State of New Jersey

PHIL MURPHY
Governor

SHEILA OLIVER
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Water Pollution Management Element
Bureau of Surface Water & Pretreatment Permitting
P.O. Box 420 – 401 E State St
Trenton, NJ 08625-0420
Phone: (609) 292-4860 / Fax: (609) 984-7938

SHAWN M. LATOURETTE
Commissioner

Email Only
May 16, 2023

Re: Final RENEWAL Discharge to Surface Water (DSW) Consolidated Master General Permit
Category: BPW - Potable Water Treatment Plant (GP)
NJPDES Permit No. NJ0129500
NJPDES Master General Permit Program Interest

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. This master general permit serves to renew the existing Master Consolidated General Permit (Category BPW) which authorizes the discharge of wastewater generated from 20 existing potable water treatment plants (WTPs) into the surface waters of the State of New Jersey.

The NJPDES draft Surface Water Master General Permit Renewal No. NJ0129500 was issued on March 27, 2023. The public notice was issued in the *DEP Bulletin* on April 5, 2023 as available at www.state.nj.us/dep/bulletin. Notice of the draft action appeared in several newspapers to represent applicable New Jersey counties including *Burlington County Times*, the *Star Ledger*, the *Trenton Times*, the *Asbury Park Press*, and the *South Jersey Times*. The public comment period ended on May 5, 2023 and comments were received on the NJPDES draft permit action. A summary of the significant and relevant comments received on the draft action during the public comment period, the Department's responses, and an explanation of any changes from the draft action have been included in the Response to Comments document attached hereto as per N.J.A.C. 7:14A15.16.

A permit condition has been included as Part IV.D.3.c for informational purposes to clarify conditions related to the Delaware River Basin Commission and the Comprehensive Plan.

The facilities covered under this Master BPW Permit renewal 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	NJG0068705	Heron Avenue WTP	Salem
10	NJG0109266	Mansfield WTP	Burlington
11	NJG0136603	Morris Lake WTP	Sussex

	NJPDES #	Facility Name	Facility County
12	NJG0063711	Pequannock WTP	Passaic
13	NJG0000965	Raritan Millstone WTP	Somerset
14	NJG0001198	Robert Frost Water Treatment Facility (Well #10)	Mercer
15	NJG0025453	Shorelands Water Company, Inc., Treatment Plant #1	Monmouth
16	NJG0025461	Shorelands Water Company, Inc., Treatment Plant #2	Monmouth
17	NJG0064271	Taylortown Filter Plant	Morris
18	NJG0035190	Township of North Brunswick WTP	Somerset
19	NJG0068730	Water Street WTP	Salem
20	NJG0062693	Woodlane WTP	Burlington

Subsequent to the finalization of this Master General Permit, individual renewal authorizations will be issued to each facility and will become effective on July 1, 2023. Until such time as the renewal permit authorization takes effect, the existing permit conditions will continue to remain in full force and effect pursuant to N.J.A.C. 7:14A-2.8.

As per N.J.A.C. 7:14A-4.2(e)3, any person 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/.

Questions or comments regarding the final action should be addressed to Robert Hall or Jonathan Hanuschik either by phone at (609) 292-4860 or email at Robert.Hall@dep.nj.gov or Jonathan.Hanuschik@dep.nj.gov.

Sincerely,

Susan Rosenwinkel
Assistant Director
Water Pollution Management Element

Enclosures

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

Table of Contents for the Final Permit

This permit package contains the items below:

List of Acronyms

ACR	Acute to Chronic Ratio
AL	Action Level
AML	Average Monthly Limitation
BMP	Best Management Practices
BPJ	Best Professional Judgement
CAP	Capacity Assurance Program
CFR	Code of Federal Regulations
CV	Coefficient of Variation
CWEA/CWA	Clean Water Enforcement Act/Clean Water Act
Department	New Jersey Department of Environmental Protection
DGW	Discharge to Groundwater
DMR	Discharge Monitoring Report
DRBC	Delaware River Basin Commission
DSN	Discharge Serial Number
DSW	Discharge to Surface Water
EDP/M	Effective Date of the Permit/Permit Modification
EEQ	Existing Effluent Quality
ELG	Effluent Limitation Guideline
g/d or g/day	Grams per Day
IEC	Interstate Environmental Commission
IPP	Industrial Pretreatment Program
kg/d or kg/day	Kilograms per Day
LTA	Long Term Average
MA1CD10 or 1Q10	Minimum average one day flow with a statistical recurrence interval of ten years
MA7CD10 or 7Q10	Minimum average seven consecutive day flow with a statistical recurrence interval of ten years
MA30CD5 or 30Q5	Minimum average 30 consecutive day flow with a statistical recurrence interval of five years
mg/L	Milligrams per Liter
MDL	Maximum Daily Limitation
MGD	Million Gallons per Day
MRF	Monitoring Report Form
NAICS	North American Industry Classification System
NPDES/NJPDES	National/New Jersey Pollutant Discharge Elimination System
NJR	New Jersey Register
PCB	Polychlorinated Biphenyls
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
RPMF	Reasonable Potential Multiplying Factor
RTR	Residuals Transfer Report
RQL	Recommended Quantification Levels
RWBR	Reclaimed Water for Beneficial Reuse
SIC	Standard Industrial Classification
SIU	Significant Indirect User
SQAR	Sludge Quality Assurance Regulations
SWQS	Surface Water Quality Standards
TMDL	Total Maximum Daily Load
TR	Total Recoverable
TRIR	Toxicity Reduction Implementation Requirements
USEPA TSD	USEPA Technical Support Document for Water Quality Based Toxics Control (EPA/505/2-90-001, March 1991)
µg/L	Micrograms per Liter
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UV	Ultraviolet
WCR	Wastewater Characterization Report
WER	Water Effects Ratio
WLA	Wasteload Allocation
WWTP	Wastewater Treatment Plant
WQBEL	Water Quality Based Effluent Limitation

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water and Pretreatment Permitting

RESPONSE TO COMMENTS

The NJPDES draft Surface Water Master General Permit Renewal No. NJ0129500 was issued on March 27, 2023. The public notice was issued in the *DEP Bulletin* on April 5, 2023 as available at www.state.nj.us/dep/bulletin. Notice of the draft action appeared in several newspapers to represent applicable New Jersey counties including *Burlington County Times,* the *Star Ledger*, the *Trenton Times*, the *Asbury Park Press*, and the *South Jersey Times*. The public comment period ended on May 5, 2023 and comments were received on the NJPDES draft permit action.

A summary of the timely and significant comments received, the New Jersey Department of Environmental Protection's (Department) responses to these comments, and an explanation of any changes from the draft action have been included below.

The following persons commented during the public comment period:

A. Drew Saskowitz, Water Quality Superintendent, Southeast Morris County Municipal Utilities Authority in a letter dated April 28, 2023.

1. COMMENT:

Southeast Morris County Municipal Utilities Authority (SMCMUA) recognizes that the Recommended Quantitation Level (RQL) for Chlorine Produced Oxidants (CPO) of 0.02 mg/L is routinely achievable using a handheld colorimetric test (DPD Colorimetric Method (4500-Cl G-11)) but questions if the RQL is also routinely achievable when interferences are present. Standard Methods for the Examination of Water and Wastewater Method 4500-Cl G-11 describes "minimum detectable concentration: approximately 10 ug Cl as Cl2/L. This detection limit is achievable under ideal conditions; normal working detection limits are typically higher." Hach method 8167 Chlorine, Free and Total, Low Range describes "the method performance data that follows was derived from laboratory tests that were measured on a DR300 and a Pocket Colorimeter II during ideal test conditions. Users can get different results under different test conditions."

The samples that SMCMUA collects at discharge serial number (DSN) 001A contain high levels of manganese which interfere with the DPD analysis. In order to account for this interference, samples need to be pretreated in order to measure the manganese interference. The pretreated sample value is then subtracted from the untreated sample result in order to get the true total chlorine reading. These conditions are no longer "ideal" and potentially alter the accuracy and precision of the method being performed. Due to this, SMCMUA requests that the final effluent limitation for CPO at Clyde Potts WTP (DSN001A) remain at 0.051 mg/L.

SMCMUA understands that the forty CPO detections that occurred at DSN001A between 10/2017 through 5/2022 were used in the water quality based effluent limitations (WQBELs) analysis. SMCMUA would like to note that these detections are highly likely due to manganese interference yielding inaccurate detectable concentrations. Historically, SMCMUA has only performed the manganese interference analysis on samples that had initial results above the current final effluent limitation of 0.051 mg/L because the pretreated manganese interference samples generate a hazardous waste containing arsenic. SMCMUA was not aware that these detections below the current limitation would be used to calculate future effluent limitations and as such had not been performing the analysis of the pretreated sample in an effort to reduce the production of a hazardous waste.

If the request to have the final effluent limitation remain at 0.051 mg/L is denied, SMCMUA would like to request that data within the upcoming 3- year compliance schedule be reviewed and WQBEL recalculated for CPO before the final limits become effective. As a result of receiving the draft renewal Discharge to Surface Water Consolidated Master General Permit Renewal with the lower limitation, SMCMUA changed the

procedure for CPO in April of 2023 and will always perform the manganese interference pretreatment. This will likely change the WQBEL for CPO since there will likely be no detections.

RESPONSE:

The Department routinely uses all effluent data reported on Monitoring Report Forms (MRFs) as submitted by permittees to perform a cause analysis to determine if the discharge from a facility shows cause to violate the Surface Water Quality Standards (SWQS). As referenced in the comment, the permittee submitted 40 data values that demonstrated that CPO was detected in the effluent. Therefore, a WQBEL is warranted for the discharge. Since the new WQBEL analysis resulted in more stringent effluent limitations than were in the existing permit, the Department is required to incorporate the new WQBELs in accordance with the regulations at N.J.A.C. 7:14A-13.6(a).

The Department acknowledges that the permittee asserts that these detections above the existing limitations may be due to manganese interference yielding inaccurate detectable concentrations since the permittee has not been performing the analysis of the pretreated samples. The Department also acknowledges that changes have been instituted to the sampling procedures which could result in a different data set. Once this data becomes available, the permittee may submit a minimum of 10 data points to the Department to allow the Department to redo the WQBEL analysis to determine if revised effluent limitations are warranted. Since the renewed individual authorization will include a 3 year compliance schedule, there is adequate time to collect and submit data and for the Department to revise the effluent limitation if warranted. Note that all analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.

No change has been made to the final master general permit as a result of this comment.

B. Thomas H. Grant, Project Manager, Environmental & Technical Services Engineers & Consultants on behalf of Heron Avenue WTP and Water Street WTP in an email dated April 28, 2023.

1. COMMENT:

Please note that water is not recycled to the head of the plants at the Heron Avenue WTP (NJG0068705) and the Water Street WTP (NJG0068730).

RESPONSE:

This comment refers to the Facility Description as included in the March 27, 2023 draft permit action for the above referenced facilities.

The Department acknowledges that water is not recycled back to the head of the plant for these two facilities as per the commenter. Since the fact sheet is not part of the final master permit package, these corrections are hereby incorporated into the administrative record as shown below where complete versions of the tables have been provided. Deletions are shown in cross outs. These corrections will also be shown in the individual authorizations for these two facilities, which will be issued subsequent to the release of the final master permit.

(#9) Heron Avenue WTP – NJG0068705

Facility Description

Source Water: Well water: wells #3 & #6
Discharge Frequency: Backup plant, no discharge from 10/2017 to 9/2021; discharged during the annual period of 10/2021 to 9/2022. (this period is not covered in the DMR data download)
Additives: Zinc Orthophosphate, Chlorine (gas), Sodium Hypochlorite, Lime, Aluminum Sulfate, polymers
WCR Parameters: 1 / Year

Receiving Waterbody Information

Receiving Water: Delaware River Zone 5
Receiving Water Classification: Zone 5 (Saline)
Hydraulic Unit Code (HUC) 14: Delaware River 18
Water Quality Impairments: Fish Tissue: Chlordane, DDT, Dieldrin, Mercury

OUTFALL 001B

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 9/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.0219 0.0361	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	# of Days	Yearly Total	81	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	0.178	MR	MR	1/Year	Calculated
pH	S.U.	Instant Min. Instant Max.	8.9 8.9	6.0 9.0	6.0 9.0	1/Year	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	1 1	20 40	20 40	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0 0	MR MR	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	0.0638 0.0638	MR MR	MR MR	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	0.864 0.864	MR MR	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max	<0.02 <0.02	MR MR	MR MR	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max	<0.05 <0.05	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Mysidopsis bahia)*	% Effluent	Minimum	>100	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(#19) Water Street WTP – NJG0068730

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent; backwash stored in lagoons. ~~is usually recycled to the head of the plant~~.
Additives: Sodium Hypochlorite, Lime, Alum Sulfate, Polyphosphate (Klenphos)
WCR Parameters: 1 / Year

Receiving Waterbody Information

Receiving Water: Delaware River
Receiving Water Classification: Zone 5 (Saline)
Hydraulic Unit Code (HUC) 14: Delaware River 18
Water Quality Impairments: Fish Tissue: Chlordane, DDT, Dieldrin, Mercury

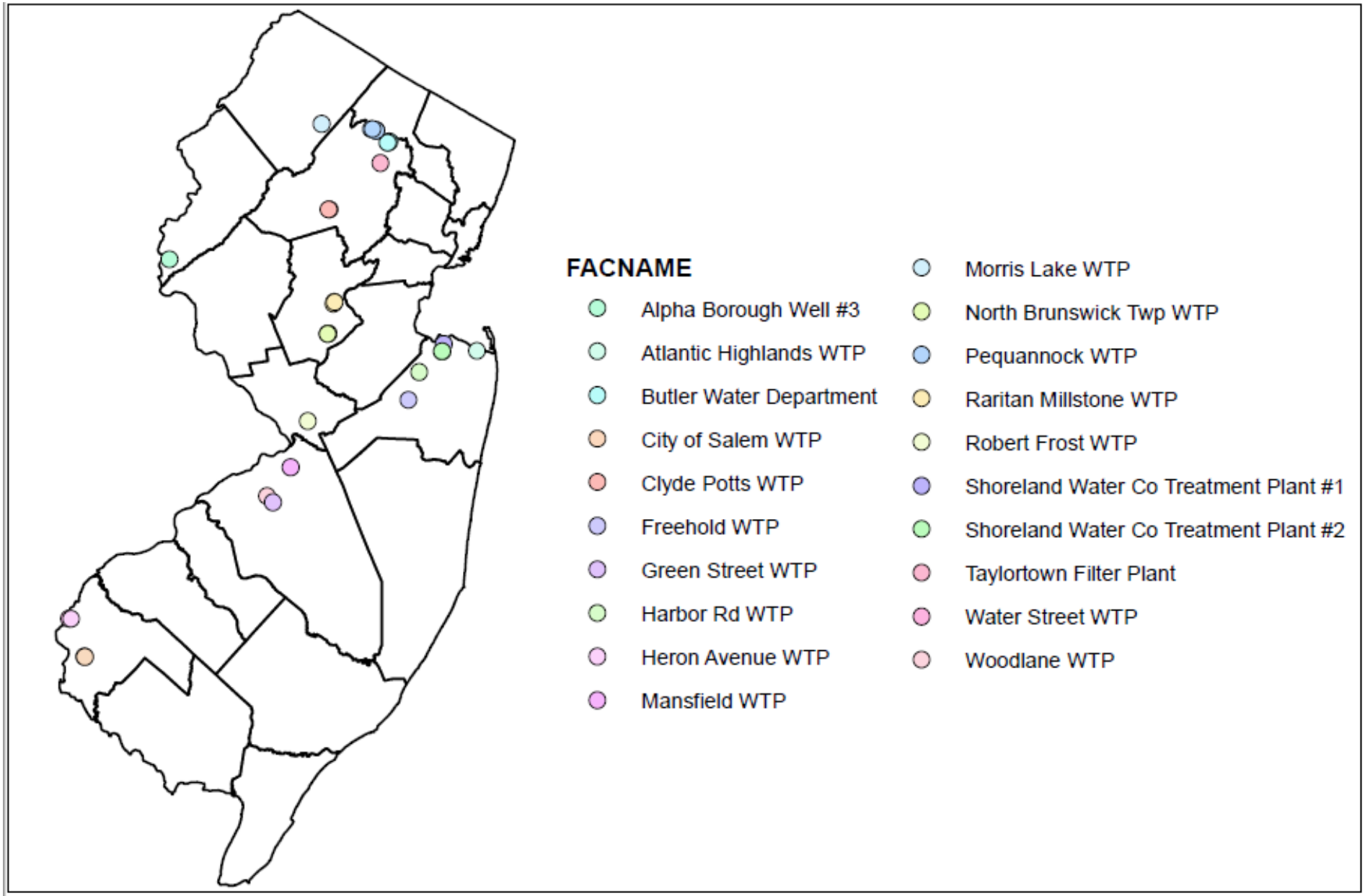
OUTFALL 001A

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY (1)	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.024 0.18	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	# of Days	Yearly Total	108	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Yearly Total	2.22	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	3.77 7.2	20 40	20 40	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	7.42 8.45	6.0 9.0	6.0 9.0	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.035 0.1	MR 0.1	MR 0.1	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	0.64 1.15	MR MR	MR MR	1/Month	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	99.9 389	MR MR	MR MR	1/Month	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	<0.05 - <0.1 <0.05 - <0.1	MR MR	MR MR	1/Month	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	25.6 239	MR MR	MR MR	1/Month	Grab
Acute WET, LC50 (*Mysidopsis Bahia*)	% Effluent	Minimum	24.8	MR	MR	1/Month	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) The DMR reporting requirement is being change from 1 / Year in the existing permit to 1 / Month in this renewal as the permittee has begun discharging at a more routine frequency.



USGS Topographical Map
BPW Facility State Map
New Jersey

(#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).
Additives: None in backwash water.
WCR Parameters: 1 / 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: No Known Impairments

OUTFALL 001A

Discharge consists of backwash from the cation exchanger which treats for calcium and magnesium in ground water. Raw well water is used to backwash the cation exchanger.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 9/2018 - 4/2022 (1)	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.052 0.082	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	# of Days	Monthly Total	12	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.50	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	4.0 33	20 25	20 25	1/Month	Composite
pH	S.U.	Instant Min. Instant Max.	6.3 8.7	6.0 9.0	6.0 9.0	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.19 0.5 9/1	MR MR	MR MR	1/6 Months	Composite
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	19.7 142	MR MR	MR MR	1/6 Months	Composite
Acute WET LC50 NOEAC (*Ceriodaphnia dubia)*	% Effluent	Minimum	16.2 **(2)** **--**	MR --	-- 100 (3)	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Discharged only during this time period. No discharge before and after that during this permit cycle. As indicated by the operator, wastewater is sent to the sanitary sewer system when there is no discharge at this outfall.
(2) Acute WET data consists of three data points of 16.2, 34.2, and >100.
(3) This effluent limitation will become effective at EDP + 37 Months. The permittee shall continue to monitor and report from EDP to EDP + 36 Months.

(#2) Atlantic Highlands WTP – NJG0034924

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent, almost daily for 30 minutes
Additives: Alum (aluminum sulfate) and Lime
WCR Parameters: 1 / 5 Years

Receiving Waterbody Information

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

OUTFALL 001A

Filter backwash and sludge supernatant from stainless steel storage tanks; pre chlorinated water is used to backwash the filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.022 0.075	MR MR	MR MR	Continuous	Metered
Duration of Discharge	# of Days	Monthly Total	24 (**1**)	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.58	MR	MR	1/Month	Calculated
pH	S.U.	Instant Min. Instant Max.	6.8 8.8	6.0 9.0	6.0 9.0	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	2.5 6	20 40	20 40	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.01 <0.01 0/37	MR MR	-- --	N/A (**2**)	--
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	1.03 3.6 37/19	MR MR	MR MR	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.22 2 12/44	MR MR	MR MR	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% Effluent	Minimum	>100 (5 samples)	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- Not Required
(1) Duration of Discharge" data as reported from 1/2021 to 5/2022, not provided for the period before that.
(2) As indicated by the operator, John Kelleher, pre-chlorinated (not finished) water is used to backwash the filters. Therefore, CPO monitoring requirements are removed in this permit renewal.

(#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**: no discharge to date
Additives: Alum (aluminum sulfate), Caustic Soda, Chlorine, Orthopolyphosphate (DSNs 001A and 003A only)
WCR Parameters: 1 / 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 10/2017 - 5/2022	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	# of Days	Monthly Total	NODI	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	NODI	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	NODI NODI	20 40	20 40	1/Quarter	Grab
pH	S.U.	Instant Min. Instant Max.	NODI NODI	6.0 9.0	6.0 9.0	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR 0.17	MR 0.17	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	NODI NODI	1.5 3.0	1.5 3.0	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	NODI NODI	MR MR	MR MR	1/6 Months	Composite
Acute WET, LC50 (*Ceriodaphnia dubia)*	% Effluent	Minimum	NODI	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

NODI No Discharge
MR Monitor and Report only

(#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 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.013 0.04	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	# of Days	Monthly Total	31	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.33	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	6.87 31 14/5	20 40	20 40	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	20.71 52.6 14/4	MR MR	MR MR	1/Quarter	Grab
pH	S.U.	Instant Min. Instant Max.	6.4 7.26	6.0 9.0	6.0 9.0	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.36 0.902 4/7	1.5 3.0	1.5 3.0	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% Effluent	Minimum	22.2 (**1**)	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Test result was deemed to be invalid.

OUTFALL 003A

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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	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.	NODI NODI	MR MR	MR MR	1/Year	Composite

Footnotes & Abbreviations:

NODI No Discharge
MR Monitor and Report only

(#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: 1 / 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: Enterococcus and PCBs in Fish Tissue (001A) / PCBs in Fish Tissue (002A)

OUTFALL 001A

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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	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.	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
Acute WET, LC50 (*Ceriodaphnia dubia)*	% Effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge

(#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 10/2017 - 5/2022	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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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	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.	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
Acute WET, LC50 (*Ceriodaphnia dubia)*	% Effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge

(#5) Clyde Potts WTP – NJG0098540

Facility Description

Source Water: Clyde Potts Reservoir
Discharge Frequency: Continuous
Additives: None expected to be present in the discharge.
WCR Parameters: 1 / 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 weekly maintenance cleaning cycle of the membrane filters; backwash of raw water strainers, stormwater, reservoir overflow, diverted reservoir flow, seepage from reservoir toe drains and filter blankets. Potable water is used for backwashing but prior to use of any additives.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.55 0.91	MR MR	MR MR	Continuous	Measured
Duration of Discharge	# of Days	Monthly Total	31	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	16.63	MR	MR	1/Month	Calculated
pH	S.U.	Instant Min. Instant Max.	6.5 8.57	6.0 9.0	6.0 9.0	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	6.93 98	20 25	20 25	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	17.78 32	MR 50	MR 50	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Det./# Non-Det.	<1.0 - <5.0 <1.0 - <5.0 0/14	10 15	10 15	1/6 Months	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Det./# Non-Det.	0.029 0.06 40/16	MR 0.051	0.01 (**1**) 0.02 (**1**)	1/Month	Grab
Thallium, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Det./# Non-Det.	<0.010-<10 <0.010-<10 0/10	-- MR	-- MR (**2**)	1/6 Months	Grab
Chronic WET, IC25 (*Ceriodaphnia dubia*)	% Effluent	Minimum # Det./# Non-Det.	91.7 (**3**) 1/9	40	40	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- Not Required
(1) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L. These effluent limitations will become effective after a 3-year compliance schedule. However, the permittee will be required to meet the RQL of 0.02 mg/L at that time.
(2) Monitoring requirements for Thallium are specified on the 1/ 5 Year WCR in the permit renewal.
(3) Chronic WET data consists of 9 results of >100%, only one result of 91.7%.

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: 1 / 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

In the new treatment plant (since May 2022) filter backwash goes to a 100,000 gallons backwash holding tank from which residuals are pumped to the existing outdoor lined basin for settling. Settled iron then goes to sludge drying beds which discharge to surface water. Finished water is used to backwash the greensand filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 – 3/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.004 0.007	MR MR	MR MR	1/Discharge	Calculated **(1)**
Duration of Discharge	# of Days	6 Month Total	4	MR	MR	1/6 Months	Calculated
Total Flow	Million Gallons	6 Month Total	0.016	MR	MR	1/6 Months	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	2.67 4	20 40	20 40	1/6 Months	Grab
pH	S.U.	Instant Min. Instant Max.	6.81 7.58	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	0.065 0.11 2/5	MR MR	0.72 1.19	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.99 1.7 2/5	MR MR	MR MR	1/6 Months	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.09 0.1 3/4	MR MR	MR MR	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.04 <0.04 0/7	MR MR	MR MR	1/6 Months	Grab
Radium-226, Total	PCi/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Grab
Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Grab
Radium-226 & Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% Effluent	Minimum	>100 **(2)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Flow is calculated by equating the square footage of the sludge drying bed and measuring the distance it falls in a 24-hour period.
(2) Based on the once per permit cycle monitoring frequency specified in the existing permit, one WET result was submitted.

(#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: 1 / 5 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 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.03 0.22	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	# of Days	Monthly Total	8	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.23	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	3 10	20 40	20 40	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	6.02 8.61	6.0 9.0	6.0 9.0	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.008 0.02 18 /36	MR MR	8.03 12.71	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.506 1.9 51/3	1.5 3.0	1.5 3.0	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	70.97 900 25/29	MR MR	MR MR	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.08 0.56 23/31	MR MR	MR MR	1/Month	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	5.37 21.8 6/48	MR MR	MR MR	1/ Quarters	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% Effluent	Minimum	>100	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(#8) Harbor Road WTP – NJG0031887

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent
Additives: Caustic Soda, Sodium Hypochlorite
WCR Parameters: 1 / 5 Year

Receiving Waterbody Information

Receiving Water: Deep Run
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030105160010
Water Quality Impairments: E. Coli, Total Phosphorus, Arsenic

OUTFALL 001A

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.01 0.3	MR MR	MR MR	1/Discharge	Calculated **(1)**
Duration of Discharge	Days/Month	Monthly Total	9	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(2)**	0.33	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	10.66 83 17/39	20 40	20 40	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	6.37 8.1	6.0 9.0	6.0 9.0	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	16.86 30.6 10/11	MR MR	MR MR	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	1.5 13.2 20/7	MR MR	MR MR	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	52 324 18/9	MR MR	MR MR	1/6 Months	Grab
Bromodichloromethane	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<10-<1 <10-<1 0/4	MR MR	MR (4) MR (4)	1/ 5 Years	Grab
Chlorodibromomethane	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<10-<1 <10-<1 0/4	MR MR	MR (4) MR (4)	1/ Years	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	69.67 300 7/5	MR MR	MR MR	1/Quarter	Grab
Radium-226, Total	PCi/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Grab
Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Grab
Radium-226 & Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	-- --	-- --	MR MR	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% Effluent	Minimum	57.4 **(3)**	MR	MR	1 / 5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

-- CPO monitoring was not required during the existing permit cycle based on the use of raw well water for backwashing the filters.

(1) Flow is calculated using the pumping rate of the filter backwash pumps.

(2) Raw water was used to backwash the filters in the existing permit. Based on information provided by the permittee in email dated 2/14/23, finished water is used to backwash the filters since the new treatment plant was placed in operation.

(3) One result available based on the existing permit which specifies a one per permit cycle monitoring frequency for WET.

(4) Sampling for Chlorodibromomethane and Bromodichloromenthane are being removed from the DMR and included on the 1 /5 Year WCR based on data showing all non-detectable values for these parameters.

(#9) Heron Avenue WTP – NJG0068705

Facility Description

Source Water: Well water: wells #3 & #6
Discharge Frequency: Backup plant, no discharge from 10/2017 to 9/2021; discharged during the annual period of 10/2021 to 9/2022. (this period is not covered in the DMR data download)
Additives: Zinc Orthophosphate, Chlorine (gas), Sodium Hypochlorite, Lime, Aluminum Sulfate, polymers
WCR Parameters: 1 / Year

Receiving Waterbody Information

Receiving Water: Delaware River Zone 5
Receiving Water Classification: Zone 5 (Saline)
Hydraulic Unit Code (HUC) 14: Delaware River 18
Water Quality Impairments: Fish Tissue: Chlordane, DDT, Dieldrin, Mercury

OUTFALL 001B
Filter backwash (using finished water) & clarifier blowdown (to 2 unlined lagoons)

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 9/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.0219 0.0361	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	# of Days	Yearly Total	81	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	0.178	MR	MR	1/Year	Calculated
pH	S.U.	Instant Min. Instant Max.	8.9 8.9	6.0 9.0	6.0 9.0	1/Year	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	1 1	20 40	20 40	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0 0	MR MR	MR MR	1/Year	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	0.0638 0.0638	MR MR	MR MR	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	0.864 0.864	MR MR	MR MR	1/Year	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max	<0.02 <0.02	MR MR	MR MR	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max	<0.05 <0.05	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 (*Mysidopsis bahia)*	% Effluent	Minimum	>100	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(#10) Mansfield WTP – NJG0109266

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent (no discharge since October 2006)
Additives: Zinc Orthophosphate, Chlorine
WCR Parameters: 1 / 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 10/2017 - 5/2022	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	# of Days	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 **(1)**	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) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#11) 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, Hydrofluorosilic Acid, Sodium Carbonate
WCR Parameters: 1 / 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 prior to addition of Zinc Orthophosphate).

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.07 1.2	MR MR	MR MR	Continuous	Metered
Duration of Discharge	# of Days	Monthly Total	31	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total **(1)**	2.15	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	9.41 18	20 40	20 40	1/Month	Grab
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max.	6.74 10.9	15 MR	15 MR	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	6.5 6.8	6.5 8.5	6.5 8.5	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<1.0-<5.0 <1.0-<5.0 0/19	10 15	10 15	1/Quarter	Grab
Copper, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<10 10 1/55	MR MR	MR MR	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.02 <0.02 0/56	MR 0.018	MR 0.018 **(1)**	1/Month	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<30 <30 0/20	MR MR	MR MR	1/Quarter	Grab
Chronic WET IC25 (*Pimephales promelas)*	% Effluent	Minimum	>100	61	61	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#12) 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: 1 / Year (DSN 001A – DSN 004A), 1 / 5 Years (DSN 005A)

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 2/2018 - 7/2019 (1)	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max	0.01 0.12	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	# of Days	Monthly Total	14	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.26	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	9.53 21	20 25	20 25	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	6.39 6.89	6.0 9.0	6.0 9.0	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.05-<5 <0.05-<5 0/18	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 0/15	MR 0.01	MR 0.01 **(2)**	1/Quarter	Grab
Acute WET, LC50 (*Ceriodaphnia dubia)*	% Effluent	Minimum	--	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) NODI from 10/2017 to 1/1/2018, and 8/2019 to 5/2022.
(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) Pequannock WTP – NJG0063711 (continued)

OUTFALL 002A **INACTIVE 002A:** Emergency overflow from the coagulation tank.							
PARAMETER	**UNITS**	**AVERAGING PERIOD**	**WASTEWATER DATA 10/2017 - 9/2021**	**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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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 **(1)**	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) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

OUTFALL 003A **INACTIVE 003A:** Emergency overflow from the clear well.							
PARAMETER	**UNITS**	**AVERAGING PERIOD**	**WASTEWATER DATA 10/2017 - 9/2021**	**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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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 **(1)**	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) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#12) Pequannock WTP – NJG0063711 (continued)

OUTFALL 004A **INACTIVE 004A:** Emergency overflow from the "wastewater" holding tanks.							
PARAMETER	**UNITS**	**AVERAGING PERIOD**	**WASTEWATER DATA 10/2017 - 9/2021**	**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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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 **(1)**	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) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

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 10/2017 - 5/2022**	**EXISTING LIMITS**	**FINAL LIMITS**	**FINAL MONITORING FREQUENCY**	**SAMPLE TYPE**
Flow (**1**)	MGD	Monthly Average Daily Max	0.027 (**1**) 0.027	MR MR	MR MR	Continuous	Calculated
Duration of Discharge	# of Days	Monthly Total	30 (**1**)	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.837 (**1**)	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	3.31 12.5	20 25	20 25	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	6.08 7.33	6.0 9.0	6.0 9.0	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.05-<5.0 <0.05-<5.0 0/29	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 0/29	MR 0.01	MR 0.01 **(2)**	1/Quarter	Grab
Chronic WET IC25 (*Ceriodaphnia dubia*)	% Effluent	Minimum	>100	MR	MR	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Data for the parameters related to Flow are for the period of 10/2020 to 5/2022. NODI from July 2018 to 9/2020.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

(#13) 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 Department records.
Additives: Sodium Hypochlorite, Aluminum Sulfate, Fluoride, Phosphoric Acid, Sulfuric Acid, Polymers, Potassium Permanganate
WCR Parameters: 1 / Year

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 003A: 02030105120140
Hydraulic Unit Code (HUC) 14 for 004A: 02030105120140
Water Quality Impairments for 001A: Dieldrin in Fish Tissue, DDT in Fish Tissue, PCBS in Fish Tissue, pH, Temperature, Turbidity,
Water Quality Impairments for 003A and 004A: Arsenic, Benzene, Total Phosphorus, pH, PCBS in Fish Tissue

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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	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

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

OUTFALL 003A

The traveling screen wash (using raw river water and city water) is done on 10-minute cycles performed daily in the winter and two to three times per day in the summer for approximately 5 days per week. Therefore, the screen washes occur more frequently in the summer than in the winter. Discharge at this outfall consists of traveling screen wash, sedimentation basins 1 and 2 overflow, and 12" underdrain

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.25 7.7	MR MR	MR MR	Continuous	Metered
Duration of Discharge	# of Days	Monthly Total	31	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	6.74	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	6.1 31.3 39/17	20 40	20 40	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.79 2.5 56/0	0.51 1.07	0.51 1.07	1/Month	Grab
pH	s.u.	Instant Min. Instant Max.	6.8 8.3	6.0 9.0	6.0 9.0	1/Month	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	445 1850 55/1	2000 4000	2000 4000	1/Month	Grab
Bromodichloromethane	µg/L	Monthly Avg. Daily Max.	1.97 3.9	MR MR	MR MR	1/6 Months	Grab
Chlorodibromomethane	µg/L	Monthly Avg. Daily Max.	0.32 1.08	MR MR	MR MR	1/6 Months	Grab
Phosphorus, Total **(1)**	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.64 9.9 55/1	MR MR	MR MR	1/Quarter	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% Effluent	Minimum	>100 **(2)**	MR	MR	1/5 Years	Composite

OUTFALL 004A

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DAT5 10/2017 - 5/2022	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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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	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) Facility is located within the Deferred area of the Raritan TMDL; therefore, no limits were calculated. See Fact Sheet for more details.

(2) Based on once per permit cycle monitoring frequency specified in the existing permit, one WET data result of LC50>100% dated August 27, 2020, was provided in the renewal application.

(#14) 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: 1 / 5 Years

Receiving Waterbody Information

Receiving Water: Pond Run
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02040105240040
Water Quality Impairments: pH, Total Phosphorus, TSS, and Arsenic

OUTFALL 001A
Filter backwash held in concrete lined basin, finished water is used to backwash greensand filters.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.033 0.07	MR MR	MR MR	1/Discharge	Measured
Duration of Discharge	# of Days	Monthly Total	7	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.21	MR	MR	1/Month	Calculated
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.73 1.2 9 / 4	25 MR	25 MR	1/6 Months	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	2.4 6.3 27 / 29	20 40	20 40	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	6.46 7.79	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 **(1)**	1/Month	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.64 7.14 12 / 0	MR MR	MR MR	1/ 6 Months	Grab
Copper, Total Recoverable	µg/L	Monthly Avg. Daily Max.	8.57 20.1	MR MR	MR MR	1/Year	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	0.76 2.85	MR MR	MR MR	1/ 6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	41.4 130	MR MR	MR MR	1/ 6 Months	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	41.4 53.5 3 / 9	MR MR	MR MR	1/ 6 Months	Grab
Radium-226, Total	PCi/L	Monthly Avg. Daily Max.	0.281 0.390	MR MR	MR MR	1/Year	Grab
Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	0.883 1.17	MR MR	MR MR	1/Year	Grab
Radium-226 + 228, Total	PCi/L	Monthly Avg. Daily Max.	1.08 1.56	MR MR	MR MR	1/Year	Grab
NOAEC (*Ceriodaphnia dubia*)	% Effluent	Minimum	>100 **(2)**	100	100	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
-- No data available
(1) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(2) WET data consists of seven data points all >100% dated 11/2017, 8/2018, 3/2019, 3/2020, 7/2020, 5/2021, and 5/2022

(#15) 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: 1 / 5 Years

Receiving Waterbody Information

Receiving Water: East Creek
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030104060040
Water Quality Impairments: Dissolved Oxygen, Enteroccocus, Fecal Coliform, Chlordane in Fish Tissue, DDT in Fish Tissue, Mercury in Fish Tissue, PCBS in Fish Tissue

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	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	# of Days	Yearly Total	NODI **(2)**	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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	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 (*Ceriodaphnia dubia*)	% Effluent	Minimum	NODI	MR	MR	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
NODI No Discharge
(1) Flow is calculated by a bucket and stopwatch method.
(2) This facility has not discharged during the existing permit cycle.

(#16) 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 not occurred in the past five years.
002B: Intermittent; Water from drainage pipes underlying sludge drying beds is usually recycled to the head of the plant, but during the existing permit cycle, discharged during the winter semi-annual monitoring periods of October through March each year; and did not discharge during the summer semi-annual monitoring periods of April through September each year.
Additives: Sodium Hypochlorite, Lime, Stern Pac (Aluminum Sulfate), Zinc Orthophosphate
WCR Parameters: **001B**: 1 / 5 Years
002B: 1 / 5 Years

Receiving Waterbody Information

Receiving Water: East Creek
Receiving Water Classification: FW2-NT (C2)
Hydraulic Unit Code (HUC) 14: 02030104060040
Water Quality Impairments: Dissolved Oxygen, Enterococcus, Fecal Coliform, Chlordane in Fish Tissue, DDT in Fish Tissue, Mercury in Fish Tissue, PCBS in Fish Tissue

OUTFALL 001B
Filter Backwash and Clarifier Blowdown via lagoons; Finished water is used to backwash the filters

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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 0.09	MR 0.09	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
Bromodichloromethane	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
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 is calculated by a bucket and stopwatch method.

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

OUTFALL 002B

Backwash water (using finished water) from drainage pipes underlying sludge drying beds is usually recycled to the head of the plant; therefore, discharge is intermittent in nature. During the existing permit cycle, discharged during the winter semi-annual monitoring periods from October to March each year; and did not discharge during the summer semi-annual monitoring periods of April through September each year.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	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	# of Days	6 Month Total	29	MR	MR	1/6 Months	Calculated
Total Flow	Million Gallons	6 Month Total	0.029	MR	MR	1/6 Months	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	6 8 2/3	20 40	20 40	1/6 Months	Grab
pH	S.U.	Instant Min. Instant Max.	6.61 7.6	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	0.0125 0.02 4/1	MR 1.27	MR 1.27	1/6 Months	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.02 - <0.12 0.2 1/4	MR MR	MR MR	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.98 - <15 13.9 1/4	MR MR	MR MR	1/6 Months	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.077 0.2 3/2	MR MR	MR MR	1/6 Months	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<6.6 - <20 232 1/4	MR MR	MR MR	1/Quarter	Grab
Thallium, Total Recoverable	µg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.17 - <2.0 <2 0/5	MR MR	-- MR (3)	1 / 5 Years	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% Effluent	Minimum	>100 **(2)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Flow is calculated by a bucket test method.
(2) Based on the once per permit cycle monitoring requirement specified in the existing permit, one Acute WET result was submitted in April 2022.
(3) Sampling for thallium is being removed from the DMR and included on the 1 /5 Year WCR since all reported samples resulted in non-detectable values.

(#17) Taylortown Filter Plant - NJG0064271

Facility Description

Source Water: Boonton Reservoir
Discharge Frequency: Intermittent
Additives: Orthophosphate, Aluminum Sulfate, Chlorine (gas & tablets)
WCR Parameters: 1 / 5 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 Known 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 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.028 0.066	MR MR	MR MR	Continuous	Metered
Duration of Discharge	# of Days	Monthly Total	21	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.55	MR	MR	1/Month	Calculated
pH	S.U.	Instant Min. Instant Max.	6.40 7.44	6.0 9.0	6.0 9.0	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	20.03 50 25/31	50 75	50 75	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	6.47 23 12/44	20 40	20 40	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.045 0.1 3/6	MR MR	0.01 (2) 0.02 (2)	1/Month	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.030 0.069 9/0	MR MR	MR MR	1/6 Months	Grab
Acute WET, LC50 (*Ceriodaphnia dubia*)	% Effluent	Minimum	>100 **(1)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) Based on the once per permit cycle monitoring requirement specified in the existing permit, one Acute WET data consists of a single data value of >100%.
(2) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L. These effluent limitations will become effective on EDP + 36 Months, but the permittee will be required to meet the RQL of 0.02 mg/L at that time.

(#18) 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: 001A: 1 / 5 Years
005A and 006A: 1 / 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 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.0006 0.001	MR MR	MR MR	1/Month	Calculated **(1)**
Duration of Discharge	# of Days	Monthly Total	31	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.019	MR	MR	1/Month	Calculated
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	12.17 22 11/8	MR 50	MR 50	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	8.075 26 8/48	20 40	20 40	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<1.38 <1.3 0/12	10 15	10 15	1/6 Months	Grab
pH	S.U.	Instant Min. Instant Max.	6.19 8.07	6.0 9.0	6.0 9.0	1/Month	Grab
Bromodichloromethane	µg/L	Monthly Avg. Daily Max.	<0.2 - 2.12 2.12 1/4	MR MR	MR MR	1/Year	Composite
Chronic WET, IC25 (*Ceriodaphnia dubia)*	% Effluent	Minimum	24.4 **(2)**	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) Chronic WET data consists of three data points of >100 and five data points of 26%, 25%, 54.9%, 64.3%, and 24.4%.

(#18) 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 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.18 0.35	MR MR	MR MR	1/Discharge	Calculated **(1)**
Duration of Discharge	# of Days	Yearly Total	7	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	1.28	MR	MR	1/Year	Calculated
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<4.8 - 13 13 1/4	MR 50	MR 50	1/Year	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	<2.5 <2.5	20 40	20 40	1/Year	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<1.475 <1.4 0/5	10 15	10 15	1/Year	Grab
pH	S.U.	Instant Min. Instant Max.	6.46 6.75	6.0 9.0	6.0 9.0	1/Year	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	<0.02 <0.02 0/4	MR 0.02	MR 0.02 **(2)**	1/Year	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max. # Detect/# Non-Detect	0.065 0.12 4/0	MR MR	MR MR	1/Year	Grab
Acute WET, LC50 *(Ceriodaphnia dubia)*	% Effluent	Minimum	>100	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) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.

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

OUTFALL 006A Clear well storage tank overflow only in emergency situation.							
PARAMETER	**UNITS**	**AVERAGING PERIOD**	**WASTEWATER DATA 10/2017 - 5/2022**	**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	# of Days	Yearly Total	NODI	MR	MR	1/Year	Calculated
Total Flow	Million Gallons	Yearly Total	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 **(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) Flow shall be calculated using clear well tank volume and time duration of overflow.
(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.

(#19) Water Street WTP – NJG0068730

Facility Description

Source Water: Well water
Discharge Frequency: Intermittent; backwash stored in lagoons.
Additives: Sodium Hypochlorite, Lime, Alum Sulfate, Polyphosphate (Klenphos)
WCR Parameters: 1 / Year

Receiving Waterbody Information

Receiving Water: Delaware River
Receiving Water Classification: Zone 5 (Saline)
Hydraulic Unit Code (HUC) 14: Delaware River 18
Water Quality Impairments: Fish Tissue: Chlordane, DDT, Dieldrin, Mercury

OUTFALL 001A

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

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY (1)	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.024 0.18	MR MR	MR MR	1/Discharge	Calculated
Duration of Discharge	# of Days	Yearly Total	108	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Yearly Total	2.22	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	3.77 7.2	20 40	20 40	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	7.42 8.45	6.0 9.0	6.0 9.0	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.035 0.1	MR 0.1	MR 0.1	1/Month	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	0.64 1.15	MR MR	MR MR	1/Month	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	99.9 389	MR MR	MR MR	1/Month	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	<0.05 - <0.1 <0.05 - <0.1	MR MR	MR MR	1/Month	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	25.6 239	MR MR	MR MR	1/Month	Grab
Acute WET, LC50 (*Mysidopsis Bahia*)	% Effluent	Minimum	24.8	MR	MR	1/Month	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) The DMR reporting requirement is being change from 1 / Year in the existing permit to 1 / Month in this renewal as the permittee has begun discharging at a more routine frequency.

(#20) 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: 1 / 5 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, Total Phosphorus, and Arsenic

OUTFALL 001A

Filter backwash; Finished water is used to backwash the greensand filters then discharged via an unlined lagoon to a neighborhood storm sewer and then to the stream.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2017 - 5/2022	EXISTING LIMITS	FINAL LIMITS	FINAL MONITORING FREQUENCY	SAMPLE TYPE
Flow	MGD	Monthly Avg. Daily Max.	0.016 0.216	MR MR	MR MR	1/Discharge	Metered
Duration of Discharge	# of Days	Monthly Total	9	MR	MR	1/Month	Calculated
Total Flow	Million Gallons	Monthly Total	0.15	MR	MR	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	4.03 18	20 40	20 40	1/Month	Grab
pH	S.U.	Instant Min. Instant Max.	6.21 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	0.02 0.07 28/28	MR 0.01	MR 0.01 **(1)**	1/Month	Grab
Phosphorus, Total	mg/L	Monthly Avg. Daily Max.	0.07 0.29	MR MR	MR MR	1/6 Months	Grab
Iron, Total Recoverable	mg/L	Monthly Avg. Daily Max.	0.55 1.6	1.5 3.0	1.5 3.0	1/6 Months	Grab
Manganese, Total Recoverable	µg/L	Monthly Avg. Daily Max.	183.52 2600	MR MR	MR MR	1/6 Months	Grab
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	8.44 16.4	MR MR	MR MR	1/Quarter	Grab
Radium-226, Total	PCi/L	Monthly Avg. Daily Max.	0.32 0.39	MR MR	MR MR	1/Year	Grab
Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	0.56 0.78	MR MR	MR MR	1/Year	Grab
Radium-226 & Radium-228, Total	PCi/L	Monthly Avg. Daily Max.	0.85 1.29	MR MR	MR MR	1/Year	Grab
Acute WET (*Ceriodaphnia dubia)*	% Effluent	Minimum	>100 **(2)**	MR	MR	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only
(1) The Permittee shall utilize analytical methods for CPO that will ensure compliance with the specified required quantification level of 0.02 mg/L.
(2) Acute WET Data consists of one data point of >100%.

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 – Potable Water Treatment Plant General Permit
Per Individual Notice of Authorization
Bureau of Surface Water & Pretreatment Permitting
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
Bureau of Surface Water & Pretreatment Permitting
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
Bureau of Surface Water & Pretreatment Permitting
Mail Code 401-02B, P.O. Box 420
401 East State Street
Trenton, NJ 08625-0420

Authorization Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
BPW – Potable Water Treatment Plant (GP) Renewal	05/16/2023	07/01/2023	06/30/2028

By Authority of:
Commissioner's Office

Susan Rosenwinkel

DEP AUTHORIZATION
Susan Rosenwinkel
Assistant Director
Water Pollution Management Element

(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 at least 180 days prior to the expiration of the permit.

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 Water System Engineering
Mail Code 401-04Q
PO Box 420
Trenton, New Jersey 08625 - 0420
(609) 292-2957
or via email to www@dep.nj.gov

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.

Actual permit conditions and MRF reporting requirements will be specified for each individual authorization when issued. The receiving stream classifications vary among the individual facilities.

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. 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.

D. 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 is not included in the individual authorization -Part III) The final effluent limitations and monitoring conditions in Part III of the individual authorization apply for the full term of this permit action and are effective on EDP.

ii. (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

3. Delaware River Basin Commission (DRBC) (Applicable to NJG0133965, NJG0035742, NJG0068730, NJG0062693, NJG0109266, NJG0004731, NJG0001198, NJG0035742, NJG0068705)

a. The permittee shall comply with the Delaware River Basin Commission (DRBC) "Water Quality Regulations."

b. Except as otherwise authorized by this permit, if the permittee seeks relief from any limitation based upon a Delaware River Basin Commission water quality standard or minimum treatment requirement, the permittee shall apply for approval from the Delaware River Basin Commission Executive Director and NJDEP for a permit revision.

c. Applicable only to NJG0133965: Prior to the permittee initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16) of the Delaware River Basin Commission's Water Quality Regulations (18CFR Part 410), a No Measurable Change to Existing Water Quality Analysis must be conducted by the Delaware River Basin Commission. The No Measurable Change to Existing Water Quality Analysis shall be conducted prior to final design to ensure that the Commission can provide the permittee with proposed effluent limitations to be included in a future NJPDES permit for Special Protection Waters specific parameters as guidance for treatment design purposes. The permittee is encouraged to contact DRBC staff during the planning stages of any project that meets the definition of substantial alteration or additions, as per DRBC.

d. Based upon the written recommendation of the DRBC staff, when the discharge is operated in accordance with the provisions and conditions established by this permit, then with respect to effluent quality and stream quality objectives, the project does not substantially impair or conflict with the Commission's Comprehensive Plan.

4. 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).

5. 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:

   biomonitoring@dep.nj.gov
   Toxicity@drbc.gov.

6. 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:

biomonitoring@dep.nj.gov
Toxicity@drbc.gov

7. 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.

E. 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 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 whole effluent toxicity limitation if a facility is implementing the Toxicity Reduction Implementation Requirements (TRIR) in Part IV of this permit.

F. 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 to the recieving waterbody.

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 safety data sheet for the product(s).

c. This letter shall be submitted to the Bureau of Surface Water and Pretreatment 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/forms_admins.htm or by contacting the Department's Permit Administration Section 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 $\geq 2x10^5$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 email addresses as applicable:

biomonitoring@dep.nj.gov

Toxicity@drbc.gov

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 & Pretreatment Permitting
biomonitoring@dep.nj.gov

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.