration to within 0.5 pH units of the original test concentration. Aeration of samples prior to test start shall be minimized where possible and samples shall not be aerated where adequate saturation exists to maintain dissolved oxygen.

E. PHYSICAL CHEMICAL MEASUREMENTS

At a minimum, the physical chemical measurements shall be as follows unless more stringent criteria is required by the method:

- pH and dissolved oxygen shall be measured at the beginning and end of each 24 hour exposure period, in at least one chamber, of each test concentration and the control. In order to ensure that measurements for these parameters are representative of the test concentrations during the test, measurements for these parameters should be taken in an additional replicate chamber for such concentrations which contains no test organisms, but is subject to the same test conditions.

- Temperature shall either be monitored continuously, measured daily in at least two locations in the environmental control system, or measured at the beginning and end of each 24 hr exposure period in at least one replicate for each treatment.

- Salinity shall be measured in all salt water tests at the beginning and end of each 24 hour exposure period, in at least one replicate for each treatment.

- For all freshwater tests, alkalinity, hardness and conductivity shall be measured in each new sample (100% effluent) and control.

- When natural salt water is used; nitrite, nitrate, and ammonia shall be measured in the control before each renewal in the mysid test only.

- For samples of discharges where concentrations of ammonia and/or chlorine are known or are suspected to be sufficient to cause toxicity, it is recommended that the concentrations of these pollutants be determined and submitted with the standardized report form. The laboratory is advised to consult with the permittee to determine if these parameters should be measured in the effluent. Where such measurements are deemed appropriate, measurements shall be conducted at the beginning of each 24 hour exposure period. Also, since a rise in the test pH can affect the toxicity of ammonia in the effluent, analysis of ammonia during the test may be appropriate if a rise in pH is accompanied by a significant increase in mortality.

F. STATISTICS

Special attention should be given to the omission and inclusion of a given replicate in the analysis of mysid fecundity data (USEPA 1994, p. 275) and *Ceriodaphnia* reproduction data (USEPA 1994, page 174).

Determination of acceptability criteria and average individual dry weight for the growth endpoints must follow the specifications in the applicable documents (e.g., p.84 for saltwater methods document.)

Use of nonparametric statistical analyses requires a minimum of four replicates per test concentration. If the data for any particular test are not conducive to parametric analyses and if less than four replicates were included, the test may not be acceptable to the Department.

For point estimate techniques, statistical analysis must follow the protocol contained in the approved testing method. The linear interpolation estimate ICp values and not the bootstrap mean ICp, shall be reported for permit compliance purposes. The ICp value reported on the Discharge Monitoring Report shall be rounded off as specified in the Department's “NJPDES Monitoring Report Form Reference Manual", updated December 2007, and available on the web at http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf for further information.

If the result reported by the ICp method is greater than 100% effluent, the test result is reported as ">100%"

If separate IC25's can be calculated from multiple test endpoints, for example a reproductive and/or growth endpoint and a survival endpoint, the lowest IC25 value expressed in units of "% effluent" will be used to determine permit compliance and should, therefore, be reported as the IC25 value for the test. If the IC25 value for growth and/or reproduction is not lower than that for survival, the IC25 value reported for the test shall be as survival. For saltwater tests, where additional controls are used in a test (i.e. brine and/or artificial sea salt control), a T-test shall be used to determine if there is a significant difference between the original test control and the additional controls. If there is a significant difference between any of the controls, the test may be deemed unacceptable and if so, will not be used for permit compliance.

III. TEST ACCEPTABILITY CRITERIA

Any test that does not meet the test acceptability criteria of the chronic toxicity method will not be used by the Department for any purpose and must be repeated as soon as practicable, with freshly collected samples.

1. Tests must be performed by a laboratory approved for the conduct of chronic toxicity tests and certified for chronic toxicity testing under N.J.A.C. 7:18.

2. Test results may be rejected due to inappropriate sampling, including the use of less than three effluent samples in a test and/or use of procedures not specified in a permit or methodology questionnaire, use of frozen samples, not refrigerating samples upon collection, or unapproved pretreatment of an effluent sample.

3. Controls shall meet, at a minimum, the applicable performance criteria specified in the Table 2.0 and in the individual method specifications contained herein.

4. Acceptable and applicable Standard Reference Toxicant Data must be available for the test.

5. No unapproved deviations from the applicable test methodology may be present.

6. When using hypothesis testing techniques, a deviation from the dose response as explained in the statistical portion of this document shall not be present in the data.

7. If more stringent criteria are required within the chronic toxicity test method or rule, the more stringent criteria must be met.

Table 2.0: CONTROL PERFORMANCE

TEST ORGANISM	MINIMUM SURVIVAL	MINIMUM WEIGHT GAIN	MINIMUM FECUNDITY/ REPRODUCTION
Pimephales promelas	80%	0.25 mg avg	N/A
Ceriodaphnia dubia	80%	N/A	Average of $\geq$15 young per surviving female
Selenastrum capricornutum	Density $\geq 2 \times 10^5$ cells/ml	N/A	Variability in controls not to exceed 20%.
Cyprinodon variegatus	80%	0.60 mg (unpreserved) avg 0.50 mg (preserved) avg	N/A
Menidia beryllina	80%	0.50 mg (unpreserved) avg 0.43 mg (preserved) avg	N/A
Mysidopsis bahia	80%	0.20 mg per mysid avg	egg production by 50% of control females if fecundity is used as an endpoint.

THE DETERMINATION OF A TEST AS UNACCEPTABLE DOES NOT RELIEVE THE FACILITY FROM MONITORING FOR THAT MONITORING PERIOD

IV. STANDARD REFERENCE TOXICANT TESTING

All chronic testing shall be accompanied by testing with a Standard Reference Toxicant (SRT) as a part of each laboratory's internal quality control program. Such a testing program must be consistent with the quality assurance/quality control protocols described in the USEPA chronic testing manuals. Laboratories may utilize the reference toxicant of their choice and toxicants such as cadmium chloride, potassium chloride, sodium dodecyl sulfate and copper sulfate are all acceptable. However, Potassium chloride has been chosen by several laboratories and is recommended by the Department. The concentration of the reference toxicant shall be verified by chemical analysis in the low and high test concentrations once each year or every 12 tests, whichever is less. It is not necessary to run SRT tests, for all species using the same SRT.

A. INITIAL STANDARD REFERENCE TOXICANT (SRT) TESTING REQUIREMENTS

At a minimum, this testing shall include an initial series of at least five SRT tests for each test species method. Acceptable SRT testing for chronic toxicity shall be performed utilizing the short term chronic toxicity test methods as specified herein. Reference toxicant tests utilizing acute toxicity testing methods, or any method other than those contained in this document are not acceptable. The laboratory should forward results of the initial SRT testing, including control charts, the name of the reference toxicant utilized, the supplier and appropriate chemical analysis of the toxicant to the Department's laboratory certification program prior to obtaining certification for chronic toxicity testing. Certification for the applicable chronic toxicity method must be obtained prior to the conduct of any chronic toxicity testing for compliance purposes.

B. SUBSEQUENT SRT TESTING REQUIREMENTS

After receiving the initial approval from the Department to conduct chronic toxicity tests for compliance purposes, subsequent SRT testing shall be conducted as follows:

1. Where organisms used in testing are cultured at the testing laboratory, SRT testing must be conducted at least once per month for each species/method.

2. Where the laboratory purchases organisms for the conduct of chronic toxicity testing for the test organism in question, the testing laboratory must conduct a concurrent SRT per lot of organisms, unless the supplier provides at least the most recent five monthly SRT's using the same toxicant and control conditions. SRT data provided by the supplier for each lot of organisms purchased is acceptable as long as the SRT test result falls within the control limits of the control chart established by the supplier for that organism. The laboratory using purchased organisms is responsible for the results of any compliance tests they perform.

3. A testing laboratory purchasing organisms from a supplier laboratory must still perform SRT testing on a monthly basis at a minimum, for each species they test with, in order to adequately document their own interlaboratory precision.

4. If a testing laboratory purchasing organisms elects not to use the SRT data from a "supplier laboratory" or such data is unavailable or where organisms are purchased from another organism supplier, the testing laboratory must conduct SRT testing on each lot of organisms purchased.

5. If a testing laboratory conducts testing for a species/method less frequently than monthly, then an SRT shall be run concurrent with the toxicity test.

   NOTE: Based on these requirements, SRT data are considered applicable to a compliance test when the SRT test results are acceptable and the SRT test is conducted within 30 days of the compliance test, for the test species and SRT in question. Therefore, it is not necessary for an approved laboratory to run an SRT test every month if the laboratory is not conducting compliance tests for a particular species.

C. CHANGING OF AN ESTABLISHED REFERENCE TOXICANT

The SRT used for any species by a laboratory may be changed at any time provided that the following conditions have been satisfied:

1. A series of at least three reference toxicant tests are conducted with the new reference toxicant and the results of those tests are identified as satisfactory, in writing, by the Department.

2. Laboratories must continue using the already approved SRT in their ongoing QA/QC program, until such time as the letter referenced above, is received by the laboratory.

D. CONTROL CHARTS

Control charts shall be established from SRT test results in accordance with the procedures outlined in the USEPA methods documents. Control charts shall be constructed using IC25's using the following methods:

1. The upper and lower control limits shall be calculated by determining +/- two standard deviations above and below the mean.

2. SRT test results which exhibit an IC25 that is greater than the highest concentration tested or less than the lowest concentration tested (i.e. a definitive endpoint cannot be determined), shall not be used to establish control charts.

3. SRT tests which do not meet the acceptability criteria for a specific species shall not be used to establish control charts.

4. All values used in the control charts should be as nominal concentrations. However, the control charts shall be accompanied by a chart tabulating the test results as measured concentrations.

5. An outlier (i.e. values which fall outside the upper and lower control limits) should be included on the control chart unless it is determined that the outlier was caused by factors not directly related to the test organisms (e.g., test concentration preparation) as the source of variability would not be directly applicable to effluent tests. In such case, the result and explanation shall be reported to the Department within 30 days of the completion of the SRT test.

The control chart established for the initial series of SRT data submitted will be used by the laboratory and the Department to determine outliers from SRT test results reported in the "NJPDES Biomonitoring Report Form - Chronic Toxicity Test" submitted by the permittees for the test species. These initial control limits will remain unchanged until twenty SRT tests have been completed by the laboratory.

The following procedures shall be used for continually updating control charts after twenty acceptable SRT tests have been completed:

1. Once a laboratory has completed twenty acceptable SRT tests for a test species, the upper and lower control limits shall be recalculated with those twenty values.

2. For each successive SRT test conducted after these first twenty tests, a moving average shall be calculated and the control limits reevaluated using the last twenty consecutive test results.

3. The upper and lower control limits shall be reported on the "NJPDES Biomonitoring Report Form - Chronic Toxicity Tests" along with the SRT test result.

E. UNACCEPTABLE SRT TEST RESULTS

If a laboratory produces any SRT test results which are outside the established upper and lower control limits for a test species at a frequency greater than one test in any twenty tests, the laboratory shall investigate sources of variability, take corrective actions to reduce identified sources of variability, and perform an additional SRT during the same month. The Department may not accept or may require repeat testing for any toxicity testing that may have been affected by such an occurrence.

If a laboratory produces two consecutive SRT test results or three out of any twenty test results which are outside the established upper and lower limits for a specific test species, the laboratory shall cease to conduct chronic toxicity tests for compliance purposes for that test species until the reason(s) for the outliers have been resolved. Approval to resume testing may be contingent upon the laboratory producing SRT test results within the established upper and lower control limits for that test species in two consecutive SRT tests. If one or both of those test results again fall outside the established control levels, the laboratory is unapproved for that test species until five consecutive test results within the established upper and lower control limits are submitted and approved by the Department.

F. ANNUAL SUBMITTALS

The Department may request, at any time, any information which is essential in the evaluation of SRT results and/or compliance data.

V. TEST CANCELLATION / RESCHEDULING EVENTS

A lab may become aware of QA problems during or immediately following a test that will prevent data from being submitted or a lab may be unable to complete a tests due to sample collection or shipping problems. If for any reason a chronic toxicity test is initiated and then prematurely ended by the laboratory the laboratory shall submit the form entitled "Chronic Whole Effluent Toxicity Testing Test Cancellation / Rescheduling Event Form" contained herein. This form shall be used to detail the reason for prematurely ending the test. This completed form and any applicable raw data sheets shall be submitted to the biomonitoring program at the address below within 30 days of the cessation of the test.

Tests are considered to be initiated once test organisms have been added to all test chambers.

Submission of this form does not relieve the facility from monitoring for that monitoring period.

VI. REPORTING

The report form entitled "NJPDES Biomonitoring Report Form - Chronic Toxicity Tests" should be used to report the results of all NJPDES chronic compliance biomonitoring tests. Laboratory facsimiles are acceptable but must contain all information included on any recent revisions of the form by the Department. Statistical printouts and raw data sheets (including chain of custody documents) for all endpoints analyzed shall be included with the report submitted to the Department. All chronic toxicity test report forms shall be submitted to the following address:

New Jersey Department of Environmental Protection
Water Pollution Management Element
Bureau of Surface Water Permitting
Division of Water Quality
Biomonitoring Program
Mail Code – 401-02B
PO Box 420
Trenton, NJ
08625-0420

In addition, the results of all chronic toxicity tests conducted must be reported on the DMR form under the appropriate parameter code in the monitoring period in which the test was conducted.

VII. METHOD SPECIFICATIONS

The following method specifications shall be followed as specified in the NJPDES permit. Any changes to these methods will not be considered acceptable unless they are approved in writing by the Department, prior to their use.

A. Fathead Minnow (*Pimephales promelas*), Larval Survival and Growth Test, method 1000.0
B. *Ceriodaphnia dubia*, Survival and Reproduction Test, method 1002.0
C. Algal, (*Selenastrum capricornutum*), Growth Test, method 1003.0
D. Sheepshead Minnow (*Cyprinodon variegatus*), Larval Survival and Growth Test, method 1005.0
E. Inland Silverside (*Menidia beryllina*), Larval Survival and Growth Test, method 1006.0
F. *Mysidopsis bahia*, Survival, Growth, and Fecundity Test, method 1007.0

VIII. REFERENCES

1. NJPDES Monitoring Report Form Reference Manual October 2007 http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf

2. USEPA. 2002. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA-821-R-02-014. October 2002. Third Edition.

3. USEPA. 2002. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. EPA-821-R-02-013. October 2002. Fourth Edition.

New Jersey Department of Environmental Protection
Water Pollution Management Element
Bureau of Surface Water Permitting
Division of Water Quality
Biomonitoring Program
Mail Code – 401-02B
PO Box 420
Trenton, NJ 08625-0420

CHRONIC WHOLE EFFLUENT TOXICITY TESTING
TEST CANCELLATION / RESCHEDULING EVENT FORM

THIS FORM IS TO BE COMPLETED AND SUBMITTED TO THE DEPARTMENT DIRECTLY BY THE LABORATORY CONDUCTING CHRONIC TOXICITY TESTS WHENEVER A CHRONIC TOXICITY TEST IS PREMATURELY ENDED FOR ANY REASON

NJPDES No.: _____

FACILITY NAME: _____

LOCATION: _____

CONTACT: _____ PHONE: _____

CANCELLATION EVENT:

LABORATORY NAME / NUMBER: _____

CONTACT: _____

TEST START DATE: _____/_____/_____ TEST END DATE: _____/_____/_____

REASON FOR CANCELLATION: _____

_____

_____

_____

When is retest scheduled to be performed?

EFFLUENT SAMPLING:

SAMPLING POINT / DESCRIPTION OF SAMPLING SITE: _____

_____

SAMPLING INITIATED: DATE: ____/____/____ TIME: _____

SAMPLING ENDED: DATE: ____/____/____ TIME: _____

NUMBER OF EFFLUENT SAMPLES COLLECTED: _____

SAMPLE TYPE (GRAB/COMPOSITE): _____

RECEIVED IN LAB BY/FROM: _____

_____

METHOD OF SHIPMENT: _____

(ALL APPLICABLE RAW DATA SHEETS MUST BE ATTACHED)

c: Permittees authorized agent.