State of New Jersey

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Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Water Pollution Management Element
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SHAWN M LATOURETTE
Commissioner

Via Email Only
July 28, 2022

Re: Draft RENEWAL Discharge to Surface Water (DSW) Consolidated Master General Permit
Category: ASC - Consolidated DSW Renewal School (GP)
NJPDES Permit No. NJ0193381
NJPDES MASTER GENERAL PERMIT PROGRAM INTEREST

Dear Interested Parties:

Enclosed is a **draft** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action identified above which has been issued in accordance with N.J.A.C. 7:14A.

Notice of this draft permit action appeared in the July 20, 2022 *DEP Bulletin*. The *DEP Bulletin* is available on the internet at http://www.state.nj.us/dep/bulletin. In addition, notice of this draft permit will appear in the newspapers listed below. The public comment period will close on September 26, 2022.

Newspaper	County
The Record	Bergen
Burlington County Times	Burlington
The Democrat	Hunterdon
Daily Record	Morris
The Herald News	Passaic
The New Jersey Herald	Sussex
The Express Times	Warren

As detailed in the *DEP Bulletin* and aforementioned newspapers, written comments or a request that the Department hold a non-adversarial public hearing on the draft document must be submitted in writing to Susan Rosenwinkel, Bureau Chief, Mail Code 401-02B, Division of Water Quality, Bureau of Surface Water & Pretreatment Permitting, P.O. Box 420, Trenton, NJ 08625-0420 or via e-mail to Susan.Rosenwinkel@dep.nj.gov by the close of the public comment period. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's tentative decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the public comment period.

The Department will respond to all significant and timely comments upon issuance of the final document. The permittee and each person who has submitted written comments will receive notice of the Department's final decision to issue, revoke, or redraft the document.

If you have questions or comments regarding the draft action, please contact Tara Klimowicz, Kevin Johnson or Bennett Moss either by phone at (609) 292-4860 or by email at tara.klimowicz@dep.nj.gov, kevin.johnson@dep.nj.gov or bennett.moss@dep.nj.gov, respectively.

Sincerely,

Susan Rosenwinkel

Susan Rosenwinkel
Bureau Chief
Bureau of Surface Water & Pretreatment Permitting

Enclosures

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

Table of Contents for the Draft Permit

This permit package contains the items listed 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

PUBLIC NOTICE

Notice is hereby given that the New Jersey Department of Environmental Protection (Department) proposes to renew the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) Consolidated School Master General Permit (Category - ASC) NJ0193381 in accordance with N.J.A.C. 7:14A-1 et seq., and by authority of the Water Pollution Control Act at N.J.S.A. 58:10A-1 et seq.

This renewal DSW Consolidated Master ASC General Permit is issued to continue to authorize the discharge of treated and disinfected domestic wastewater to surface waters of the State of New Jersey. This general permit currently includes twenty-two individual schools and will regulate these facilities under a general permit. The Department has determined that the wastewater characteristics, effluent limitations and monitoring conditions of the discharges are similar and as such are more appropriately controlled under a general permit. Individual authorizations will be issued for each of the twenty-two school wastewater treatment plants, following the finalization of this Master ASC General Permit. The public comment period will close on September 26, 2022.

Although this general permit is specifically designed for these existing twenty-two facilities, the Department reserves the right to include any school wastewater treatment facilities, with similar wastewater characteristics, that have received all applicable Federal, State and local approvals; including the appropriate Departmental approvals and any necessary wastewater management plan (WMP) approvals.

Modification provisions as cited in the permit may be initiated in accordance with the provisions set forth in Part IV and upon written notification from the Department.

This renewal draft NJPDES Consolidated School Master General Permit has been prepared for this facility based on the administrative record which is on file at the offices of the Department, located at 401 East State Street, Trenton, New Jersey. It is available for inspection, by appointment, Monday through Friday, between 8:30 A.M. and 4:00 P.M. Appointment for inspection may be requested through the Office of Records Access. Details are available online at www.nj.gov/dep/opra, or by calling (609) 341-3121.

Written comments or a request that the Department hold a non-adversarial public hearing on the draft document must be submitted in writing to Susan Rosenwinkel Chief (Susan.Rosenwinkel@dep.nj.gov), or Attention: Comments on Public Notice NJ0193381, at Mail Code 401-02B, Division of Water Quality, Bureau of Surface Water and Pretreatment Permitting, P.O. Box 420, Trenton, NJ 08625-0420 by the close of the public comment period, which closes after publication of this notice in the newspaper. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the public comment period.

The Department will respond to all significant and timely comments upon issuance of the final document. The permittee and each person who has submitted written comments will receive notice of the Department’s permit decision.

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

FACT SHEET

Masterfile #: Varies **PI #:** Varies

This fact sheet sets forth the principle facts and the significant factual, legal, and policy considerations examined during preparation of the draft permit. This action has been prepared in accordance with the New Jersey Water Pollution Control Act and its implementing regulations at N.J.A.C. 7:14A-1 et seq. - The New Jersey Pollutant Discharge Elimination System.

PERMIT ACTION: Discharge to Surface Water Renewal – Master General Consolidated School Permit – Category ASC - NJ0193381

The Department is proposing to renew the existing Master ASC General Permit.

1 Background and Description of Master General ASC Permit:

There are currently 22 individual schools covered under this master general permit that discharge their treated domestic wastewater to surface waters throughout the State of New Jersey. These existing facilities are similar in with respect to the following factors:

- Only treated domestic wastewater generated from schools is discharged with no off-site contribution;
- The total flow quantities are small ranging in size from 0.0048 up to 0.05 million gallons per day (MGD);
- Many of these facilities discharge seasonally where the majority of the flow is generally discharged during the non-summer months.

In accordance with N.J.A.C. 7:14A-6.13(b)4, the New Jersey Department of Environmental Protection (hereafter "the Department") may issue one master general permit to cover a category of discharges that meet the following criteria: involve the same or substantially similar types of operations; discharge the same type of wastes; require the same or similar effluent limitations and operating conditions; require the same or similar monitoring; and are more appropriately controlled under a general permit than under an individual permit. The Department has determined that issuance of a master general permit for these schools meet these regulatory criteria.

There are many benefits to renewing this master general permit for these discharges. First, issuance of a master general permit serves to simplify and streamline the NJPDES permitting process for these similar types of discharges. Secondly, the issuance of an individual NJPDES/DSW permit takes a considerably longer period of time to issue as compared to a general permit authorization. By issuing this master general permit, the Department can issue more NJPDES/DSW permits in an expeditious manner with no sacrifice in protection of the water resource. Finally, given the de-minimus nature of the flow quantities and expected pollutants, issuance of a master general permit ensures that the Department's resources are utilized in a sound manner.

Individual authorizations for discharges that are being issued under this master general permit continue to meet certain eligibility criteria. All facilities considered eligible under this master general permit are rated as minor facilities by the Department in accordance with the United States Environmental Protection Agency (EPA) rating criteria. Although this master general permit is specifically designed for these existing individual schools at this time, the Department reserves the right to include any new facilities, with similar wastewater characteristics, that have

received all other applicable Federal, State and local approvals, including the appropriate departmental approvals and any necessary Wastewater Management Plan (WMP) approval.

The NJPDES category for this master general permit is "ASC". Any individual authorization issued under the ASC permit is given two NJPDES numbers. The NJPDES number on the individual authorization page is specific to the individual facility whereas the NJPDES number NJ0193381 is for the master ASC permit. Note that, Holmdel Board of Education Village School (NJ0027031) has elected to be authorized under an individual permit.

Facilities Covered under the Master General Consolidated Discharge to Surface Water Permit General Permit for Schools are as follows:

	NJPDES Permit No.	Facility	Permitted Flow (MGD)
1	NJG0020419	Long Pond School WTP	0.01
2	NJG0020711	Warren County Technical School STP	0.012
3	NJG0021091	Jefferson Township High - Middle School	0.0275
4	NJG0021105	Arthur Stanlick School	0.007095
5	NJG0021253	Indian Hills High School	0.0336
6	NJG0021571	Springfield Township Elementary	0.0075
7	NJG0022101	Blair Academy	0.05
8	NJG0022276	Stony Brook School	0.01
9	NJG0022438	Helen A. Fort Middle School	0.05
10	NJG0023001	Salvation Army Camp Tecumseh	0.018
11	NJG0023175	Round Valley Middle School	0.009
12	NJG0023311	Kingwood Township School	0.0048
13	NJG0023841	Lounsberry Hollow Middle School	0.032
14	NJG0024091	Union Township Elementary	0.011
15	NJG0027049	Pope John XXIII High School	0.022
16	NJG0027065	Sparta Alpine School	0.025
17	NJG0027553	Lester D. Wilson Elementary	0.0075
18	NJG0028894	Kittatinny Regional HS Board of Ed	0.045
19	NJG0029432	Robert Erskine School	0.008
20	NJG0031046	North Warren Regional School District	0.02
21	NJG0031585	High Point Regional High School	0.03
22	NJG0035670	Alexandria Middle School	0.0099

2 Discharge Location Information and Receiving Waterbody Classification:

Receiving waterbody classifications are obtained from N.J.A.C. 7:9B-1.1 et seq., the New Jersey Surface Water Quality Standards (NJSWQS). Fresh waters are considered to be those waters classified as FW2 waters whereas pinelands waters are considered to be those waters classified as PL waters. All facilities covered under this master general permit are classified as either FW2 or PL waters. Designated uses for waterbody classifications can be found at N.J.A.C. 7:9B-1.12 and are as follows:

FW2:

1. Maintenance, migration and propagation of the natural and established biota;
2. Primary and secondary contact recreation;
3. Industrial and agricultural water supply;
4. Public potable water supply after conventional filtration treatment (a series of processes including filtration, flocculation, coagulation, and sedimentation, resulting in substantial particulate removal but no consistent removal of chemical constituents) and disinfection; and
5. Any other reasonable uses.

PL:

1. Cranberry bog water supply and other agricultural uses;
2. Maintenance, migration and propagation of the natural and established biota indigenous to this unique ecological system;
3. Public potable water supply after conventional filtration treatment (a series of processes including filtration, flocculation, coagulation, and sedimentation, resulting in substantial particulate removal but no consistent removal of chemical constituents) and disinfection;
4. Primary and secondary contact recreation; and
5. Any other reasonable uses.

Receiving waterbody classifications are as follows:

NJPDES Permit No.	Facility	County	Waterbody Classification
NJG0020419	Long Pond School WTP	Sussex	FW2-NT(C2)
NJG0020711	Warren County Technical School STP	Warren	FW2-TM(C1)
NJG0021091	Jefferson Township High - Middle School	Morris	FW2-TM(C1)
NJG0021105	Arthur Stanlick School	Morris	FW2-NT(C2)
NJG0021253	Indian Hills High School	Bergen	FW2-NT(C2)
NJG0021571	Springfield Township Elementary	Burlington	FW2-NT(C2)
NJG0022101	Blair Academy	Warren	FW2-TM(C1)*
NJG0022276	Stony Brook School	Morris	FW2-NT(C2)
NJG0022438	Helen A. Fort Middle School	Burlington	PL
NJG0023001	Salvation Army Camp Tecumseh	Hunterdon	FW2-NT(C1)
NJG0023175	Round Valley Middle School	Hunterdon	FW2-TP(C1)
NJG0023311	Kingwood Township School	Hunterdon	FW2-NT(C2)
NJG0023841	Lounsberry Hollow Middle School	Sussex	FW2-TM(C2)
NJG0024091	Union Township Elementary	Hunterdon	FW2-TP(C1)
NJG0027049	Pope John XXIII High School	Sussex	FW2-NT(C1)
NJG0027065	Sparta Alpine School	Sussex	FW2-NT(C1)
NJG0027553	Lester D. Wilson Elementary	Hunterdon	FW2-NT(C1)
NJG0028894	Kittatinny Regional HS Board of Ed	Sussex	FW2-NT(C2)
NJG0029432	Robert Erskine School	Passaic	FW2-TM(C1)
NJG0031046	North Warren Regional School District	Warren	FW2-TM(C1)*
NJG0031585	High Point Regional High School	Sussex	FW2-NT(C1)*
NJG0035670	Alexandria Middle School	Hunterdon	FW2-NT(C1)

*The receiving waterbody classification has changed since the January 1, 2017 Master General Permit.

The receiving waterbody classification and outfall name for each discharge are also indicated on the Permit Summary Tables which are included as an attachment to this document. Any parameters listed as impaired in the Permit Summary Tables are listed on Sublist 5 as per New Jersey's 2016 Integrated Water Quality Monitoring and Assessment Report (includes 305(b) Report and 303(d) List. The 75th percentile flow is defined as the flow which is exceeded 75 percent of the time for the appropriate "period of record" as determined by the United States Geological Survey (USGS).

A copy of the appropriate section of a USGS quadrangle map will be included in the individual authorizations which will be issued for each facility subsequent to finalization of this master general permit. These USGS quadrangle maps will indicate the location of the facility and discharge point for each facility. A treatment schematic will also be included in the individual authorizations where available.

3 Type and Quantity of the Wastes or Pollutants:

The Permit Summary Tables for existing discharges are located near the end of this fact sheet and contain a summary of the quantity and quality of pollutants treated and discharged from existing facilities covered under this general permit. Effluent data was obtained from the Monitoring Report Forms for the time period specified in the table.

All treatment works with a discharge regulated under N.J.A.C. 7:14A must have permits that implement applicable technical standards for residual management. All applicable conditions for residual management have been included in a separate NJPDES Residual General Permit Authorization; therefore, are not included in this permit renewal.

4 Description of Limitations and Conditions for New and Existing Discharges:

A. Basis for Effluent Limitations and Permit Conditions - General

The effluent limitations and permit conditions in this permit have been developed to ensure compliance with the following, as applicable:

1. NJPDES Regulations (N.J.A.C. 7:14A),
2. New Jersey Surface Water Quality Standards (N.J.A.C. 7:9B),
3. New Jersey's 2016 Integrated Water Quality Monitoring and Assessment Report (includes 305(b) Report and 303(d) List),
4. Requirements of the Delaware River Basin Commission (N.J.A.C. 7:9B-1.5(b)1),
5. Requirements of the Pinelands Commission (N.J.A.C. 7:50-6.81 to 6.87),
6. Requirements of the Highlands Commission (N.J.S.A. 13:20-1 et seq),
7. Secondary Treatment Standards (40 CFR Part 133, N.J.A.C. 7:14A-12.2 and -12.3),
8. Existing permit limitations in accordance with N.J.A.C. 7:14A-13.19 and 40 CFR 122.44 (antibacksliding requirements),
9. Permit limitations in accordance with N.J.A.C. 7:9B-1.5(d) (antidegradation requirements),
10. Statewide Water Quality Management Planning Rules (N.J.A.C. 7:15).

In accordance with N.J.A.C. 7:14A-13.5, Water Quality Based Effluent Limitations (WQBELs) are imposed when it has been determined that the discharge of a pollutant causes an excursion of criteria specified in the NJSWQS, N.J.A.C. 7:9B-1.1 et seq., and the Federal Water Quality Standards, 40 CFR Part 131. WQBELs are authorized by Section 301 of the Clean Water Act, 40 CFR 122, N.J.S.A. 58:10A-4, and N.J.A.C. 7:14A-13.2 and 13.3. The procedures used to develop WQBELs are contained in the State and Federal Standards. Specific procedures, methodologies, and equations are contained in the current USEPA "Technical Support Document for Water Quality-based Toxics Control" (TSD) (EPA- 505/2-90-001) and are referenced in N.J.A.C. 7:14A-13.5 and 13.6.

Expression of all effluent limitations is in accordance with N.J.A.C. 7:14A-13.14 and 13.15.

Whole effluent toxicity limitations are expressed as a minimum as a percent.

Loading limitations (kg/day or g/day) are calculated by multiplying the permitted flow value (in million gallons per day (MGD)) by the conversion factor of 3.785 (L/gal) and the appropriate concentration limitation (mg/L or µg/L).

B. Basis and Derivation for Effluent Limitations and Monitoring Requirements - Specific

Please refer to the Permit Summary Table attachment of this Fact Sheet for additional information regarding effluent limitations and monitoring requirements for these existing discharges. Monitoring frequencies and samples types are in accordance with N.J.A.C. 7:14A-14, unless specified otherwise in the permit.

This permit action does not authorize any increase in the concentration of pollutants above those levels authorized under the existing permits. All permit limitations and conditions in this permit action are equal to or more stringent than those contained in the existing permit action unless otherwise specified. As a result, this permit action satisfies the federal and state anti-degradation regulations at N.J.A.C. 7:14A-13.19, 40 CFR 131.12 and N.J.A.C. 7:9B-1.5(d), and no further anti-degradation analysis is necessary.

1. Flow:

This permit does not include a numerical limitation for flow. However, monitoring conditions are applied to all sites pursuant to N.J.A.C. 7:14A-13.13.

Monitoring Frequency and Sample Type for all sites: Flow shall be monitored on a **continuous** basis with a **metered** sample type.

2. Biochemical Oxygen Demand $(BOD)_5$ or 5-Day Carbonaceous Biochemical Oxygen Demand $(CBOD_5)$:

The following permits contain **BOD_5** limits which are being retained in accordance with N.J.A.C. 7:14A-13.19:

NJPDES Permit No.	Concentration, in mg/L		Loading (kg/day)		Percent Removal
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average Minimum
NJG0020419	25	37.5	(0.94)	(1.4)	90
NJG0020711	25	25	(1.14)	(1.14)	90
NJG0021571	25	37.5	(0.71)	(1.06)	85
NJG0022101	30	45	(6)	(9)	85
NJG0022438	25	37.5	(4.73)	(7.09)	85
NJG0023001	25	25	(1.70)	(1.70)	85
NJG0023175	30	45	(1)	(1.5)	85
NJG0023311	25	37.5	(0.45)	(0.68)	85
NJG0023841	15	22.5	(1.8)	(2.72)	85
NJG0024091	8	12	(0.33)	(0.5)	85
NJG0027049	25	40	(2.08)	(3.33)	85
NJG0027065	15	15	(1.4)	(1.4)	85
NJG0027553	25	37.5	(0.71)	(1.06)	85
NJG0028894	25	40	(4.2)	(6.8)	85
NJG0031585	15	15	(1.7)	(1.7)	85

The following permits contain **$CBOD_5$** limits which are being retained in accordance with N.J.A.C. 7:14A-13.19:

NJPDES Permit No.	Concentration, in mg/L		Loading (kg/day)		Percent Removal
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average Minimum
NJG0021091	8	12	(0.85)	(1.25)	85
NJG0021105	25	40	(MR)	(MR)	85
NJG0021253	8	12	(1)	(1.5)	85
NJG0022276	8	12	(0.3)	(0.45)	85
NJG0029432	8	12	(0.24)	(0.36)	85
NJG0031046	25	40	(1.89)	(3.03)	85
NJG0035670	25	37.5	(1.04)	(1.56)	85

Two of these facilities have BOD_5 concentration limitations set at 30 mg/L as a monthly average and 45 mg/L as a weekly average. These limitations are equivalent to the definition of secondary treatment at 40 CFR 133.102(a) (1) and (2) and N.J.A.C. 7:14A-12.2 (b) 1. Other limitations are based on the minimum effluent standards for either the Atlantic Coastal Plain or Wallkill River Basin (15 mg/L as a monthly average and 22.5 mg/L as a weekly average), Delaware River Basin (25 mg/L as a monthly average and 37.5 mg/L as a weekly average), or the Passaic River Basin (25 mg/L as a monthly average and 37.5 mg/L as a weekly average). Other effluent limitations may be based on site-specific water quality studies.

All mass loading limitations are retained from the existing permit in accordance with N.J.A.C. 7:14A-13.19. For most facilities loading limits are premised on the concentration values multiplied by the permitted flow and a conversion factor.

Percent removal limitations are retained from the existing permits in accordance with N.J.A.C. 7:14A-13.19. Any percent removal values of 85% are based on the definition of secondary treatment at 40 CFR 133.102(a)(3), N.J.A.C. 7:14A-12.2(b)3 and N.J.A.C. 7:14A-12.2(c)3.

Monitoring Frequency and Sample Type for all Facilities: The monitoring frequency of **once per month** has been retained from the existing permit and is consistent with N.J.A.C. 7:14A-14.2. The sample type shall be a **grab** sample.

3. Total Suspended Solids (TSS):

The effluent limitations for TSS for all sites (with one exception) are 30 mg/L as a monthly average and 45 mg/L as a weekly average and are being retained pursuant to N.J.A.C. 7:14A-13.19. These limitations are equivalent to the definition of secondary treatment at 40 CFR 133.102(a) (1) and (2) and N.J.A.C. 7:14A-12.2 (b) 1. Permit No. NJG0024091 contains site-specific effluent limitations of 8 mg/L as a monthly average and 12 mg/L as a weekly average which are being retained pursuant to N.J.A.C. 7:14A-13.19.

All mass loading limitations are retained from the existing permit in accordance with N.J.A.C. 7:14A-13.19. For most facilities loading limits are premised on the concentration values multiplied by the permitted flow and a conversion factor.

The percent removal limitation of 85% is also applied to all sites and is based on the definition of secondary treatment at 40 CFR 133.102(b)(3) and N.J.A.C. 7:14A-12.2(e)3. This limit is retained pursuant to N.J.A.C 7:14A-13.19.

Monitoring Frequency and Sample Type for all Facilities: The monitoring frequency of **once per month** has been retained from the existing permit and is consistent with N.J.A.C. 7:14A-14.2. The sample type shall be a **grab** sample.

4. pH:

For all Facilities (with the exception of NJ0027065, NJ0024091): The effluent limitations for pH are an instantaneous minimum of 6.0 s.u. and an instantaneous maximum of 9.0 s.u. These effluent limitations are based on the definition of secondary treatment at 40 CFR 133.102(c) and N.J.A.C. 7:14A-12.2 (f) where the limits are retained in accordance with N.J.A.C. 7:14A-13.19.

For Facilities NJ0027065 and NJ0024091: Effluent limitations for NJ0027065 and NJ0024091 are 6.5 s.u. as an instantaneous minimum and 8.5 s.u. as an instantaneous maximum. These limits are retained from the existing permits in accordance with N.J.A.C. 7:14A-13.19.

Monitoring Frequency and Sample Type for all sites: The monitoring frequency of **once per day** has been retained the existing permit and is consistent with N.J.A.C. 7:14A-14.2. The sample type shall be a **grab** sample.

5. Temperature:

As authorized by N.J.A.C. 7:14A-6.2(a)14, monitoring and reporting requirements for effluent temperature are retained from the existing permit. While effluent temperature is a monitoring requirement that applies to all facilities, effluent temperature may also be included in the permit to track compliance with the in-stream un-ionized ammonia criteria at N.J.A.C. 7:9B-1.14(c) for certain facilities.

Monitoring Frequency and Sample Type for all sites: The monitoring frequency of **once per day** has been retained the existing permit and is consistent with N.J.A.C. 7:14A-14.2. The sample type shall be a **grab** sample.

6. Bacterial Indicator:

The effluent limitation for E.coli for all sites is 126/100 mL as a monthly average geometric mean and is being retained pursuant to N.J.A.C. 7:14A-13.19. This limitation is consistent with N.J.A.C. 7:9B-1.14(d).

Monitoring Frequency and Sample Type for all Facilities: The monitoring frequency of **once per month** has been retained from the existing permit and is consistent with consistent with N.J.A.C. 7:14A-14.2. The sample type shall be a **grab** sample.

7. Dissolved Oxygen (DO):

All discharge authorizations for schools contain effluent limitations for DO. The technical source for these limitations vary and can be from the NJSWQS, area-wide water quality management plans, or site-specific water quality studies. The NJSWQS at N.J.A.C. 7:9B-1.1 et seq. for DO for FW2-NT waters is a 24 hour average of not less than 5.0 but not less than 4.0 at any time. For FW2-TM waters the 24 hour average is not less than 6.0 but not less than 5.0 at any time. For FW2-TP waters DO can be not less than 7.0 at any time. For the purposes of permit implementation, a 24 hour average is considered equivalent to a "daily minimum" and a limit of "at any time" is equivalent to an instantaneous minimum.

Effluent limitations for the following sites conform with the NJSWQS and are being retained in this master ASC permit:

NJPDES Permit		**DO Limits, mg/L**	
NJPDES Permit No.	Receiving Water Classification	Instant Minimum	Daily Average Minimum
NJG0020711	FW2-TM(C2)	5.0	6.0
NJG0021091	FW2-TM(C1)	5.0	6.0
NJG0021105	FW2-NT(C2)	4.0	5.0
NJG0021571	FW2-NT(C2)	4.0	5.0
NJG0022101	FW2-TM(C1)*	5.0	6.0
NJG0022438	PL	4.0	5.0
NJG0023001	FW2-NT(C1)	4.0	5.0
NJG0023311	FW2-NT(C2)	4.0	5.0
NJG0027049	FW2-NT(C2)	4.0	5.0
NJG0027065	FW2-NT(C1)	4.0	5.0
NJG0027553	FW2-NT(C1)	4.0	5.0
NJG0028894	FW2-NT(C2)	4.0	5.0
NJG0029432	FW2-TM(C1)	5.0	6.0
NJG0031046	FW2-TM(C1)*	5.0	6.0
NJG0031585	FW2-NT(C1)*	4.0	5.0
NJG0035670	FW2-NT(C1)	4.0	5.0

*The receiving waterbody classification has changed since the January 1, 2017 Master General Permit.

Effluent limitations for the following sites are more stringent than or comparable to the NJSWQS and the technical source of the limitations may have been based on a site-specific water quality study. The Department is retaining the existing limits for these facilities pursuant to N.J.A.C. 7:14A-13.19. A summary of these limitations is as follows:

NJPDES Permit		**DO Limits, mg/L**			
NJPDES Permit No.	Receiving Water Classification	Monthly Average Min.	Daily Average Min.	Weekly Average Min.	Instant Min.
NJG0020419	FW2-NT(C2)	5.0	6.0	--	--
NJG0021253	FW2-NT(C2)	--	6.0	--	MR
NJG0022276	FW2-NT(C2)	--	6.0	--	MR
NJG0023841	FW2-TM(C2)	--	MR	6.0	--

The following sites are classified as FW2-TP(C1). The existing effluent limitations have been retained for those sites pursuant to N.J.A.C. 7:14A-13.19. A summary of these limitations is as follows:

NJPDES Permit		DO Limits, mg/L	
NJPDES Permit No.	Receiving Water Classification	Monthly Average Min.	Instant Min.
NJG0023175	FW2-TP(C1)	6.0	MR
NJG0024091	FW2-TP(C1)	7.0	MR

Monitoring Frequency and Sample Type for all Facilities: The monitoring frequency of **once per month** has been retained the existing permits and is consistent with N.J.A.C. 7:14A-14.2. The sample type shall be a **grab** sample.

8. Oil and Grease:

The effluent limitations of 10 mg/L as a monthly average and 15 mg/L as an instantaneous maximum are included for all sites and have been retained from the existing permits pursuant to N.J.A.C. 7:14A-13.19. These effluent limitations are based on N.J.A.C. 7:14A-12.8(c).

Monitoring Frequency and Sample Type for all sites: The monitoring frequency of **once per quarter** has been retained from the existing permits. The sample type shall be a **grab** sample.

9. Total Dissolved Solids (TDS):

TDS monitoring requirements are applicable to those facilities that have permitted flows greater than or equal to 0.01 MGD and discharge to waterbodies within the Delaware River Basin Special Protection Waters (SPW), in accordance with the Effluent Quality Requirements of the DRBC Water Quality Regulations at Section 3.10.4.D.2. Therefore, the monitoring and reporting requirements for TDS as a monthly average and daily maximum have been retained in this permit renewal action for the following facilities:

- **SPW Facilities:**

NJPDES Permit No.	Facility	Permitted Flow (MGD)
NJG0020419	Long Pond School WTP	0.01
NJG0020711	Warren County Technical School STP	0.01168
NJG0022101	Blair Academy	0.05
NJG0023001	Salvation Army Camp Tecumseh	0.017
NJG0027049	Pope John XXIII High School	0.02
NJG0027065	Sparta Alpine School	0.025
NJG0028894	Kittatinny Regional HS Board of Ed	0.045
NJG0031046	North Warren Regional School District	0.02

Additionally, consistent with the requirements of the DRBC, TDS monitoring requirements are also applicable to those facilities that have a permitted flow greater than or equal to 0.05 MGD and discharge to a non-SPW Delaware River Basin waterbody. As a result, a monitoring requirement for TDS as a monthly average and daily maximum has been imposed for Helen A. Fort (NJG0022438). However, it has come to the Department's attention that the existing treatment plant will be replaced by a new treatment plant. During the construction the existing plant will continue to operate. The permitted flow will remain the same for the new treatment plant, but the treatment units will differ. Therefore, the Department has determined that it is not appropriate to impose the new TDS monitoring requirement at this time since a new treatment plant is under construction. The Department will impose the monitoring and reporting requirement for TDS once the new treatment plant is online.

- **Non-SPW Facility:**

NJPDES Permit No.	Facility	Permitted Flow (MGD)
NJG0022438	Helen A. Fort Middle School	0.05

Monitoring Frequency and Sample Type for affected sites: The monitoring frequency of **once per quarter** has been retained from the existing permits. The sample type shall be a **grab** sample.

10. Chlorine Produced Oxidants (CPO):

Seven facilities (NJG0020711, NJG0021253 NJG0022101, NJG0022438, NJG0023001, NJG0024091 and NJG0031046) covered under this permit continue to chlorinate their effluent. The SWQS at N.J.A.C. 7:9B-1.14 (d) specify aquatic life criteria for CPO. As a result, CPO limitations are appropriate for those facilities that chlorinate their effluent. While these facilities also dechlorinate using an appropriate chemical prior to discharge, monitoring for CPO ensures measurement of any residual chlorine in the effluent. Therefore, effluent CPO limitations have been retained from the existing permit pursuant to N.J.A.C. 7:14A-13.19 for those sites that chlorinate. For those facilities that use UV disinfection, effluent limitations for CPO are not included as chlorination is not part of the treatment process.

It has come to the Department's attention that the existing treatment plant for NJG0022438 will be replaced by a new treatment plant. The existing plant will continue to operate during the construction; therefore, existing CPO requirements have been retained. The permitted flow will remain the same for the new treatment plant, but the treatment units will differ and will include UV disinfection. The Department will re-evaluate the facility's CPO data once the new treatment plant is online to determine if CPO is still present.

Monitoring Frequency and Sample Type: The monitoring frequency of **once per day** is carried forward from the existing permits for those sites that chlorinate. The sample type shall be a **grab** sample.

11. Ammonia (Total as N):

Ammonia-N in water exists in two forms: NH_3 and NH_4^+. As NH_3, ammonia-N is called "un-ionized"; as NH_4^+, ammonia-N is called "ionized". Generally, the un-ionized fraction is considered more toxic than the ionized fraction. The relative proportion that is found in each fraction is primarily dependent on the temperature and the pH of the solution. At a higher temperature and/or a higher pH, more ammonia-N exists in the un-ionized form as compared to a lower temperature and/or pH. Ammonia-N is usually measured as total ammonia-N, which includes both the ionized and the un-ionized fractions.

The NJSWQS at N.J.A.C. 7:9B-1.14 set an instream limit on the concentration of un-ionized ammonia that may be allowed in the stream. The NJSWQS may be expressed as calculations dependent on instream temperature and pH. Where this is the case, the values for temperature and pH used to calculate the un-ionized ammonia criteria are those values that exist after any allowable mixing of the effluent and receiving water. There are criteria values for both acute and chronic toxicity effects. Permit limits to protect against the toxic effects of ammonia instream are based on the more stringent calculated long term average.

Limit Derivation: The effluent limitations are calculated using the procedures in the TSD in accordance with N.J.A.C. 7:14A-13.6(a). The wasteload allocation is calculated by solving a series of simultaneous equations for the carbonate and ammonia equilibria according to the following methodology. It is assumed that there is complete and total mixing with the receiving stream. The input data in the solution of the equilibrium equations are derived from Discharge Monitoring Report (DMR) data.

Carbonate Equilibrium: The simultaneous equilibrium (temperature corrected) for the first and second carbonate equilibrium for each pH value are solved to calculate the carbon species and the hydrogen ion concentrations. This is done separately for each stream, i.e. the effluent and the upstream receiving stream.

The downstream concentrations for the carbon fractions are then calculated by mass balance. The downstream final temperature is also calculated by mass balance. The final downstream hydrogen ion concentration is then calculated by the carbonate equilibrium equations. The final pH is calculated from the final hydrogen ion concentration.

Equilibrium Equation:

$$\log K = -[A/T] + D - C \times T$$

$C = 0.032786$

$D = 14.8435$

$A = 3404.71$

T = Temp in °K

Ammonia-N Equilibrium: Using the final pH and the final temperature, the ammonia equilibrium of the final mixed stream is calculated.

Equilibrium Equation:

$$pK_a = 0.09018 + 2729.92/T$$

T= Temp in degrees K

The final total ammonia-N wasteload allocation is calculated by mass balance from the instream un-ionized ammonia criteria. A "reserve capacity", or "margin of safety", is considered in setting the wasteload allocation in accordance with N.J.A.C. 7:15-7.1 and Section 4.2.1 of the USEPA TSD. For certain sites the ammonia toxicity analysis may be a subset of a parameter specific TMDL as identified in N.J.A.C. 7:15-7.1.

The ammonia toxicity criteria adopted in January 2002 for FW2-NT waters includes separate spawning and non-spawning season equations for calculating the applicable instream criteria. The spawning season criteria apply for the months of March through October, while the non-spawning season criteria apply for the months of November through February. This is a significant departure from the historically used summer (May through October) and winter (November through April) seasons. By moving the traditional winter months of March and April into the spawning season, they are now grouped with the traditional summer months of May through October.

Due to cold weather effects on the nitrification process, some dischargers have indicated to the Department that the simple procedure of applying the summer season limits to the months of March and April could result in effluent limitation exceedances. Therefore, the Department evaluates the WQBELs for March and April using the spawning season criteria, winter season ambient stream information (where appropriate), and March/April effluent pH and temperature data. In order to keep March and April grouped with the other traditional winter months of November through February, the more stringent of the non-spawning or March/April WQBELs are applied to the traditional winter season. In this way, water quality is protected from the toxic effects of ammonia during both the non-spawning months of November through February and the spawning months of March and April. Additionally, the more stringent limitations for the other spawning months of May through October do not have to be applied to the cooler, wetter months of March and April.

The Department has determined that all site-specific ammonia limits shall be retained from the existing permit pursuant to N.J.A.C. 7:14A-13.19 given that receiving water low flow values did not significantly change resulting in a de minimus change in the ammonia limitation if any. The ammonia limits that are being retained are as follows:

NJPDES Permit No.	Summer Limits May through October in mg/L and (kg/day)		Winter Limits November through April in mg/L and (kg/day)	
	Monthly Average	Weekly Average	Monthly Average	Weekly Average
NJG0020419	3.5 (0.13)	(a) 5.1 (0.19)	4.7 (0.18)	(a) 6.9 (0.26)
NJG0020711	20 (0.91)	MR (MR)	20 (0.91)	MR (MR)
NJG0021091	2 (0.2)	3 (0.3)	4 (0.42)	(a) 5.8 (0.6)
NJG0021105	4.5 (MR)	(a) 6.6 (MR)	MR (MR)	(a) 8.0 (0.21)
NJG0021253	2 (0.25)	3 (0.38)	2 (0.25)	3 (0.38)
NJG0021571	MR (MR)	9.0 (0.26)	MR (MR)	16 (0.45)
NJG0022101	20 (3.8)	MR (MR)	20 (3.8)	MR (MR)
NJG0022276	2.0 (0.08)	3.0 (0.11)	MR (MR)	(a) 4.4 (0.16)
NJG0022438	20 (3.78)	(a) MR (MR)	20 (3.78)	(a) MR (MR)
NJG0023175	1.0 (0.03)	MR (MR)	MR (MR)	(a) MR (MR)
NJG0023311	2 (0.04)	(a) 3 (0.055)	3 (0.055)	(a) 4 (0.07)
NJG0023841	2.6 (0.31)	(a) 3.8 (0.46)	2.6 (0.31)	(a) 3.8 (0.46)
NJG0024091	1.0 (MR)	MR (MR)	MR (MR)	(a) MR (MR)
NJG0027065	MR (MR) 3.9 (0.37)	(a) 7 (0.66) (a) 6.0 (0.57)	MR (MR) 4.2 (0.40)	(a) 12.6 (1.2) (a) 7.0 (0.66)
NJG0027553	MR (MR) MR (MR)	(a) 10.5 (0.3) (a) 10.2(0.29)	20 (0.57) MR (MR)	(a) 22 (0.62) (a) 18.4 (0.52)
NJG0028894	20 (3.4)	(a) MR (MR)	20 (3.4)	(a) MR (MR)
NJG0029432	2 (0.06)	3 (0.09)	MR (MR)	(a) 7.0 (0.21)
NJG0031046	18.2 (1.38)	(a) 26.6 (2.01)	20 (MR)	MR (MR)
NJG0031585	MR (MR)	MR (MR)	MR (MR)	MR (MR)
NJG0035670	MR (MR)	(a) 10.5 (0.44)	20 (0.83)	(a) 22 (0.92)
NJG0023001	2.7 (0.37)	4.4 (0.59)	2.5 (0.34)	4.2 (0.57)
NJG0027049	2.4 (0.18)	4.0 (0.30)	2.5 (0.19)	4.2 (0.32)

Footnotes: MR - Monitor and Report (a) Daily Maximum

Monitoring Frequency and Sample Type for all Facilities: The monitoring frequency of **once per month** has been retained from the existing permits and is consistent with N.J.A.C. 7:14A-14.2. The sample type shall be a **grab** sample.

12. Phosphorus:

Background

The Department has utilized two approaches to control the discharge of phosphorus in the surface waters of the State. One is through the issuance of NJPDES permits with site specific WQBELs based on the 0.1 mg/L phosphorus standard established in the NJSWQS. The other is through the development of phosphorus total maximum daily loads (TMDLs). Phosphorus TMDLs are based on a more comprehensive analysis and provide watershed based (rather than site specific) phosphorus limits for the affected dischargers. A TMDL is "**proposed**" when the Department publishes the TMDL Report as a proposed Water Quality Management Plan (WQMP) amendment in the New Jersey Register (NJR) for public review and comment. Following the public comment period, the Department prepares a response to comments received and any required revisions to the TMDL. The revised document with response to comments is "**established**" upon submittal to EPA for review. Following EPA's review and approval process, the TMDL is deemed "**approved**" and can then be "**adopted**" as an amendment to the WQMP. The notice of adoption is published in the NJR.

Phosphorus Requirements in the ASC Permit

The phosphorus limits have been reevaluated in light of continued TMDL issuance, Stream Visual Assessment Protocol (SVAP) procedures and WQBEL calculations. The basis for phosphorus requirements for all facilities is included below as well as the newly proposed limitations, if applicable.

- **Adopted TMDLs**

Adopted TMDLs exist for the following facilities:

	Master ASC Phosphorus Limits (Retained)			
	Concentration (mg/L)		Loading (kg/d)	
NJPDES Permit No.	Monthly Average	Weekly Average	Monthly Average	Weekly Average
NJG0020419	1.0	--	(MR)	--
NJG0021091	1.0	1.5	(MR)	(MR)
NJG0021253	0.76	(MR)	(MR)	(MR)
NJG0022276	1.0	1.5	(MR)	(MR)
NJG0023175	4.75	(MR)	(MR)	(MR)
NJG0024091	1.0	MR	(MR)	(MR)
NJG0027065	1.0	--	(MR)	--
NJG0029432	1.6	2.4	(MR)	(MR)

NJG0020419 (Long Pond School): The receiving water into which this facility discharges is within the Pequest River Watershed in the Northwest Water Region. A report entitled, "TMDLs for Phosphorus to Address Four (4) Impaired Assessment Units in the Pequest River" was adopted on June 20, 2011 and specifies "no measurable change in TMDL boundary load" for Long Pond School. Therefore, the existing phosphorus effluent limitation of 1.0 mg/L as a monthly average and the monitoring and reporting requirement for monthly average loading has been retained in this renewal action.

NJG0021091 (Jefferson Township High – Middle School): Phosphorus has been found to be a pollutant of concern for the Passaic River Basin. On May 7, 2007, the Department proposed phosphorus TMDL, and a uniform allocation of this loading capacity, for the Wanaque Reservoir. The report was entitled "Phase I Passaic River Study Total Maximum Daily Load for Phosphorus in Wanaque Reservoir Northeast Water Region" and was included as part of the amendment process for the Northeast, Upper Raritan, Sussex County and Upper Delaware WQMP. This TMDL was the first phase of a two-phase TMDL study addressing in-stream phosphorus impairments in the non-tidal Passaic River Basin. The adoption of the TMDL in the Northeast WQMP was finalized on April 24, 2008.

Jefferson Township High - Middle School is located outside the model boundaries of the TMDL. As per footnote 3 of Table 14 of the adopted TMDL, since the TP load generated by the permittee is insignificant when compared to the boundary loads, the impact of this discharge is considered de minimus. For example, assuming no natural TP load attenuation, the average total permitted load from this and other de minimus facilities is less than 0.71% of the total boundary load. Therefore, the WLAs established for this facility are based on the permitted flow and monthly average concentrations in accordance with existing permit conditions. The existing concentration limitations of 1.0 mg/L as a monthly average and 1.5 mg/L as a weekly average have been retained in this permit action. In addition, the monitoring and reporting requirement for monthly average loading and weekly average loading has also been carried forward in this permit action.

NJG0021253 (Indian Hills High School): Phosphorus has been found to be a pollutant of concern for the Ramapo River. On May 7, 2007, the Department proposed phosphorus TMDL for the Ramapo River. The report is entitled, "Total Maximum Daily Load to Address Phosphorus Impairment in the Pompton Lake and Ramapo River in the Northeast Water Region." The TMDL was adopted on April 24, 2008.

On June 21, 2012 the Department issued an Individual General Permit Authorization modification to correct the final phosphorus effluent concentration limitations imposed on Indian Hills High School. As stated in the modification cover letter, the Department misinterpreted the TMDL and imposed a long term average (LTA) limitation rather than an average monthly limitation (AML) for phosphorus. Specifically, the final phosphorus effluent concentration limitation should be 0.76 mg/L as a monthly average and monitoring only as a weekly average concentration. Therefore, the existing final phosphorus concentration monthly average of 0.76 mg/L has been retained in this permit renewal. In addition, the monitoring and reporting requirement for monthly average loading, weekly average loading and weekly average concentration has also been carried forward.

NJG0022276 (Stony Brook School): Phosphorus has been found to be a pollutant of concern for the Passaic River Basin. On May 7, 2007, the Department proposed an amendment to the Northeast, Upper Raritan, Sussex County and Upper Delaware Water Quality Management Plans to incorporate the TMDL for phosphorus, and a uniform allocation of this loading capacity, in the Non-Tidal Passaic River Basin. The proposed amendment included a report entitled "Total Maximum Daily Load Report for the Non-Tidal Passaic River Basin Addressing Phosphorus Impairments." The TMDL was adopted on April 24, 2008 and published in the New Jersey Register on May 19, 2008. The TMDL assigns a WLA of 0.04 kg/d to the permittee. Therefore, existing phosphorus effluent limitations of 1.0 mg/L as a monthly average and 1.5 mg/L as a weekly average have been retained in this permit action. In addition, the monitoring and reporting requirement for monthly average loading and weekly average loading has also been carried forward in this renewal action.

NJG0023175 (Round Valley Middle School): Phosphorus has been found to be a pollutant of concern for the Raritan River Basin. A report entitled, "TMDL Report for the Non-Tidal Raritan River Basin Addressing Total Phosphorus, Dissolved Oxygen, pH and Total Suspended Solids Impairments" was adopted on May 24, 2016 and published in the New Jersey Register on June 20, 2016. The TMDL to assigns a monthly average concentration limitation of 4.75 mg/L to Round Valley Middle School. In addition, a monitoring and reporting requirement for the monthly average loading, weekly average loading and weekly average concentration has been included in this permit renewal.

NJG0024091 (Union Board of Education): The receiving water into which these facilities discharge is within the Raritan River Basin and is covered by a TMDL. As a result, the Department has carried forward the monthly average concentration limit of 1.0 mg/L from the existing permit. In addition, the monitoring and reporting requirement for the monthly average loading, weekly average loading and weekly average concentration has also been carried forward in this permit renewal.

NJG0027065 (Sparta Alpine): Phosphorus has been found to be a pollutant of concern for the Pequest River Watershed Basin. On June 7, 2010, the Department proposed a phosphorus TMDL, and a uniform allocation of this loading capacity, for the Headwaters of the Pequest River. The report was entitled "Total Maximum Daily Loads for Phosphorus to Address Four Impaired Assessment Units in the Pequest River Watershed" and was included as part of the amendment process for the Upper Delaware Water Quality Management Plan and Sussex County WQMP. The report states that the Sparta Alpine School will be required to maintain effluent quality so as to result in "no measurable change" in water quality at the point of entry into impaired assessment units. Therefore, the existing phosphorus effluent limitation of 1.0 mg/L as a monthly average has been carried forward form the existing permit. In addition, the monitoring and reporting requirement for monthly average loading has been retained in this renewal action.

NJG0029432 (Robert Erskine School): Phosphorus has been found to be a pollutant of concern for the Passaic River Basin. On May 7, 2007, the Department proposed an amendment to Northeast, Upper Raritan, Sussex County and Upper Delaware WQMPs to incorporate TMDL for phosphorus, and a uniform allocation of this loading capacity, in the Non-Tidal Passaic River Basin. The proposed amendment included a report entitled

"Total Maximum Daily Load Report for the Non-Tidal Passaic River Basin Addressing Phosphorus Impairments." The TMDL was adopted on April 24, 2008 and published in the New Jersey Register on May 19, 2008. The TMDL assigns a WLA of 0.05 kg/d to the permittee. Therefore, the limitations are concentrations of 1.6 mg/L as a monthly average and 2.4 mg/L as a weekly average have been carried forward from the existing permit. In addition, the monitoring and reporting requirement for monthly average loading and weekly average loading has also been retained in this permit.

- **Approved TMDLs (In Progress)**

The following facilities have TMDLs that have been deemed "approved" and are in the process of being "adopted"; therefore, approved TMDLs are not included at this time unless stated below. At such time as the TMDL's are adopted the Department will reflect the new phosphorus requirement in a subsequent permit action. Details regarding each facility are as follows:

	Master ASC Phosphorus Limits (Retained)			
	Concentration (mg/L)		Loading (kg/d)	
NJPDES Permit No.	Monthly Average	Weekly Average	Monthly Average	Weekly Average
NJG0021105	0.561	MR	(MR)	(MR)
NJG0021571	MR	MR	(MR)	(MR)
NJG0022438	MR	MR	(MR)	(MR)
NJG0023841	MR	0.5	(MR)	0.06
NJG0031585	MR	MR	(MR)	(MR)

NJG0021105 (Arthur Stanlick School): In a report entitled "Total Maximum Daily Loads for Phosphorus To Address 4 Eutrophic Lakes in the Northwest Water Region" approved by USEPA on September 1, 2003, the Department established a WLA of 5.5 kg/yr for 4,000 gallons per day (GPD) for the Arthur Stanlick School. On September 14, 2006, the Bureau of Watershed Regulation (BWR) received an application from the permittee to increase the NJPDES flow value from 4,000 GPD to 7,095 GPD. As a result, the BWR adopted the Jefferson Township Wastewater Management Plan and the Sussex County WQMP on July 3, 2007 to reflect the higher flow of 7,095 GPD. The WLA of 5.5 kg/yr, allocated in the TMDL equates to a monthly average loading limit of 0.015 kg/day and a monthly average concentration limit of 0.561 mg/l for 7,095 GPD. While the TMDL has not yet been adopted, the Department is retaining the existing permit limit of 0.561 mg/L as a monthly average concentration. In addition, the Department has also retained the monitoring and reporting requirement for monthly average loading and the monitoring and reporting requirement for the weekly average concentration and loading in this renewal permit.

NJG0021571 (Springfield Township Elementary): Phosphorus was found to be a pollutant of concern in Barkers Brook. Therefore, in a report entitled, "TMDLs for Phosphorus to Address 4 Stream Segments (Annaricken Brook, Barkers Brook North Branch, and Doctors Creek)" approved by USEPA on October 1, 2007, the Department established a permit limit of 0.55 mg/L and a WLA of 5.73 kg/yr for Springfield Township Elementary School. Since the TMDL has not yet been adopted, the specified TMDL effluent limitations are not enforceable in this permit action. Therefore, the existing monitoring and reporting requirements for monthly average and weekly average concentration and loading have been retained in this permit action.

NJG0022438 (Helen Fort Middle School): The receiving water into which this facility discharges is within the Rancocas / Pennsauken watershed. Since the development of a Rancocas / Pennsauken watershed TMDL is underway, appropriate Phosphorus limits will be applied at the time the TMDL is adopted. Therefore, the existing monitoring and reporting requirements for monthly average and weekly average concentration and loading have been retained in this permit action.

NJG0023841 (Lounsberry Hollow Middle School): Phosphorus has been found to be a pollutant of concern for the Wallkill River Basin. A report entitled, "Total Maximum Daily Load for Phosphorus to Address Seven (7) Stream Segments in the Northwest Water Region" approved by USEPA on September 30, 2005, the Department establishes a WLA of 22.09 kg/yr for Lounsberry Hollow Middle School. Due to the pending TMDL, the Department issued a Stay Letter on June 23, 2011 which stayed the final phosphorus effluent WQBELs to the interim phase phosphorus limitations of the June 21, 2006 permit. Since the TMDL has not yet been adopted the specified TMDL effluent limitations are not included in this permit action. Therefore, the Department has retained the existing permit limit of 0.5 mg/L as a weekly average concentration in this permit action. In addition, the monitoring and reporting requirement for monthly average loading, weekly average loading and monthly average concentration has also been carried forward in this permit action.

NJG0031585 (High Point High School): As noted in the final permit issued July 25, 2011, phosphorus has been found to be a pollutant of concern for the Wallkill River Basin. Therefore, in accordance with N.J.A.C. 7:15–7.2(g), the Department proposed an amendment to the Sussex County WQMP to incorporate TMDL for phosphorus. The TMDL report is entitled "Total Maximum Daily Load to Address Phosphorus in the Clove Acres Lake and Papakating Creek Northwest Water Region" and was approved on September 29, 2004.

The TMDL to Address Phosphorus in the Clove Acres Lake and Papakating Creek Northwest Water Region assigns a long term average WLA of 45.2 kg/yr to High Point Regional High School. Since the TMDL has not yet been adopted, the specified TMDL effluent limitations are not included in this permit action. Therefore, the monthly average and weekly average concentration and loading monitoring and reporting requirements have been retained in this permit action.

- **Facilities that have passed Stream Visual Assessment Protocol (SVAP)**

Any facility not subject to a TMDL can elect to have a SVAP performed. The SVAP provides a basic level of stream health evaluation and assesses the applicability of the water quality criteria for a discharge. The SVAP evaluation is a special consideration for small dischargers under the Department's "Technical Manual for Phosphorus Evaluations For Discharge to Surface Waters" (Technical Manual). As per the Technical Manual, for small dischargers, (NJPDES permitted flow values of 100,000 GPD or less) the Department considers a SVAP score of 5.5 or greater to be sufficient proof that phosphorus is not rendering the waters unsuitable for the designated uses. The Technical Manual can be found on the Department's website at: https://www.nj.gov/dep/dwq/pdf/p-manual-07-30-08.pdf.

The following facilities have passed the SVAP and are not included under an issued TMDL or have a TMDL pending. Therefore, the Department is retaining the existing limits and monitoring and reporting requirements for these facilities pursuant to N.J.A.C. 7:14A-13.19:

	Master ASC Phosphorus Limits (Retained)			
	Concentration (mg/L)		Loading (kg/d)	
NJPDES Permit No.	Monthly Average	Weekly Average	Monthly Average	Weekly Average
NJG0020711	MR	MR	MR	MR
NJG0023001	1.0	MR	MR	MR
NJG0023311	MR	MR	MR	MR
NJG0027049	MR	MR	MR	MR
NJG0027553	MR	MR	MR	MR
NJG0035670	MR	MR	MR	MR

- **Phosphorus WQBELs Calculated**

The following facilities, NJG0022101 (Blair Academy), NJG0028894 (Kittatinny Regional HS) and NJG0031046 (North Warren Regional School District) do not fall under any TMDL at this time. As a result, WQBELs have been calculated. In accordance with N.J.A.C. 7:14A-13.6(a) and 13.5(a), a WQBEL shall be imposed when the Department has determined that the discharge causes an excursion above the SWQS. In accordance with N.J.A.C. 7:9B-1.14(c), the criteria for total phosphorus (TP) is 0.1 mg/L except where site-specific or watershed criteria are developed or it can be demonstrated that total phosphorus is not a limiting nutrient and will not otherwise render the waters unsuitable for the designated uses. At this time, the Department does not have evidence to conclude that phosphorus is not the limiting nutrient in the receiving stream, nor that the discharge of phosphorus from the permittee will not render the waters unsuitable for the designated uses. Furthermore, site-specific or watershed criterion has not been developed for the subwatershed into which the permittee discharges. Therefore, the numerical criterion of 0.1 mg/L TP is applicable for this receiving water.

In order to determine the need for phosphorus WQBELs, the Department has analyzed phosphorus effluent data from January 2017 through June 2021 for NJG0022101, NJG0028894 and NJG0031046. After review of the applicable data set, phosphorus was found to be discharged in quantifiable amounts in the effluent. Therefore, further analyses has been conducted on this pollutant.

Using the steady state mass balance equation, a WLA was developed utilizing the applicable criteria specified in the NJSWQS at N.J.A.C. 7:9B and a low flow value obtained from USGS.

The resulting WLA is as follows:

Permit No.	Permitted Flow	7Q10 Flow	Maximum Effluent Concentration (A)	Wasteload Allocation (B)	Show Cause? (A > B?)
NJG0022101	0.05 MGD	0.8 cfs	1.97 mg/L	0.20 mg/L	**Yes**
NJG0028894	0.045 MGD	8.8 cfs	0.57 mg/L	12.7 mg/L	No
NJG0031046	0.02 MGD	18 cfs	6.1 mg/L	58.3 mg/L	No

NJG0028894 and NJG0031046: As a result of the cause analyses, the discharge of phosphorus in the permittee's effluent **was not found** to cause an exceedance of the total phosphorus criteria specified in the NJSWQS at N.J.A.C. 7:9B. Therefore, no new WQBELs have been included in the permit at this time for NJG0028894 and NJG0031046. However, consistent with the provisions at N.J.A.C. 7:14A-13.9(a) and the antidegradation requirements at N.J.A.C. 7:9B-1.5(d), the existing monthly average limitation of 1.0 mg/L has been retained for NJG0028894 with monitoring for the weekly average concentration and monthly average and weekly average loadings. Continued concentration and loading monitoring is also retained for NJG0031046.

NJG0022101: As a result of the cause analysis, the discharge of phosphorus in the permittee's effluent **was found** to cause an exceedance of the total phosphorus criteria specified in the NJSWQS at N.J.A.C. 7:9B. However, as per an email dated April 5, 2022, the facility has elected to have the Department perform a SVAP on the receiving stream which must occur during low flow conditions, typically in the late summer/early fall. Therefore, until the SVAP scores are available, and a determination has been made as to whether there is sufficient proof that phosphorus is not rendering the waters unsuitable for the designated uses, the existing limit and monitoring and reporting requirements will be retained.

Details regarding each facility are as follows:

	Existing Master ASC Phosphorus Limits				Proposed Master ASC Phosphorus Limits			
	Concentration (mg/L)		Loading (kg/d)		Concentration (mg/L)		Loading (kg/d)	
NJPDES Permit No.	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Monthly Average	Weekly Average
NJG0022101	1.0	MR	(MR)	(MR)	1.0	MR	(MR)	(MR)
NJG0028894	1.0	MR	(MR)	(MR)	1.0	MR	(MR)	(MR)
NJG0031046	MR	MR	(MR)	(MR)	MR	MR	(MR)	(MR)

Monitoring Frequency and Sample type for all sites: The monitoring frequency for Phosphorus has been retained at **once per quarter** in consideration of the size of the discharges. The sample type shall be a **grab** sample.

13. Nitrate (Total as N):

The existing permit specifies an annual monitoring frequency for Nitrate for all facilities covered under this permit. A review of the available data from the existing permit cycle indicates the presence of Nitrate for all facilities. A WQBEL analysis was not performed at this time due to a limited data set. However, the monitoring and reporting requirement has been retained in this permit action based on N.J.A.C. 7:14A-13.5(k)3.

Monitoring Frequency and Sample type for all sites: The monitoring frequency has been increased from annual to **semi-annual** in accordance with N.J.A.C. 7:14A-14.2(b). It is the Department's position that an increased monitoring frequency will ensure that sufficient data is collected to properly assess the quality of these facilities' discharge and impact on the affected receiving streams. The sample type shall be a **grab** sample.

14. Copper and Zinc

In accordance with N.J.A.C. 7:14A-13.6(a), a Water Quality Based Effluent Limitation (WQBEL) shall be imposed when the Department determines, pursuant to N.J.A.C. 7:14A-13.5, that the discharge of a pollutant causes an excursion above a SWQS. In order to determine the need for toxic pollutant specific WQBELs, the Department has analyzed all effluent data sets made available to the Department. Acceptable data sets generally consist of, at a minimum, 10 data values during the most recent 2½ years of data collection. A pollutant is considered discharged in "quantifiable amounts" when an exact amount of that pollutant is measured equal to or above the detection level reported by a laboratory analysis (refer to the latest version of the "NJPDES Monitoring Report Form Reference Manual," which can be accessed at http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf). WQBELs are evaluated using the methodologies and procedures specified below.

Quantified Pollutant Analysis Methodology: For each pollutant discharged in quantifiable amounts in the effluent, excluding those listed in the *2016 New Jersey Integrated Water Quality Monitoring and Assessment Report* (integrated list), a cause analysis was conducted using the procedures specified in the USEPA TSD in accordance with N.J.A.C. 7:14A-13.5. The cause analysis consists of a comparison between the pollutant's maximum effluent concentration value (or average value of a long term data set in the case of criteria with an averaging period longer than one year) and the pollutant's applicable site specific WLA.

Using the steady state mass balance equation, WLAs were developed utilizing the applicable surface water quality criteria, pollutant specific upstream concentrations (when available), the permittee's long-term average design flow, and applicable MA1CD10 (1Q10), MA7CD10 (7Q10), and/or 75th percentile stream design low flows values. The 7Q10 stream design flow is utilized for all chronic and human health non-carcinogenic calculations, while the 1Q10 and 75th percentile stream design flows are utilized for acute and human health carcinogenic calculations respectively.

Unless site-specific values are available, the applied for the Copper and Zinc criteria are based on a default hardness value of 100 mg/L of $CaCO_3$, a default water effect ratio (WER) of 1.0 and the default metal translator values of 0.908 and 0.950 respectively, which are based on the conversion factors for dissolved metals at 40 CFR Part 131 and N.J.A.C. 7:14A-13.6(c). The translator values are utilized to convert the total recoverable data to its dissolved equivalent for the cause analyses for aquatic criteria, and, if applicable, to convert the dissolved long term averages to total recoverable values for determining WQBELs.

WQBEL Derivation Procedures (non 303(d) listed pollutants): The non end-of-pipe WQBELs were calculated by the procedures set forth in the USEPA TSD and in accordance with N.J.A.C. 7:14A-13.6(a). WLAs were developed using the same inputs as the cause analyses. If less than 80% of the data points in the data set were quantified, the Department utilized the greater of two values for the Coefficient of Variation (CV); the calculated lognormal CV or a default CV. If applicable, the default CV used was 0.6 based on recommendations set forth in the USEPA TSD (5.5.2). Otherwise, a parameter specific CV was calculated.

For acute and chronic calculations, the long term average (LTA) values were developed using the 99th percentile multiplier and the more stringent results were utilized in calculating the maximum daily limitation (MDL) and average monthly limitation (AML). However, for human health calculations the WLA was set equal to the AML (based on the TSD Section 5.4.4) and compared to the more stringent acute or chronic limitations. Of the acute, chronic, and human health calculations, the more stringent MDL and AML were established as the applicable limit. In accordance with N.J.A.C. 7:14-A-13.14(a)2, effluent limitations are expressed as concentration and mass loading. The limitations for the metal parameters are expressed in the total recoverable form in accordance with 40 CFR 122.45(c).

For continuous discharges, N.J.A.C. 7:14A-13.15(a)3 states, "limitations on any pollutant or pollutant parameter where the monitoring frequency is once per month or less may be stated as a maximum daily limitation". The USEPA commented on this NJPDES regulation via a memo dated September 16, 2010 from Barbara A. Finazzo, Director, Division of Environmental Planning and Protection, USEPA-Region 2 to John Plonski, Assistant Commissioner for Water Resources Management, NJDEP. USEPA noted in the memo that to ensure consistency with the federal regulations, New Jersey must establish permit limitations to provide both short-term and long-term controls to ensure water quality standards are met.

Therefore, in situations where monitoring frequency is once per month or less and consistent with section 5.5.3 of the TSD, EPA suggests that a statistical procedure be employed using n (number of samples) = 4 to derive the average monthly limitation.

As described above, WQBELs are calculated using several default or assumed values. The permittees can always provide additional technical information, as outlined in Part IV Section F that can include a WER analysis and/or site-specific hardness values. The Department could then propose a modification to this permit to remove or modify any proposed effluent limitations based on the technical information provided, which is considered new information and would constitute an exception to antibacksliding regulations at N.J.A.C. 7:14A-13.19.

- **Facilities with Calculated Water Effects Ratio (WER) Analysis or Site-Specific Hardness Values**

  The following permittees have provided additional technical information for the Department's consideration when determining the applicability of effluent limitations based on a WQBEL analysis.

  NJG0021105 (Arthur Stanlick): A site-specific effluent hardness study and a WER study for Copper were submitted by this facility to be used in the determination of WQBELs. The final WER Study for Copper was submitted by Great Lakes Environmental Center on May 7, 2008 and was approved by the Department. Based on these studies, the Department approved a site specific hardness value of 145 mg/L of CaCO3 and a dissolved WER factor of 1.056 for Copper.

  NJG0021253 (Indian Hills High School): Pursuant to the conditions set forth in the September 23, 2012 ACO, the permittee submitted a "Copper Summary Report" and "Water Effects Ratio Study" as well as a

"Zinc Summary Report." Both studies were dated January 9, 2014 and were submitted by Lyons Environmental Service. Based on these studies, the Department approved a site specific hardness of 242 mg/L, a total and dissolved WER of 2.04 and 1.87 respectively, and a Zinc site specific translator of 0.933.

NJG0023311 (Kingwood Township School): The permittee submitted a study to determine site-specific values for Copper and Zinc translators and hardness as well as a WER for Copper. Based on the study submitted by Omni Environmental Corporation, entitled "Copper and Zinc Translators and Water Effect Ratio Study, Kingwood Township School WWTP" dated June 2011, the Department approved a site specific hardness value of 227 mg/L of CaCO3 for Copper and Zinc and a WER of 4.16 for Copper. In addition, site-specific translators were established at 0.437 for Copper and 0.841 for Zinc.

NJG0027049 (Pope John): A site-specific effluent hardness study to be used in the determination of WQBEL calculations was submitted by the permittee and approved in a letter dated June 20, 2008. Based on this study, the Department approved a site specific hardness value of 275 mg/L of CaCO3. Since the hardness study did not result in the removal of the Copper WQBEL, the permittee elected to conduct a WER Study for Copper. The final revised WER Study was submitted in June 2011 and approved by the Department, resulting in a WER factor of 2.15.

Copper and Zinc Requirements in the Proposed Permit

The basis for the Copper and Zinc requirements for the facilities included in this master general permit renewal, including any newly proposed effluent limitations, were determined by the Department based on a review of the applicable effluent data from January 2016 to August 2021 and pursuant with N.J.A.C 7:14A-13.5. The Department's conclusions are as follows:

- **Sufficient data (facilities with existing effluent limitations) - WQBEL analyses performed:**

There are existing and effective Copper limitations for NJG0021105 (Arthur Stanlick School), NJG0022276 (Stony Brook School), and NJG0035670 (Alexandria Middle School) and there are existing and effective Zinc limitations for NJG0022276 (Stony Brook School) and NJG0023841 (Lounsberry Hollow Middle School). Review of the applicable effluent data for these pollutants for these permittees with existing limitations, found that these pollutants were still detected in the effluent being discharged. Further analysis revealed that these pollutants still showed cause and/or the reasonable potential to cause an exceedance of the applicable instream water quality criteria. In accordance with N.J.A.C. 7:14A-13.19, these existing effluent limitations have been retained as follows:

	Existing Permit Limits		Proposed ASC Limits	
Parameter - NJPDES Permit No.	**Monthly Average In µg/L, (grams/day)**	**Daily Maximum In µg/L, (grams/day)**	**Monthly Average In µg/L, (grams/day)**	**Daily Maximum In µg/L, (grams/day)**
Copper - NJG0021105 *	Report (Report)	21.3 (0.57)	Report (Report)	21.3 (0.57)
Copper - NJG0022276	Report (Report)	17.7 (0.7)	Report (Report)	**14 (0.53)**
Copper - NJG0035670	Report (Report)	96.2 (4.0)	Report (Report)	96.2 (4.0)
Zinc - NJG0022276	Report (Report)	112 (4.3)	Report (Report)	112 (4.3)
Zinc - NJG0023841	Report (Report)	112.5 (13.6)	Report (Report)	112.5 (13.6)

*WER and site specific hardness studies were submitted and approved by the Department in 08/2008.

In accordance with N.J.A.C. 7:14A-6.4(a), a schedule to achieve compliance with the more stringent WQBELs for Copper at NJG0022276 has been included in this permit. Interim monthly average and daily

maximum monitoring and reporting requirements have been included as authorized by N.J.A.C. 7:14A-6.2(a)14. During the compliance schedule period, the permittee is required to submit progress reports in accordance with N.J.A.C. 7:14A-6.4(a)2ii and 13.17(a)7. Refer to the Compliance Schedule section of this fact sheet for further clarification. Upon submission of the information outlined in Part IV Section, the Department may consider proposing a modification to this permit to remove or modify the effluent limitations proposed for the toxic pollutants

Monitoring Frequency: The **quarterly** monitoring frequency for Copper and/or Zinc has been retained for NJG0021105, NJG0022276, and NJG0035670 limitations in accordance with N.J.A.C. 7:14A-14.2(c). For NJG0023841, the **semi-annual** monitoring frequency has been retained for the existing Zinc effluent limitation in accordance with N.J.A.C. 7:14A-14.2(c) and in consideration of the observed concentration of Zinc in the effluent was consistently below the applicable water quality criteria established by the State SWQS (N.J.A.C. 7:9B).

- **Sufficient data (facilities without existing effluent limitations) - WQBEL analyses performed:**

A review of the applicable Copper and Zinc effluent data sets for NJG0021253 (Indian Hill High School), NJG0022438 (Helen A Fort), NJG0023175 (Round Valley Middle School), NJG0023311 (Kingwood Township School), NJG0024091 (Union Township Elementary), NJG0028894 (Kittatinny Regional HS Board of Ed), NJG0031046 (North Warren Regional School District), NJG0031585 (High Point Regional High School) and NJG0035670 (Alexandria Middle School) found that these pollutants were detected in the effluent discharged from these facilities in quantifiable amounts and that there was sufficient up-to-date data to perform WQBEL analyses. Except for NJG0022438, the Department's findings from the WQBEL analyses of these pollutants being discharged by these facilities is presented below in the quantified pollutant analysis results section.

For NJG0022438 (Helen A Fort), the Department has been made aware that the existing treatment plant will be replaced by a new treatment plant. A Treatment Works Approval (TWA) No. 20-0138 was issued by the Department for the construction of the new treatment plant. The construction process will take approximately one year. During the construction the existing plant will continue to operate. The permitted flow will remain the same for the new treatment plant, but the treatment units will differ. Therefore, the Department has determined that it is not appropriate to impose newly calculated WQBELs for NJG0022438 since a new treatment plant is under construction. However, the monitoring and reporting requirements for Copper and Zinc have been retained in this permit renewal as quarterly. It is the Department's position that this will provide sufficient up-to-date data to re-evaluate the facility's effluent for these pollutants once the new treatment plant is online. Furthermore, Copper is listed in the 2016 *New Jersey Integrated Water Quality Monitoring and Assessment Report* (integrated list) as having water quality violations for the reach of the receiving stream into which the permittee discharges.

Quantified Pollutant Analysis Results:

Cause analyses were conducted on Copper and Zinc. The results are summarized in the tables below. The Department has determined the following conclusions that establishes the permit requirements for the applicable facilities based on the results of the cause analyses conducted on **Copper** and **Zinc**.

- **Show Cause - New Limits Proposed:**

NJPDES Permit No. and Parameter	Number of data points	Coefficient of variation (CV)	Maximum reported data value (µg/L) A	Calculated instream WLA (µg/L) B	"Cause" Y = yes N = no A > B ?	Aquatic criteria LTA (µg/L)	Water Quality Based Limit, if applicable (µg/L) (grams/day)
NJG0021253 Copper	(dt) = 15 (nd) = 3	1.04 (ca)	122.6 *	(a) = 55.5* (c) = 34.3* (h) = 1300*	(a) = Y (c) = Y (h) = N	(a) = 12.0** (c) = 13.6 **	MDL = **61.17(a) (7.8)**
NJG0024091 Copper	(dt) = 16 (nd) = 3	0.66 (ca)	80.8*	(a) = 87.4* (c) = 58.2* (h) = 8939*	(a) = N (c) = Y (h) = N	(a) = 28.3** (c) = 31.9**	MDL = **96.3(a) (4)**
NJG0021253 Zinc	(dt) = 18 (nd) = 0	0.90 (ca)	313.49*	(a) = 240.7 (c) = 240.7 (h) = 7400	(a) = Y (c) = Y (h) = N	(a) = 58.09** (c) =104.5**	MDL = **258.0 (a) (32.8)**
NJG0023311 Zinc	(dt) = 13 (nd) = 3	0.85 (ca)	290.2*	(a) = 228.0* (c) = 228.0* (h) = 7400*	(a) = Y (c) = Y (h) = N	(a) = 63.8** (c) = 113.9**	MDL = **271.1 (a) (4.9)**

Footnotes and Abbreviations:

(dt) = data values detected.
(nd) = data values non-detected.
(a) = acute aquatic
(c) = chronic aquatic
(h) = human health non-carcinogen
(d) = Default CV
(ca) = Calculated from data set
(sst) = site specific translator value
LTA = Long Term Average
N/A = Not applicable
(*) = Dissolved
(**) = Total Recoverable
MDL = Maximum Daily Limit
AML = Average Monthly Limit
MR = Monitor and Report

As seen in the table above, the discharge of **Copper** in the effluent from NJG0021253 (Indian Hill High School) and NJG0024091 (Union Township Elementary) as well as the discharge of **Zinc** in the effluent from NJG0021253 (Indian Hill High School) and NJG0023311 (Kingwood Township School) **were found** to cause an excursion of the State's SWQS. Pursuant to N.J.A.C. 7:14A -13.3(e) and consistent with N.J.A.C. 7:14A-13.6(a), the Department has included Copper and Zinc WQBELs in the draft permit renewal for the corresponding facilities where these parameters showed cause and where there no existing effluent limitation in effect. In accordance with N.J.A.C. 7:14-13.8.a.3, the average monthly limitations calculated will not be included in the permit for this parameter. However, monitoring and reporting requirement for the monthly averaging period have been included in the permit.

In accordance with N.J.A.C. 7:14A-6.4(a), a schedule to achieve compliance with the new WQBELs for Copper and Zinc for the facilities listed above has been included in this permit. Interim monthly average and daily maximum monitoring and reporting requirements have been included as authorized by N.J.A.C. 7:14A-6.2(a)14. During the compliance schedule period, the permittee is required to submit progress reports in accordance with N.J.A.C. 7:14A-6.4(a)2ii and 13.17(a)7. Refer to the Compliance Schedule section of this fact sheet for further clarification. Upon submission of the information outlined in Part IV Section, the Department may consider proposing a modification to this permit to remove or modify the effluent limitations proposed for the toxic pollutants

Monitoring Frequency: The monitoring frequency for the newly imposed Copper limitations for NJG0021253 and NJG0024091 as well as the newly imposed Zinc limitations for NJG0021253 and NJG0023311 has been established at **once per quarter** in consideration of the size of the discharge**.**

- **No Cause - Retain Quarterly Monitoring**:

NJPDES Permit No. and Parameter	Number of data points	Coefficient of variation (CV)	Maximum reported data value (µg/L) A	Calculated instream WLA (µg/L) B	"Cause" Y = yes N = no A > B ?	Aquatic criteria LTA (µg/L)	Water Quality Based Limit, if applicable (µg/L)
NJG0023175 Copper	(dt) = 19 (nd) = 0	0.26 (ca)	50.8* (**1**)	(a) = 104.0* (c) = 69.3* (h) = 10673*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0023311 Copper	(dt) = 14 (nd) = 1	0.56 (ca)	23.4* (sst) (**1**)	(a) = 114.5* (c) = 71.0* (h) =1300*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0031585 Copper	(dt) = 11 (nd) = 7	0.48 (ca)	49.03	(a) = 94.9* (c) = 81.5* (h) = 12504*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0028894 Copper	(dt) = 8 (nd) = 10	0.41 (ca)	59.8*	(a) = 1345.5* (c) = 1079.2* (h) = 165632*	(a) = N (c) = N (h) =N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0031046 Copper	(dt) = 18 (nd) = 0	0.61 (ca)	87.8*	(a) = 5353* (c) = 4936* (h) = 757602*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0023175 Zinc	(dt) = 19 (nd) = 1	0.74 (ca)	227.1*	(a) = 931.4* (c) = 931.4* (h) = 60549	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0024091 Zinc	(dt) = 19 (nd) = 0	0.92 (ca)	203.4*	(a) = 782.2* (c) = 782.7* (h) = 50885*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0028894 Zinc	(dt) = 18 (nd) = 0	0.37 (ca)	84.2*	(a) = 12050* (c) = 14503* (h) = 942830*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0031046 Zinc	(dt) = 14 (nd) = 3	1.07 (ca)	123.5* (**1**)	(a) = 47941* (c) = 66336* (h) = 4321506*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0031585 Zinc	(dt) = 19 (nd) = 0	0.69 (ca)	263.1	(a) = 849.6* (c) = 1095* (h) = 71179*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR
NJG0035670 Zinc	(dt) = 17 (nd) = 0	1.97 (ca)	535.8*	(a) = 857.1* (c) = 857.1* (h) = 55717.7*	(a) = N (c) = N (h) = N	(a) = N/A (c) = N/A	N/A Retain Quarterly MR on the DMR

(1) It was determined that the sampling results associated with this permit had an outlier data value, which was subsequently removed from the WQBEL analysis.

Footnotes and Abbreviations:

(dt) = data values detected.
(nd) = data values non-detected.
(a) = acute aquatic
(d) = Default CV
(ca) = Calculated from data set
(sst) = site specific translator value
(*) = Dissolved
(**) = Total Recoverable
MDL = Maximum Daily Limit

(c) = chronic aquatic
(h) = human health non-carcinogen
LTA = Long Term Average
N/A = Not applicable
AML = Average Monthly Limit
MR = Monitor and Report

As seen in the table above, the discharge of **Copper** in the permittee's effluent from NJG0023175 (Round Valley Middle School), NJG0023311 (Kingwood Township School), NJG0031585 (High Point Regional High School), NJG0028894 (Kittatinny Regional HS Board of Ed) and NJG0031046 (North Warren Regional School District) **was not found to cause** an excursion of the SWQS. Additionally, the discharge of **Zinc** in the permittee's effluent from NJG0035670 (Alexandria Middle School), NJG0023175 (Round Valley Middle School), NJG0024091 (Union Board of Education), NJG0028894 (Kittatinny Regional HS Board of Ed), NJG0031046 (North Warren Regional School District) and NJG0031585 (High Point Regional High School) **was not found to cause** an excursion of the SWQS. Therefore, new WQBELs for Copper and Zinc are not being proposed in the draft permit for these facilities at this time. However, the monitoring and reporting requirements have been retained in this permit renewal pursuant with N.J.A.C. 7:14A-13.5(k)3 and based on the need to re-evaluate the necessity for WQBELs upon renewal of the permit.

Monitoring Frequency: The existing **quarterly** monitoring frequency for Copper at NJG0023175, NJG0023311, NJG0031585, NJG0028894 and NJG0031046 and for Zinc at NJG0023175, NJG0024091, NJG0028894, NJG0031046, NJG0031585 and NJG0035670, shall be retained for these facilities.

- **Insufficient data (facilities without existing effluent limitations) – No WQBEL analyses performed:**

Facilities where Monitoring Frequencies have been Increased

At this time for the following facilities identified below, additional data is needed for Copper and Zinc to determine the need for WQBELs given the presence of detectable values. Consistent with the existing permit, monitoring and reporting for Copper and Zinc are retained in the permit renewal in accordance with N.J.A.C. 7:14A-13.5(k)3. In consideration of the available effluent data, the effluent flow rates and the characteristics of the receiving waterbodies and in satisfying the recommendations of Section 3.1 of the TSD, it is the Department's position that increasing the monitoring frequency to **semi-annual** for Copper and Zinc for these facilities will provide sufficient up-to-date data to reevaluate the necessity for WQBELs upon renewal of the permit.

NJPDES Permit No.	Parameter(s)	Existing Frequency on WCR	Proposed Frequency on DMR
NJG0021091	Copper	Annual	Semi-annual
NJG0021571	Copper	Annual	Semi-annual
NJG0022101	Copper	Annual	Semi-annual
NJG0023001	Copper	Annual	Semi-annual
	Zinc	Annual	Semi-annual
NJG0023841	Copper	Annual	Semi-annual
NJG0027065	Copper	Annual	Semi-annual
NJG0029432	Copper	Annual	Semi-annual
	Zinc	Annual	Semi-annual

Facilities where Monitoring Frequencies have been Retained

At this time, insufficient detectable data exists for Copper and Zinc for the facilities identified below to determine the need for WQBELs in the permit renewal. Therefore, no further analyses were conducted for these parameters. Consistent with the existing permit, monitoring and reporting for Copper and Zinc are included in the permit renewal for these facilities in accordance with N.J.A.C. 7:14A-13.5.(k)3. In consideration of the available effluent data, effluent flow rates and the characteristics of the receiving waterbodies and in satisfying the recommendations of Section 3.1 of the TSD, it is the Department's position that retaining the **annual**

monitoring frequency for Copper and Zinc for these facilities will provide the necessary up-to-date data to reevaluate the need for WQBELs upon renewal of the permit.

NPDES Permit No.	Parameter(s)	Existing Frequency on WCR	Proposed Frequency on WCR
NJG0020419	Copper	Annual	Annual
	Zinc	*	Annual
NJG0020711	Copper	Annual	Annual
	Zinc	Annual	Annual
NJG0021091	Zinc	Annual	Annual
NJG0021105	Zinc	Annual	Annual
NJG0021571	Zinc	Annual	Annual
NJG0022101	Zinc	Annual	Annual
NJG0027049	Copper	Annual	Annual
	Zinc	Annual	Annual
NJG0027065	Zinc	Annual	Annual
NJG0027553	Copper	Annual (DMR)	Annual (WCR)
	Zinc	Annual	Annual

* It has come to the Department's attention that Zinc was inadvertently included on the once per permit cycle MRF for NJG0020419 in the previous permit. However, the correct monitoring frequency for Zinc should have been Annual which has been corrected in this Master ASC Renewal Permit.

Sample Type Requirements:

In accordance with N.J.A.C. 7:14A-14.2(a), the sample type for all toxic metals shall be a **grab** sample for facilities that have a permitted discharge of less than 0.05 MGD. Consistent with the intent of 40 CFR 122.45(c) and N.J.A.C. 7:14A-13.14(b), the monitoring data for all toxic metals, including Copper and Zinc, shall be expressed as total recoverable.

15. Wastewater Characterization Report (WCR)

The SWQS at N.J.A.C. 7:9B specify pollutant specific acute and chronic criteria for the protection of aquatic life and human health criteria for various toxic pollutants including Asbestos, and several Acids, Base/Neutrals, Metals, Pesticides, and Volatiles.

The 2017 master general permit required a once per permit cycle monitoring frequency for priority pollutants. This limited sampling frequency was premised on the low discharge flows of all sites as well as a comprehensive review of available priority pollutant data as submitted under the individual permits for these facilities. Priority pollutants are not expected to be present in this category of discharges yet the Department included this comprehensive sampling as a precautionary screening. The Department reviewed available priority pollutant data as submitted with renewal applications and analyzed all effluent data sets made available. This includes acid extractables, base/neutrals, volatile organics, and most metals (copper and zinc addressed separately). In general, priority pollutants were either not detected or detected at levels below NJSWQS.

In addition, the 2017 master general permit required annual monitoring requirements on the WCR for Trihalomethanes for those facilities that chlorinate and once per permit cycle monitoring for those facilities at use UV disinfection. Trihalomethanes are formed as a by-product predominantly when chlorine is used to disinfect water and represent one group of chemicals generally referred to as disinfection by-products. Trihalomethanes result from the reaction of chlorine and/or bromine with organic matter present in the water being treated. The typical constituents are chloroform, bromoform, bromodichloromethane and dichlorobromomethane. The Department reviewed the trihalomethanes data and only bromodichloromethane was not detected on a regular basis.

Monitoring Frequency and Sample Type for all Facilities: Given the above as well as the overall infrequency of detected values, the Department is continuing a **once per permit cycle** frequency for all priority pollutants. The monitoring data for toxic metals shall be expressed in the total recoverable form in accordance with 40 CFR 122.45(c). Given that some sites continue to chlorinate, the Department is continuing WCR monitoring for bromodichloromethane, dichlorobromomethane, bromoform and chloroform on an **annual** basis only for those sites that chlorinate. Monitoring for bromodichloromethane, dichlorobromomethane, bromoform and chloroform for those sites that utilize UV shall be conducted on a **once per permit cycle** basis. Consistent with the existing permit, the sample type shall be a **grab** sample for all priority pollutants.

16. Whole Effluent Toxicity (WET):

Section 101(a) of the Clean Water Act (CWA) establishes a national policy of restoring and maintaining the chemical, physical and biological integrity of the Nation's waters. In addition, section 101(a)(3) of the CWA and the State's SWQS at N.J.A.C. 7:9B-1.5(a)4 state that the discharge of toxic pollutants in toxic amounts is prohibited. Further, 40 CFR 122.44(d) and N.J.A.C. 7:14A-13.6(a) require that where the Department determines using site-specific WET data that a discharge causes, shows a reasonable potential to cause, or contributes to an excursion above the SWQS, the permitting authority must establish effluent limits for WET.

In order to determine the need for a WET WQBEL, the Department analyzed all available WET effluent data from the 22 facilities under this master general permit. In general, an acceptable data set consists of, at a minimum, 10 data values including the most recent 2½ years of data. Refer the Tables below for site specific WET data.

- **Existing Limit Retained, All Data Non-Detect**

NJG0020711, NJG0022101, NJG0028894, NJG0031046, NJG0031585 and NJG0035670: After a review of the WET data for these 6 facilities, acute WET was not found in quantifiable amounts (i.e. all results were >100%). Furthermore, all existing permits for the abovementioned contain an acute WET limitation that is based on site specific criteria.

Based on consistent compliance, the Department is retaining the WET limits (and monitoring requirements) for these facilities. The table below includes the WET requirements for these sites:

NJPDES Permit No.	Facility	Parameter	Species	Wastewater Data (Min. %) January 2017 to June 2021	Limit (Min. %)	Frequency
NJG0020711	Warren County Technical School STP	Acute	*Ceriodaphnia*	>100 (4 data pts.)	AL 50	1/Year
NJG0022101	Blair Academy	Acute	*Pimephales*	>100 (5 data pts.)	AL50	1/Year
NJG0028894	Kittatinny Regional HS Board of Ed	Acute	*Pimephales*	>100 (4 data pts.)	AL 50	1/Year
NJG0031046	North Warren Regional School District	Acute	*Ceriodaphnia*	>100 (4 data pts.)	AL 50	1/Year
NJG0031585	High Point Regional High School	Acute	*Ceriodaphnia*	>100 (4 data pts.)	AL 50	1/Year
NJG0035670	Alexandria Middle School	Acute	*Ceriodaphnia*	>100 (4 data pts.)	AL 50	1/Year

AL - Action Level

Action Level for Acute WET**:** On January 5, 2009 the NJPDES Rules were readopted. This readoption repealed N.J.A.C. 7:14A-5.3(a) which contained the state minimum effluent standard for acute WET and instead adopted an acute WET action level of LC50≥50% at N.J.A.C. 7:14A-13.18(f). Therefore, consistent with this requirement, the existing and effective acute WET limitation of LC50≥50% has been replaced with an acute WET action level of LC50≥50% in this renewal. Monitoring and reporting will be required to determine whether the discharge causes, shows a reasonable potential to cause, or contributes to an excursion above the SWQS.

Imposing an action level for acute WET will be equally protective of water quality as an effluent limit in this circumstance, since the violation of either the WET limitation or the action level carries with it the same enforceable permit condition to initiate the Toxicity Reduction and Implementation Requirements (TRIR), in order to correct the toxicity problem should this value be exceeded. As a result, the Department anticipates there will be no change in water quality as a result of this change. This change satisfies the antibacksliding provisions at N.J.A.C. 7:14A-13.19, which incorporate Section 402(o)3 of the Federal Clean Water Act, because it includes the TRIR provisions. Specifically, Section 402(o)3 prohibits the revision of an effluent limit "if the implementation of such limitation would result in a violation of a water quality standard." In this circumstance, violation of either the numerically identical action level or an effluent limitation will trigger an enforceable permit condition to conduct a TRIR in order to address or prevent a violation of a water quality standard.

- **Existing Limit Retained, Data Showed Detects and Non-Detects**

NJG0020419, NJG0021091, NJG0021105, NJG0021253, NJG0023841, NJG0023175 and NJG0027049: After review of the WET data, WET was found at quantifiable amounts in the data for these 6 facilities. Furthermore, all existing permits for the abovementioned contain a chronic WET limitation that is based on site specific criteria.

As a result, the chronic WET limitations have been retained for these facilities based on N.J.A.C. 7:14A-13.5(k)3 and the need to re-evaluate the necessity for WQBELs upon renewal of the permit (based on recommendations of section 3.1 of the EPA TSD). The table below includes the WET requirements for these sites:

NJPDES Permit No.	Facility	Parameter	Species	Wastewater Data (Min. %) January 2017 to June 2021	Existing Limit (Min. %)	Frequency
NJG0020419	Long Pond School WTP	Chronic	*Ceriodaphnia*	21.2 and >100 (2 data pts.)	61	1 / 6 Months
NJG0021091	Jefferson Township High - Middle School	Chronic	*Ceriodaphnia*	81, 24, <24 and <100	18	1/Year
NJG0021105	Arthur Stanlick School	Chronic	Ceriodaphnia	81, <81 and <100	61	1/Year
NJG0021253	Indian Hills High School	Chronic	*Ceriodaphnia*	75.4, 14.5, 38.5, 89.3, 56.5, 48.7, 59.7, 90.5, 96.9 and >100 (8 data pts.)	61	1 / 6 Months
NJG0023841	Lounsberry Hollow Middle School	Chronic	*Ceriodaphnia*	20 and >100 (8 data pts.)	55	1 / 6 Months
NJG0027049	Pope John XXIII High School	Chronic	*Ceriodaphnia*	32.3, 86.9, 99.3, 75.7, 27, 70.7, 4.3, 14.8 and >100 (14 data pts.)	61	1 / 6 Months

- **Monitor and Report Retained**

NJG0021571, NJG0023001, NJG0023175, NJG0023311, NJG0027553 and NJG0029432: After review of the applicable WET data for these facilities, chronic WET was found in quantifiable amounts for 4 facilities. Although the WET data results revealed detections for these 4 facilities, most of the data was non-detect with only one detectable data point per each facility. Furthermore, chronic WET was not found in quantifiable amounts for the other 2 facilities. As a result, the chronic WET monitoring and reporting requirements have been retained for these facilities based on N.J.A.C. 7:14A-13.5(k)3 and the need to re-evaluate the necessity for WQBELs upon renewal of the permit (based on recommendations of section 3.1 of the EPA Technical Support Document). Based on a review of individual WET results and in consideration of the size of the discharge, monitoring frequencies were reconsidered where some sites are required to sample at a decreased frequency.

Monitoring frequencies have been set forth as follows:

NJPDES Permit No.	Facility	Parameter	Species	Wastewater Data (Min. %) January 2017 to June 2021	Existing Monitoring Frequency	Proposed Monitoring Frequency
NJG0021571	Springfield Township Elementary	Chronic	*Ceriodaphnia*	72.5 and >100 (2 data pts.)	1/Year	1/Year
NJG0023001	Salvation Army Camp Tecumseh	Chronic	*Ceriodaphnia*	>100 (5 data pts.)	1/Year	1/Year
NJG0023175	Round Valley Middle School	Chronic	*Ceriodaphnia*	2.9 and >100 (7 data pts.)	1/6 Months	1/Year
NJG0023311	Kingwood Township School	Chronic	*Ceriodaphnia*	3 and >100 (4 data pts.)	1/Year	1/Year
NJG0027553	Lester D. Wilson Elementary	Chronic	*Ceriodaphnia*	94.1 and >100 (7 pts)	1/6 Months	1/Year
NJG0029432	Robert Erskine School	Chronic	*Ceriodaphnia*	>100 (3 data pts.)	1/Year	1/Year

- **WET WQBEL Performed**

NJG0022276, NJG0022438, NJG0024091 and NJG0027065: After review of the applicable WET data for these facilities, chronic WET was found in quantifiable amounts in the effluent for all 4 facilities. Therefore, further analyses have been conducted for WET. Please refer to the individual Permit Summary Tables for a listing of WET results.

Cause Analysis:

For WET, a cause analysis was conducted in accordance with N.J.A.C. 7:14A-13.5. When the maximum effluent value (in toxic units) exceeds the applicable site specific WLA (in toxic units), the discharge is shown to cause an exceedance of the SWQS.

Using the steady state mass balance equation, site specific acute (TU_aS) and chronic WLAs (TU_cS) were developed utilizing the narrative criteria for toxic substances (general) specified in the New Jersey SWQS at N.J.A.C. 7:9B, the permittee's design flow (MGD), and MA1CD10 (1Q10) and MA7CD10 (7Q10) stream design low flows values (cfs). The 7Q10 stream design flow is utilized for the chronic calculations, while the 1Q10 stream design flow is utilized for acute calculations. Consistent with the recommendations of section 2.3.3 of the USEPA TSD, values of 0.3 acute toxic unit (TU_a) and 1.0 chronic toxic unit (TU_c) were used to interpret the narrative water quality criteria for WET contained at N.J.A.C. 7:9B-1.14(c) (see Response to Comments 13-74 through 13-89, 29 NJR 1861, (May 5, 1997)).

Details regarding each facility are as follows:

Permit No.	Permitted Flow	1Q10 Flow	7Q10 Flow	Maximum Effluent Concentration (A)	Wasteload Allocation (B)	Show Cause? (A > B?)	Resultant Applicable Limitation
NJG0022276	0.01 MGD	0.0 cfs	0.0 cfs	12.20 TUc	1.0 TUc	**Yes**	**IC25 = 61% effluent**
NJG0022438*	0.05 MGD	0.4 cfs	0.4 cfs	47.62 TUc	6.17 mg/L	**Yes**	**(1)**
NJG0024091	0.011 MGD	0.1 cfs	0.1 cfs	2.32 TUc	6.88 TUc	No	Retain MR
NJG0027065	0.025 MGD	0.0 cfs	0.0 cfs	50.00 TUc	1.0 TUc	**Yes**	**IC25 = 61% effluent**

*DMR data was missing from January 2019 through March 2019 and was not included in the WQBEL analysis.
(1) It has come to the Department's attention that the existing treatment plant will be replaced by a new treatment plant. During the construction the existing plant will continue to operate. The permitted flow will remain the same for the new treatment plant, but the treatment units will differ. Therefore, the Department has determined that it is not appropriate to impose the newly calculated WET limitation for NJG0022438 at

this time since a new treatment plant is under construction. The Department will re-evaluate the facility's WET data once the new treatment plant is online.

WQBEL Derivation:

Since the discharge **was found** to cause an exceedance of the chronic interpretation of the narrative criteria for WET identified in the SWQS, a WQBEL has been calculated in accordance with N.J.A.C. 7:14A-13.6(a), 40 CFR 122.44(d), and USEPA's TSD for NJG0022276 and NJG0027065.

To enable a comparison between acute and chronic WET limits, the acute WLA (WLA_a) was translated to equivalent chronic toxic units (WLA_{ac}) by multiplying the WLA_a by the default ACR of 10.

The acute and chronic WLAs were then converted to an acute LTA ($TU_{ac}s$) and a chronic LTA (LTA_c) of 1.8912 TU_cs, using a default acute and chronic CV of 0.6, and multipliers of 0.321 and 0.527 for the acute and chronic LTAs respectively. Those multipliers are based on the 99th percentile consistent with Response to Comments 13-74 through 13-89, 29 NJR 1861 and are found on Page 102 of the USEPA TSD. The resultant LTA values were evaluated and the more protective (e.g. lower) value selected for translation into a daily maximum WET limit using the applicable 99th percentile multiplier, as found on Page 103 of the USEPA TSD.

The daily maximum chronic WET limit (TU_cs) was then converted to a permit limitation expressed as an IC25, as listed in the chart above.

Based on a review of individual WET results, monitoring frequencies were reconsidered where some sites are required to sample at an increased frequency. Monitoring frequencies have been set forth as follows:

NJPDES Permit No.	Facility	Parameter	Species	Existing Monitoring Frequency	Proposed Monitoring Frequency
NJG0022276	Stony Brook School	Chronic	*Ceriodaphnia*	1/6 Months	1/6 Months
NJG0022438	Helen A. Fort Middle School	Chronic	*Ceriodaphnia*	1/6 Months	1/6 Months
NJG0024091	Union Township Elementary	Chronic	*Ceriodaphnia*	1/6 Months	1/6 Months
NJG0027065	Sparta Alpine School	Chronic	*Ceriodaphnia*	1/Year	**1/6 Months**

In accordance with N.J.A.C. 7:14A-6.4(a) and 13.21(b), a schedule to achieve compliance with the new chronic WET WQBEL has been included in this permit for NJG0022276 and NJG0027065. Interim monitoring and reporting requirements have been included as authorized by N.J.A.C. 7:14A-6.2(a)14. Refer to the Compliance Schedule section of this fact sheet for further clarification. Language has been included in Part IV Section G of the permit to allow the Department to extend that compliance date where the permittee is conducting a toxicity investigation as specified in Part IV of the permit but has not yet attained consistent compliance with the chronic WET limit.

WET Test Species

The test species method to be used for acute testing is specified for each individual permittee. Since all the facilities discharge to freshwater, the more sensitive species as specified in each permit is either the *Pimephales promelas* (Fathead minnow) 96 hr definitive test or *Ceriodaphnia dubia* 48 hr definitive test. Such selection is based on the freshwater characteristics of the receiving stream, N.J.A.C. 7:9B-1.5 and N.J.A.C. 7:18, the Regulations Governing the Certification of Laboratories and Environmental Measurements (N.J.A.C. 7:18).

The test species method to be used for chronic testing is specified in each individual permit. Since all the facilities discharge to freshwater, the more sensitive species as specified in each permit is either the Fathead minnow (*Pimephales promelas*) 7-day larval survival and growth test, 40 CFR 136.3, method 1000.0 or the *Ceriodaphnia dubia*, Survival and Reproduction Test, 40 CFR 136.3, method 1002.0. Such selection is based on

the freshwater characteristics of the receiving stream, N.J.A.C. 7:9B-1.5 and the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Permit Program" document. This document is included as Appendix A of this permit, in accordance with N.J.A.C. 7:14A-6.5, 11.2(a)2.iv. and 40 CFR Part 136.

Toxicity Reduction Implementation Requirements (TRIR)

The TRIR are included in accordance with N.J.A.C. 7:14A-13.17(a), 7:14A-6.2(a)5 and recommendations in Section 5.8 of the TSD. The requirements are necessary to ensure compliance with the applicable WET toxicity limitation or action level. As included in section B.1 of the TRIR requirements, the initial step of the TRIR is to identify the variability of the effluent toxicity and to verify that a consistent toxicity problem does in fact exist.

Effluent samples for conducting WET testing are to be collected at the effluent discharge pipe, consistent with the collection location for other parameters. The sample type shall be a **composite** sample for all facilities.

C. **Use of Sufficiently Sensitive Test Methods for Reporting:**

When more than one test procedure is approved under this part 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).

An EPA-approved method is sufficiently sensitive where:

A. The method minimum level is at or below the level of the applicable water quality criterion or permit limitation for the measured pollutant or pollutant parameter; or
B. The method minimum level is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
C. The method has the lowest minimum level of the EPA-approved analytical methods.

When there is no analytical method that has been approved under 40 CFR part 136, required under 40 CFR chapter I, subchapter N or O, and is not otherwise required by the Department, the permittee may use any suitable method upon approval by the Department.

For questions regarding the applicability of the rule and whether or not the facility is complying with the target level of sensitivity, contact Steve Seeberger of the Bureau of Surface Water and Pretreatment Permitting at (609) 292-4860 or via email at Stephen.Seeberger@dep.nj.gov.

For questions regarding laboratory methodologies, certifications, or specifics relating to quantitation limits associated with individual test methods, contact Ryan Larum of the Office of Quality Assurance at (609) 292-3950 or via email at Ryan.Larum@dep.nj.gov.

D. Electronic Reporting Requirements:

On October 22, 2015, the U.S. Environmental Protection Agency (EPA) promulgated the final National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule (see Federal Register 80:204 p. 64064). This rule requires entities regulated under the Clean Water Act NPDES program to report certain information electronically instead of filing paper reports.

All required monitoring results reported on Monitoring Report Forms (MRFs) shall be electronically submitted to the Department via NJDEP's Electronic MRF Submission Service. In addition, the following documents shall be electronically submitted to the NJDEP via the Department's designated Electronic Submission Service:

- Requests for authorization (i.e. RFAs) under this general permit
- Requests for termination/revocation under this general permit

Consistent with the provisions of the final rule, the permittee may seek a waiver from the mandatory electronic reporting of the above identified documents and reports for just cause. Such a request shall be made in accordance with the provisions of 40 CFR 127.15 and submitted to the Department at the address identified below:

NJDEP: Division of Water Quality
Mail Code 401-02B
Bureau of Groundwater, Residuals and Permit Administration Section
P.O. Box 420
401 E. State Street
Trenton, NJ 08625-0420

E. General conditions:

In accordance with N.J.A.C. 7:14A-2.3 and 6.1(b), specific rules from the New Jersey Administrative Code have been incorporated either expressly or by reference in Part I and Part II.

F. Operator Classification Number:

The operator classification requirement is not included in the individual requests for authorization. To obtain or determine the appropriate licensed operator classification for the treatment works specified, the permittee shall contact the Bureau the Bureau of Environmental, Engineering and Permitting at (609) 984-4429.

G. Flow Related Conditions:

All flow related conditions are incorporated into the permit to implement the Treatment works Approval Program (N.J.A.C. 7:14A-22), the Capacity Assurance Program (N.J.A.C. 7:14A-22.16), the Sewer Ban Program (N.J.A.C. 7:14A-22.17), the applicable Water Quality Management Plan (N.J.A.C. 7:15), and the Sludge Quality Assurance Regulations (N.J.A.C. 7:14C).

The permitted flow values used for each site are identified above in item 2. These facilities are located within their area Water Quality Management Plans in accordance with N.J.A.C. 7:14A-15.4(b).

H. Compliance Schedule:

Since the effluent data for certain facilities indicates that the permittees may be unable to consistently comply with the final effluent limitations for either Chronic WET, Copper and/or Zinc, a schedule of compliance is included in the permit, including interim deadlines for progress or reports of progress towards compliance with the conditions of this permit, in accordance with N.J.A.C. 7:14A-6.4(a). Please refer to the individual Permit Summary Tables for the affected facilities.

The compliance schedule for the newly imposed final effluent limitations is established at 36 months from the effective date of the permit (EDP) to allow the permittee sufficient time to achieve compliance with the newly established effluent limitations. This schedule is provided in consideration of the time it would require for the permittee to undertake steps needed to modify or install treatment facilities, operations or other required measures.

In addition, N.J.A.C. 7:14A-13.21(b) allows the Department to include a schedule to achieve compliance with a WET WQBEL. This compliance schedule time frame is established at three (3) years and is modeled after the schedule applied to new sources, new dischargers, or expanded direct dischargers at N.J.A.C. 7:14A13.21(c)

Beginning on EDP + 1 year and every subsequent year after, until the final effluent limitation(s) becomes effective, the permittee must submit a progress report to the Department on the steps taken towards compliance

with the final effluent limitations. The progress report must include but is not limited to the following information:

- Investigative work as to what type of treatment options or other means of compliance are considered;
- Decision on the chosen method of treatment;
- Progress on design, bidding and construction schedule;
- The permittee's intent to do studies indicated in Part IV of this permit (to obtain site specific hardness, translator and WER values, etc.).

I. Removal of Modification of Final WQBELs for Copper or Zinc:

The Department will consider proposing to remove or modify a toxic pollutant's newly imposed final effluent limitation from the permit if site-specific information is submitted for Departmental review and consideration. Items that will be considered include, but are not limited to: submission of additional effluent data; acceptable site-specific ambient data (e.g. hardness, pollutant specific data); acceptable site-specific translator values to enable assessment of a dissolved metal versus a total metal ratio; a water effects ratio (WER) study, updated 1Q10, 7Q10, 75th percentile, and/or other appropriate stream flow values.

Guidance regarding WER studies is available at:

http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/pollutants/copper/upload/ copper.pdf

All studies require a NJDEP approved workplan that shall be submitted to the Department for approval prior to commencement of any work.

Upon receipt of this technical information the Department could propose a modification to this permit to remove or modify any existing or proposed WQBELs. This technical information would be considered new information and would constitute an exception to antibacksliding at N.J.A.C. 7:14A-13.19.

J. Best Management Practices for Cleaning Products and Hazardous Wastes:

Best Management Practices (BMP) shall be followed to control or abate the discharge of toxic pollutants that may result from the use of cleaning products or hazardous substances. Specifically, cleaning agents, paints, and chemistry laboratory chemicals should be used as directed on the product labels and excess product should be disposed of properly as a household hazardous waste based on township and/or county requirements. The permittee is encouraged to develop and implement a BMP Plan based on the school's operations. This BMP Plan is intended to ensure that toxic pollutants are not put into the sanitary wastewater collection system through sinks and floor drains; passed through the treatment system, and ultimately discharged to the receiving waterbody at the surface water outfall.

5 Variances to Permit Conditions:

Procedures for modifying a WQBEL are found in the SWQS, N.J.A.C. 7:9B-1.8 and 1.9. If a WQBEL has been proposed in this permit action, the permittee may request a modification of that limitation in accordance with N.J.A.C. 7:14A-11.7(a). This request must be made prior to the close of the public comment period. The information that must be submitted to support the request may be obtained from the Bureau of Environmental Analysis, Restoration and Standards at (609) 633-1441.

6 Description of Procedures for Reaching a Final Decision on the Draft Action:

Please refer to the procedures described in the public notice published in the *DEP Bulletin*. In addition to the *DEP Bulletin*, the public notice for this permit action is published in the following newspapers to represent the counties where the facilities are located:

Newspaper	County
The Record	Bergen
Burlington County Times	Burlington
The Democrat	Hunterdon
Daily Record	Morris
The Herald News	Passaic
The New Jersey Herald	Sussex
The Express Times	Warren

7 Contact Information:

If you have any questions regarding this permit action, please contact Tara Klimowicz, Kevin Johnson, or Bennet Moss of the Bureau of Surface Water and Pretreatment Permitting at either (609) 292-4860 or via email at Tara.Klimowicz@dep.nj.gov, Kevin.Johnson@dep.nj.gov, or Bennett.Moss@dep.nj.gov, respectively.

8 Contents of the Administrative Record

The following items are used to establish the basis of the draft master general permit:

Rules and Regulations:

1. 33 U.S.C. 1251 et seq., Federal Water Pollution Control Act. [B]
2. 40 CFR Part 131, Federal Water Quality Standards. [B]
3. 40 CFR Part 122, National Pollutant Discharge Elimination System. [B]
4. N.J.S.A. 58:10A-1 et seq., New Jersey Water Pollution Control Act. [A]
5. N.J.A.C. 7:14A-1 et seq., NJPDES Regulations. [A]
6. N.J.A.C. 7:9B-1 et seq., New Jersey Surface Water Quality Standards. [A]
7. N.J.A.C. 7:15, Statewide Water Quality Management Planning Rules. [A]
8. Delaware River Basin Commission: Administrative Manual – Part III Water Quality Regulations.

Guidance Documents / Reports:

1. "Field Sampling Procedures Manual", published by the NJDEP. [A]
2. "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. [A]
3. "USEPA TSD for Water Quality-based Toxics Control", EPA/505/2-90-001, March 1991. [B]
4. New Jersey's 2016 Integrated Water Quality Monitoring and Assessment Report (includes 305 (b) Report 303(d) List). [A]
5. NJPDES/DSW Monitoring Report Forms as indicated on "Permit Summary Tables" attachment.
6. DMRs and WCRs reviewed.
7. Standard Compliance and Inspections Reports reviewed for the last three years.

Permits / Applications:

NJPDES Permit No.	Facility	Issuance Date of Existing Permit Authorization	Administrative Completeness Date of Renewal Application
NJG0020419	Long Pond School WTP	December 22, 2016	August 9, 2021
NJG0020711	Warren County Technical School STP	December 20, 2016	August 18, 2021
NJG0021091	Jefferson Township High - Middle School	December 20, 2016	November 5, 2021
NJG0021105	Arthur Stanlick School	December 19, 2016	October 28, 2021
NJG0021253	Indian Hills High School	December 21, 2016	October 6, 2021
NJG0021571	Springfield Township Elementary	December 16, 2016	October 18, 2021
NJG0022101	Blair Academy	December 21, 2016	October 5, 2021
NJG0022276	Stony Brook School	December 20, 2016	December 6, 2021
NJG0022438	Helen A. Fort Middle School	December 20, 2016	September 21, 2021
NJG0023001	Salvation Army Camp Tecumseh	December 16, 2016	April 28, 2021
NJG0023175	Round Valley Middle School	December 21, 2016	December 8, 2021
NJG0023311	Kingwood Township School	December 21, 2016	October 14, 2021
NJG0023841	Lounsberry Hollow Middle School	December 21, 2016	December 6, 2021
NJG0024091	Union Township Elementary	December 22, 2016	November 30, 2021
NJG0027049	Pope John XXIII High School	December 21, 2016	July 14, 2021
NJG0027065	Sparta Alpine School	December 21, 2016	October 18, 2021
NJG0027553	Lester D. Wilson Elementary	January 17, 2017	September 29, 2021
NJG0028894	Kittatinny Regional HS Board of Ed	December 16, 2016	September 21, 2021
NJG0029432	Robert Erskine School	December 20, 2016	November 8, 2021
NJG0031046	North Warren Regional School District	December 21, 2016	September 29, 2021
NJG0031585	High Point Regional High School	December 21, 2016	November 29, 2021
NJG0035670	Alexandria Middle School	December 21, 2016	September 29, 2021

Other:
1. Water Quality Based Effluent Limitation (WQBEL) Analysis Calculation Sheets.
2. Whole Effluent Toxicity (WET) Calculation Sheets.

Footnotes:
[A] Denotes items that may be found on the New Jersey Department of Environmental Protection (NJDEP) website located at "http://www.nj.gov/dep/".
[B] Denotes items that may be found on the USEPA website at "http://www.epa.gov/".

Long Pond School - NJG0020419

1 Facility Description:

NJPDES Flow Value: 0.01 MGD

Treatment Units:
1. Bar screen
2. Comminutor
3. Aeration tank
4. Clarifier
5. Sand filters
6. Ultraviolet (UV) Disinfection
7. Flow monitoring

Sludge generated at the facility is managed off-site at an approved residuals management operation.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Lake Illiff*	Downstream Confluences:	N/A
Via :	Via unnamed Tributary	Receiving River Basin:	Delaware River Basin (Zone1D)
Classification:	FW2-TM (C1)	Watershed Management Area:	01
Latitude:	41° 01’ 53.7”	Watershed:	Pequest River (above /include Bear Swamp)
Longitude:	74° 42’ 35.4”	Subwatershed:	New Wawayanda Lake/Andover Pond trib
County:	Sussex	14 digit Hydrologic Unit Code :	02040105070020
Municipality:	Newton Town	Water Quality Impairments:	Chlordane in Fish Tissue, Biological (Cause Unknown), Mercury in Fish Tissue, PCBs in Fish Tissue
Outfall Description			
Outfall Configuration:	Non-submerged pipe		

Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.0 cfs
75th percentile flow:	0.1 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.1 cfs

*The United States Geological Survey (USGS) records reference the receiving stream as the Pequest River tributary.

3 Permit Summary Table and Permit Requirements (NJG0020419):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0023 0.033	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.015 0.015 8/31	0.94 1.4	0.94 1.4	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	2.86 2.70 5/34	25 37.5	25 37.5	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	268.96 268.96 38/1	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	97	90	90	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.015 0.015 22/17	1.1 1.7	1.1 1.7	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.05 3.05 26/13	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	345.86 345.86	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	90.1	85	85	1/Month	1/Month
Total Dissolved Solids (TDS)	mg/L	Monthly Avg. Daily Max. # Det. / # ND	441.1 1000.0 17/0	MR MR	MR MR	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	-- --	MR MR	MR MR	--	1/6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	23.4 91.9	MR MR	MR MR	1/Year	1/6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. # Det. / # ND	0.03 18/1	MR TMDL	MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. # Det. / # ND	0.398 16/1	1.0 TMDL	1.0 TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max. # Det. / # ND	21.33 42.00 3/30	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Monthly Avg Daily Avg. Min.	9.09 9.14	5.0 6.0	5.0 6.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	18.00 193.0 4/13	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3.0 11.7 25.0	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.21 8.14	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) May 1 – Oct 31	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0045 0.01 6/10	0.13 0.19	0.13 0.19	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) May 1 – Oct 31	mg/L	Monthly Avg. Daily Max. # Det. / # ND	1.10 2.50 6/10	3.5 5.1	3.5 5.1	1/Month	1/Month
Ammonia (Total as N) Nov 1 – Apr 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.01 0.02 8/15	0.18 0.26	0.18 0.26	1/Month	1/Month
Ammonia (Total as N) Nov 1 – Apr 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	2.23 5.80 10/13	4.7 6.9	4.7 6.9	1/Month	1/Month
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	% effluent	Minimum	21.2	61	61	1/Year	1/Year

Footnotes and Abbreviations (NJG0020419):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Warren County Technical School STP - NJG0020711

1 Facility Description:

NJPDES Flow Value: 0.012 MGD

Treatment Units:
1. Bar Screen (1 unit)
2. Aerated Equalization Tank (1 unit)
3. Comminutor
4. Activated Sludge Process
   a. Aeration Tank (1 unit)
   b. Settling Tank (1 unit)
5. Secondary Settling Tank (1 unit)
5. Chlorine Contact Tank (1 unit)
6. Dechlorination Chamber (1 unit)
7. Aeration Tower (1 unit)

Sludge is stored in a holding tank before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Pohatcong Creek	Downstream Confluences:	Delaware River
Via :	Outfall pipe	Receiving River Basin:	Delaware River Basin (Zone 1E)
Classification (a):	FW2-TM (C1)	Watershed Management Area:	01
Latitude:	40° 44’ 23.7”	Watershed:	Pohatcong Creek
Longitude:	75° 01’ 13.1”	Subwatershed:	Pohatcong Ck (Edison Rd – Brass Castle Ck)
County:	Warren County	14 digit Hydrologic Unit Code:	02040105140030
Municipality:	Franklin Township	Water Quality Impairments:	Arsenic, Biological (Cause Unknown), pH, Phosphorus, TSS
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	2.6 cfs,	MA7CD10 (7Q10) summer:	2.9cfs
MA7CD10 / 7Q10:	2.9 cfs,	MA7CD10 (7Q10) winter:	4.7.cfs
75^{th} percentile flow:	9.4 cfs	MA30CD10 (30Q10) summer:	3.4cfs
		MA30CD10 (30Q10) winter:	6.3cfs

3 Permit Summary Table and Permit Requirements (NJG0020711):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.002 0.01	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.064 0.066 44/11	1.14 1.14	1.14 1.14	1 / Month	1 / Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	8.01 8.16 30/25	25 25	25 25	1 / Month	1 / Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	292.13 292.13 55/0	MR MR	MR MR	1 / Month	1 / Month
BOD_5 Min Percent Removal	%	Monthly Avg.	97.24	90	90	1 / Month	1 / Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.08 0.08 43/12	1.36 2.04	1.36 2.04	1 / Month	1 / Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	8.49 9.14 29/26	30 45	30 45	1 / Month	1 / Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	392.91 392.91 55/0	MR MR	MR MR	1 / Month	1 / Month
TSS Minimum Percent Removal	%	Monthly Avg. # Det. / # ND	80.90 55/0	85	85	1 / Month	1 / Month
Total Dissolved Solids (TDS)	mg/L	Monthly Avg. Daily Max. # Det. / # ND	394.21 630.00 19/0	MR MR	MR MR	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.53 1.24 5/0	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max. # Det. / # ND	49.74 101.00 5/0	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. # Det. / # ND Weekly Avg. # Det. / # ND	0.05 19/0 0.05 20/0	MR MR SVAP	MR MR SVAP	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. # Det. / # ND Weekly Avg. # Det. / # ND	3.94 19/0 3.94 20/0	MR MR SVAP	MR MR SVAP	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max. # Det. / # ND	93.24 920.00 17/30	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Instant. Min. Daily Avg. # Det. / # ND	6.10 9.20 55/0	5.0 6.0	5.0 6.0	1 / Month	1 / Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	5.45 5.70 2/17	10 15	10 15	1 / Quarter	1 / Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	0.20 14.14 30.90	MR MR MR	MR MR MR	1 / Day	1 / Day

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Effluent pH	su	Instant. Min. Instant. Max. # Det. / # ND	6.00 8.60 55/0	6.0 9.0	6.0 9.0	1 / Day	1 / Day
Ammonia (Total as N) May 1 – Oct 31	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.003 0.03 26/1	0.91 MR	0.91 MR	1 / Month	1 / Month
Ammonia (Total as N) May 1 – Oct 31	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.33 1.58 24/3	20 MR	20 MR	1 / Month	1 / Month
Ammonia (Total as N) Nov 1 – Apr 30	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.009 0.13 27/1	0.91 MR	0.91 MR	1 / Month	1 / Month
Ammonia (Total as N) Nov 1 – Apr 30	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.774 8.75 27/1	20 MR	20 MR	1 / Month	1 / Month
Chlorine Produced Oxidants	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0002 0.003 55/0	MR 0.005	MR 0.005	1 / Day	1 / Day
Chlorine Produced Oxidants	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.02 0.09 55/0	MR 0.1	MR 0.1	1 / Day	1 / Day
Acute Toxicity, LC50 *Pimephales promelas*	%	Minimum	>100	50 AL	50 AL	1 / Year	1 / Year

Footnotes and Abbreviations (NJG0020711):

MR Monitor and report only AL Action Level SVAP Stream Visual Assessment Protocol

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Jefferson Township High-Middle School - NJG0021091

1 Facility Description:

NJPDES Flow Value: 0.0275 MGD

Treatment Units:
1. Comminutor
2. Aerated equalization tank
3. Aeration tank
4. Clarifier
5. Tertiary sand filters
6. Ultraviolet disinfection chamber
7. Post aeration tank

Sludge Management: Sludge removed from the clarifier is transferred to an aerobic digester before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water*:	Russia Brook	Downstream Confluences:	Russia Brook, Lake Swannanoa
Via :	Unnamed Tributary (locally known as Edison Brook)	Receiving River Basin:	Passaic River Basin
Classification:	FW2-TM (C1)	Watershed Management Area:	06
Latitude:	41° 01’ 05.3”	Watershed:	Rockaway River
Longitude:	74° 32’ 59.7”	Subwatershed:	Russia Brook (below Milton)
County:	Morris	14 digit Hydrologic Unit Code:	02030103030020
Municipality:	Jefferson Township	Water Quality Impairments:	Temperature
Outfall Description			
Outfall Configuration:	headwall		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.1 cfs	MA7CD10 (7Q10) summer:	0.1 cfs
MA7CD10 / 7Q10:	0.1 cfs	MA7CD10 (7Q10) winter:	0.2 cfs
75th percentile flow (f):	0.4 cfs	MA30CD10 (30Q10) summer:	0.1 cfs
		MA30CD10 (30Q10) winter:	0.3 cfs

*The USGS records reference the receiving stream as the Russia Brook tributary.

3 Permit Summary Table and Permit Requirements (NJG0021091):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.01 0.03	MR MR	MR MR	Continuous	Continuous
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.084 0.102 38/16	0.85 1.25	0.85 1.25	1/Month	1/Month
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	2.65 2.65 33/21	8 12	8 12	1/Month	1/Month
Influent $CBOD_5$	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	154.36 154.36 54/0	MR MR	MR MR	1/Month	1/Month
$CBOD_5$ Min Percent Removal	%	Monthly Avg. # Det. / # ND	92 52/2 (>)	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.16 0.23 49/5	3.1 4.7	3.1 4.7	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	6.47 6.47 47/7	30 45	30 45	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	357.11 357.11	MR MR	MR MR	1/Month	1/Month
TSS Minimum Percent Removal	%	Monthly Avg. # Det. / # ND	65 53/1	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max. # Det. / # ND	1.14 5.11 13/0	MR MR	MR MR	1/Year	1/6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max. # Det. / # ND	36.01 70.90 13/0	MR MR	MR MR	1/Year	1/6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.004 0.005 35/7	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.12 0.11 34/8	1.0 1.5 TMDL	1.0 1.5 TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max # Det. / # ND	12.69 2420.00 17/16	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg. Instant Min	9.83 6.86	6.0 5.0	6.0 5.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	1.82 2.50 7/9	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3.20 16.08 30.90	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.16 8.73	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) DO based May 1 – Oct 31	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0047 0.0059 17/9	0.2 0.3	0.2 0.3	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) DO based May 1 – Oct 31	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.14 0.14 15/11	2.0 3.0	2.0 3.0	1/Month	1/Month
Ammonia (Total as N) Nov 1 – April 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0085 0.0101 20/8	0.42 0.6	0.42 0.6	1/Month	1/Month
Ammonia (Total as N) Nov 1 – April 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.22 0.22 19/9	4.0 5.8	4.0 5.8	1/Month	1/Month
Total Recoverable Copper	mg/L	Monthly Avg. Daily Max. # Det. / # ND	78.87 297 4/0	MR --	MR MR	1/Year (WCR)	1 / 6 Months (DMR)
Chronic Toxicity, IC25, *Ceriodaphnia dubia*	% effluent	Minimum	24	18	18	1/Year	1/Year

Footnotes and Abbreviations (NJG0021091):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Arthur Stanlick School - NJG0021105

1 Facility Description:

NJPDES Flow Value: 0.007095 MGD

Treatment Units:
1. Trash trap tank
2. Raw wastewater equalization tank
3. Membrane bioractor (MBR)
4. Ultraviolet (UV) disinfection
5. Post-aeration tank
6. Chemical addition facilities for alum, methanol and sodium hydroxide (added to MBR as needed)

Sludge Management: Sludge is stored in a sludge holding tank before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water*:	Lake Shawnee	Downstream Confluences:	Lake Shawnee
Via :	Unnamed Tributary	Receiving River Basin:	Delaware River Basin (Zone 1E)
Classification:	FW2-NT (C2)	Watershed Management Area:	01
Latitude:	40° 58’ 16.9”	Watershed:	Musconetcong River (above Trout Brook)
Longitude:	74° 35’ 27.5”	Subwatershed:	Lake Hopatcong
County:	Morris	14 digit Hydrologic Unit Code:	02040105150020
Municipality:	Jefferson Twp.	Water Quality Impairments:	PCBs in Fish Tissue, pH, Temperature
Outfall Description			
Outfall Configuration	Partially/ seasonally submerged pipe	Submerged Pipe Characteristics:	Pipe is approximately 2-3” below the high water line during submergence season
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.0 cfs
75th percentile flow:	0.1 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.1 cfs

*The USGS records reference the receiving stream as the Weldon Brook tributary.

3 Permit Summary Table and Permit Requirements (NJG0021105):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0012 0.007	MR MR	MR MR	Continuous	Continuous
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND.	2.57 2.51 40/15	MR MR	MR MR	1/Month	1/Month
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg. # Det. / # ND. Weekly Avg. # Det. / # ND.	3.24 36/19 3.22 37/18	25 40	25 40	1/Month	1/Month
Influent $CBOD_5$	mg/L	Monthly Avg. Weekly Avg.	182.84 184.19	MR MR	MR MR	1/Month	1/Month
$CBOD_5$ Min Percent Removal	%	Monthly Avg.	97.43	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. # Det. / # ND. Weekly Avg. # Det. / # ND.	0.03 32/22 0.4 34/20	MR MR	MR MR	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. # Det. / # ND. Weekly Avg. # Det. / # ND.	4.48 29/25 4.53 30/24	30 45	30 45	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	245.24 251.44	MR MR	MR MR	1/Month	1/Month
TSS Min Percent Removal	%	Monthly Avg. # Det. / # ND.	95.80 51/3	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max. # Det. / # ND.	0.035 0.38 16/2	MR MR	MR MR	1/Year	1/6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max. # Det. / # ND.	6.68 33.50 16/2	MR MR	MR MR	1/Year	1/6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND.	0.006 0.007 34/8	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND.	0.088 0.088 29/13	0.561 MR TMDL	0.561 MR TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. # Det. / # ND. Instant Max # Det. / # ND.	1.27 15/21 2.00 16/20	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg. Instant Min.	8.49 6.46	5.0 4.0	5.0 4.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND.	1.72 2.40 8/9	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3.00 16.72 26.90	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.16 8.26	6.0 9.0	6.0 9.0	1/Day	1/Day

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) DO based May 1 – Oct 31	kg/d	Monthly Avg. Daily Max. # Det. / # ND.	0.0078 0.10 15/11	MR MR	MR MR	1/Month	1/Month
Ammonia (Total as N) DO based May 1 – Oct 31	mg/L	Monthly Avg. Daily Max. # Det. / # ND.	0.11 0.302 14/12	4.5 6.6	4.5 6.6	1/Month	1/Month
Ammonia (Total as N) Nov 1 – Apr 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.001 0.003 20/8	MR 0.21	MR 0.21	1/Month	1/Month
Ammonia (Total as N) Nov 1 – Apr 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND.	0.16 0.302 19/9	MR 8.0	MR 8.0	1/Month	1/Month
Total Recoverable Copper	g/day	Monthly Avg. # Det. / # ND. Daily Max. # Det. / # ND.	0.04 26/13 0.83 27/12	MR 0.57	MR 0.57	1/Quarter	1/Quarter
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND.	7.16 73.10 25/14	MR 21.3	MR 21.3	1/Quarter	1/Quarter
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	% effluent	Minimum	11.8	61	61	1/ Year	1/Year

Footnotes and Abbreviations (NJG0021105):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Indian Hills High School – NJG0021253

1 Facility Description:

NJPDES Flow Value: 0.0336 MGD

Treatment Units:
1. Equalization Basin (metal with cathodic protection)
2. Aeration Basin (metal with cathodic protection)
3. Settling Tank (metal with cathodic protection)
4. Mechanical Filters (sand and charcoal filters)
5. Backwash Holding Tank (metal with cathodic protection)
6. Holding Tank for Ultraviolet (UV) Units (concrete)
7. Holding Tank for Flow meter (concrete)

Sludge Management: Sludge generated at this facility is managed off-site at an approved residuals management operation.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Pond Brook via drainage ditch	Downstream Confluences:	Ramapo River
Via :	Outfall pipe	Receiving River Basin:	Passaic River Basin
Classification (a):	FW2-NT (C2)	Watershed Management Area:	03
Latitude:	41° 01’ 26.2”	Watershed:	Ramapo River
Longitude:	74° 13’ 55.1”	Subwatershed:	Crystal Lake/ Pond Brook
County:	Bergen	14 digit Hydrologic Unit Code:	020301031000060
Municipality:	Oakland	Water Quality Impairments:	pH
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.0 cfs
75th percentile flow:	0.0 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.0 cfs

3 Permit Summary Table and Permit Requirements (NJG0021253):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0034 0.022	MR MR	MR MR	Continuous	Continuous
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0678 0.0678 9 / 45	1 1.5	1 1.5	1 / Month	1 / Month
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.156 3.156 9 / 45	8 12	8 12	1 / Month	1 / Month
Influent $CBOD_5$	mg/L	Monthly Avg. Weekly Avg.	165.4 165.4	MR MR	MR MR	1 / Month	1 / Month
$CBOD_5$ Minimum Percent Removal	%	Monthly Avg.	96.37	85	85	1 / Month	1 / Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg.	0.1154 0.1154	3.8 5.7	3.8 5.7	1 / Month	1 / Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	7.917 7.917	30 45	30 45	1 / Month	1 / Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	249.8 249.8	MR MR	MR MR	1 / Month	1 / Month
TSS Minimum Percent Removal	%	Monthly Avg.	86.7	85	85	1 / Month	1 / Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	1.024 3.13	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	76.28 124	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.0084 0.0084	MR MR TMDL	MR MR TMDL	1 / Quarter	1 / Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	0.5871 0.5871	0.76 MR TMDL	MR MR TMDL	1 / Quarter	1 / Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	94.6 192.4	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg. Instant Min.	8.915 7.4	6.0 MR	6.0 MR	1 / Month	1 / Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	7.55 7.55	10 15	10 15	1 / Quarter	1 / Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	0.7 14.6 26.8	MR MR MR	MR MR MR	1 / Day	1 / Day
Effluent pH	su	Instant. Min. Instant. Max.	6.19 9	6.0 9.0	6.0 9.0	1 / Day	1 / Day
Ammonia (Total as N) DO based	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0045 0.0045 7 / 47	0.25 0.38	0.25 0.38	1 / Month	1 / Month
Ammonia (Total as N) DO based	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.4667 0.4667 6 / 48	2 3	2 3	1 / Month	1 / Month
Chlorine Produced Oxidants (1) (Back up chlorination in use)	kg/d	Monthly Avg. Daily Max.	0.0001 0.001	MR MR	MR MR	1 / Day	1 / Day
Chlorine Produced Oxidants (1) (Back up chlorination in use)	mg/L	Monthly Avg. Daily Max.	0.0072 0.06	0.013 0.1	0.013 0.1	1 / Day	1 / Day
Total Recoverable Copper	g/day	Monthly Avg. Daily Max. # Det. / # ND	0.4317 1.84 15 / 3	MR MR	MR 7.8 (2)	1/Quarter	1/Quarter

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Total Recoverable Copper	µg/L	Monthly Avg. Daily Max. # Det. / # ND	36.89 135 15 / 3	MR MR	MR 61.17 (2)	1/Quarter	1/Quarter
Total Recoverable Zinc	g/day	Monthly Avg. Daily Max. # Det. / # ND	1.119 5.42 13 / 5	MR MR	MR 32.8 (2)	1/Quarter	1/Quarter (DMR)
Total Recoverable Zinc	µg/L	Monthly Avg. Daily Max. # Det. / # ND	104.8 336 13 / 5	MR MR	MR 258 (2)	1/Quarter	1/Quarter (DMR)
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	% effluent	Minimum	14.5	61	61	1/6 Months	1/ 6 Months

Footnotes and Abbreviations (NJG0021253):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

(1) When the facility is using UV disinfection in place of chlorination, the permittee is not required to monitor CPO and can report “Code =N” on the monthly DMR.

(2) From EDP to EDP + 36 months, Copper and Zinc limits as well as monthly Copper and Zinc monitoring are still applicable. From EDP + end of 36 months until permit expiration, the newly calculated limits will be imposed.

Springfield Township Elementary School STP - NJG0021571

1 Facility Description:

NJPDES Flow Value: 0.0075 MGD

Treatment Units:
1. Bar screen
2. Comminutor
3. Aeration tank
4. Clarifier
5. Ultraviolet disinfection system

Sludge is stored in a sludge holding tank before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Barkers Brook	Downstream Confluences:	Assiscunk Creek
Via :	Pipe	Receiving River Basin:	Delaware River Basin (Zone 2)
Classification:	FW2-NT (C2)	Watershed Management Area:	20
Latitude:	40° 02’ 07.7”	Watershed:	Assiscunk Creek
Longitude:	74° 42’ 04.3”	Subwatershed:	Barkers Brook (above 40d02m30s)
County:	Burlington	14 digit Hydrologic Unit Code:	02040201100020
Municipality:	Springfield Township	Water Quality Impairments:	Arsenic, Dissolved Oxygen, Biological – cause unknown
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.0 cfs
75^{th} percentile flow:	0.0 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.0 cfs

3 Permit Summary Table and Permit Requirements (NJG0021571):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.002 0.018	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.024 0.024 26 / 28	0.71 1.06	0.71 1.06	1 / Month	1 / Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	4.559 4.559 24 / 30	25 37.5	25 37.5	1 / Month	1 / Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	80	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.080 0.087 52 / 2	0.9 1.3	0.9 1.3	1 / Month	1 / Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	14.591 15.002 54/0	30 45	30 45	1 / Month	1 / Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	304.6 354.7	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	33.9	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	-- --	MR MR	MR MR	--	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	58.86 79.3	MR MR	MR MR	1/Year	1 / 6 Months
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	18.0 90	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg. Instant Min.	5.854 5.15	5.0 4.0	5.0 4.0	1 / Month	1 / Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	1.95 2.3	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	1.7 16.7 29.2	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.21 7.94	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) May 1 – Oct. 31	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0022 0.0022 20 / 9	MR 0.26	MR 0.26	1/Month	1/Month
Ammonia (Total as N) May 1 – Oct. 31	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.2657 0.2657 20 / 9	MR 9.0	MR 9.0	1 / Month	1 / Month
Ammonia (Total as N) Nov. 1 – Apr. 30	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.019 0.019 19 / 9	MR 0.45	MR 0.45	1 / Month	1 / Month
Ammonia (Total as N) Nov. 1 – Apr. 30	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.5247 0.5247 19 / 9	MR 16	MR 16	1 / Month	1 / Month
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.029 0.029	MR MR TMDL	MR MR TMDL	1 / Quarter	1 / Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	4.92 4.92	MR MR TMDL	MR MR TMDL	1 / Quarter	1 / Quarter

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Total Recoverable Copper	µg/L	Monthly Avg. Daily Max. # Det. / # ND	-- 56.1 5 / 0	MR MR	MR MR	1/Year (WCR)	1/6 Months (DMR)
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	% effluent	Minimum	72.5	MR	MR	1/Year	1/Year

Footnotes and Abbreviations (NJG0021571):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Blair Academy – NJG0022101

1 Facility Description:

NJPDES Flow Value: 0.05 MGD

Treatment Units:
1. Bar Screens
2. Aeration Tank and Clarifier with Chemical Addition
3. Addition of Sodium Hypochloride for Disinfection
4. Post Aerators

Sludge is held in a storage tank before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Blairs Creek	Downstream Confluences:	Paulins Kill
Via :	Outfall pipe	Receiving River Basin:	Delaware River Basin (Zone 1D)
Classification:	FW2-TM (C1)*	Watershed Management Area:	01
Latitude:	40° 59’ 11”	Watershed:	Paulins Kill (below Stillwater Village)
Longitude:	74° 57’ 33”	Subwatershed:	Blair Creek
County:	Warren	14 digit Hydrologic Unit Code:	02040105050020
Municipality:	Blairstown	Water Quality Impairments:	Temperature
Outfall Description			
Outfall Configuration:	non-submerged pipe	Submerged Pipe Characteristics:	N/A
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.7 cfs	MA7CD10 (7Q10) summer:	0.8 cfs
MA7CD10 / 7Q10:	0.8 cfs	MA7CD10 (7Q10) winter:	1.8 cfs
75th percentile flow:	4.8 cfs	MA30CD10 (30Q10) summer:	1.1 cfs
		MA30CD10 (30Q10) winter:	2.9 cfs

*The receiving waterbody classification has changed since the January 1, 2017 Master General Permit.

3 Permit Summary Table and Permit Requirements (NJG0022101):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0177 0.044	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg.	0.1975 0.1975	6.0 9.0	6.0 9.0	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.4917 3.4898 54 / 0	30 45	30 45	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	528.46 528.46	MR MR	MR MR	1/Month	1/Month
BOD_5 Minimum Percent Removal	%	Monthly Avg.	94.29	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg.	0.2735 0.2735	6 9	6 9	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	4.975 4.975	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	383.94 383.94	MR MR	MR MR	1/Month	1/Month
TSS Minimum Percent Removal	%	Monthly Avg.	86.36	85	85	1/Month	1/Month
Total Dissolved Solids (TDS)	mg/L	Monthly Avg. Daily Max.	757.59 1400	MR MR	MR MR	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max	0.086 1.34	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max	1.257 14	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.0264 0.0264	MR MR	MR MR	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	0.4830 0.4830	1.0 MR	1.0 MR	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	21.38 110	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg. Inst. Min.	8.86 4.4	6.0 5.0	6.0 5.0	1 / Month	1 / Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	5.005 5 20/0	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3.2 17.1 28	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.14 8.64	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N), Summer: May 1 to Oct 31	kg/d	Monthly Avg. Weekly Avg.	0.0913 0.0913	3.8 MR	3.8 MR	1 / Month	1 / Month
Ammonia (Total as N), Summer: May 1 to Oct 31	mg/L	Monthly Avg.` Weekly Avg.	1.199 1.199	20 MR	20 MR	1 / Month	1 / Month
Ammonia (Total as N), Winter: Nov 1 to Apr 30	kg/d	Monthly Avg. Weekly Avg..	0.077 0.077	3.8 MR	3.8 MR	1 / Month	1 / Month
Ammonia (Total as N), Winter: Nov 1 to Apr 30	mg/L	Monthly Avg. Weekly Avg.	1.356 1.356	20 MR	20 MR	1 / Month	1 / Month
Chlorine Produced Oxidants	kg/d	Monthly Avg. Daily Max.	0.014 0.355	MR 0.019	MR 0.019	1 / Day	1 / Day
Chlorine Produced Oxidants	mg/L	Monthly Avg. Daily Max.	0.0162 0.06	MR 0.1	MR 0.1	1 / Day	1 / Day
Total Recoverable Copper	µg/L	Monthly Avg. Daily Max. # Det. / # ND	-- 70.3 4 / 0	MR MR	MR MR	1/Year (WCR)	1/6 Months (DMR)

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Acute Toxicity, LC50 *Pimephales promelas*	% effluent	Minimum	>100	AL 50	AL 50	1 / Year	1 / Year

Footnotes and Abbreviations (NJG0022101):

MR Monitor and report only AL Action Level

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Stony Brook Elementary School – NJG0022276

1 Facility Description:

NJPDES Flow Value: 0.01 MGD

Treatment Units:
1. Wet well
2. Comminutor
3. Equalization basin
4. Aeration tank
5. Clarifier
6. Mud well
7. Rapid sand filters (2)
8. Clear well
9. Post aeration
10. Ultraviolet (UV) disinfection chamber

Sludge is stored in a sludge holding tank before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Untermeyer Lake via unnamed tributary and storm sewer	Downstream Confluences:	East Ditch River
Via :	Outfall pipe	Receiving River Basin:	Passaic River Basin
Classification:	FW2-NT (C2)	Watershed Management Area:	03
Latitude:	40° 58’ 14.736”	Watershed:	Pompton River
Longitude:	74° 21’ 5.691”	Subwatershed:	Lincoln Park Tribs (Pompton River)
County:	Morris	14 digit Hydrologic Unit Code :	02030103030130
Municipality:	Kinnelon Borough	Water Quality Impairments :	Arsenic, Dissolved Oxygen, Biological (Cause Unknown), Mercury in Water Column
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.0 cfs
75th percentile flow:	0.1 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.1 cfs

3 Permit Summary Table and Permit Requirements (NJG0022276):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0053 0.0116	MR MR	MR MR	Continuous	Continuous
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0083 0.0083 12 / 42	0.3 0.45	0.3 0.45	1/Month	1/Month
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.833 3.833 12 / 42	8.0 12.0	8.0 12.0	1/Month	1/Month
Influent $CBOD_5$	mg/L	Monthly Avg. Weekly Avg.	322.3 284.2	MR MR	MR MR	1/Month	1/Month
$CBOD_5$ Min. Percent Removal	%	Monthly Avg.	93.3	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg.	0.0427 0.0427	1.1 1.7	1.1 1.7	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	4.481 4.60	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	370.1 369.1	MR MR	MR MR	1/Month	1/Month
TSS Minimum Percent Removal	%	Monthly Avg.	79.07	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	0.2363 0.427	MR MR	MR MR	1/ Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	90.1 125	MR MR	MR MR	1/ Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.0005 0.0005	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	0.1765 0.1765	1.0 1.5 TMDL	1.0 1.5 TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant. Max.	1.8 9	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg. Instant Min.	9.916 8.4	6.0 MR	6.0 MR	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	5 5	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	12.4 20.004 27.8	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.49 7.24	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) DO Based Summer: May 1 to Oct 31	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.014 0.014 4 / 20	0.08 0.11	0.08 0.11	1/Month	1/Month
Ammonia (Total as N) DO Based Summer: May 1 to Oct 31	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.4652 0.4652 4 / 21	2.0 3.0	2.0 3.0	1/Month	1/Month
Ammonia (Total as N) DO Based Winter: Nov 1 to Apr 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0003 0.0008 8 / 19	MR 0.16	MR 0.16	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) DO Based - Winter Winter: Nov 1 to Apr 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.0057 0.2021 7 / 20	MR 4.4	MR 4.4	1/Month	1/Month
Total Recoverable Copper	g/day	Monthly Avg. Daily Max. # Det. / # ND	0.0159 0.05 16 / 12	MR 0.7	MR 0.53 (1)	1/Quarter	1/Quarter
Total Recoverable Copper	µg/L	Monthly Avg. Daily Max. # Det. / # ND	9.816 16 16 / 12	MR 17.7	MR 14 (1)	1/Quarter	1/Quarter
Total Recoverable Zinc	g/day	Monthly Avg. Daily Max.	0.831 0.27	MR 4.3	MR 4.3	1/Quarter	1/Quarter
Total Recoverable Zinc	µg/L	Monthly Avg. Daily Max.	35.67 122	MR 112	MR 112	1/Quarter	1/Quarter
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	%	Minimum	8.2 (2)	MR	61 (1)	1/ 6 Months	1/ 6 Months

Footnotes and Abbreviations (NJG0022276):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

(1) From EDP to EDP + 36 months, the daily maximum Copper limitations and monthly Copper monitoring as well as the Chronic WET monitoring are still applicable. From EDP + end of 36 months until permit expiration, the newly calculated limitations for Copper and Chronic WET will be imposed.

(2) The Chronic Whole Effluent Toxicity (WET) test results for NJG0022276 are as follows: >100.0 23.8, 49.8, 8.2, 63.2, 49.6, >100.0 and >100.0.

Helen A. Fort Middle School - NJG0022438

1 Facility Description:

NJPDES Flow Value: 0.05 MGD

*Treatment Units:

1. Bar screen
2. Communitor
3. Aeration tank
4. Settling tank
5. Sand filtration beds
6. Chlorination tank
7. Dechlorination tank

Sludge is aerated during storage before being managed at an approved residuals management site.

* It has come to the Department's attention that the existing treatment plant for the Helen A. Fort Middle School located in Pemberton Township, Burlington County will be replaced by a new treatment plant. A Treatment Works Approval (TWA) No. 20-0138 was issued by the Department for construction for the new treatment plant on June 1, 2020. The construction process will take approximately one year. During the construction of the new treatment plant, the existing plant will continue to operate. The design flow (or NJPDES Flow Value) of 0.05 MGD will remain the same for the new treatment plant, but the treatment units will differ. For instance, the new treatment plant will include Ultraviolet disinfection. Once the new treatment plant is operational, the existing treatment will be taken offline and decommissioned.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Unnamed tributary of Rancocas Creek North Branch	Downstream Confluences:	Rancocas Creek North Branch
Via :	Outfall pipe	Receiving River Basin:	Delaware River Basin (Zone 2)
Classification:	PL	Watershed Management Area:	19
Latitude:	39° 59' 58.6"	Watershed:	Rancocas Creek NB (below New Lisbon dam)
Longitude:	74° 39' 51.3"	Subwatershed:	Rancocas Creek NB (Rt. 206 to Pemberton br)
County:	Burlington	14 digit Hydrologic Unit Code:	02040202040030
Municipality:	Pemberton Township	Water Quality Impairments:	Arsenic, Copper, E. Coli, Phosphorus
Outfall Description			
Outfall Configuration:	Non-submerged pipe	Submerged Pipe Characteristics:	Not Applicable

Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.4 cfs	MA7CD10 (7Q10) summer:	0.4 cfs
MA7CD10 / 7Q10:	0.4 cfs	MA7CD10 (7Q10) winter:	0.8 cfs
75th percentile flow:	1.1 cfs	MA30CD10 (30Q10) summer:	0.5 cfs
		MA30CD10 (30Q10) winter:	1.0 cfs

3 Permit Summary Table and Permit Requirements (NJG0022438):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021 (1)	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.002 0.021	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg.	0.045 0.046	4.73 7.09	4.73 7.09	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg.	5.39 5.41	25 37.5	25 37.5	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	254.76 258.57	MR MR	MR MR	1/Month	1/Month
BOD_5 Min Percent Removal	%	Monthly Avg.	94.93	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0144 0.014 24 / 26	5.7 8.5	5.7 8.5	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.82 3.86 32 / 21	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	239.38 246.69	MR MR	MR MR	1/Month	1/Month
TSS Min Percent Removal	%	Monthly Avg.	93.19	85	85	1/Month	1/Month
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.041 0.040	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	6.87 6.36	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Weekly Avg.	0.34 0.34	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Weekly Avg.	33.98 33.98	MR MR	MR MR	1/Year	1 / 6 Months
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	5.14 14	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg Instant Min	8.24 0.1	5.0 4.0	5.0 4.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Daily Max.	3.23 5	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	4.5 15.03 25.5	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	5.65 8.92	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) May 1 to Oct 31	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.016 0.25 18 / 7	3.78 MR	3.78 MR	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021 (1)	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) May 1 to Oct 31	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.81 7.9 19 / 6	20 MR	20 MR	1/Month	1/Month
Ammonia (Total as N) Nov 1 to Apr 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.04 0.27 20 / 5	3.78 MR	3.78 MR	1/Month	1/Month
Ammonia (Total as N) Nov 1 to Apr 30	mg/L	Monthly Avg. Daily Max.	5.53 32.2	20 MR	20 MR	1/Month	1/Month
Chlorine Produced Oxidants (2)	kg/d	Monthly Avg. Daily Max.	0.000069 0.005	MR 0.02	MR 0.02	1/Day	1/Day
Chlorine Produced Oxidants (2)	mg/L	Monthly Avg. Daily Max.	0.0091 1.12	MR 0.1	MR 0.1	1/Day	1/Day
Total Recoverable Copper	mg/L	Monthly Avg. Daily Max. # Det. / # ND	33.55 87 13 / 1	MR MR	MR MR	1/Quarter	1/Quarter
Total Recoverable Zinc	mg/L	Monthly Avg. Daily Max. # Det. / # ND	62.59 252 13 / 1	MR MR	MR MR	1/Quarter	1/Quarter
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	%	Minimum	2.1 (3)	MR	MR	1/ 6 Months	1/ 6 Months

Footnotes and Abbreviations (NJG0022438):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values

(1) The sampling results were not reported on the Discharge Monitoring Report Forms (DMRs) for the months of January 2019, February 2019 and March 2019. As a result, these months were not included in the data set.
(2) The permittee reported "0" on one occasion which was not considered in average calculations as it appears to be an error.
(3) The Chronic Whole Effluent Toxicity (WET) test results for NJG0022438 are as follows: 96.5, 2.1, 23.7, >100.0, 61.5, 75.0 and 100.0

The Salvation Army, Camp Tecumseh – NJG0023001

1 Facility Description:

NJPDES Flow Value: 0.018 MGD

As mentioned in the existing Master ASC Permit Renewal, the STP at this facility was upgraded in August 2005 with a prefabricated Rotating Biological Contactor (RBC) treatment system, which has a design capacity of 0.036 MGD. However, the facility's previous STP had a design capacity of 0.018 MGD, which is also the flow identified in the current Wastewater Management Plan (WMP).

Treatment Units:
1. Primary settling tank (Below RBC)
2. Rotating biological contactor (three stage unit):
   a. Primary biological stage
   b. Secondary biological stage
   c. Tertiary biological stage (Nitrification/Phosphorus Removal w/Alum)
3. Final settling tank
4. Chlorination tank
5. First dechlorination tank
6. Re-aeration
7. Second dechlorination tank

Sludge is collected in the primary settling tank before being removed to an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Nishisakawick Creek	Downstream Confluences:	Delaware River
Via :	Outfall pipe	Receiving River Basin:	Delaware River Basin (Zone 1E)
Classification:	FW2-NT (C1)	Watershed Management Area:	11
Latitude:	40° 35' 55.3"	Watershed:	Central Delaware Tributaries
Longitude:	75° 00' 26.9"	Subwatershed:	Hakihokake/harihokake/ Nishisakwick Creek
County:	Hunterdon	14 digit Hydrologic Unit Code:	02040105170040
Municipality:	Alexandria Township	Water Quality Impairments:	None
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.1 cfs
MA7CD10 / 7Q10:	0.1 cfs	MA7CD10 (7Q10) winter:	0.2 cfs
75^{th} percentile flow:	0.3 cfs	MA30CD10 (30Q10) summer:	0.1 cfs
		MA30CD10 (30Q10) winter:	0.3 cfs

3 Permit Summary Table and Permit Requirements (NJG0023001):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.005 0.05	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg.	0.053 0.055	1.70 1.70	1.70 1.70	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg.	3.90 4.05	25 25	25 25	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	175.99 175.99	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	97.07	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.08 0.09 54 / 0	2.04 3.06	2.04 3.06	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.89 4.21 54 / 0	30 45	30 45	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	429.86 429.86	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	97.78	85	85	1/Month	1/Month
Total Dissolved Solids (TDS)	mg/L	Monthly Avg. Daily Max.	205.64 420.0	MR MR	MR MR	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	2.99 7.50	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	3.95 7.50	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.009 0.009	MR MR SVAP	MR MR SVAP	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	0.44 0.44	1.0 MR SVAP	1.0 MR SVAP	1/Quarter	1/Quarter
E.Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	2.17 11	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Instant Min. Daily Avg.	7.87 9.90	4.0 5.0	4.0 5.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	1.11 1.80 19 / 0	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	0.20 14.01 25.20	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.8 8.5	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N), Summer: May 1 –Oct 31	kg/d	Monthly Avg. Weekly Avg.	0.013 0.033	0.37 0.59	0.37 0.59	1/Month	1/Month
Ammonia (Total as N), Summer: May 1 –Oct 31	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.51 0.51 26 / 0	2.7 4.4	2.7 4.4	1/Month	1/Month
Ammonia (Total as N), Winter : Nov 1 – Apr 30	kg/d	Monthly Avg. Weekly Avg.	0.008 0.008	0.34 0.57	0.34 0.57	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N), Winter : Nov 1 – Apr 30	mg/L	Monthly Avg. Weekly Avg. #Detect/#ND	0.61 0.61 28 / 0	2.5 4.2	2.5 4.2	1/Month	1/Month
Chlorine Produced Oxidants	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0002 0.005 54 / 0	MR 0.007	MR 0.007	1/Day	1/Day
Chlorine Produced Oxidants	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.01 0.04 54 / 0	MR 0.1	MR 0.1	1/Day	1/Day
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	0.056 0.07 4/0	MR MR	MR MR	1/Year (WCR)	1/6 Months (DMR)
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max. # Det. / # ND	0.085 0.089 4/0	MR MR	MR MR	1/Year (WCR)	1/6 Months (DMR)
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	%	Minimum	100	MR	MR	1/Year	1/Year

Footnotes and Abbreviations (NJG0023001):

MR Monitor and report only SVAP Stream Visual Assessment Protocol

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Round Valley Middle School - NJG0023175

1 Facility Description:

NJPDES Flow Value: 0.009 MGD

Treatment Units:
1. Comminutor and bar screen
2. Aerated equalization tank
3. Aeration tank with immersion heater, an alum feed system and a pH control system
4. Clarifier
5. Aerated sludge holding tank
6. Filter feed tank/pressurized filter
7. Ultraviolet (UV) disinfection system (2 units, one is spare)
8. Effluent discharge tank

Sludge generated at this facility is removed on a periodic basis and managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	South Branch Rockaway Creek	Downstream Confluences:	South Branch Rockaway Creek
Via :	unnamed tributary	Receiving River Basin:	Lamington River
Classification:	FW2-TP (C1)	Watershed Management Area:	08
Latitude:	40° 39’ 27.5”	Watershed:	Lamington River
Longitude:	74° 50’ 0.6”	Subwatershed:	Rockaway Creek South Branch
County:	Hunterdon County	14 digit Hydrologic Unit Code:	02030105050100
Municipality:	Clinton Township	Water Quality Impairments:	E. Coli, Biological - Causes Unknown, Temperature
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.1 cfs	MA7CD10 (7Q10) summer:	0.1 cfs
MA7CD10 / 7Q10:	0.1 cfs	MA7CD10 (7Q10) winter:	0.1 cfs
75th percentile flow:	0.4 cfs	MA30CD10 (30Q10) summer:	0.1 cfs
		MA30CD10 (30Q10) winter:	0.2 cfs

3 Permit Summary Table and Permit Requirements (NJG0023175):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.003 0.013	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.042 0.044 23 / 28	1.0 1.5	1.0 1.5	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	5.49 5.69 20 / 30	30 45	30 45	1/Month	1/Month
Influent $CBOD_5$	mg/L	Monthly Avg. Weekly Avg.	203.62 209.07	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	97.38	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.12 0.14 51 / 0	1.0 1.5	1.0 1.5	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	12.43 13.95 51 // 0	30 45	30 45	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	275.83 279.68	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	90.47	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.87 2.27 9 / 0	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max. # Det. / # ND	91.23 114.0 9 / 0	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.03 0.03	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	3.73 3.73	4.75 MR TMDL	4.75 MR TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	26.85 510.0	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Monthly Avg. Instant Min.	7.66 4.5	6.0 MR	6.0 MR	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	2.25 2.3 2 / 0	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	8.7 19.58 38.1	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.53 8.98	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) Summer - May 1 through October 31	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0009 0.0009 13 / 11	0.03 MR	0.03 MR	1/Month	1/Month
Ammonia (Total as N) Summer - May 1 through October 31	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.10 0.10 13 / 11	1.0 MR	1.0 MR	1/Month	1/Month
Ammonia (Total as N) Winter - November 1 through April 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.002 0.0068 14 / 13	MR MR	MR MR	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) Winter - November 1 through April 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.29 1.8 14 / 13	MR MR	MR MR	1/Month	1/Month
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	14.11 101 20 / 0	MR MR	MR MR	1/Quarter	1/Quarter
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max. # Det. / # ND	54.37 239 19 / 1	MR MR	MR MR	1/Quarter	1/Quarter
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	%	Minimum	2.9	MR	MR	1/6 Months	1/6 Months

Footnotes and Abbreviations (NJG0023175):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Kingwood Township School – NJG0023311

1 Facility Description:

NJPDES Flow Value: 0.0048 MGD.

Treatment Units:
1. Equalization tank
2. Rotor disk
3. Primary clarifier
4. Secondary clarifier
5. Filter tank
5. Ultraviolet (UV) disinfection (1 unit)

Sludge is disposed off-site at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water :	Unnamed Tributary to Copper Creek via storm water collection and conveyance system	Downstream Confluences:	Delaware River
Via :	Outfall pipe	Receiving River Basin:	Delaware River Basin (Zone 2)
Classification:	FW2-NT (C2)	Watershed Management Area:	11
Latitude:	40° 30’ 25”	Watershed:	Hakihokake/Harihokake/ Nishisakawick Creek
Longitude:	75° 00’ 44”	Subwatershed:	Kingwood Township (Warford-Little Nishisakawk)
County:	Hunterdon	14 digit Hydrologic Unit Code:	02040105170060
Municipality:	Kingwood Township	Water Quality Impairments:	Phosphorus
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.0 cfs
75^{th} percentile flow:	0.0 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.0 cfs

3 Permit Summary Table and Permit Requirements (NJG0023311):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.002 0.009	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg.	0.039 0.040	0.45 0.68	0.45 0.68	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg.	6.86 6.95	25 37.5	25 37.5	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	497.07 505.33	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	89.7	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg.	0.08 0.08	0.55 0.82	0.55 0.82	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	16.56 16.63	30 45	30 45	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	474.57 489.92	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	77.5	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	0.32 0.32	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	60.12 60.12	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.05 0.05	MR MR SVAP	MR MR SVAP	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	10.94 10.94	MR MR SVAP	MR MR SVAP	1/Quarter	1/Quarter
E.coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	64.06 750	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Monthly Avg. Instant Min.	6.12 4	-- 5.0	-- 5.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	3.55 7.10	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	8.70 20.74 38.40	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.01 8.58	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) Summer - May 1 through October 31	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.003 0.068 25 / 1	0.11 0.18	0.11 0.18	1/Month	1/Month
Ammonia (Total as N) Summer - May 1 through October 31	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.60 8.5 25 / 1	6 10	6 10	1/Month	1/Month
Ammonia (Total as N) Winter - November 1 through April 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.011 0.11 23 / 5	0.11 0.18	0.11 0.18	1/Month	1/Month
Ammonia (Total as N) Winter - November 1 through April 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	1.79 15.5 23 / 5	6 10	6 10	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Total Recoverable Copper (1)	g/d	Month Avg. Daily Max. # Det. / # ND	0.26 2.16 14/1	MR MR	MR MR	1/6 Months	1 / Quarter
Total Recoverable Copper (1)	µg/L	Month Avg. Daily Max. # Det. / # ND	31.73 127 14/1	MR MR	MR MR	1/6 Months	1 /Quarter
Total Recoverable Zinc (1)	g/d	Month Avg. Daily Max. # Det. / # ND	0.54 3.03 13 / 3	MR MR	MR 4.9 (2)	1/6 Months	1 / Quarter
Total Recoverable Zinc (1)	µg/L	Month Avg. Daily Max. # Det. / # ND	100.90 345 13 / 3	MR MR	MR 271.1 (2)	1/6 Months	1 / Quarter
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	%	Minimum	3	MR	MR	1/Year	1/Year

Footnotes and Abbreviations (NJG0023311):

MR Monitor and report only SVAP Stream Visual Assessment Protocol

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values

(1) Effluent requirements were considered based on the final copper Water Effects Ratio (WER) study and site-specific copper and zinc translators and hardness data submitted by the permittee.
(2) From EDP to EDP + 36 months, monthly Zinc monitoring is still applicable. From EDP + end of 36 months until permit expiration, the newly calculated Zinc limitations will be imposed.

Lounsberry Hollow Middle School – NJG0023841

1 Facility Description:

NJPDES Flow Value: 0.032 MGD

Treatment Units:
1. Bar Screen
2. Comminutor
3. Equalization Tank
4. Aeration Tank
5. Biological Settling Clarifier
6. Chemical Mixing Unit
7. Chemical Clarifier (Phosphorus Removal)
8. Rapid Sand Filters (2 units)
9. Clear Well
10. Ultraviolet Disinfection (UV) Chamber (2 units)
11. Post Aeration Tank

Sludge Management: Sludge is decanted then stored in a holding tank before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Lounsberry Hollow Brook via unnamed tributary and storm sewer	Downstream Confluences:	Black Creek
Via :	Concrete outfall pipe	Receiving River Basin:	Wallkill River Basin
Classification:	FW2-TM (C2)	Watershed Management Area:	02
Latitude (a):	41° 13’ 23”	Watershed:	Pochuck Creek
Longitude (a):	74° 29’ 49.8”	Subwatershed:	Black Creek (below G. George Resort trib)
County:	Sussex	14 digit Hydrologic Unit Code:	02020007040020
Municipality:	Vernon Township	Water Quality Impairments:	Arsenic, Dissolved Oxygen, Biological (Cause Unknown)
Outfall Description			
Outfall Configuration:	Non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.1 cfs
75^{th} percentile flow:	0.3 cfs	MA30CD10 (30Q10)summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.2 cfs

(a) Latitude and Longitude Coordinates for the facility’s “End of Pipe”.

3 Permit Summary Table and Permit Requirements (NJG0023841):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.006 0.17	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.146 0.1675 4 / 50	1.8 2.72	1.8 2.72	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	5.73 6.63 4 / 50	15 22.5	15 22.5	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	130.09 130.18 52 / 2	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	97.35	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.11 0.11 46 / 8	3.6 5.4	3.6 5.4	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	5.76 6.05 46 / 8	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	169.55 168.17	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	86.03	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max	0.924 2.65	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max	38.67 56.1	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.018 0.018 6 / 11	MR 0.06 TMDL	MR 0.06 TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.17 0.17 6 / 11	MR 0.5 TMDL	MR 0.5 TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	14 72	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Weekly Avg. Daily Avg.	8.66 8.66	6.0 MR	6.0 MR	1/ Month	1/ Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	1.7 1.7	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	1 12.83 27.6	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	Su	Instant. Min. Instant. Max.	6.08 8.47	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N), Summer: May 1 - Oct. 31	kg/d	Monthly Avg. Daily Max.	0.001 0.002	0.31 0.46	0.31 0.46	1/ Month	1/ Month
Ammonia (Total as N), Summer: May 1 – Oct. 31	mg/L	Monthly Avg. Daily Max.	0.16 0.16	2.6 3.8	2.6 3.8	1/ Month	1/ Month
Ammonia (Total as N), Winter: Nov.1 – Apr. 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0163 0.06 6 / 22	0.31 0.46	0.31 0.46	1/ Month	1/ Month
Ammonia (Total as N), Winter: Nov. 1 – Apr. 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.606 1.03 5 / 23	2.6 3.8	2.6 3.8	1/ Month	1/ Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Total Recoverable Zinc	g/day	Monthly Avg. Daily Max # Det. / # ND	1.20 3.81 8 / 0	MR 13.6	MR 13.6	1/ 6 Months	1/ 6 Months
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max # Det. / # ND	51.05 87.2 8 / 0	MR 112.5	MR 112.5	1/ 6 Months	1/ 6 Months
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	-- 19.2 2/3	MR MR	MR MR	1/ Year (WCR)	1/6 Months (DMR)
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	%	Minimum	20	55	55	1 / Year	1 / Year

Footnotes and Abbreviations (NJG0023841):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Union Township Elementary School - NJG0024091

1 Facility Description:

NJPDES Flow Value: 0.011 MGD

Treatment Units:
1. Comminutor
2. Aeration and pH maintenance tank
3. Clarifier
4. Chlorination/dosing tank
5. Sand filter bed
6. Dechlorination
7. Post aeration

Sludge is transported off-site where it is managed at an approved residuals management site, which is currently Passaic Valley Sewage Authority.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Mulhockaway Creek	Downstream Confluences:	Mulhockaway Creek
Via :	Unnamed tributary	Receiving River Basin:	Raritan River Basin
Classification:	FW2-TP (C1)	WMA:	08
Latitude:	40° 37’ 57”	Watershed:	Raritan River SB (3 Brdgs to Spruce Run)
Longitude:	74° 58’ 16.9”	Subwatershed:	Mulhockaway Creek
County:	Hunterdon	14 digit Hydrologic Unit Code:	02030105020030
Municipality:	Union Township	Water Quality Impairments:	Arsenic and Temperature
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.1 cfs	MA7CD10 (7Q10) summer:	0.1 cfs
MA7CD10 / 7Q10:	0.1 cfs	MA7CD10 (7Q10) winter:	0.2 cfs
75^{th} percentile flow (d):	0.2 cfs	MA30CD10 (30Q10) summer:	0.1 cfs
		MA30CD10 (30Q10) winter:	0.3 cfs

3 Permit Summary Table and Permit Requirements (NJG0024091):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.001 0.06	MR MR	MR MR	Continuous	Continuous
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.021 0.021 20 / 34	0.33 0.5	0.33 0.5	1/Month	1/Month
5 Day Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg. Weekly Avg. #Det / #ND	3.775 3.775 20 / 34	8.0 12	8.0 12	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	243.01 243.01	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	82.84	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.03 0.03 7 / 11	0.33 0.5	0.33 0.5	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	4.85 5.29 7 / 11	8.0 12	8.0 12	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	652.74 658.24	MR MR	MR MR	1/Month	1/Month
TSS Minimum Percent Removal	%	Monthly Avg.	77.59	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	0.14 0.42	MR MR	MR MR	1/ Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	23.69 42.34	MR MR	MR MR	1/ Year	1 / 6 Months
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.002 0.002 7 / 11	1.0 MR TMDL	1.0 MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.36 0.36 7 / 11	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max # Det. / # ND	45.03 1190 39 / 6	126 MR	126 MR	1 / Month	1 / Month
Dissolved Oxygen (minimum)	mg/L	Monthly Avg. Daily Avg.	8.68 7.66	MR 7.0	MR 7.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	1.40 1.40	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3.5 14.27 28.70	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.08 8.61	6.5 8.5	6.5 8.5	1/Day	1/Day
Ammonia (Total as N) DO based - May 1 - Oct. 31	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.02 0.02 5 / 21	MR MR	MR MR	1/Month	1/Month
Ammonia (Total as N) DO based - May 1 - Oct. 31	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	1.87 1.87 4 / 22	1.0 MR	1.0 MR	1/Month	1/Month
Ammonia (Total as N) Nov. 1 - Apr. 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.055 0.45 15 / 13	MR MR	MR MR	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) Nov.1 - Apr 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	5.85 31.6 14 / 14	MR MR	MR MR	1/Month	1/Month
Chlorine Produced Oxidants (CPO)	kg/day	Monthly Avg. Daily Max. # Det. / # ND	<0.01 0.0001 8 / 46	MR 0.0042	MR 0.0042	1/Day	1/Day
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max. # Det. / # ND	<0.01 <0.01 0 / 54	MR 0.1	MR 0.1	1/Day	1/Day
Total Recoverable Copper	g/d	Monthly Avg. Daily Max.	-- --	-- --	MR 4 (1)	--	1/Quarter
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	26.2 89 15 / 4	MR MR	MR 96.3 (1)	1/Quarter	1/Quarter
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max. # Det. / # ND	26.2 89 15 / 4	MR MR	MR MR	1/Quarter	1/Quarter
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	% effluent	Minimum	43.1 (2)	MR	MR	1/ 6 Months	1/ 6 Months

Footnotes and Abbreviations (NJG0024091):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

(1) From EDP to EDP + 36 months, monthly Copper monitoring is still applicable. From EDP + end of 36 months until permit expiration, the newly calculated Copper limitations will be imposed.

(2) The Chronic Whole Effluent Toxicity (WET) test results for NJG0024091 are as follows: >100.0, 64.3, >100.0, 43.1, 43.1, >100.0, 81.9, >100.0 and >100.0.

Pope John XXIII High School – NJG0027049

1 Receiving Water Information:

NJPDES Flow Value: 0.022 MGD

Treatment Units:
1. Comminutor
2. Bar Screen
3. Surge Tank
4. Return Activated Sludge Tank
5. Steel Tank with Dual Media Filter
6. Ultraviolet (UV) Disinfection Chamber
7. Metal Tanks with Aerators

Sludge is stored in a holding tank before being managed at an approved residuals management site.

2 Facility Description:

General Information		Watershed Information	
Receiving Water:	Unnamed tributary to Fox Hollow Lake	Downstream Confluences:	Lake Mohawk
Via :	Publicly owned storm sewer	Receiving River Basin:	Delaware River Basin (Zone 1D)
Classification (a):	FW2-NT (C1)	WMA:	01-Upper Delaware River
Latitude:	41° 01’ 56.7”	Watershed:	Paulins Kill (above Stillwater Village)
Longitude:	74° 39’ 59”	Subwatershed:	Sparta Junction tribs
County:	Sussex	14 digit Hydrologic Unit Code:	02040105040050
Municipality:	Sparta	Water Quality Impairments:	Dissolved Oxygen, Phosphorus, Temperature
Outfall Description			
Outfall Configuration:	N/A- discharge to a publicly owned storm sewer	Submerged Pipe Characteristics:	N/A
Current Receiving Stream Design Low Flow Values *			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.0 cfs
75^{th} percentile flow:	0.0 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.0 cfs

3 Permit Summary Table and Permit Requirements (NJG0027049):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.004 0.02	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.26 0.26 12 / 42	2.08 3.33	2.08 3.33	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	6.45 6.45 12 / 42	25 40	25 40	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	179.22 179.22	MR MR	MR MR	1/Month	1/Month
BOD_5 Minimum Percent Removal	%	Monthly Avg.	85.1	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.13 0.13 35 / 19	2.5 3.75	2.5 3.75	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	8.17 8.17 35 / 19	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	173.31 173.31	MR MR	MR MR	1/Month	1/Month
TSS Minimum Percent Removal	%	Monthly Avg.	91.03	85	85	1/Month	1/Month
Total Dissolved Solids (TDS)	mg/L	Monthly Avg. Daily Max.	1138.89 1700	MR MR	MR MR	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max	1.20 1.80	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max	66.87 103	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.004 0.004	MR MR SVAP	MR MR SVAP	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	0.26 0.24	MR MR SVAP	MR MR SVAP	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	48.51 1050	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg. Instant Min.	8.19 5.11	5.0 4.0	5.0 4.0	1/ Month	1/ Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	7.55 9.47	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3 14.84 25	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.1 8.4	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N), Summer, May 1 – Oct. 31	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.005 0.013 9 / 17	0.18 0.30	0.18 0.30	1/ Month	1/ Month
Ammonia (Total as N), Summer, May 1 – Oct. 31	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.37 0.948 9 / 17	2.4 4.0	2.4 4.0	1/ Month	1/ Month
Ammonia (Total as N), Winter, Nov. 1 – Apr. 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.018 0.112 9 / 19	0.19 0.32	0.19 0.32	1/ Month	1/ Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N), Winter, Nov. 1 – Apr. 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	1.08 6.55 9 / 19	2.5 4.2	2.5 4.2	1/ Month	1/ Month
Chronic Toxicity, *Ceriodaphnia dubia*	% effluent	Minimum	4.3	61	61	1 / 6 Months	1 / 6 Months

Footnotes and Abbreviations (NJG0027049):

MR Monitor and report only SVAP Stream Visual Assessment Protocol

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Sparta Alpine School – NJG0027065

1 Facility Description:

NJPDES Flow Value: 0.025 MGD

Treatment Units:
1. Muffin Monster
2. Equalization Tank
3. Sequencing Batch Reactor
4. Dosing Tank
5. Drum Filter
6. Ultraviolet Disinfection

Sludge Management: Sludge is managed off-site at an approved sludge management operation.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Paulins Kill via an unnamed tributary	Downstream Confluences:	Paulins Kill
Via :	Outfall pipe	Receiving River Basin:	Delaware River Basin (Zone 1D)
Classification (a):	FW2-NT (C1)	WMA:	
Latitude:	41° 01’ 20”	Watershed:	Paulins Kill (above Stillwater Village)
Longitude:	74° 40’ 37”	Subwatershed:	Paulins Kill (above Rt 15)
County:	Sussex	14 digit Hydrologic Unit Code:	02040105040050
Municipality:	Sparta Township	Water Quality Impairments:	Dissolved Oxygen, Biological (Cause Unknown), Phosphorus
Outfall Description			
Outfall Configuration:	Partially submerged pipe	Submerged Pipe Characteristics:	*N/A*

Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.0 cfs
75th percentile flow:	0.0 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.0 cfs

3 Permit Summary Table and Permit Requirements (NJG0027065):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0041 0.022	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0825 0.0825 24 / 30	1.4 1.4	1.4 1.4	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	5.364 5.364 22 / 32	15 15	15 15	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	194.7 194.7	MR MR	MR MR	1/Month	1/Month
BOD_5 Minimum Percent Removal	%	Monthly Avg.	86.57	95	95	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.1157 0.1159 49 / 5	2.9 4.4	2.9 4.4	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	7.516 7.516 49 / 5	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	180.4 180.4	MR MR	MR MR	1/Month	1/Month
TSS Minimum Percent Removal	%	Monthly Avg.	84.38	85	85	1/Month	1/Month
Total Dissolved Solids (TDS)	mg/L	Monthly Avg. Daily Max.	755.27 994	MR MR	MR MR	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max	1.14 3.51	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max	68.65 120	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. # Det. / # ND	0.0121 18 / 5	MR TMDL	MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. # Det. / # ND	0.76 18 / 5	1.0 TMDL	1.0 TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max # Det. / # ND	48.38 118.7 35 / 17	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Instant. Min. Daily Avg.	6.2 7.527	4.0 5.0	4.0 5.0	1/ Month	1/ Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	7.645 9.39 2 / 21	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3.3 16.22 35.5	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.45 7.8	6.5 8.5	6.5 8.5	1/Day	1/Day
Ammonia (Total as N) Summer – May 1 to Oct. 31	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0115 0.03 4 / 20	0.37 0.57	0.37 0.57	1/ Month	1/ Month
Ammonia (Total as N) Summer – May 1 to Oct. 31	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.775 2.1 4 / 20	3.9 6	3.9 6	1/ Month	1/ Month
Ammonia (Total as N) Winter – Nov. 1 to April 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0338 0.13 8 / 20	0.40 0.66	0.40 0.66	0.40 0.66	0.40 0.66

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) Winter – Nov. 1 to April 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	2.206 5 8 / 20	4.2 7	4.2 7	4.2 7	4.2 7
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	-- 28.2 4/1	MR MR	MR MR	1/Year (WCR)	1 / 6 Months (DMR)
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	% effluent	Minimum	2 (1)	MR	61 (2)	1 / Year	1 / 6 Months

Footnotes and Abbreviations (NJG0027065):

MR Monitor and report only TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values

(1) The Chronic Whole Effluent Toxicity (WET) test results for NJG0027065 are as follows: 10.6, >100, 2, 54.4 and 64.6.
(2) From EDP to EDP + 36 months, Chronic WET monitoring is still applicable. From EDP + end of 36 months until permit expiration, the newly calculated Chronic WET limitation will be imposed.

Lester D. Wilson Elementary School – NJG0027553

1 Facility Description:

NJPDES Flow Value: 0.0075 MGD

Treatment Units:
1. Septic tank
2. Underground denitrification / nitrification sand filter
3. Underground polishing sand filter
4. Ultraviolet (UV) disinfection unit

Sludge Management: Sludge is pumped from the septic tank and then trucked to an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Unnamed Tributary	Downstream Confluences:	Nishisakawick Creek
Via :	Outfall Pipe	Receiving River Basin:	Delaware River Basin (Zone 1E)
Classification:	FW2-NT (C1)	WMA:	11
Latitude:	40°34’ 08”	Watershed:	Hakihokakae/Harihokake/Nishisakawick Creek
Longitude:	75° 01’26”	Subwatershed:	Nishisakawick Creek (above 40d, 33m)
County:	Hunterdon	14 digit Hydrologic Unit Code:	02040105170040
Municipality:	Alexandria Township	Water Quality Impairments:	None
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.1 cfs
75th percentile flow (b):	0.3 cfs	MA30CD10 (30Q10) summer:	0.1 cfs
		MA30CD10 (30Q10) winter:	0.2 cfs

3 Permit Summary Table and Permit Requirements (NJG0027553):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0006 0.0221	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0062 0.0062 48 / 6	0.71 1.06	0.71 1.06	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.995 3.995 4 / 50	25 37.5	25 37.5	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	343.7 358.7	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	32.8	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.009 0.009 49 / 5	0.85 1.28	0.85 1.28	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.118 3.118 23 / 31	30 45	30 45	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	702.2 702.2	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	67.5	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	0.0162 0.0445	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	12.83 22.6	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0044 0.0044 19 / 0	MR MR SVAP	MR MR SVAP	1/ Quarter	1/ Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	1.634 1.634 19 / 0	MR MR SVAP	MR MR SVAP	1/ Quarter	1/ Quarter
E Coli (geometric mean)	# per 100mL	Monthly Avg. Weekly Avg.	13.9 58	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Instant Min. Daily Avg.	4 8.368	4.0 5.0	4.0 5.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	1.763 2 8 / 11	10 15	10 15	1/ Quarter	1/ Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	5.1 15.60 29.6	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.35 8.23	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) Summer – May 1 to Oct. 31	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0033 0.0317 25 / 1	MR 0.29	MR 0.29	1/Month	1/Month
Ammonia (Total as N) Summer – May 1 to Oct. 31	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	1.053 8.9 14 / 12	MR 10.2	MR 10.2	1/Month	1/Month
Ammonia (Total as N) Winter – Nov. 1 to April 30	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.0019 0.0251 26 / 2	MR 0.52	MR 0.52	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) Winter – Nov. 1 to April 30	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	1.269 5.4 12 / 16	MR 18.4	MR 18.4	1/Month	1/Month
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	2.703 6.7 9 / 8	MR MR	MR MR	1/Year (DMR)	1/Year (WCR)
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	%	Minimum	94.1	MR	MR	1/ 6 Months	1/ Year

Footnotes and Abbreviations (NJG0027553):

MR Monitor and report only SVAP Stream Visual Assessment Protocol

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Kittatinny Regional High School - NJG0028894

1 Facility Description:

NJPDES Flow Value: 0.045 MGD

Treatment Units:

1. Bar Screen
2.
2. Equalization Tank
3. Aeration Tank
4. Clarifiers (2 units)
5. Concrete Lined Settling Tank
6. Ultraviolet (UV) Disinfection
7. Aerated Manhole

Sludge Management: Sludge is managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Paulins Kill	Downstream Confluences:	Delaware River
Via :	Outfall Pipe	Receiving River Basin:	Delaware River Basin (Zone 1D)
Classification:	FW2-NT	WMA:	01: Upper Delaware
Latitude:	41° 06’ 14”	Watershed:	Paulins Kill (above Stillwater Village)
Longitude:	74° 45’ 29.8”	Subwatershed:	Paulins Kill (Paulins Kill outlet to Dry Brook)
County:	Sussex	14 digit Hydrologic Unit Code:	02040105040080
Municipality:	Hampton	Water Quality Impairments:	Arsenic
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values *			
MA1CD10 / 1Q10:	7.3 cfs	MA7CD10 (7Q10) summer:	8.8 cfs
MA7CD10 / 7Q10:	8.8 cfs	MA7CD10 (7Q10) winter:	15 cfs
75th percentile flow:	33 cfs	MA30CD10 (30Q10) summer:	11 cfs
		MA30CD10 (30Q10) winter:	22 cfs

3 Permit Summary Table and Permit Requirements (NJG0028894):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.005 0.021	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.1503 0.1503 37 / 17	4.2 6.8	4.2 6.8	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	6.030 6.030 37 / 17	25 40	25 40	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	171.1 169.8	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	74.29	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg.	0.2284 0.2284	5.1 7.6	5.1 7.6	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	8.861 8.861	30 45	30 45	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	164.89 165.45	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	27.73	85	85	1/Month	1/Month
Total Dissolved Solids (TDS)	mg/L	Monthly Avg. Daily Max.	987.1 1220	MR MR	MR MR	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	0.420 0.79	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	35.9 55.2	MR MR	MR MR	1/ Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.1093 0.1093 7 / 5	MR MR	MR MR	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	0.2713 0.2713 7 / 5	1.0 MR	1.0 MR	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	21.47 92	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Instant Min. Daily Avg.	7.07 8.48	4.0 5.0	4.0 5.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	1.6 1.6 1 / 17	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	0.3 13.11 28.3	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.36 10.51	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) DO based Summer - May 1 to Oct.31	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0449 0.21 9 / 17	3.4 MR	3.4 MR	1/Month	1/Month
Ammonia (Total as N) DO based Summer - May 1 to Oct.31	mg/L	Monthly Avg. Daily Max. # Det. / # ND	1.796 6.58 9 / 17	20 MR	20 MR	1/Month	1/Month
Ammonia (Total as N) Winter - Nov. 1 to April 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.097 0.81 16/ 12	3.4 MR	3.4 MR	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) Winter - Nov. 1 to April 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	3.347 25.7 15 / 13	20 MR	20 MR	1/Month	1/Month
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	24.01 65.9 8 / 10	MR MR	MR MR	1/Quarter	1/Quarter
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max. # Det. / # ND	50.48 88.9 18 / 0	MR MR	MR MR	1/Quarter	1/Quarter
Acute Toxicity, LC50 *Pimephales promelas*	% effluent	Minimum	>100	AL 50	AL 50	1/Year	1/Year

Footnotes and Abbreviations (NJG0028894):

MR Monitor and report only AL Action Level

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Robert Erskine School – NJG0029432

1 Facility Description:

NJPDES Flow Value: 0.008 million gallons per day (MGD).

The wastewater treatment plant at Robert Erskine School also processes the sanitary wastewater from Peter Cooper School which is transferred over approximately two (2) times a week.

Treatment Units*:*
1. Bar Screen
2. Equalization Tank (Influent Well)
3. Extended Aeration Tank – Addition of Caustic Soda and Alum
4. Secondary Clarifier (Settling Tank)
5. Mud Well
6. Carbon Filters (2 units)
7. Post Aeration Tank
5. Ultraviolet (UV) Disinfection Chamber

Sludge Management: Sludge generated at this facility is held in a holding tank before being managed off-site at an approved residuals management operation.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Erskine Brook via storm sewer	Downstream Confluences:	Wanaque Reservoir
Via :	Outfall pipe	Receiving River Basin:	Passaic
Classification:	FW2-TM (C1)	WMA:	03
Latitude:	41° 05’ 31.5”	Watershed:	Wanaque River
Longitude:	74° 15’ 52.6”	Subwatershed:	Wanaque Reservoir (below Monks gage)
County:	Passaic	14 digit Hydrologic Unit Code:	02030103070050
Municipality:	Ringwood Borough	Water Quality Impairments:	None
Outfall Description			
Outfall Configuration:	submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.0 cfs	MA7CD10 (7Q10) summer:	0.0 cfs
MA7CD10 / 7Q10:	0.0 cfs	MA7CD10 (7Q10) winter:	0.1 cfs
75th percentile flow:	0.3 cfs	MA30CD10 (30Q10) summer:	0.0 cfs
		MA30CD10 (30Q10) winter:	0.2 cfs

3 Permit Summary Table and Permit Requirements (NJG0029432):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0008 0.009	MR MR	MR MR	Continuous	Continuous
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	kg/d	Monthly Avg. Weekly Avg.	0.0054 0.0054	0.24 0.36	0.24 0.36	1/Month	1/Month
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg. Weekly Avg.	1.27 1.24	8 12	8 12	1/Month	1/Month
Influent $CBOD_5$	mg/L	Monthly Avg. Weekly Avg.	108.19 108.19	MR MR	MR MR	1/Month	1/Month
$CBOD_5$ Min. Percent Removal	%	Monthly Avg.	87	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg.	0.015 0.015	0.91 1.4	0.91 1.4	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	5.61 5.66	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	464.47 464.47	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	96.78	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	0.024 0.024	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	33.0 33.0	MR MR	MR MR	1/ Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.0015 0.0015	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	0.397 0.397	1.6 2.4 TMDL	1.6 2.4 TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max.	12.16 365.0	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Monthly Avg. Instant Min	8.98 7.95	MR 7.0	MR 7.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	8.18 8.18	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	8 15.76 24	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	5.56 8.49	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) DO based Summer, May 1 to Oct.31	kg/d	Monthly Avg. Weekly Avg.	0.00087 0.00079	0.06 0.09	0.06 0.09	1/Month	1/Month
Ammonia (Total as N) DO based Summer, May 1 to Oct.31	mg/L	Monthly Avg. Weekly Avg.	0.24 0.24	2 3	2 3	1/Month	1/Month
Ammonia (Total as N) Toxicity based Winter - Nov. 1 to April 30	kg/d	Monthly Avg. Daily Max.	0.00086 0.003	MR 0.21	MR 0.21	1/Month	1/Month
Ammonia (Total as N) Toxicity based Winter - Nov. 1 to April 30	mg/L	Monthly Avg. Daily Max.	0.21 0.4	MR 7.0	MR 7.0	1/Month	1/Month
Total Recoverable Copper	gr/d	Monthly Avg. Daily Max. # Det. / # ND	0.041 0.07 3 / 0	MR MR	MR MR	1/Year	1 / 6 Months

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Total Recoverable Copper	µg/L	Monthly Avg. Daily Max. # Det. / # ND	21.47 28.0 3 / 0	MR MR	MR MR	1/ Year	1 / 6 Months
Total Recoverable Zinc	gr/d	Monthly Avg. Daily Max. # Det. / # ND	0.15 0.23 3 / 0	MR MR	MR MR	1/ Year	1 / 6 Months
Total Recoverable Zinc	µg/L	Monthly Avg. Daily Max. # Det. / # ND	132.1 318 3 / 0	MR MR	MR MR	1/ Year	1 / 6 Months
Chronic Toxicity, IC25 *Ceriodaphnia dubia*	% effluent	Minimum	>100	MR	MR	1/Year	1/Year

Footnotes and Abbreviations (NJG0029432):

MR Monitor and report only

TMDL – Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

North Warren Regional School District– NJG0031046

1 Facility Description:

NJPDES Flow Value: 0.02 MGD

Treatment Units:
1. Bar screen
2. Comminutor
3. Activated sludge with clarification
4. Sodium hypochlorite disinfection
5. Sulfur dioxide dechlorination
6. Post aeration

Sludge is stored in a holding tank before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Paulins Kill	Downstream Confluence:	Delaware River
		Receiving River Basin:	Delaware River Basin (Zone 1D)
Via :	Outfall pipe	WMA:	01
Classification:	FW2-TM (C1)*	Watershed:	Upper Delaware
Latitude:	40° 58’ 46.8”	Subwatershed:	Paulins Kill (below Blairstown gauge)
Longitude:	74° 59’ 16.2”	14 digit Hydrologic Unit Code:	020401005050050
County:	Warren	Outfall Configuration:	non-submerged pipe
Municipality:	Blairstown Township	Water Quality Impairments:	Temperature, Mercury & PCB in fish tissue
Current Receiving Stream Design Low Flow Values *			
MA1CD10 / 1Q10:	13 cfs	MA7CD10 (7Q10) summer:	18 cfs
MA7CD10 / 7Q10:	18 cfs	MA7CD10 (7Q10) winter:	32 cfs
75^{th} percentile flow:	75 cfs	MA30CD10 (30Q10) summer:	23 cfs
		MA30CD10 (30Q10) winter:	48 cfs

*The receiving waterbody classification has changed since the January 1, 2017 Master General Permit.

3 Permit Summary Table and Permit Requirements (NJG0031046):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.004 0.096	MR MR	MR MR	Continuous	Continuous
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	kg/d	Monthly Avg. Weekly Avg.	0.086 0.086	1.89 3.03	1.89 3.03	1/ Month	1/ Month
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg. Weekly Avg.	6.54 6.54	25 40	25 40	1/ Month	1/ Month
Influent $CBOD_5$	mg/L	Monthly Avg. Weekly Avg.	134.33 134.33	MR MR	MR MR	1/ Month	1/ Month
$CBOD_5$ Minimum Percent Removal	%	Monthly Avg.	91.88	85	85	1/ Month	1/ Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.18 0.20 54 / 0	2.28 3.41	2.28 3.41	1/ Month	1/ Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	10.7 11.11 36 / 18	30 45	30 45	1/ Month	1/ Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	179.3 179.3	MR MR	MR MR	1/ Month	1/ Month
TSS Minimum Percent Removal	%	Monthly Avg.	91.1	85	85	1/ Month	1/ Month
Total Dissolved Solids (TDS)	mg/L	Monthly Avg. Daily Max.	518.0 763.0	MR MR	MR MR	1/Quarter	1/Quarter
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	1.15 3.31	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	41.03 95.6	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg.	0.03 0.03	MR MR	MR MR	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg.	1.77 1.77	MR MR	MR MR	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max # Det. / # ND	10.7 800 23 / 21	126 MR	126 MR	1/ Month	1/ Month
Dissolved Oxygen (minimum)	mg/L	Daily Avg. Instant Min.	9.75 6.75	6.0 5.0	6.0 5.0	1/ Month	1/ Month
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # ND	1.575 2.5 8 / 10	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3.2 15.23 23.9	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.48 8.94	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N) DO based Summer - May 1 to Oct.31	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.029 0.72 26 / 0	1.38 2.01	1.38 2.01	1/ Month	1/ Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N) DO based Summer - May 1 to Oct. 31	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.13 0.78 26 / 0	18.2 26.6	18.2 26.6	1/ Month	1/ Month
Ammonia (Total as N) Winter - Nov. 1 to April 30	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.037 0.06 28 / 0	MR MR	MR MR	1/ Month	1/ Month
Ammonia (Total as N) Winter - Nov. 1 to April 30	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.38 3.38 28 / 0	20 MR	20 MR	1/ Month	1/ Month
Chlorine Produced Oxidants (1)	kg/day	Monthly Avg. Daily Max. # Det. / # ND	0.0002 -- 51/0	0.008 --	0.008 MR	1/Day	1/Day
Chlorine Produced Oxidants (1)	mg/L	Monthly Avg. Daily Max. # Det. / # ND	0.012 -- 34 / 17	0.1 --	0.1 MR	1/Day	1/Day
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	5.14 25.0 18 / 0	MR MR	MR MR	1/Quarter	1/Quarter
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max. # Det. / # ND	10.02 130 15 / 3	MR MR	MR MR	1/Quarter	1/Quarter
Acute Toxicity, LC50 *Ceriodaphnia*	% effluent	Minimum	>100	AL 50	AL 50	1/ Year	1/ Year

Footnotes and Abbreviations (NJG0031046):

MR Monitor and report only AL Action Level

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

(1) Permittee reported "0" three times which was not considered in average calculations as it appears to be an error.

High Point Regional High School – NJG0031585

1 Facility Description:

The facility's permitted flow value is 0.03 million gallons per day (MGD).

Treatment Units:
1. Comminutor
2. Aeration Tank
3. Clarifiers (2) Primary & Secondary in succession
4. Tertiary Filters (2) in parallel
5. Clear Well (post aeration)
6. Ultraviolet (UV) Disinfection Chamber

Sludge Management: Sludge is held in a holding tank before being managed at an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Papakating Creek West Branch	Downstream Confluences:	Wallkill River
Via :	Outfall pipe	Receiving River Basin:	Wallkill River Basin
Classification:	**FW2-NT (C1)***	WMA:	02
Latitude:	41° 12' 12.3"	Watershed:	Papakating Creek
Longitude:	74° 38' 35.4"	Subwatershed:	Papakating Creek West Branch (below 74d39m30s side road)
County:	Sussex	14 digit Hydrologic Unit Code:	02020007020050
Municipality:	Wantage Township	Water Quality Impairments:	None
Outfall Description			
Outfall Configuration:	non-submerged pipe		
Current Receiving Stream Design Low Flow Values			
MA1CD10 /1Q10:	0.3 cfs	MA7CD10 (7Q10) summer:	0.4 cfs
MA7CD10 / 7Q10:	0.4 cfs	MA7CD10 (7Q10) winter:	0.8 cfs
75th percentile flow:	2.7 cfs	MA30CD10(30Q10)summer:	0.5 cfs
		MA30CD10(30Q10) winter:	1.5 cfs

*The receiving waterbody classification has changed since the January 1, 2017 Master General Permit.

3 Permit Summary Table and Permit Requirements (NJG0031585):

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0043 0.0375	MR MR	MR MR	Continuous	Continuous
5 Day Biochemical Oxygen Demand (BOD_5)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.11 0.11 9 / 45	1.7 1.7	1.7 1.7	1/Month	1/Month
5 Day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	3.94 3.94 5 / 49	15 15	15 15	1/Month	1/Month
Influent BOD_5	mg/L	Monthly Avg. Weekly Avg.	243.64 243.64	MR MR	MR MR	1/Month	1/Month
BOD_5 Min. Percent Removal	%	Monthly Avg.	98.7	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg.	0.11 0.1	3.4 5.1	3.4 5.1	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	4.44 4.44	30 45	30 45	1/Month	1/Month
Influent Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	276.1 276.1	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	93.66	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	0.91 1.98	MR MR	MR MR	1/Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	24.59 46.72	MR MR	MR MR	1/Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.064 0.064 18 / 0	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	2.92 2.92 18 / 0	MR MR TMDL	MR MR TMDL	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	21.5 120	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Instant Min. Daily Avg. Min.	7.73 7.73	4.0 5.0	4.0 5.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	1.6 1.8	10 15	10 15	1/ Quarter	1/ Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	1.0 13.4 26.0	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.68 8.6	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia Total (as N) Summer – May 1 to Oct. 31	kg/d	Monthly Avg. Weekly Avg.	0.12 0.12	MR MR	MR MR	1/Month	1/Month
Ammonia Total (as N) Summer – May 1 to Oct. 31	mg/L	Monthly Avg. Weekly Avg.	4.5 4.5	MR MR	MR MR	1/Month	1/Month
Ammonia Total (as N) Winter – Nov. 1 to April 30	kg/d	Monthly Avg. Weekly Avg.	0.13 0.13	MR MR	MR MR	1/Month	1/Month
Ammonia Total (as N) Winter – Nov. 1 to April 30	mg/L	Monthly Avg. Weekly Avg.	3.42 3.42	MR MR	MR MR	1/Month	1/Month
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max. # Det. / # ND	22.45 54.0 11 / 7	MR MR	MR MR	1/Quarter	1/Quarter

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Total Recoverable Zinc	mg/L	Monthly Avg. Daily Max. # Det. / # ND	100.13 277.0 19 / 0	MR MR	MR MR	1/Quarter	1/Quarter
Acute Toxicity, LC50 *Ceriodaphnia dubia*	% effluent	Minimum	>100	50 AL	50 AL	1/Year	1/Year

Footnotes and Abbreviations (NJG0031585):

MR Monitor and report only AL Action Level TMDL Total Maximum Daily Load

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

Alexandria Middle School- NJG0035670

1 Facility Description:

NJPDES Flow Value: 0.0099 MGD

Treatment Units:
1. Comminutor
2. Aerated equalization tank
3. Extended aeration activated sludge tank
4. Clarifier
5. Rapid sand filter (steel tank)
6. Ultraviolet (UV) disinfection system

Sludge Management: Sludge is stored in holding tanks before being removed to an approved residuals management site.

2 Receiving Water Information:

Outfall Designator: 001A

General Information		Watershed Information	
Receiving Water:	Nishisakawick Creek	Downstream Confluences:	Delaware River
Via :	Outfall pipe	Receiving River Basin:	Delaware River Basin (Zone 1E)
Classification:	FW2-NT (C1)	WMA :	11
Latitude:	40° 34’ 23”	Watershed:	Hakihokake / Nishisakawick Ck
Longitude:	75° 00’ 36.8”	Subwatershed:	Nishisakawick Creek (above 40d 33m)
County:	Hunterdon	14 digit Hydrologic Unit Code:	02040105170040
Municipality:	Alexandria Township	Water Quality Impairments:	None
Outfall Description			
Outfall Configuration:	non-submerged pipe	Submerged Pipe Characteristics:	N/A
Current Receiving Stream Design Low Flow Values			
MA1CD10 / 1Q10:	0.1 cfs	MA7CD10 (7Q10) summer:	0.1 cfs
MA7CD10 / 7Q10:	0.1 cfs	MA7CD10 (7Q10) winter:	0.3 cfs
75^{th} percentile flow:	0.5 cfs	MA30CD10 (30Q10) summer:	0.1 cfs
		MA30CD10 (30Q10) winter:	0.4 cfs

3 Permit Summary Table and Permit Requirements (NJG0035670)

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Flow	MGD	Monthly Avg. Daily Max.	0.0026 0.0077	MR MR	MR MR	Continuous	Continuous
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	kg/d	Monthly Avg. Weekly Avg. # Det. / # ND	0.015 0.015 53 / 0	0.094 1.405	0.094 1.405	1/Month	1/Month
5 Day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg. Weekly Avg. # Det. / # ND	8.5 8.5 16 / 38	25 37.5	25 37.5	1/Month	1/Month
Influent $CBOD_5$	mg/L	Monthly Avg. Weekly Avg.	70.77 67.39	MR MR	MR MR	1/Month	1/Month
$CBOD_5$ Min. Percent Removal	%	Monthly Avg.	91.83	85	85	1/Month	1/Month
Total Suspended Solids (TSS)	kg/d	Monthly Avg. Weekly Avg.	0.051 0.051	1.12 1.70	1.12 1.70	1/Month	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Weekly Avg.	12.7 12.7	30 45	30 45	1/Month	1/Month
Influent TSS	mg/L	Monthly Avg. Weekly Avg.	192.61 192.61	MR MR	MR MR	1/Month	1/Month
TSS Min. Percent Removal	%	Monthly Avg.	90.41	85	85	1/Month	1/Month
Nitrate (Total as N)	kg/d	Monthly Avg. Daily Max.	0.09 0.48	MR MR	MR MR	1 / Year	1 / 6 Months
Nitrate (Total as N)	mg/L	Monthly Avg. Daily Max.	31.14 66.5	MR MR	MR MR	1 / Year	1 / 6 Months
Phosphorus (Total as P)	kg/d	Monthly Avg. Daily Max. Weekly Avg.	0.017 0.13 --	MR MR -- SVAP	MR -- MR SVAP	1/Quarter	1/Quarter
Phosphorus (Total as P)	mg/L	Monthly Avg. Daily Max. Weekly Avg.	3.99 16.6 --	MR MR -- SVAP	MR -- MR SVAP	1/Quarter	1/Quarter
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	5.23 31.0	126 MR	126 MR	1/Month	1/Month
Dissolved Oxygen (minimum)	mg/L	Instant Min. Daily Avg.	2.0 7.86	4.0 5.0	4.0 5.0	1/Month	1/Month
Oil and Grease	mg/L	Monthly Avg. Instant Max.	2.22 3.0	10 15	10 15	1/Quarter	1/Quarter
Effluent Temperature	°C	Instant. Min. Monthly Avg. Instant. Max.	3.9 14.97 26.4	MR MR MR	MR MR MR	1/Day	1/Day
Effluent pH	su	Instant. Min. Instant. Max.	6.33 8.5	6.0 9.0	6.0 9.0	1/Day	1/Day
Ammonia (Total as N), May 1 – Oct. 31	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.0069 0.37 26 / 0	MR 0.39	MR 0.39	1/Month	1/Month
Ammonia (Total as N), May 1 – Oct. 31	mg/L	Monthly Avg. Daily Max. # Det. / # ND	2.18 52.9 19 / 7	MR 10.5	MR 10.5	1/Month	1/Month
Ammonia (Total as N), Nov. 1 – Apr. 30	kg/d	Monthly Avg. Daily Max. # Det. / # ND	0.023 0.021 28 / 0	0.75 0.82	0.75 0.82	1/Month	1/Month

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 1/1/2017 - 6/30/2021	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY
Ammonia (Total as N), Nov. 1 – Apr. 30	mg/L	Monthly Avg. Daily Max. # Det. / # ND	4.49 40.3 19 / 9	20 22	20 22	1/Month	1/Month
Total Recoverable Copper	g/day	Monthly Avg. Daily Max. # Det. / # ND	0.029 0.69 46 / 0	MR 4	MR 4	1/Quarter	1/Quarter
Total Recoverable Copper	µg/L	Monthly Avg. Daily Max. # Det. / # ND	8.56 95.0 40 / 6	MR 96.2	MR 96.2	1/Quarter	1/Quarter
Total Recoverable Zinc	g/day	Monthly Avg. Daily Max. # Det. / # ND	0.038 0.27 17 / 0	MR MR	MR MR	1/Quarter	1/Quarter
Total Recoverable Zinc	µg/L	Monthly Avg. Daily Max. # Det. / # ND	26.25 183.0 17 / 0	MR MR	MR MR	1/Quar	1/Quarter
Acute Toxicity, LC50 *Ceriodaphnia dubia*	%	Minimum	>100	MR	MR	1/ Year	1/ Year

Footnotes and Abbreviations (NJG0035670):

MR Monitor and report only SVAP Stream Visual Assessment Protocol

Det. / # ND The number of sampling results reported with detectable values versus the number of sampling results reported with non-detectable values.

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: NJ0193381

Draft: Surface Water Master General Permit Renewal

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

Property Owner:
NJPDES Master General Permit Program Interest
Category ASC
Per Individual Notice of Authorization
Division of Water Quality
401-02B; P.O. Box 420
401 East State Street
Trenton, NJ 0862

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

Authorization Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
ASC - Consolidated DSW Renewal School (GP)	*Pending*	*Pending*	*Pending*

By Authority of:
Commissioner's Office

DEP AUTHORIZATION
Susan Rosenwinkel, Bureau Chief
Bureau of Surface Water & Pretreatment Permitting

(Terms, conditions and provisions attached hereto)

PART I
GENERAL REQUIREMENTS:
NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

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

b. General Conditions

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

c. Operation And Maintenance

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

d. Monitoring And Records

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

e. Reporting Requirements

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

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

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

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

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

B. General Conditions

1. Scope

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

2. Permit Renewal Requirement

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

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

3. Notification of Non-Compliance

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

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

4. Notification of Changes

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

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

5. Access to Information

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

6. 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.

7. Permit Renewal Requirement

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

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

8. 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.

9. 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.

10. 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.

11. Operator Certification

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

i. Notifications shall be submitted to:
NJDEP
Bureau of Licensing & Pesticides Operations
Mail Code 401-04E
P.O. Box 420
Trenton, New Jersey 08625-0420
(609) 777-1013

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

12. 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.

13. Standard Reporting Requirements – Monitoring Report Forms (MRFs)

a. As of the effective date identified below, all required monitoring results reported on Monitoring Report Forms (MRFs) shall be electronically submitted to the Department via NJDEP's Electronic Monitoring Report Form (MRF) Submission Service.

b. Any electronic 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.

14. Standard Reporting Requirements - Electronic Submission of NJPDES Information

a. 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):
ASCA Sanitary Outfall	On Individual Authorization		ASC - Consolidated School Sanitary Treatment Plants (GP)

Location Description

Individual authorization will reference latitude and longitude of discharge location.

Contributing Waste Types

Sanitary

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP) Unless specified otherwise, all limits have been retained from the existing permit pursuant to N.J.A.C. 7:14A-13.19. Please refer to the individual authorization for more information.

Comments:

Effluent limitations and monitoring requirements are contained on the Permit Summary Tables and Part III of the individual authorizations.

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

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, Total	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Comments:

Annual monitor and report requirements shall be included for copper and zinc for certain facilities as specified on the WCR form. Bromodichloromethane, bromoform, and chloroform shall be sampled on an annual basis for facilities that chlorinate. See Part III of the individual authorizations for specific sampling requirements.

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Zinc, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Copper, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chloroform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromodichloromethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Cyanide, Total (as CN)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Arsenic, Total Recoverable (as As)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Selenium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Thallium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Beryllium, Total Recoverable (as Be)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Barium, Total Recoverable (as Ba)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Nickel, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Silver, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Cadmium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Lead, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chromium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Antimony, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Mercury Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acenaphthylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acenaphthene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Anthracene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(k)fluoranthene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(a)pyrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis(2-chloroethyl) ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis(2-chloroethoxy) methane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis (2-chloroiso-propyl) ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Butyl benzyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chrysene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Diethyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Dimethyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Diphenyl-hydrazine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Fluoranthene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Fluorene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorocyclo-pentadiene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Isophorone	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodiphenyl-amine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodimethyl-amine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Nitrobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Phenanthrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pyrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(ghi)perylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2,4-Trichloro-benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Dibenzo(a,h) anthracene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2-Chloronaphthalene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Di-n-octyl Phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,6-Dinitrotoluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
3,3'-Dichloro-benzidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Naphthalene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,3-Dichloropropene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2,4,5-Tetrachloro-benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodiethyl-amine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
N-nitrosopyrrolidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chloroform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Toluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acrolein	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acrylonitrile	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chlorodibromomethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Ethylbenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Methyl Bromide	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Methyl Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Methylene Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Tetrachloroethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Trichlorofluoro-methane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1-Dichloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1-Dichloroethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,1-Trichloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,2-Trichloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichloropropane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-trans-Dichloro-ethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromodichloromethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Vinyl Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Trichloroethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-Nitrosodi-n-butylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Phenols	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,5-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dimethylphenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dinitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,6-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years.

Comments:

All parameters on this semi-annual WCR shall be monitored and reported once per permit cycle. The test shall be conducted EDP + 48 months (4 years) and EDP + 54 months (4.5 years). Monitor and report requirements will be contained in the individual authorizations.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Pentachlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Consolidated School Sanitary Treatment Plants (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).

d. In September 2014, EPA codified the use of sufficiently sensitive test methods. Because of this rule update, the Department is removing the existing Required Quantitation Level in this permit as this level does not comply with these regulatory changes. Due to adoption of the sufficiently sensitive test methods rule a new Recommended Quantitation Level (RQL) for CPO of 0.02 mg/L has been developed which has been shown to be attainable using an EPA approved standard method. Specifically, the Department has determined that this RQL is routinely achievable using a handheld colorimetric test (DPD Colorimetric Method (4500-Cl G-11)) where this method is well described in the Standard Methods for the Examination of Water and Wastewater, available at www.standardmethods.org. This method is standard practice in testing for CPO and has been available for decades.
.

e. 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.

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

g. 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.

h. 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.

i. Flow shall be measured using a meter unless specified otherwise in the individual authorization.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

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

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

C. REPORTING

1. Standard Reporting Requirements

a. Please refer to Part II, Section B.9 for Standard Reporting Requirements.

D. SUBMITTALS

1. Standard Submittal Requirements

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

E. FACILITY MANAGEMENT

1. Discharge Requirements

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

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

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

d. The discharge shall not exhibit a visible sheen.

e. The permittee shall comply with the following Capacity Assurance Program (CAP) requirements:.

i. The permittee shall ensure compliance with the CAP regulations and upon triggering the action level in Part III, the permittee is required to initiate the requirements of N.J.A.C. 7:14A-22.16.

ii. For the calculation of the parameter "CAP Threshold" in Part III of the permit, the permittee shall use the permitted flow (MGD) and the 12-month rolling average flow calculated for the parameter of "Flow, In Conduit or Thru Treatment Plant" in the calculation of the percentage of the permitted flow for the month. This percentage shall be reported as the CAP Threshold percentage.

iii. For more information concerning the CAP, please contact the Bureau of Environmental, Engineering and Permitting at (609) 984-4429.

2. Applicability of Discharge Limitations and Effective Dates

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

i. (If a three year compliance schedule is included for the individual authorization- Part III) This permit includes multiple phases for DSN 001A. The "initial" phase limitations and monitoring conditions are effective from the effective date of the permit (EDP) until EDP + 36 months. The "final" limitations and monitoring conditions become effective at the end of EDP + 36 months.

b. Wastewater Characterization Report (WCR) Form Requirements

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

3. Operation, Maintenance and Emergency Conditions

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

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

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

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

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

c. Part III of the individual authorization may contain an effluent limitation or Action Level (AL) for acute Whole Effluent Toxicity. Toxicity Reduction and Implementation Requirements may be triggered based on exceedences of this limitation. See the Toxicity Reduction and Implementation Requirements section below for more details.

d. 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.

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

f. 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.

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

h. Submit an acute whole effluent toxicity test report along with your Discharge Monitoring Reports within twenty-five days after the end of every month 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.

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

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

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

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

d. The permittee shall collect and analyze the concentration of ammonia-N in the effluent on the day a sample is collected for WET testing. This result is to be reported on the Biomonitoring Report Form.

e. 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).

f. 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.

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

h. Submit a chronic whole effluent toxicity test report along with your Discharge Monitoring Reports within twenty-five days after the end of every month 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.

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

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

   i. If the exceedence of the toxicity limit or action level 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 or action level 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 or action level.

   ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit or action level 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 or action level 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 or action level 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 or action level 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 or action level 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 or action level in Part III in four consecutive toxicity tests.

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

iii. Documents regarding Toxicity Investigations shall be sent to the following:
New Jersey Department of Environmental Protection
Mail Code 401-02B
Division of Water Quality
Bureau of Surface Water & Pretreatment Permitting
401 East State Street
P.O. Box 420
Trenton, New Jersey 08625-0420.

F. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

1. There are no pretreatment program requirements for this facility.

G. 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. The Department may modify individual authorizations under this permit through a minor modification in accordance with N.J.A.C. 7:14A-16.5(a)1 to reduce the WET monitoring sample frequency. The criteria for such reduction is a minimum of 4 consecutive data points with a result of >100. The Department may also consider site-specific characteristics such as discharge volume, location and wastewater constituents.

c. The Department may modify individual authorizations under this permit through a minor modification in accordance with N.J.A.C. 7:14A-16.5(a)1 to reduce the monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using a sufficiently sensitive quantification level as defined at 40 CFR 136, 40 CFR 122.21(e)(3), and 40 CFR 122.44(i)(1)(iv).

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

3. Removal or Modification of Final WQBELs or Criteria End-of-Pipe Effluent Limitations for Chemical Specific Toxic Pollutants

a. The Department will consider proposing to remove or modify a toxic pollutant's newly imposed final effluent limitation from the permit if any or all of the information in item "b" below is submitted for Departmental review and consideration.

b. Items that will be considered include, but are not limited to:

i. Submission of additional effluent data.

ii. Acceptable site-specific ambient data (e.g. hardness, pollutant specific data) collected in accordance with a NJDEP approved work plan.

iii. Acceptable site-specific translator values to enable assessment of a dissolved metal versus a total metal ratio. A Water Effects Ratio (WER) study can also be conducted for copper. Guidance regarding a Water Effects Ratio study can be obtained at http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/pollutants/copper/upload/copper Assessment of site-specific translators or a WER shall be developed in accordance with a NJDEP approved work plan.

iv. Acceptable site-specific criteria developed in accordance with a NJDEP approved work plan.

v. Updated 1Q10, 7Q10, 75th percentile, and/or other appropriate stream flow values where applicable.

c. All studies require a NJDEP approved workplan that shall be submitted to the Department for approval prior to commencement of any work.

i. It is recommended that all ambient monitoring associated with the establishment of hardness values, pollutant concentrations, site-specific translator values and/or a WER study be conducted under the confines of a single work plan.

d. The Department will review all submitted information and will either propose a permit action to remove/modify the final effluent limitation(s) or deny the modification request.

H. CUSTOM REQUIREMENTS

1. Best Management Practices (BMPs) for Cleaning Products and Hazardous Wastes

a. Best Management Practices (BMP) shall be followed to control or abate the discharge of toxic pollutants that may result from the use of cleaning products or hazardous substances. Specifically, cleaning agents, paints, and chemistry laboratory chemicals should be used as directed on the product labels and excess product should be disposed of properly as a household hazardous waste based on township and/or county requirements. The permittee is encouraged to develop and implement a BMP Plan based on the schools operations. This BMP Plan is intended to ensure that toxic pollutants are not put into the sanitary wastewater collection system through sinks and floor drains; passed through the treatment system, and ultimately discharged to the receiving waterbody at the surface water outfall.

2. Chlorine Produced Oxidants (CPO)

a. Effluent shall not exceed a daily maximum concentration of 0.1 mg/L for CPO at all times. This requirement also applies to facilities that use UV disinfection even though a routine reporting requirement for CPO is not specified.

3. Delaware River Basin Commission (DRBC) Requirements – applicable to those faciilities which discharge to the Delware River Basin.

a. The permittee shall comply with the DRBC Water Quality Regulations.

b. The below conditions are applicable to the following facilities: NJG0020419, NJG0020711, NJG0022101,NJG0023001, NJG0027049, NJG0027065, NJG0028894, NJG0031046, and NJG0022438 only.

i. 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.

ii. 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. .

iii. The permittee may conduct a study to determine if specific conductance may be substituted for TDS in the permit. The study should include effluent specific data to be used to determine a correlation between TDS and specific conductance. Upon review, the Delaware River Basin Commission will determine if the permit may be modified to allow the substitution of specific conductivity for TDS monitoring. The TDS limit would then be supplanted by a specific conductance limit in the permit. .

iv. 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. .

APPENDIX A:

CHRONIC TOXICITY TESTING SPECIFICATIONS

FOR USE IN THE NJPDES PERMIT PROGRAM

Version 3.0

May 2017

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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.