State of New Jersey

PHIL MURPHY
Governor

SHEILA OLIVER
Lt. Governor

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

CATHERINE R. McCABE
Commissioner

Email Only
May 1, 2020

Bridget M. McKenna, Chief Operating Officer
Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark City, NJ 07105

Re: Final Surface Water Major Mod Permit Action
Category: A - Sanitary Wastewater; CSM - Combined Sewer Management
NJPDES Permit No. NJ0021016
Passaic Valley Sewerage Commissioners
Newark City, Essex County

Dear Ms. McKenna:

Enclosed is a **final** NJPDES permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. This major modification is being issued to modify the renewal permit that was issued by the Department on March 12, 2015. This permit action is being issued in order to incorporate electronic data interchange requirements; relocate language regarding Inflow/Infiltration requirements from the Nine Minimum Control section to the Long Term Control Plan section; revise pretreatment notification requirements; and incorporate various wording modifications to clarify the Department's intent.

This permit package contains the modified permit. Those changes that are affected by this permit action are noted as such on the Table of Contents. This permit action also includes the due date of October 1, 2020 for the Long Term Control Plan, as referenced in the Department's April 15, 2020 stay letter, as included in Part IV.D.3.b.vi for Category CSM.

The thirty (30) day public comment period began on March 20, 2020 when the public notice was published in the *Jersey Journal, Star Ledger* and the *Herald News*. It ended on April 20, 2020. No written comments were received on the draft action during the comment period, and no provisions of the draft permit have been changed in the final permit. Therefore, the right by you, or any third party, to contest the permit conditions in an adjudicatory hearing has been waived pursuant to N.J.A.C. 7:14A-15.13.

Questions or comments regarding the final action should be addressed to Robert Hall by email at Robert.Hall@dep.nj.gov.

Sincerely,

Susan Rosenwinkel

Susan Rosenwinkel
Bureau Chief
Bureau of Surface Water Permitting

Enclosures
cc: Permit Distribution List
Masterfile #: 8439; PI #: 46756

Table of Contents for the Final Permit

This permit package contains the following items with an explanation as to which changes are being incorporated in this subject permit modification as compared to the most recent permit action

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: NJ0021016

Final: Surface Water Major Mod Permit Action

Permittee:
Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark, NJ 07105

Co-Permittee:

Property Owner:
Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark, NJ 07105

Location Of Activity:
Passaic Valley Sewerage Commissioners
600 Wilson Avenue
Newark City, Essex County

Authorizations Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
A - Sanitary Wastewater - Renewal CSM – Combined Sewer Management - Renewal	3/12/2015	7/01/2015	6/30/2020
A - Sanitary Wastewater – Minor Mod	6/01/2015	7/01/2015	6/30/2020
A - Sanitary Wastewater CSM – Combined Sewer Management - Minor Mod	10/09/2015	7/01/2015	6/30/2020
A - Sanitary Wastewater CSM – Combined Sewer Management - Major Mod – Bypass Authorization	12/10/2019	1/01/2020	6/30/2020
A - Sanitary Wastewater CSM – Combined Sewer Management - Major Mod	5/01/2020	6/01/2020	6/30/2020

By Authority of:
Commissioner's Office

Susan Rosenwinkel

DEP AUTHORIZATION
Susan Rosenwinkel, Bureau Chief
Bureau of Surface Water Permitting
Water Pollution Management Element
Division of Water Quality

(Terms, conditions and provisions attached hereto)

PART I
GENERAL REQUIREMENTS:
NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

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

b. General Conditions

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

c. Operation And Maintenance

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

d. Monitoring And Records

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

e. Reporting Requirements

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

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

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

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

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

B. General Conditions

1. Scope

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

2. Permit Renewal Requirement

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

b. Submit a complete permit renewal application: 180 days before the Expiration Date.

3. Notification of Non-Compliance

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

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

4. Notification of Changes

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

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

5. Access to Information

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

6. Operator Certification

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

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

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

7. Operation Restrictions

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

C. Custom Requirement

1. CSO Reopener Clause

a. This reopener clause authorizes the NJDEP to reopen and modify the permit upon determination that the CSO controls as contained in an approved LTCP fail to meet WQS or protect designated uses.

PART III
LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
001A Sanitary Outfall	Upper New York Bay	SE2(C2)	A - Sanitary Wastewater

Location Description

The effluent sampling point for DSN 001A shall be post chlorination. The influent sampling point for DSN 001A shall be before any treatment, other than degritting, and before the addition of any internal waste streams. DSN 001A is located at Lat. = 40d 39' 16" and Long. = 74d 03' 42" and discharges to the Upper New York Bay, classified as SE-2 waters.

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).

Comments:

Total Flow (Bypass) serves to represent an approximate amount of volume that would otherwise be discharged via Combined Sewer Overflows (CSOs) but now receives primary treatment.

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

PHASE: 1 Initial **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	330 Annual Average	*****	*****	MGD	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	*****	REPORT Report Per Maximum	SU	6/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	6/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			

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Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids, Total Suspended	Effluent Gross Value	41900 Monthly Average	62850 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Day	Calculated
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	53700 Monthly Average	78400 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Month	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Coliform, Fecal General	Effluent Gross Value	*****	*****	*****	*****	200 Monthly Geo Avg	400 Weekly Geometric	#/100ML	1/Day	Grab
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Effluent Gross Value	34916 Monthly Average	55867 Weekly Average	KG/DAY	*****	25 Monthly Average	40 Weekly Average	MG/L	1/Day	24 Hour Composite
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

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BOD, Carbonaceous 5 Day, 20oC	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Day	Calculated
January thru December	QL	***	***		***	***	***			
LC50 Statre 96hr Acu Mysid Bahia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/Quarter	Composite
January thru December	AL	***	***		50	***	***			
Chlorine Produced Oxidants	Effluent Gross Value	196 Monthly Average	293 Daily Maximum	KG/DAY	*****	0.14 Monthly Average	0.21 Daily Maximum	MG/L	6/Day	Grab
January thru December	MDL	125	125		***	0.1	0.1			
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	6/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	6/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	3 Weekly Av Minimum	REPORT Daily Avg Minimum	*****	MG/L	1/Day	Grab
January thru December	QL	***	***		***	***	***			
Cyanide, Total (as CN)	Effluent Gross Value	120 Monthly Average	255 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	RQL	56	56		***	40	40			

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).

Comments:

Total Flow (Bypass) serves to represent an approximate amount of volume that would otherwise be discharged via Combined Sewer Overflows (CSOs) but now receives primary treatment.

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

PHASE: 1 Initial **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Nickel, Total Recoverable	Effluent Gross Value	150 Monthly Average	262 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	14	14		***	10	10			
Zinc, Total Recoverable	Effluent Gross Value	562 Monthly Average	1037 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	42	42		***	30	30			
Lead, Total Recoverable	Effluent Gross Value	162 Monthly Average	300 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	14	14		***	10	10			
Copper, Total Recoverable	Effluent Gross Value	187 Monthly Average	350 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	14	14		***	10	10			
Mercury Total Recoverable	Effluent Gross Value	2.5 Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	1.4	1.4		***	1	1			
Cyanide, free	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

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).

Comments:

Total Flow (Bypass) serves to represent an approximate amount of volume that would otherwise be discharged via Combined Sewer Overflows (CSOs) but now receives primary treatment.

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

PHASE: 2 Final **PHASE Start Date:** INACTIVE **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Bypass	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Calculated
January thru December	QL	***	***		***	***	***			
Flow, In Conduit or Thru Treatment Plant	Raw Sew/influent	REPORT Monthly Average	REPORT Daily Maximum	MGD	REPORT Annual Average	*****	*****	MGD	Continuous	Metered
January thru December	QL	***	***		***	***	***			
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	REPORT Annual Average	*****	*****	MGD	Continuous	Calculated
January thru December	QL	***	***		***	***	***			
Flow, Total	Bypass	REPORT Monthly Total	*****	MGAL	*****	*****	*****	*****	1/Month	Metered
January thru December	QL	***	***		***	***	***			
pH	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	*****	REPORT Report Per Maximum	SU	6/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	6/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Day	24 Hour Composite
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January thru December	RQL	1.4	1.4		***	1	1			

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Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Total Flow (Bypass) serves to represent an approximate amount of volume that would otherwise be discharged via Combined Sewer Overflows (CSOs) but now receives primary treatment.

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

PHASE: 2 Final **PHASE Start Date:** INACTIVE **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Cyanide, free	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Arsenic, Total (as As)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Beryllium, Total (as Be)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Cadmium, Total (as Cd)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chromium, Total (as Cr)	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Thallium, Total (as Tl)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Silver, Total (as Ag)	Effluent Gross Value	REPORT RQL = 2	UG/L	24 Hour Composite	January thru December
Antimony, Total (as Sb)	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Selenium, Total (as Se)	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Acenaphthylene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Acenaphthene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Benzo(k)fluoranthene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethoxy) methane	Effluent Gross Value	REPORT RQL = 26.5	UG/L	24 Hour Composite	January thru December
Bis (2-chloroiso-propyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Butyl benzyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Chrysene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December

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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Diethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dimethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,2-Diphenyl-hydrazine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Fluoranthene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Fluorene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachlorocyclo-pentadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachloroethane	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Isophorone	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodiphenyl-amine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodimethyl-amine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Nitrobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Phenanthrene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December

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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Benzo(ghi)perylene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
1,2,4-Trichloro- benzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dibenzo(a,h) anthracene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
2-Chloronaphthalene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
2,6-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
3,3'-Dichloro- benzidine	Effluent Gross Value	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Naphthalene	Effluent Gross Value	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December

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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Benzidine	Effluent Gross Value	REPORT RQL = 50	UG/L	24 Hour Composite	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,3-Dichloropropene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
Dichlorobromomethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,2-Dichloroethane	Effluent Gross Value	REPORT RQL = 3	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT RQL = 8	UG/L	Grab	January thru December
Chloroform	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Toluene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
Acrolein	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Acrylonitrile	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Chlorobenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Chlorodibromomethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December

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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Ethylbenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Methyl Bromide	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Methyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Methylene Chloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Tetrachloroethylene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Trichlorofluoro- methane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,1-Dichloroethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1-Dichloroethylene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,1-Trichloro- ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2-Trichloro- ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro- ethane	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
1,2-Dichloropropane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,2-trans-Dichloro- ethylene	Effluent Gross Value	REPORT RQL = 4	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Vinyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December

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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Trichloroethylene	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Phenols	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Delta BHC, Total (ug/l)	Effluent Gross Value	REPORT RQL = 0.02	*****	24 Hour Composite	January thru December
Endosulfan Sulfate	Effluent Gross Value	REPORT RQL = 0.08	UG/L	24 Hour Composite	January thru December
Beta Endosulfan	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha Endosulfan	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Endrin Aldehyde	Effluent Gross Value	REPORT RQL = 0.1	UG/L	24 Hour Composite	January thru December
4,4'-DDT(p,p'-DDT)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
4,4'-DDD(p,p'-DDD)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
4,4'-DDE(p,p'-DDE)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Aldrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha BHC	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Beta BHC	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December

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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Gamma BHC (lindane),	Effluent Gross Value	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December
Chlordane	Effluent Gross Value	REPORT RQL = 0.2	UG/L	24 Hour Composite	January thru December
Dieldrin	Effluent Gross Value	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December
Endrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Toxaphene	Effluent Gross Value	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Heptachlor	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Heptachlor Epoxide	Effluent Gross Value	REPORT RQL = 0.4	UG/L	24 Hour Composite	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT RQL = 18	UG/L	24 Hour Composite	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
2,4-Dimethylphenol	Effluent Gross Value	REPORT RQL = 13.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrophenol	Effluent Gross Value	REPORT RQL = 40	UG/L	24 Hour Composite	January thru December
2,4,6-Trichloro- phenol	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 21	UG/L	24 Hour Composite	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT RQL = 12	UG/L	24 Hour Composite	January thru December

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).

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

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
002A Sanitary Outfall	Upper Newark Bay	SE3(C2)	A - Sanitary Wastewater

Location Description

DSN 002A shall be before any treatment, other than degritting, and before the addition of any internal waste streams. DSN 002A is located at Lat. = 40d 42' 45.5" and Long. = 74d 07' 22.9" and discharges to the Newark Bay, classified as SE-3 waters.

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).

Comments:

This MRF is currently inactive. The effluent limitations/monitoring conditions will become effective once an approved TWA has been obtained as explained in Part IV. H.4. The permittee shall notify the Department that an approved TWA has been obtained and the bypass line construction is complete so the monitoring conditions can be activated.

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

PHASE: Interim **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Total	*****	# OF DAYS	1/Month	Calculated
January thru December	QL	***	***		***	***	***			
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	REPORT Annual Average	*****	*****	MGD	Continuous	Metered
January thru December	QL	***	***		***	***	***			
Flow, Total	Effluent Gross Value	REPORT Monthly Total	*****	MGAL	*****	*****	*****	*****	1/Month	Calculated
January thru December	QL	***	***		***	***	***			

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).

Comments:

This MRF is currently inactive. The effluent limitations/monitoring conditions will become effective once an approved TWA has been obtained as explained in Part IV. H.4. The permittee shall notify the Department that an approved TWA has been obtained and the bypass line construction is complete so the monitoring conditions can be activated.

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

PHASE: Interim **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Chlorine Produced Oxidants	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	Continuous	Metered
January thru December	MDL	***	***		***	***	***			

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
IPPI Influent IPP Requirements			A - Sanitary Wastewater

Contributing Waste Types

Sanitary

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Cyanide, Total (as CN)	Raw Sew/influent	REPORT RQL = 40	UG/L	Grab	January thru December
Arsenic, Total (as As)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Beryllium, Total (as Be)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Cadmium, Total (as Cd)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Chromium, Total (as Cr)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Copper, Total (as Cu)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Lead, Total (as Pb)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Thallium, Total (as Tl)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Nickel, Total (as Ni)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Silver, Total (as Ag)	Raw Sew/influent	REPORT RQL = 2	UG/L	24 Hour Composite	January thru December
Zinc, Total (as Zn)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Antimony, Total (as Sb)	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Selenium, Total (as Se)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Mercury, Total (as Hg)	Raw Sew/influent	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Acenaphthylene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Acenaphthene	Raw Sew/influent	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Anthracene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Benzo(b)fluoranthene (3,4-benzo)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Benzo(k)fluoranthene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)pyrene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethyl) ether	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethoxy) methane	Raw Sew/influent	REPORT RQL = 26.5	UG/L	24 Hour Composite	January thru December
Bis (2-chloroiso-propyl) ether	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Butyl benzyl phthalate	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Chrysene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Diethyl phthalate	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dimethyl phthalate	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2-Diphenyl-hydrazine	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Fluoranthene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Fluorene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachlorocyclo-pentadiene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachloroethane	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Indeno(1,2,3-cd)-pyrene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Isophorone	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
N-nitrosodi-n-propylamine	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodiphenyl-amine	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodimethyl-amine	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Nitrobenzene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Phenanthrene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Pyrene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(ghi)perylene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)anthracene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2-Dichlorobenzene	Raw Sew/influent	REPORT RQL = 9	UG/L	Grab	January thru December
1,2,4-Trichloro- benzene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dibenzo(a,h) anthracene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
1,3-Dichlorobenzene	Raw Sew/influent	REPORT RQL = 9	UG/L	Grab	January thru December
1,4-Dichlorobenzene	Raw Sew/influent	REPORT RQL = 20	UG/L	Grab	January thru December
2-Chloronaphthalene	Raw Sew/influent	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrotoluene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
2,6-Dinitrotoluene	Raw Sew/influent	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
3,3'-Dichloro- benzidine	Raw Sew/influent	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
4-Bromophenyl phenyl ether	Raw Sew/influent	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Naphthalene	Raw Sew/influent	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December
Bis(2-ethylhexyl) phthalate	Raw Sew/influent	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December
Di-n-butyl phthalate	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzidine	Raw Sew/influent	REPORT RQL = 50	UG/L	24 Hour Composite	January thru December
Hexachlorobenzene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Hexachlorobutadiene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,3-Dichloropropene	Raw Sew/influent	REPORT RQL = 7	UG/L	Grab	January thru December
Dichlorobromomethane	Raw Sew/influent	REPORT	UG/L	Grab	January thru December
Carbon Tetrachloride	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,2-Dichloroethane	Raw Sew/influent	REPORT RQL = 3	UG/L	Grab	January thru December
Bromoform	Raw Sew/influent	REPORT RQL = 8	UG/L	Grab	January thru December
Chloroform	Raw Sew/influent	REPORT RQL = 5	UG/L	Grab	January thru December
Toluene	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Benzene	Raw Sew/influent	REPORT RQL = 7	UG/L	Grab	January thru December
Acrolein	Raw Sew/influent	REPORT RQL = 50	UG/L	Grab	January thru December
Acrylonitrile	Raw Sew/influent	REPORT RQL = 50	UG/L	Grab	January thru December
Chlorobenzene	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Chlorodibromomethane	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Ethylbenzene	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Methyl Bromide	Raw Sew/influent	REPORT RQL = 9	UG/L	Grab	January thru December

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Methyl Chloride	Raw Sew/influent	REPORT RQL = 10	UG/L	Grab	January thru December
Methylene Chloride	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Tetrachloroethylene	Raw Sew/influent	REPORT RQL = 9	UG/L	Grab	January thru December
Trichlorofluoro- methane	Raw Sew/influent	REPORT RQL = 5	UG/L	Grab	January thru December
1,1-Dichloroethane	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,1-Dichloroethylene	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,1-Trichloro- ethane	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2-Trichloro- ethane	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro- ethane	Raw Sew/influent	REPORT RQL = 10	UG/L	Grab	January thru December
1,2-Dichloropropane	Raw Sew/influent	REPORT RQL = 5	UG/L	Grab	January thru December
1,2-trans-Dichloro- ethylene	Raw Sew/influent	REPORT RQL = 4	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Raw Sew/influent	REPORT	UG/L	Grab	January thru December
Vinyl Chloride	Raw Sew/influent	REPORT RQL = 10	UG/L	Grab	January thru December
Trichloroethylene	Raw Sew/influent	REPORT RQL = 5	UG/L	Grab	January thru December
Chloroethane	Raw Sew/influent	REPORT	UG/L	Grab	January thru December

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Parachloro-m-cresol	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Phenols	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Delta BHC, Total (ug/l)	Raw Sew/influent	REPORT RQL = 0.02	*****	24 Hour Composite	January thru December
Endosulfan Sulfate	Raw Sew/influent	REPORT RQL = 0.08	UG/L	24 Hour Composite	January thru December
Beta Endosulfan	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha Endosulfan	Raw Sew/influent	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Endrin Aldehyde	Raw Sew/influent	REPORT RQL = 0.1	UG/L	24 Hour Composite	January thru December
PCB-1016 (Arochlor 1016)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
4,4'-DDT(p,p'-DDT)	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
4,4'-DDD(p,p'-DDD)	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
4,4'-DDE(p,p'-DDE)	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Aldrin	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha BHC	Raw Sew/influent	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Beta BHC	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Gamma BHC (lindane),	Raw Sew/influent	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Chlordane	Raw Sew/influent	REPORT RQL = 0.2	UG/L	24 Hour Composite	January thru December
Dieldrin	Raw Sew/influent	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December
Endrin	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Toxaphene	Raw Sew/influent	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Heptachlor	Raw Sew/influent	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Heptachlor Epoxide	Raw Sew/influent	REPORT RQL = 0.4	UG/L	24 Hour Composite	January thru December
PCB-1221 (Arochlor 1221)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1232 (Arochlor 1232)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1242 (Arochlor 1242)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1248 (Arochlor 1248)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1254 (Arochlor 1254)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1260 (Arochlor 1260)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
2-Chlorophenol	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
2-Nitrophenol	Raw Sew/influent	REPORT RQL = 18	UG/L	24 Hour Composite	January thru December
2,4-Dichlorophenol	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

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)..

Table III - C - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 06/01/2020 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2,4-Dimethylphenol	Raw Sew/influent	REPORT RQL = 13.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrophenol	Raw Sew/influent	REPORT RQL = 40	UG/L	24 Hour Composite	January thru December
2,4,6-Trichloro- phenol	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
4-Chlorophenyl phenyl ether	Raw Sew/influent	REPORT RQL = 21	UG/L	24 Hour Composite	January thru December
4-Nitrophenol	Raw Sew/influent	REPORT RQL = 12	UG/L	24 Hour Composite	January thru December
4,6-Dinitro-o-cresol	Raw Sew/influent	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
Phenol Single Compound	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Pentachlorophenol	Raw Sew/influent	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Notes and Definitions

A. Footnotes

1. These notes are specific to this permit

a. The permit conditions in the CSO section apply only to the combined sewer system owned/operated by the permittee and related discharges.

2. CSO related resources are listed below with a link to the current webpage

a. NJDEP's CSO main website and related links can be found at http://www.nj.gov/dep/dwq/cso.htm

b. EPA's Combined Sewer Overflows Principal Guidance Documents can be found at http://water.epa.gov/polwaste/npdes/cso/Guidance-Documents.cfm

c. The Nine Minimum Control requirements from the National CSO Policy along with EPA's guidance document can be found at N.J.A.C. 7:14A-11.12-Appendix C and http://www.epa.gov/npdes/pubs/owm0030.pdf

d. The Nine elements of a Long Term Control Plan from the National CSO Policy along with EPA's guidance document can be found at N.J.A.C. 7:14A-11.12-Appendix C and http://water.epa.gov/polwaste/npdes/cso/upload/owm0272.pdf.

e. EPA's Post Construction Compliance Monitoring Guidance document can be found at http://www.epa.gov/npdes/pubs/final_cso_pccm_guidance.pdf

f. EPA's Guidance: Coordinating Combined Sewer Overflow (CSO) Long-Term Planning with Water Quality Standards Reviews (PDF)

g. EPA's Capacity, management, operation and maintenance (CMOM) guidance document can be found at http://www.epa.gov/npdes/pubs/cmom_5.pdf

h. Dry-Weather Deposition and Flushing for Combined Sewer Overflow Pollution Control: http://nepis.epa.gov/Adobe/PDF/30000821.PDF

i. Combined sewer overflow control (manual): http://nepis.epa.gov/Adobe/PDF/30004MAO.pdf

j. EPA's Storm Water and Combined Sewer Overflows Publications can be found at http://water.epa.gov/polwaste/wastewater/StormwaterPubs.cfm

B. Definitions

1. These definitions are specific only to this permit

a. “Dry weather overflow (DWO)” means a combined sewer overflow that cannot be attributed to a precipitation event, including snow melt, within the hydraulically connected system. DWOs include the following flows: domestic sewage, dewatering activities, commercial and industrial wastewaters, ground water and tidal infiltration upstream of the regulator, and any other non-precipitation event related flows downstream of the regulator to the outfall pipe.

   Groundwater infiltration and tidal infiltration originating downstream of the regulator are allowable sources of discharges from a CSO during dry weather. On a case-by-case basis, the Department reserves the right to allow temporary use of the CSO outfall structures for other types of discharges to address extraordinary circumstances. Such use must be specifically approved by the Department
   .

b. "Green Infrastructure" means methods of stormwater management that reduce wet weather/stormwater volume, flow, or changes the characteristics of the flow into combined or separate sanitary or storm sewers, or surface waters, by allowing the stormwater to infiltrate, to be treated by vegetation or by soils; or to be stored for reuse. Green infrastructure includes, but is not limited to, pervious paving, bioretention basins, vegetated swales, and cisterns

c. "Hydraulically connected system" means the entire collection system that conveys flows to one Sewage Treatment Plant (STP). On a case-by-case basis, the permittee, in consultation with the Department, may segment a larger hydraulically connected system into a series of smaller inter-connected systems, based upon the specific nature of the sewer system layout, pump stations, gradients, locations of CSOs and other physical features which support such a sub area. A hydraulically connected system could include multiple municipalities, comprised of both combined and separate sewers

C. NINE MINIMUM CONTROL REQUIREMENTS

1. **Proper operation and regular maintenance programs for the sewer system and the CSOs**
2. **Maximum use of the collection system for storage**
3. **Review and modification of pretreatment requirements to assure CSO impacts are minimized**
4. **Maximization of flow to the POTW for treatment**
5. **Prohibition of CSOs during dry weather**
6. **Control of solid and floatable materials in CSOs**
7. **Pollution prevention**
8. **Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts**
9. **Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls**

D. NINE ELEMENTS OF THE LONG TERM CONTROL PLAN

1. **Characterization, Monitoring, and Modeling of the Combined Sewer Systems**
2. **Public Participation**

3. **Consideration of Sensitive Areas**
4. **Evaluation of Alternatives**
5. **Cost/Performance Considerations**
6. **Operational Plan**
7. **Maximizing Treatment at the Existing POTW Treatment Plant**
8. **Implementation Schedule**
9. **Compliance Monitoring Program**

Sanitary Wastewater

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. The permittee shall utilize analytical methods that will ensure compliance with the Quantification Levels (QLs) listed in PART III. If the permittee and/or contract laboratory determines that the QLs achieved for any pollutant(s) generally will not be as sensitive as the QLs specified in PART III, the permittee must submit a justification of such to the Bureau of Point Source Permitting Region 2. For limited parameters with no QL specified, the sample analysis shall use a detection level at least as sensitive as the effluent limit.

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

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

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

g. Monitoring for Wastewater Characterization Report parameters shall be conducted concurrently with the Whole Effluent Toxicity monitoring, when feasible.

h. All influent and effluent sampling for toxic pollutant analyses shall be collected concurrently.

i. Annual wastewater testing 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.

j. Influent flow for DSN 001A shall be measured using a flow meter. Effluent flow for DSN 001A shall be calculated by subtracting the flow metered at DSN 002A from the metered influent flow at DSN 001A.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

a. The permittee shall retain records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports, and all data used to complete the application for this permit.

b. Records of monitoring information shall include the date, locations and time of sampling or measurements, the individual who performed the sampling or measurements, the date the samples were collected, the date the samples were analyzed, the individual who performed the analysis, the analytical method used, and the results.

c. The permittee shall retain copies of all reports required by a NJPDES permit and records of all data used to complete the application for a NJPDES permit for a period of at least 5 years.

C. REPORTING

1. Standard Reporting Requirements

a. The permittee shall submit all required monitoring results to the DEP on the forms provided to them. The Monitoring Report Forms (MRF) may be provided to the permittee in either a paper format or in an electronic file format. Unless otherwise noted, all requirements below pertain to both paper and electronic formats.

b. Any MRF in paper format shall be submitted to the following addresses:.

i. NJDEP
Division of Water Quality
Bureau of Permit Management
Mailcode 401-02B
P.O. Box 420
Trenton, New Jersey 08625-0420.

ii. Northern Bureau of Water Compliance and Enforcement
7 Ridgeway Avenue
Cedar Knolls
New Jersey 07927-1112.

c. Any electronic data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Interchange (EDI) agreement with the permittee. Paper copies must be available for on-site inspection by DEP personnel or provided to the DEO upon written request.

d. All monitoring reports 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 monitoring report forms in his or her absence. Authorizations for other individuals to sign shall be made in accordance with N.J.A.C. 7:14A-4.9(b).

f. Monitoring reports shall be completed in accordance with the current Monitoring Report Reference (MRF) Manual and any updates thereof.

g. When quantification levels (QL) and effluent limits are both specified for a given parameter in Part III, and the QL is less stringent than the effluent limit, effluent compliance will be determined by comparing the reported value against the QL.

h. If monitoring for a parameter is not required for that monitoring period, the permittee is required to report "CODE=N" on that Monitoring Report Form.

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.

2. Polychlorinated Biphenyls (PCB) Requirements

a. Pollutant Minimization Plan (PMP) Requirement

i. If, based on the review of the Final Report, the Department determines that a PMP is required, the permittee shall prepare and submit a PMP to the Department by the date specified in the Department's determination letter.

ii. The permittee shall implement the PMP within 30 days after written notification by the Department that the PMP is complete.

iii. The PMP shall be developed to achieve maximum practical reduction in accordance with the PMP Technical Manual.

b. PCB PMP Annual Report Requirement

i. The permittee shall submit an annual report in accordance with the Annual Report Guidance Document every 12 months from the implementation of the PMP.

ii. Any revisions to the PMP as a result of the ongoing work shall be reported in the annual report.

iii. The annual report shall contain, at a minimum, a detailed discussion of the specific progress and actions taken by the permittee during the previous twelve month period that addresses PCB loadings and implementation of the PMP.

E. FACILITY MANAGEMENT

1. Discharge Requirements

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

b. The permittee shall not discharge foam, or cause objectionable deposits, or foaming of the receiving water.

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. When the committed flow exceeds 95% of 330 MGD on an annual average basis, the permittee shall:.

i. Develop a Capacity Assurance Program (CAP) in accordance with N.J.A.C. 7:14A-22.16.

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

iii. Contact the Division of Watershed Management at (609) 984-0058 to discuss whether an amendment to the WQMP will be necessary.

f. (This condition is only applicable during the Inital Phase of DSN 001A) The permittee will be authorized during this permit term to use DSN 002A to discharge fully treated effluent only when the hydraulic capacity of DSN 001A is exceeded during periods of heavy precipitation. All effluent discharged through DSN 002A must receive the same treatment as the effluent discharged through DSN 001A; in other words, there shall be no bypassing of any treatment steps. When discharge through DSN 002A will last for more than 24 hours, the discharge must be reported to the Department as soon as it becomes apparent that the duration of the discharge will be greater than 24 hours.

Please see Part IV, Section H.3 for conditions for the Final Phase of DSN 001A and the Interim Phase of DSN 002A in relation to the bypass authorization.

2. Interstate Environmental Commission

a. The permittee shall comply with the Interstate Environmental Commission's (IEC) "Water Quality Regulations." Although no monitoring requirements specific to the IEC are included in this permit, compliance may be determined by the IEC based on its own sampling events. IEC effluent requirements shall not be considered effluent limitations for the purpose of mandatory penalties under N.J.S.A. 58:10A-10.1.

3. Applicability of Discharge Limitations and Effective Dates

a. DSN 001A: The Initial Phase monitoring conditions and limitations are effective from the effective date of this permit modification until an approved TWA for the bypass line has been obtained and the bypass line construction is complete.

The Final Phase monitoring and limitations will become effective once the TWA has been obtained and the bypass line construction is complete and the permittee requests the Department to activate the phase.

DSN 002A: The Interim Phase monitoring and limitations will become effective once the TWA has been obtained and the bypass line construction is complete and the permittee requests the Department to activate the phase.

4. Operation, Maintenance and Emergency conditions

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

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

5. Toxicity Testing Requirements-Acute Whole Effluent Toxicity

a. The DMR for DSN 001A contains an Action Level (AL) for acute Whole Effluent Toxicity. Toxicity Reduction and Implementation Requirements may be triggered based on exceedences of this Action Level. See Toxicity Reduction and Implementation Requirements section below for more details.

b. 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.

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

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. 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.

f. The permittee shall resubmit an Acute Methodology Questionnaire within 60 days of any change in laboratory.

g. Submit an acute whole effluent toxicity test report: within twenty-five days after the end of every quarterly monitoring period beginning from the effective date of the permit (EDP). The permittee shall submit toxicity test results on appropriate forms. (Activity #: DSW090003 - Effective: 7/1/2015)

h. Test reports shall be submitted to:
New Jersey Department of Environmental Protection
Mailcode 401-02B
Division of Water Quality, Bureau of Surface Water Permitting
P.O. Box 420
Trenton, New Jersey 08625-042B.

6. Toxicity Reduction Implementation Requirements (TRIR)

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 action level specified in Part III of this permit.

   i. If the exceedence of the toxicity 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 action level in Part III. The monitoring frequency for toxicity testing shall be increased to monthly. 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 action level.

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

c. The permittee shall initiate a preliminary toxicity identification (PTI) upon the third exceedence of the toxicity action level specified in Part III during the 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) pretreatment program information,
(3) evaluation of ammonia and chlorine produced oxidants levels and their effect on the toxicity of the discharge,
(4) evaluation of chemical use and processes at the facility, and
(5) an evaluation of incidental facility procedures such as floor washing, and chemical spill disposal which may contribute to effluent toxicity.

iii. If the permittee demonstrates that the cause of toxicity is the chlorine added for disinfection or the ammonia concentration in the effluent and the chlorine and/or ammonia concentrations are below the established water quality based effluent limitation for chlorine and/or ammonia, the permittee shall identify the procedures to be used in future toxicity tests to account for chlorine and/or ammonia toxicity in their preliminary toxicity identification report.

iv. 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 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 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 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 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 action level in Part III, the permittee shall submit a plan for resuming the CTI.

7. Chlorine Produced Oxidants (CPO) Requirements (Only Applicable to DSN 001A)

a. The permittee shall collect the effluent CPO grab samples at the treatment plant O&M Building Sample Room. For the purpose of DMR reporting and compliance with the applicable maximum daily and monthly average effluent limitations in Table III-A-1, the measured effluent CPO concentration value in mg/L will be adjusted as follows...

i. Utilizing the following equation, calculate the effluent travel time ("ETT") in minutes from the treatment plant O&M Building Sample Room to the Upper New York Harbor outfall structure at the time the effluent CPO concentration was measured at the treatment plant:

ETT = (601.62 / EFR) * 60

where "EFR" equals the effluent flow rate in MGD occurring at the time the effluent grab sample for CPO analysis was taken at the treatment plant.

ii. Calculate the CPO concentration decay ("CPODECAY") in mg/L during the effluent travel in the outfall pipe from the treatment plant O&M Building Sample Room to the Upper New York Harbor outfall structure using the equation:

CPODECAY = (0.0043 mg/L/min) * ETT

where "ETT" equals the effluent travel time calculated in step i. above.

iii. Calculate the CPO concentration at the discharge location in Upper New York Harbor ("CPOEFFL") using the equation:

CPOEFFL = (CPOMEAS) - (CPODECAY)

where "CPOMEAS" equals the measured effluent CPO concentration at the treatment plant in mg/L and "CPODECAY" equals the CPO concentration decay calculated in step ii. above.

iv. The calculated CPOEFFL is the CPO concentration value that is used to determine compliance with the water quality based maximum daily and average monthly CPO concentration effluent limitations in Table III-A-1 and for all DMR monitoring and reporting purposes.

v. If the CPOEFFL value calculated using the above procedure is less that the method detection level (MDL) of the method being used to measure CPO, then the CPOEFFL value used for reporting purposes will be < MDL in mg/L. For example, if the MDL for the method being use to measure CPO is 0.05 mg/L and the calculated CPOEFFL value is 0.01 mg/L, then < 0.05 mg/L (not 0.01 mg/L) is to be used for DMR reporting purposes for that measurement.

8. Introduction to RWBR Requirements

a. The following RWBR sections contain the conditions for the permittee to beneficially reuse treated effluent or Reclaimed Water for Beneficial Reuse (RWBR), provided the effluent is in compliance with the criteria specified for the particular use specified below.

b. There are two levels of RWBR uses. Public Access and Restricted Access.

9. RWBR Requirements for Public Access

a. The Public Access reuse types authorized by this permit are those approved in Appendix A. Other Public Access reuse types may be added by minor modification of this permit.

b. The hydraulic loading rate for land application of RWBR shall not exceed 2 inches per week.

c. Any water diverted for RWBR shall be monitored and comply with the high level treatment requirements listed below and the operational requirements in the approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.

i. Total Suspended Solids (TSS): Instantaneous maximum of 5.0 mg/L prior to disinfection.

ii. Nitrogen, Total (NO3 + NH3): Daily maximum of 10.0 mg/L. This requirement only applies when RWBR is land applied.

iii. Fecal Coliform: 7-day median maximum of 2.2 colonies per 100 mL and an instantaneous maximum of 14 colonies per 100 mL.

iv. Chlorine Produced Oxidants (CPO): If the permittee disinfects utilizing chlorine, an instantaneous minimum of 1.0 mg/L after fifteen minutes contact time at peak hourly flow must be met.

d. Monitoring of the diverted public access RWBR shall be conducted in the following manner:

i. Sampling for TSS shall be immediately prior to disinfection. Monitoring for TSS shall be a grab sample once per week.

ii. Sampling for Turbidity in systems shall be sampled immediately prior to disinfection. The permittee shall establish a correlation between Turbidity and TSS in their effluent as detailed in the Reuse Technical Manual. A statistically significant correlation between Turbidity and TSS shall be established prior to commencement of the RWBR program and shall be incorporated into the Operations Protocol and updated annually. The initial correlation should be done as part of a daily monitoring program for at least 30 days. To ensure continuous compliance with the 5.0 mg/L TSS level, Turbidity must be monitored continuously and achieve the level established in the Operations Protocol.

iii. For chlorine disinfection, monitoring for CPO shall be continuous and shall be monitored after the appropriate contact time is achieved.

iv. Monitoring for Fecal Coliform shall be a grab sample, taken in accordance with Part III, at least a minimum of once per week taken immediately after disinfection. Fecal coliform shall be monitored immediately after disinfection.

v. Monitoring for Total Nitrogen (NO3 + NH3) shall be a composite sample, taken in accordance with Part III, at least once per week taken prior to RWBR diversion. Total Nitrogen (NO3 + NH3) shall be monitored after the appropriate disinfection treatment is achieved.

e. All monitoring results of the RWBR shall be reported each month on Wastewater Characterization Reports (WCR). Unless noted otherwise, the highest of all measured values for diverted RWBR shall be reported.

   i. If chlorine is used for disinfection, the lowest sampling result obtained during the reporting month shall be reported for CPO.

10. RWBR Requirements for Restricted Access--Land Application and Non Edible Crops

a. The Restricted Access--Land Application and Non Edible Crops reuse types authorized by this permit are those approved in Appendix A. Other Restricted Access--Land Application and Non Edible Crops reuse types may be added by minor modification of this permit.

b. The hydraulic loading rate for land application of RWBR shall not exceed 2 inches per week.

c. Any water diverted for RWBR shall be monitored and comply with the high level treatment requirements listed below and the operational requirements in the approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.

d. Nitrogen, Total (NO3 + NH3): Daily maximum of 10 mg/L. Frequency of sampling for Total Nitrogen shall be at a minimum monthly. The sample shall be collected as a composite sample taken prior to diversion for RWBR. Nitrogen, Total (NO3 + NH3) shall be monitored after the appropriate disinfection treatment time is achieved. This requirement only applies when RWBR is land applied, however, this requirement does not apply to spray irrigation within a fenced perimeter or otherwise restricted area.

e. Fecal Coliform shall comply with the permit limitations as specified in the Effluent Limitations Table in Part III of the permit. Frequency of sampling for Fecal Coliform and Enterococci shall be in accordance with Part III of this permit. The sample shall be collected as a grab sample taken immediately after disinfection.

f. Chlorine Produced Oxidants (CPO): For chlorine disinfection, instantaneous minimum of 1.0 mg/L after fifteen minutes contact time at peak hourly flow. Frequency of sampling for CPO shall be in accordance with Part III of this permit. The sample shall be collected as a grab sample taken immediately after disinfection. The value reported for CPO shall be the minimum sampling result obtained during the reporting month for diverted RWBR. Chlorine Produced Oxidants (CPO) shall be monitored after the appropriate contact time is achieved.

g. All monitoring results of the RWBR shall be reported each month on Wastewater Characterization Reports (WCR). Unless noted otherwise, the highest of all measured values for diverted RWBR shall be reported.

11. RWBR Requirements for Restricted Access--Construction and Maintenance Operations

a. The Restricted Access--Construction and Maintenance Operations reuse types authorized by this permit are those approved in Appendix A. Other Restricted Access--Construction and Maintenance Operations reuse types may be added by minor modification of this permit.

b. Fecal Coliform shall comply with the permit limitations as specified in the Effluent Limitations Table in Part III of the permit. Frequency of sampling for Fecal Coliform and Enterococci shall be in accordance with Part III of this permit. The sample shall be collected as a grab sample taken immediately after disinfection. This requirement does not apply to sanitary sewer jetting.

12. RWBR Requirements for Restricted Access--Industrial Systems

a. The Restricted Access--Industrial Systems reuse types authorized by this permit are those approved in Appendix A. Other Restricted Access--Industrial Systems reuse types may be added by minor modification of this permit.

13. RWBR Submittal Requirements

a. For all types of RWBR, with the exception of sanitary sewer jetting and STP washdown water, the permittee shall submit and receive approval of an Operations Protocol or modify the existing Operations Protocol as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of any RWBR activity. A copy of the approved Operations Protocol shall be maintained onsite. Specific requirements for the Operations Protocol are identified in the Reuse Technical Manual.

b. The permittee shall submit a copy of the Reuse Supplier and User Agreement with each request for authorization to distribute RWBR in which the user is a different entity than the supplier. Specific requirements for the Reuse Supplier and User Agreement are identified in the Reuse Technical Manual.

c. For Public Access RWBR on Edible Crops, the permittee shall submit an annual inventory of edible crop irrigation with the Beneficial Reuse Annual Report. Specific requirements for the annual inventory are identified in the Reuse Technical Manual.

d. Submit a Beneficial Reuse Annual Report: by February 1 of each year beginning from the effective date of the permit (EDP). The permittee shall compile the total volume of RWBR distributed to each type of authorized RWBR activity for the previous calendar year. Specific requirements for the Annual Reuse Report are identified in the Reuse Technical Manual. (Activity #: DSW090003 - Effective: 7/1/2015)

e. The permittee shall submit and receive approval of an Engineering Report in support of RWBR authorization requests for new or expanded RWBR projects as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of this/these type/s of RWBR activity. A copy of the approved Engineering Report shall be maintained onsite. Specific requirements for the Engineering Report are identified in the Reuse Technical Manual.

f. All submittals shall be mailed or delivered to: New Jersey Department of Environmental Protection, Mailcode 401-02B, Division of Water Quality, Bureau of Surface Water Permitting, P.O. Box 420, Trenton, New Jersey 08625-0420.

14. RWBR Operational Requirements

a. Effluent that does not meet the requirements for RWBR established in Part III, Part IV and the operational requirements specified in the facility's approved Operations Protocol shall not be diverted for RWBR.

b. The land application of RWBR shall not produce surface runoff or ponding.

c. All setback distances shall be consistent with the distances outlined in the Reuse Technical Manual.

d. Land application sites shall not be frozen or saturated when applying RWBR.

e. A daily log noting the volume of RWBR distributed to each approved application site shall be maintained on-site by the permittee and made available to the Department upon request. The volume of RWBR to be distributed shall be determined through the use of a totalizing flow meter, or other means of accurate flow measurement.

f. Any vehicle used to transport and/or distribute RWBR shall be appropriately marked. The vehicle shall not be used to transport water or other fluid that does not meet all limitations and requirements as specified in this permit for water diverted for RWBR, unless the tank has been emptied and adequately cleaned prior to the addition of the RWBR.

g. The permittee shall post Access Control and Advisory Signs in accordance with the requirements of the Reuse Technical Manual.

h. There shall be no cross-connections to potable water systems.

i. All RWBR piping, pipelines, valves, and outlets shall be appropriately color coded, tagged or labeled to warn the public and employees that the water is not intended for drinking. Worker contact with RWBR shall be minimized.

j. The issuance of this permit for the use of RWBR shall not be considered as a waiver of any applicable federal, state or local rule, regulation or ordinance.

F. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

1. General Requirements

a. The Permittee has developed an industrial pretreatment program pursuant to the General Pretreatment Regulations 40 CFR Part 403 and N.J.A.C. 7:14A-1 et seq. The Permittee shall implement and enforce its approved pretreatment program to prevent the introduction of pollutants into its system which would:

i. interfere with attainment of the effluent limitations contained in the permittee's NJPDES permit;

ii. pass through the treatment works and impair the water quality of the receiving stream; or

iii. affect sludge quality so as to interfere with the use or management of the municipal sludge.

b. The Permittee shall comply with the public participation and notification requirements, including but not limited to, those specified in N.J.A.C. 7:14A-19.10, and 40 CFR Part 25.

c. The Permittee shall secure and maintain sufficient resources and qualified personnel to carry out the program implementation procedures described in this permit.

2. Identify and Locate Industrial Users

a. The Permittee shall update its inventory of indirect users at a frequency and diligence adequate to ensure proper identification of indirect users subject to pretreatment standards, appropriate characterization of the nature of their discharges, and correct designation of indirect users as categorical, significant/major, or other regulated. At a minimum, this inventory shall be updated annually and shall be included in the Pretreatment Program 40 CFR Part 403 Annual Report.

b. The Permittee shall notify an indirect user of pretreatment standards and requirements within thirty (30) days of the determination of the indirect user being subject to regulation under the pretreatment program.

3. Program Modifications

a. The Permittee shall notify the Bureau of Pretreatment and Residuals (BPR) of all substantial industrial pretreatment program (IPP) modifications, as defined under 40 CFR 403.18(b), and comply with the program modification requirements under N.J.A.C. 7:14A-19.9. The Permittee must await formal approval from the BPR before implementing substantial program modifications.

b. For non-substantial program modifications, the Permittee shall provide to the BPR the information required under N.J.A.C. 7:14A-19.9(b). The Permittee, as required by 40 CFR 403.18(d)(1), must submit this information to the BPR at least 45 days prior to implementation. Modifications that are not considered substantial are deemed approved unless the Department notifies the Permittee within 45 days that the modifications are not approved.

4. Develop Local Limits

a. The Permittee has developed and shall enforce local limits as required by N.J.A.C. 7:14A-19.7.

b. The Permittee shall submit a written technical evaluation of the need to revise local limits as required under N.J.A.C. 7:14A-19.7(d).

c. The written technical evalulation required in b. above shall be submitted: within 6 months from the effective date of this document. (Activity #: DSW090003 - Effective: 7/1/2015)

5. Issue IPP Permits

a. The Permittee must issue an individual IPP Permit to those facilities which are classified as "Significant Industrial Users" (SIUs) as defined in the Passaic Valley Sewerage Commissioners Rules and Regulations.

b. These individual IPP Permits must contain the minimum requirements as specified under N.J.A.C. 7:14A-19.8(b).

c. The Permittee shall issue a draft IPP Permit to a newly identified (i.e. currently discharging) IU within 180 days of identifying that IU.

i. New IUs shall receive an IPP Permit prior to commencement of discharge.

ii. The Permittee shall issue or reissue the IPP Permits, in absence of litigation and/or enforcement action(s) initiated by the Permittee, within one hundred and eighty (180) days of the expiration date of the IPP Permit previously issued to an existing industrial user.

6. Perform Compliance Monitoring and Inspections

a. The Permittee shall randomly inspect indirect users and randomly sample and analyze indirect user effluents at a frequency commensurate with the character, consistency, and volume of the contribution. However, the frequency of sampling shall be adequate to determine the compliance status of the indirect user exclusive of self-monitoring data submitted by the user. Specifically, the frequency of inspection and sampling of all significant industrial users (SIU), as defined by Passaic Valley Sewerage Commisioners, shall be no less than once per year for inspection and no less than once per year for sampling. Also, in accordance with N.J.A.C. 7:14A-19.6(a)1, facilities which have an IPP permit from the POTW but do not meet the POTW's definition of SIU i.e., "other regulated IUs"), and are not CIUs, must be inspected by the POTW once per year and must be sampled by the POTW at least once every three (3) years.

b. Sample collection and analysis and the gathering of other compliance data shall be performed with sufficient care to produce evidence admissible in judicial enforcement proceedings.

7. Take Enforcement Actions

a. The permittee shall take enforcement actions based upon indirect users' noncompliance in accordance with its approved enforcement response plan.

8. Perform Data Management and Record Keeping

a. The Permittee shall develop and maintain a data management system which includes industrial user inventory, characterization of discharge, compliance status, IPP permit status, and enforcement actions.

b. The Permittee shall retain for a minimum of five (5) years all records of monitoring activities and results (whether or not such activities are required by this permit) and shall make such records available to EPA and the State upon request.

9. Notification Requirements

a. The Permittee shall notify its significant industrial users in writing of their obligation to comply with applicable requirements under Subtitles C and D of the Resource Conservation and Recovery Act (RCRA).

10. Pretreatment Annual Report

a. The Permittee shall submit a report annually to the Bureau of Pretreatment and Residuals describing the Permittee's pretreatment activities for the twelve (12) month period from August 1 through July 31. In the event that the Permittee is not in compliance with any conditions or requirements of this permit, the Permittee shall also include the reason for noncompliance and state how and when the Permittee shall comply with such conditions and requirements.

b. Submit the Annual Pretreatment Program Report: by September 1 of each year beginning from the effective date of the permit (EDP). (Activity #: DSW090003 - Effective: 7/1/2015)

i. a summary of analytical results of the priority pollutant scans performed on the Delegated Local Agency's (DLA) influent, effluent, and sludge;

ii. a discussion of upset, interference, or pass through incidents, if any, at the DLA treatment plant(s) which the Permittee knows or suspects were caused by indirect users of the DLA system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken, and, if known, the name and address of the indirect user(s) responsible;

iii. an updated list of the Permittee's industrial users including their names and addresses, and a list of deletions and additions. The Permittee shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to Federal categorical standards and which set(s) of standards are applicable; significant/major non-categorical IUs (as defined by the DLA); and other regulated non-categorical industries. The Permittee shall characterize the compliance status of each industrial user with respect to the discharge limitations and reporting requirements;

iv. a summary of the inspection and sampling activities conducted by the Permittee during the period covered by the annual report to gather information and data regarding industrial users;

v. a summary of the compliance and enforcement activities during the period covered by the annual report. The summary shall include administrative and legal/judicial actions initiated by the permittee during the period noted;

vi. a description of any significant changes in operating the pretreatment program which differ from the information in the Permittee's approved DLA pretreatment program including, but not limited to, changes concerning:
(1) the program's administrative structure
(2) local industrial discharge limitations
(3) monitoring program or monitoring frequencies
(4) Legal authority or enforcement policy
(5) funding mechanisms
(6) resource requirements
(7) staffing levels;

vii. a summary of the annual pretreatment funding, including salaries (as a lump sum), analytical costs for both in-house and contract analyses, equipment costs, and other expenditures associates with implementation of the pretreatment program. The Permittee must also provide a manpower estimate in full-time equivalents (FTEs);

viii. a summary of public participation activities to involve and inform the public. This shall include a copy of the annual publication of significant non-compliance, if such publication was needed to comply with N.J.A.C. 7:14A-19.10(b); and

ix. other information as required and described in the NJDEP 403 Annual Report Guidance.

x. Two copies of the Pretreatment Program Annual Report shall be submitted to the BPR in the form prescribed in that guidance. The reports shall be submitted to:
NJDEP
Mailcode 401-02B
Bureau of Pretreatment and Residuals
401 East State Street
P.O. Box 420
Trenton, NJ 08625-0420.

11. CWEA Annual Report

a. The Permittee must submit information required by N.J.A.C. 7:14A-19.6(c), (d) and (e) pertaining to the implementation of the DLA's approved pretreatment program.

b. Submit the CWEA Annual Report: by February 1 of each year beginning from the effective date of the permit (EDP). (Activity #: DSW090003 - Effective: 7/1/2015)

c. Two copies of this report shall be submitted to:
NJDEP, Mailcode 401-02B
Bureau of Pretreatment and Residuals
401 E. State Street
P.O. Box 420
Trenton, N.J. 08625-0420.

12. Grace Period Annual Report

a. The permittee must submit the information required by N.J.A.C. 7:14A-19.6(h) and (i) pertaining to implementation of the DLA's approved pretreatment program.

b. Submit the Grace Period Annual Report by March 1 of each year beginning from the effective date of the permit (EDP).

c. Two copies of this report shall be submitted to:
NJDEP
Mailcode 401-02B
Bureau of Pretreatment and Residuals
401 East State Street
P.O. Box 420
Trenton, NJ 08625-0420.

G. CONDITIONS FOR MODIFICATION

1. Notification requirements

a. The permittee may request a minor modification for a reduction in monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using the specified QL.

2. Causes for modification

a. Pursuant to N.J.A.C. 7:14A-6.2(a)(10)(iii), the Department may modify or revoke and reissue any permit to incorporate limitations or requirements to control the discharge of toxic pollutants, including whole effluent, chronic and acute toxicity requirements, chemical specific limitations or toxicity reduction requirements, as applicable.

b. The permittee may request a minor modification to eliminate the monitoring requirements associated with a discharge authorized by this permit when the discharge ceases due to changes at the facility.

H. Custom Requirement

1. Re-evaluation of Section (A) Power Supply of Emergency Plan

a. PVSC shall re-evaluate section section (A) Power Supply of their Emergency Plan required in accordance with N.J.A.C. 7:14A-6.12(d)3i(1) to determine if any modifications need to be considered in consideration of recent region wide power outages, and submit the evaluation and any such modifications to the Department for review.

2. Bacterial Indicator Sample Requirement (Only applicable to DSN 001A)

a. The permittee is authorized to hold the bacterial indicator samples (fecal coliform) in a bottle prior to testing for permit limitation compliance reporting purposes for a time period not to exceed the travel time in the outfall pipe (in minutes) calculated using the following equation:

(25.069 million gallons X 24 hours/day X 60 mins/hour) / (flow rate in MGD).

3. Conditions Related to Interim Bypass Authorization

a. Bypassing is prohibited except during wet weather when influent flows exceed 400 MGD as an instantaneous flow.

b. Interim bypass is prohibited unless and until a Treatment Works Approval is issued for the construction and operation of the bypass line on an interim basis. If issued, operation of the bypass must comply with the terms and conditions of this NJPDES permit and the Treatment Works Approval.

c. The use of Outfall DSN 002A is conditional upon the hydraulic capacity of Outfall DSN 001A being exceeded.

d. All bypassed flow shall be combined with fully treated effluent flow prior to discharge.

e. All applicable effluent limitations and monitoring conditions as included in this permit for DSN 001A and DSN 002A are required to be met at all times.

f. At any time that this bypass occurs during a calendar day, whether for the entire day or a portion of that day, the Duration of Discharge shall be reported as one day for outfall DSN 001A. In the event that the capacity of DSN 001A is exceeded and DSN 002A is utilized, it shall also be reported as one day for DSN 002A. In the event that the bypass line is utilized sporadically throughout a 24-hour period, that shall also be reported as one day for outfall DSN 001A and DSN 002A, if the flow exceeds the capacity of DSN 001A.

g. Part III of the permit contains options for reporting percent removal for TSS and CBOD5 for DSN 001A. Option 1 applies when the instantaneous influent flow is less than 400 MGD for the entire day where the 85% removal requirement is applicable. Option 2 applies when the instantaneous influent flow reaches or exceeds the designated flow of 400 MGD, at any point during the day. When this condition occurs, the permittee shall report the percent removal value under “Option 2”. For whichever option is not applicable, the permittee shall report “Code = N”. For example, if Option 1 is applicable, then the permittee shall report “Code = N” under Option 2. Percent removal values shall be tracked on a daily basis where the 85% removal condition does apply to any calendar days for which the instantaneous influent flow is less than 400 MGD. A tabular representation of influent flow, effluent flow, CBOD5 influent, CBOD5 effluent, CBOD5 percent removal, TSS influent, and TSS effluent and TSS percent removal shall be tracked on a daily basis and included as an attachment to the Monitoring Report Form.

h. The permittee shall continuously meter flow for any flows into the plant and report it on the DMR form under the parameter "Flow, In Conduit or Thru Treatment Plant" as "Raw Sew/Influent" for DSN 001A.

   Effluent flow for DSN 001A shall be calculated by subtracting the flow metered at DSN 002A from the metered influent flow at DSN 001A.

i. Approval of the interim bypass and the conditions on the use of the interim bypass may be modified or terminated by the Department via a subsequent permit action under N.J.A.C. 7:14A-16.4 for cause such as if there is a substantial increase in the volume or character of pollutants being introduced to the WWTP.

j. The permittee is required to evaluate bypass as one of the seven CSO control alternatives as part of the LTCP as required by CSM, Part IV.G.4. Departmental approval of the interim use of a bypass line during wet weather for the duration of the current permit does not guarantee Departmental approval of the long-term use of the bypass beyond the life of the current permit or any period that the NJPDES permit may be extended as per N.J.A.C. 7:14A-2.8.

k. Total Flow (Bypass) serves to represent an approximate amount of volume that would otherwise be discharged via Combined Sewer Overflows (CSOs) but now receives primary treatment.

4. One Year Exemption from Monitoring Free Cyanide

a. The permittee does not have to monitor for free cyanide from EDP to EDP + 1 year and shall report Code = N on the MRF forms during that time period. At EDP + 13 months, the permit shall begin reporting results for free cyanide.

Combined Sewer Management

A. MONITORING REQUIREMENTS

1. CSO Monitoring Requirements

a. Since the permittee does not own and/or operate any CSO outfalls, this section does not apply.

B. RECORDKEEPING

1. Recordkeeping Requirements

a. The permittee shall identify the Combined Sewer System (CSS) complaint, maintenance, inspection, and repair documentation forms and related tracking forms and/or systems and the Permittee shall also specify how, where and when this documentation will be maintained.

C. REPORTING

1. Reporting Requirements

a. Since the permittee does not own and/or operate any CSO outfalls, this section does not apply.

D. SUBMITTALS

1. CSO Submittal Requirements

a. The permittee shall respond to all deficiencies cited by the Department within 30 days of notification. With adequate justification provided by the permittee, the Department may extend this deadline an additional 30 days.

b. All reports submitted to the Department pursuant to the requirements of this permit shall comply with the signatory requirements of N.J.A.C. 7:14A-4.9., and contain the following certification (or such revised form as previously approved in writing by the Department):

i. "I certify under penalty of law that those portions of this document relating to the treatment and collection system owned and operated by the permittee and all attachments related thereto were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system owned and operated by the permittee, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information".

c. Since multiple municipalities/permittees own separate portions of the hydraulically connected sewer system, the permittee shall work cooperatively with all other appropriate municipalities/permittees in the hydraulically connected sewer system to ensure that the Nine Minimum Controls (NMC) & Long Term Control Plans (LTCP) activities are being developed and implemented consistently. The permittee shall identify their joint and separate responsibilities with all other appropriate municipalities/permittees in the hydraulically connected sewer system regarding implementation of the NMCs and LTCPs. This information shall be provided/updated in the quarterly Progress Reports.

Combined Sewer Management

d. The permittee shall summarize on a quarterly basis its CSO construction related activities, as well as those reported to them by the other CSO permittees, in their system. Notification through the TWA process is sufficient for this purpose. The permittee shall make these construction related activities available publicly on their website or other acceptable means.

e. The permittee shall submit all information required by this permit via email or other electronic format acceptable to the Department to NJCSOProgram@dep.nj.gov. Until the Department can accept any file larger than 20 megabytes (MB), any larger file can be broken up into smaller segments and sent separately or can be sent via mail delivery on CDs or DVDs.

2. Updated Nine Minimum Control (NMC) Submittal Requirements

a. The permittee shall submit GPS data in degrees-minutes-seconds (at a minimum to the the tenth of a second accuracy) for all CSO regulators, pump stations and CSO outfalls owned/operated by the permittee in accordance with N.J.A.C. 7:1D-Appendix A, and NJ GIS protocol at http://www.state.nj.us/dep/gis/standard.htm. The permittee shall submit this GPS data: within 6 months from the effective date of the permit (EDP).

b. The permittee shall submit a PDF of a sewer map: within 12 months from the effective date of the permit (EDP). This map shall depict the actual locations of the separate and combined sanitary sewers, CSO regulators and outfalls owned/operated by the permittee.

c. The permittee shall install signs for each CSO outfall within 6 months from the effective date of the permit (EDP), in accordance with Section F.8. The permittee shall retain information at the offices of the permittee including a chart listing the CSO outfall designator and the physical address/location of the sign for each CSO outfall.

3. Long Term Control Plan (LTCP) Submittal Requirements

a. The Department encourages a single LTCP to be developed and submitted on behalf of all of the permittees in a hydraulically connected sewer system. If the STP and the hydraulically connected municipalities work cooperatively to develop and implement a single, coordinated LTCP, the permittee may request an extension of time to the LTCP compliance schedule due dates consistent with Part IV.D.3.b below.

b. The permittee shall develop an approvable LTCP that will include the Elements contained in Section G. The LTCP shall consist of the following steps and be submitted according to the schedule below.

i. Step 1a - System Characterization Work Plan for the LTCP - In accordance with Section G.1., unless otherwise approved by the Department in writing, the permittee shall submit an approvable System Characterization Work Plan: within 6 months from the effective date of the permit (EDP).

ii. Step 1b1 - In accordance with G.1., the permittee shall submit the System Characterization Report: within 36 months from the effective date of the permit (EDP).

iii. Step 1b2 - In accordance with G.2., the permittee shall submit the Public Participation Process Plan: within 36 months from the effective date of the permit (EDP).

iv. Step 1b3 - In accordance with G.3., the permittee shall submit the Consideration of Sensitive Areas Information of the LTCP: within 36 months from the effective date of the permit (EDP).

v. Step 2 - Development and Evaluation of Alternatives for the LTCP - In accordance with Sections G.2. through G.5. and G.9., the permittee shall submit an approvable Development and Evaluation of Alternatives Report: within 48 months from the effective date of the permit (EDP).

vi. THIS REQUIREMENT IS STAYED UNTIL OCTOBER 1, 2020. Step 3 - Selection and Implementation of the LTCP: In accordance with Sections G.2. and G.6. through G.9., the permittee shall submit an approvable Selection and Implementation of Alternatives Report: 10/1/2020.

vii. Upon Departmental approval of the LTCP, the permittee shall begin implementation of the LTCP in accordance with the schedule contained therein.

c. In accordance with Section G.9., the permittee shall submit an approvable baseline Compliance Monitoring Program (CMP) Work Plan: within 6 months from the effective date of the permit (EDP).

d. Unless otherwise specified by the Department, in accordance with Section G.9. and the approved work plan, the permittee shall submit an approvable baseline CMP Report and data: within 36 months from the effective date of the permit (EDP).

4. CSO Progress Report Submittal Requirements

a. The permittee shall Submit a progress report: within twenty-five (25) days after the end of every quarter beginning from the effective date of the permit (EDP).

b. The Progress Reports shall be prepared in accordance with the following requirements:

i. The Progress Reports shall follow the outline structure of the permit requirements in Sections F and G.

ii. The Progress Reports shall include, at a minimum, a summary of all permit compliance deadlines, their progress to date and CSO control measures implemented by the permittee to comply with the NMCs. The progress reports shall also include a prioritized schedule for additional CSO control measures to be implemented, and the effectiveness of the implemented CSO control measures, pursuant to this permit for the previous calendar quarter.

iii. The first Progress Report shall include a summary of all CSO control measures implemented to date and the effectiveness of those control measures.

iv. Each Progress Report must include a verification that the Operation and Maintenance Manual, including the SOPs, Asset Management Plan and Emergency Plan, have been updated in accordance with this permit and amended annually, as necessary.

v. Each Progress Report shall contain a detailed discussion of, and document compliance with, the continued implementation of the NMCs and the manner in which all owners/operators of the hydraulically connected collection system participated in the development of the LTCP, including information regarding the development and status of the telephone hotline/website pursuant to Section F.8.

vi. Upon Departmental approval of the LTCP, the permittee shall begin implementation of the permittee's CSO control measures in accordance with the schedule in the approved LTCP.

E. FACILITY MANAGEMENT

1. CSO Discharge Requirements

a. Since the permittee does not own/operate any CSO outfalls, there are no CSO discharge requirements.

2. Interstate Environmental Commission (IEC)

a. The permittee shall comply with the Interstate Environmental Commission's (IEC) "Water Quality Regulations", where applicable.

F. NINE MINIMUM CONTROL REQUIREMENTS

1. Proper Operation and Regular Maintenance Program Requirements

a. The permittee shall continue to implement and review annually, and update as needed, an Operations & Maintenance (O&M) Program and corresponding Manual, including an Emergency Plan, in accordance with N.J.A.C. 7:14A-6.12, to ensure that the treatment works, including but not limited to collection system, the CSO outfalls, solids/floatables facilities, regulators, and related appurtenances which are owned/operated by the permittee are operated and maintained in a manner to achieve compliance with all terms and conditions of this permit.

b. The permittee shall operate the treatment works using a licensed operator in accordance with N.J.S.A. 58:11-66(a), N.J.A.C. 7:14A-6.12(b) and N.J.A.C. 7:10A.

c. The permittee shall provide adequate operator staffing for the treatment works.

d. The permittee shall provide documentation that demonstrates that employees were provided with appropriate training to perform the operation and maintenance duties required and to follow the Standard Operating Procedures (SOPs) in the O&M Program and corresponding Manual. This shall include a current training program for the purpose of informing new employees and maintaining training levels for current employees in regards to the CSO O&M Program and corresponding Manual, including safety related concerns.

e. The permittee shall implement an O&M Program & Manual that includes, at a minimum the following:

i. A directory of appropriate O&M staff, including a description of their individual responsibilities and emergency contact information.

ii. A description of the permittee's Fats, Oils and Greases (FOG) Program (if applicable).

iii. An updated characterization of the entire collection system owned/operated by the permittee that conveys flows to the treatment works. The permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information.

f. This characterization in Section F.1.e.iii above shall include a spreadsheet, organized by CSO outfall, as appropriate, of the capacity, dimensions, age, type of material, and specific location of the items listed below. This spreadsheet shall be completed no later than EDP + 6 months.

i. CSO Outfalls (if applicable);

ii. Tide gates (if applicable);

iii. Solids/floatables controls (if applicable);

iv. Regulators (if applicable);

v. Gravity lines and force mains (if applicable), including size, length and direction of flow;

vi. Pump stations (if applicable);

vii. Significant Indirect Users (SIUs) upstream of any CSO outfall; and

viii. Specific locations that have historically experienced the following: blockages, bottlenecks, flow constrictions, sewer overflows including to basements, streets and other public and private areas, or related incidences.

g. The permittee shall delineate the characterization information required in Section F.1.f on a GIS map, as applicable, pursuant to N.J.A.C. 7:1D-Appendix A and shall follow the NJ GIS protocol at http://www.state.nj.us/dep/gis/standard.htm. This map shall be completed by EDP + 12 months.

h. The permittee shall evaluate dry and wet weather flows that it receives from separately sewered municipalities that contribute flows to the portion of the CSS owned or operated by the permittee, along with I/I studies required by CSO permittees, to inform the evaluation of I/I reduction as an alternative in the LTCP.

i. The permittee shall also include SOPs in the O&M Program and corresponding Manual for the operation, inspections, and scheduled preventative maintenance in accordance with the appropriate manufacturer's recommendations and equipment manuals at a minimum, to ensure that the entire collection system that is owned/operated by the permittee that conveys flows to the treatment works will function properly.

j. At a minimum, the SOPs shall contain detailed instructions for system operations, such as frequency of inspections, regular maintenance, and the timely repair, and documentation of such information, of the entire collection system that conveys flows to the treatment works. These SOPs shall include procedures to address the following items:

i. SOPs shall be designed to ensure that the entire collection system owned/operated by the permittee that conveys flows to the treatment works functions in such a way as to not result in sewage overflows (except from designated CSO outfalls) including to basements, streets and other public and private areas, or bottlenecks/constrictions that limit flow in specific areas and prevent the downstream STP treatment capacity from being fully utilized, in accordance with Section F.4.

ii. SOPs shall be designed to ensure that the storage and conveyance of combined sewage to the STP is maximized in accordance with Sections F.2 and F.4.

iii. SOPs shall be designed to ensure that the impacts from SIUs contributing to the CSOs that are owned/operated by the permittee are minimized in accordance with Section F.3.

iv. SOPs shall be designed to ensure there will be no dry weather overflows from any CSO that is owned/operated by the permittee in accordance with Section F.5.

v. SOPs to conduct a visual inspection program of sufficient scope and frequency of the CSS that is owned/operated by the permittee to provide reasonable assurance that unpermitted discharges, obstructions, damage, and DWOs will be discovered.

vi. SOPs shall be designed to ensure the solids/floatables appurtenances that are owned/operated by the permittee will be maintained and the solids/floatables will be removed from the CSO discharge and disposed of properly at such frequency so as not to cause obstructions of flow for any future CSO discharges, in accordance with Part II of this permit and Section F.6.

vii. SOPs designed to prevent the Intrusion upstream due to high tides and/or receiving water flooding into the entire collection system owned/operated by the permittee that conveys flows to the treatment works through proper operation and maintenance.

viii. SOPs designed to provide a gravity sewer and catch basin inspection schedule and clean as necessary for the collection system that is owned/operated by the permittee.

ix. SOPs shall be designed to provide a system for documenting, assessing, tracking, and addressing residential complaints regarding blockages, bottlenecks, flow constrictions, sewer overflows including to basements, streets and other public and private areas, or related incidents for the collection system that is owned/operated by the permittee.

x. Unless written extension is granted by the Department for extraordinary circumstances, the SOP shall be designed to ensure removal within seven (7) calendar days of the permittee becoming aware of any obstructions within the collection system that is owned/operated by the permittee that are directly causing any CSO overflows due to debris, Fats, Oils and Greases and sediment buildup, or other foreign materials.
The SOP shall be designed to ensure removal of any other obstructions that are contributing to overflows due to debris, Fats, Oils and Greases and sediment buildup, or other foreign materials in the collection system owned/operated by the permittee on a scheduled basis as necessary for the proper operation of the system.
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xi. Require immediate steps to take corrective action(s) to repair damage and/or structural deterioration, address unpermitted discharges, and eliminate DWOs of the entire collection system owned/operated by the permittee that conveys flows to the treatment works.

xii. Provide reduction strategies to resolve excessive I/I through the identification of I/I sources and the prioritization and implementation of I/I reduction projects within the collection system that is owned/operated by the permittee.

xiii. Provide procedures whereby wet weather flows are maximized for conveyance to the STP.

k. The permittee shall incorporate an Asset Management Plan as part of the overall O&M strategy. This plan shall include an infrastructure inventory with infrastructure repair/replacement needs listed and scheduled according to priority/criticality, that demonstrates the entire collection system owned/operated by the permittee that conveys flows to the treatment works is perpetually and proactively managed with the appropriate resources (capital, staffing, training, supplies, equipment) allocated in the permittee's budget. This information shall be included in the permittee's budget as prepared and submitted to Department of Community Affairs, if appropriate. The Asset Management Plan shall be completed no later than EDP+12 months.

l. The permittee shall also include in the O&M Program and corresponding Manual, an Emergency Plan, in accordance with N.J.A.C. 7:14A-6.12(d). The Emergency Plan shall provide for, to the maximum extent possible, uninterrupted treatment works operation during emergency conditions using in-house and/or contract based services. The Emergency Plan shall include Standard Operating Procedures (SOPs), which ensure the effective operation of the treatment works under emergency conditions, such as extreme weather events and extended periods of no power.

m. The permittee shall review annually the O&M Program & Manual and update it as needed to reflect updated information and changes in the characterization, design, construction, operations, maintenance, Emergency Plan, and SOPs as listed in Section F.1, and include verification that the O&M Program and corresponding Manual has been prepared and updated in accordance with the submittal requirements in Section D.4.

2. Maximum use of the collection system for storage

a. The permittee shall use the entire collection system owned/operated by the permittee for in-line storage of sewage for future conveyance to the STP when sewer system flows subside by ensuring that the sewage is retained in the sewer system to the extent practicable to minimize CSO discharges (i.e. volume, frequency and duration), while not creating or increasing sewage overflows, including to basements, streets and other public and private areas.

b. The permittee shall minimize the introduction of sediment and obstructions in the entire collection system owned/operated by the permittee that conveys flows to the treatment works pursuant to Sections F.1. and F.7.

c. The permittee shall operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works pursuant to Section F.1.

d. The permittee shall identify and implement minor modifications, based on the ongoing evaluations, to enable appropriate segments of the collection system owned/operated by the permittee to store additional wet weather flows to reduce any CSOs until downstream sewers and treatment facilities can adequately convey and treat the flows.

3. Review and modification of pretreatment requirements to assure CSO impacts are minimized

a. For the SIU dischargers upstream of any CSO outfall which is owned/operated by the permittee, the permittee shall: (1) determine the locations of the SIUs; (2) identify the CSO outfalls associated with each of the SIUs; and (3) determine the discharge volume and loading of SIU-permitted parameters for each SIU. In the case of a municipal permittee or non-delegated STP permittee, information to satisfy (1) and (3) shall be obtained from the delegated local agency that regulates the SIU or, if there is no delegated local agency, from the Department. This information shall be used to prioritize O&M activities in portions of the CSS affected by SIU discharges and shall be considered when developing the LTCP. The permittee shall include this information in the characterization portion of the O&M Program and Manual as required in Section F.1. This information shall be updated annually in the Progress Report in accordance with Section D.4.b.iv.

b. The permittee shall require SIUs upstream of any CSO outfall which is owned/operated by the Permittee to investigate ways to minimize their discharges during wet weather and report their findings to the permittee.

c. The permittee shall establish agreements with SIUs upstream of any CSO outfall which is owned or operated by the permittee or ordinances specifying that the SIUs (especially for batch discharges, non-continuous dischargers) should restrict discharges to the extent practical during wet weather periods.

4. Maximization of flow to the POTW for treatment

a. The permittee shall operate and maintain the entire collection system owned/operated by the permittee that conveys flows to the treatment works to maximize the conveyance of wastewater to the STP for treatment subject to existing capacity.

b. The permittee shall evaluate and implement alternatives for increasing flow to the STP in accordance with i and ii below that do not require extensive engineering studies or significant construction costs:

i. Capacity evaluations of the entire collection system owned/operated by the permittee that conveys flows to the treatment works in accordance with Section F.1.f to determine the maximum amount of flow that can be stored and transported.

ii. Identification of other activities conducted and/or planned to further maximize flow to the POTW.

5. Prohibition of CSOs during dry weather

a. The permittee shall operate the system in such a way that it does not cause any dry weather overflow from the collection system owned/operated by other permittees in the hydraulically connected system.

6. Control of Solids/Floatables in CSOs

a. Since the permittee does not own and/or operate any CSO outfalls, this section does not apply.

7. Implementation of Pollution Prevention Measures

a. The permittee shall encourage municipalities to continue to implement and upgrade pollution prevention measures necessary to prevent and limit contaminants from entering the entire collection system owned/operated by the permittee that conveys flows to the treatment works. Unless demonstrated to the Department to be impracticable measures, shall include, but not be limited to, the following:.

i. Implementation of a regular street cleaning program.

ii. Retrofitting of existing storm drains to meet the standards in Appendix B, where such inlets are in direct contact with repaving, repairing (excluding repair of individual potholes), reconstruction, resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen) or alterations of facilities owned/operated by the permittee. For exemptions to this standard see "Exemptions" listed in Appendix B.

iii. Implementation of stormwater pollution prevention rules and ordinances.

iv. Implementation of solid waste collection and recycling ordinances.

v. Implementation of public education programs.

b. The permittee shall enforce rules and regulations on illegal connections and unauthorized discharge(s) into the POTW

8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts

a. Since the permittee does not own and/or operate any CSO outfalls, this section does not apply.

9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls

a. Since the permittee does not own and/or operate any CSO outfalls, this section does not apply.

G. LONG TERM CONTROL PLAN REQUIREMENTS

1. Characterization Monitoring and Modeling of the Combined Sewer System

a. The permittee, as per D.3.a and G.10, shall submit an updated characterization study that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling and other means as appropriate to establish the existing baseline conditions, evaluate the efficacy of the CSO technology based controls, and determine the baseline conditions upon which the LTCP will be based. The permittee shall work in coordination with the combined sewer communities which are hydraulically connected to PVSC for appropriate Characterization, Monitoring and Modeling of the Sewer System.

b. The characterization study shall:
- include a thorough review of the entire collection system that conveys flows to the treatment works, including areas of sewage overflows, including to basements, streets and other public and private areas, to adequately address the response of the CSS to various precipitation events;
- identify the number, location, frequency and characteristics of CSOs; and
- identify water quality impacts that result from CSOs.

Ambient in-stream monitoring may be performed in accordance with the guidance document entitled: "Receiving Waters Monitoring Work Plan Guidance for the CSO Program" available at www.state.nj.us/dep/dwq.

c. The permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information. A list of the studies performed by the CSO permittees in this hydraulically connected sewer system is included as Appendix C in the permit renewal.

d. The major elements of the sewer system characterization are noted below:

i. Rainfall Records - The permittee shall examine the historical rainfall record for the geographic area of its existing CSS using sound statistical procedures and best available data. The permittee shall evaluate flow variations due to precipitation events in the receiving waterbody to correlate between CSOs and receiving water conditions.

ii. Combined Sewer System Characterization - the permittee shall evaluate sewer system records, field inspections gathered from the O&M Characterization required under Section F.1. (and previous relevant studies), and other activities necessary to understand the number, location and frequency of overflows and their location relative to sensitive areas and to pollution sources in the collection system, such as SIUs.

iii. CSO Monitoring - Using all available information the permittee shall develop and/or update a previously existing, comprehensive, representative monitoring program that measures the frequency, duration, flow rate, volume and pollutant concentration of CSO discharges and assesses the impact of the CSOs on the receiving waters. The monitoring data may utilize existing data from previous studies, and must include necessary CSO effluent and ambient in-stream monitoring for pathogens (including current and recreational standards for bacteriological indicators (e.g., fecal coliform, Enterococcus and E. Coli)). Only ambient monitoring data collected in accordance with a Department-approved Quality Assurance/Quality Control program shall be used. A representative sample of overflow points can be selected that is sufficient to allow characterization of CSO discharges, their water quality impacts and to facilitate evaluation of control plan alternatives.

iv. Modeling - the permittee may employ NJDEP or EPA approved models, which include appropriate calibration and verification with field measurements, to aid in the characterization. If models are used they shall be identified by the permittee along with an explanation of why the model was selected and used in the characterization. The permittee should base its choice of a model on the characteristics of the entire collection system that conveys flows to the treatment works (including flows from other hydraulically connected municipal sewer systems), the number and location of overflow points, and the sensitivity of the receiving water body to the CSO discharges. The sophistication of the model should relate to the complexity of the system to be modeled and to the information needs associated with evaluation of CSO control options and water quality impacts. Because of the iterative nature of modeling sewer systems, CSOs, and their impacts, monitoring and modeling efforts are complementary and should be coordinated with other affected entities.

v. The permittee shall identify sensitive areas where CSOs occur. These areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters used for primary contact recreation (including but not limited to bathing beaches), public drinking water intakes or their designated protection areas, and shellfish beds.

2. Public Participation Process

a. The permittee shall submit the Public Participation Plan to include appropriate input and participation with other hydraulically connected communities, in accordance with D.3.a and G.10. The permittees may use information from the previous submittals. A list of the previous submittals from the CSO permittees in this hydraulically connected sewer system is included as Appendix C in the renewal permit.

b. Implementation shall actively involve the affected public throughout each of the 3 Steps of the LTCP process. The affected public includes rate payers (including rate payers in the separate sewer sections), industrial users of the sewer system, persons who reside downstream from the CSOs, persons who use and enjoy the downstream waters, and any other interested persons. A Public Participation Plan shall include the following elements:

i. Conduct outreach to inform the affected/interested public (during the development of the permittee's LTCP) through various methods including: public meetings, direct mailers, billing inserts, newsletters, press releases to the media, postings of information on the permittee's website, hotline, development of advisory committees, etc.; and to

ii. Invite members of the affected/interested public to join a Supplemental CSO Team to work with the permittee's assigned staff, consultants and/or contractors as required in Part IV, Section G.2.c. of the permit.

c. The permittee shall actively involve members of the affected/interested public by establishing a Supplemental CSO Team to provide input for consideration by the permittee. The goals of the Supplemental CSO Team could consist of the following elements:

i. Meet periodically to assist in the sharing of information, and to provide input to the planning process;

ii. Review the proposed nature and extent of data and information to be collected during LTCP development;

iii. Provide input for consideration in the evaluation of CSO control alternatives; and

iv. Provide input for consideration in the selection of those CSO controls that will cost effectively meet the Clean Water Act requirements.

3. Consideration of Sensitive Areas

a. The permittee's LTCP shall give the highest priority to controlling overflows to sensitive areas, in accordance with D.3.a and G.10. Sensitive areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters used for primary contact recreation (including but not limited to bathing beaches), public drinking water intakes or their designated protection areas, and shellfish beds.

b. The LTCP shall comply with the following requirements:

i. Prohibit new or significantly increased CSOs

ii. Eliminate or relocate CSOs that discharge to sensitive areas wherever physically possible and economically achievable, except where elimination or relocation would provide less environmental protection than additional treatment.

iii. Where elimination or relocation is not physically possible and economically achievable, or would provide less environmental protection than additional treatment, the permittee shall provide the level of treatment for remaining CSOs deemed necessary to meet WQS for full protection of existing and designated uses.

4. Evaluation of Alternatives

a. The permittee shall evaluate a reasonable range of CSO control alternatives, in accordance with D.3.a and G.10, that will meet the water quality-based requirements of the CWA using either the Presumption Approach or the Demonstration Approach (as described in Sections G.4.f.and G.4.g).

b. The permittee shall submit, as per Section D.3.b.v, the Evaluation of Alternatives Report that will enable the permittee, in consultation with the Department, the public, owners and/or operators of the entire collection system that conveys flows to the treatment works, to select the alternatives to ensure the CSO controls will meet the water quality-based requirements of the CWA, will be protective of the existing and designated uses in accordance with N.J.A.C. 7:9B, give the highest priority to controlling CSOs to sensitive areas, and address minimizing impacts from SIU discharges.

c. The permittee shall select either Demonstration or Presumption Approach for each group of hydraulically connected CSOs, and identify each CSO group and its individual discharge locations.

d. The Evaluation of Alternatives Report shall include a list of control alternative(s) evaluated for each CSO.

e. The permittee shall evaluate a range of CSO control alternatives predicted to accomplish the requirements of the CWA. In its evaluation of each potential CSO control alternative, the permittee shall use an NJDEP approved hydrologic, hydraulic and water quality models. The permittee shall utilize the models to simulate the existing conditions and conditions as they are expected to exist after construction and operation of the chosen alternative(s). The permittee shall evaluate the practical and technical feasibility of the proposed CSO control alternative(s), and water quality benefits of constructing and implementing various remedial controls and combination of such controls and activities which shall include, but not be limited to the controls below:

   i. Green infrastructure.

   ii. Increased storage capacity in the collection system.

   iii. STP expansion and/or storage at the plant (an evaluation of the capacity of the unit processes must be conducted at the STP resulting in a determination of whether there is any additional treatment and conveyance capacity within the STP). Based upon this information, the permittee shall determine (modeling may be used) the amount of CSO discharge reduction that would be achieved by utilizing this additional treatment capacity while maintaining compliance with all permit limits

   iv. Reduction of I/I in the entire collection system that conveys flow to the STP to free up storage or conveyance capacity in the sewer system and/or treatment capacity at the STP, and feasibility of implementing in the entire system or portions thereof. If I/I reduction is proposed as a selected LTCP alternative, the permittee shall submit a schedule and written agreement with the affected municipalities to revise rules, ordinances, and/or its sewer use agreements to require the affected municipalities to: (1) operate and maintain their treatment works; (2) identify and reduce I/I, and (3) identify and eliminate interconnections and cross-connections in storm sewers.

   v. Sewer separation.

   vi. Treatment of the CSO discharge.

   vii. CSO related bypass of the secondary treatment portion of the STP in accordance with N.J.A.C. 7:14A-11.12 Appendix C, II C.7.

f. The "Presumption" Approach, in accordance with N.J.A.C 7:14A-11 Appendix C provides:
A program that meets any of the criteria listed below will be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA, provided the Department determines that such presumption is reasonable in light of the data and analysis conducted in the characterization, monitoring, and modeling of the system and the consideration of sensitive areas described above.
Combined sewer flows remaining after implementation of the NMCs and within the criteria specified in this Section at G.4.f.i. and ii. shall receive minimum treatment in accordance with the items below:
- Primary clarification (removal of floatables and settleable solids may be achieved by any combination of treatment technologies or methods that are shown to be equivalent to primary clarification),
- Solids and floatables disposal, and
- Disinfection of effluent, if necessary, to meet WQS, protect designated uses and protect human health, including removal of harmful disinfection chemical residuals/by-products (e.g. chlorine produced oxidants), where necessary.

The permittee must demonstrate any of the following three criteria below:.

i. No more than an average of four overflow events (see below) per year from a hydraulically connected system as the result of a precipitation event that does not receive the minimum treatment specified below. The Department may allow up to two additional overflow events per year. For the purpose of this criterion, an ‘event' is:
- In a hydraulically connected system that contains only one CSO outfall, multiple periods of overflow are considered one overflow event if the time between periods of overflow is no more than 24 hours.
- In a hydraulically connected system that contains more than one CSO outfall, multiple periods of overflow from one or more outfalls are considered one overflow event if the time between periods of overflow is no more than 24 hours without a discharge from any outfall.

ii. The elimination or the capture for treatment of no less than 85% by volume of the combined sewage collected in the CSS during precipitation events on a hydraulically connected system-wide annual average basis.

iii. The elimination or removal of no less than the mass of the pollutants, identified as causing water quality impairment through the sewer system characterization, monitoring, and modeling effort, for the volumes that would be eliminated or captured for treatment under Section G.4.f.ii.

g. The "Demonstration" Approach, in accordance with N.J.A.C. 7:14A-11 Appendix C provides:
A permittee may demonstrate that a selected control program, though not meeting the criteria specified under the Presumption Approach above, is adequate to meet the water quality-based requirements of the CWA.

The permittee should demonstrate each of the following below:

i. The planned control program is adequate to meet WQS and protect designated uses, unless WQS or uses cannot be met as a result of natural background conditions or pollution sources other than CSOs.

ii. The CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment.

iii. The planned control program will provide the maximum pollution reduction benefits reasonably attainable.

iv. The planned control program is designed to allow cost effective expansion or cost effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS or designated uses.

5. Cost Performance Considerations

a. The permittee shall submit in accordance with the submittal requirements at Sections D.3.a. and D.3.b.v., the cost/performance considerations that demonstrate the relationships among proposed control alternatives that correspond to those required in accordance with Section G.4. This shall include an analysis to determine where the increment of pollution reduction achieved in the receiving water diminishes compared to the increased costs. If the permittee chooses to pursue the "Presumption Approach" of ‘no more than an average of four discharge events per year', the permittee is not required to conduct this analysis for the other number of events (i.e. 0, 7, 10, 20). This analysis, often known as "knee of the curve", shall be among the considerations used to help guide selection of controls.

In accordance with Section G.1.a., the permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information, such as those listed in the renewal permit.

6. Operational Plan

a. Upon Departmental approval of the final LTCP and throughout implementation of the approved LTCP as appropriate, the permittee shall update the O&M Program and Manual in accordance with D.3.a and G.10, to address the final LTCP CSO control facilities and operating strategies, including but not limited to, maintaining Green Infrastructure, staffing and budgeting, I/I, and emergency plans.

7. Maximizing Treatment at the Existing STP

a. The LTCP shall include the maximization of the removal of pollutants during and after each precipitation event at the STP, in accordance with D.3.a and G.10, so that such flows receive treatment to the greatest extent practicable, including utilizing available tankage for storage, while still meeting all permit limits.

b. The permittee shall incorporate the receiving STP's plan for maximizing flow and treatment at the STP.

8. Implementation Schedule

a. The permittee shall submit a construction and financing schedule in accordance with D.3.a and G.10, for implementation of Department approved LTCP CSO controls. Such schedules may be phased based on the relative importance of the adverse impacts upon water quality standards and designated uses, the permittee's financial capability, and other water quality related infrastructure improvements, including those related to stormwater improvements that would be connected to CSO control measures.

b. Upon Departmental approval of the LTCP, the permittee shall begin implementation of the LTCP in accordance with the approved schedule contained therein.

c. In accordance with Section D.3.b.vi., the permittee shall submit an implementation schedule, including yearly milestones, which considers the items listed below:

i. Adequately addressing areas of sewage overflows, including to basements, streets and other public and private areas.

ii. CSO overflows that discharge to sensitive areas as the highest priority.

iii. Use impairment of the receiving water.

iv. The permittee's financial capability including, but not limited to, consideration of the factors below:
- Median household income,
- Total annual wastewater and CSO control costs per household as a percent of median household income,
- Overall net debt as a percent of full market property value,
- Property tax revenues as a percent of full market property value,
- Property tax collection rate
- Unemployment, and
- Bond rating

v. Grant and loan availability.

vi. Previous and current residential, commercial and industrial sewer user fees and rate structures.

vii. Other viable funding mechanisms and sources of financing.

viii. Resources necessary to design, construct and/or implement other water related infrastructure improvements as part of an Asset Management Plan as per Part IV.F.1.

9. Compliance Monitoring Program (CMP)

a. The monitoring information collected from the ambient baseline monitoring phase of the CMP, in accordance with D.3.a., will be compared to subsequent CMP events during and after LTCP implementation to evaluate the effectiveness of implemented CSO controls.

b. The permittee shall implement a CMP adequate to: verify baseline and existing conditions, the effectiveness of CSO controls, compliance with water quality standards, and protection of designated uses. This CMP shall be conducted before (baseline), during and after implementation of the LTCP and shall include a work plan to be approved by the Department that details the monitoring protocols to be followed, including the following necessary monitoring listed below:

i. Ambient in-stream monitoring may be performed in accordance with the guidance document entitled: "Receiving Waters Monitoring Work Plan Guidance for the CSO Program" at www.state.nj.us/dep/dwq.

ii. Discharge frequency for each CSO (days and hours per month).

iii. Duration of each discharge for each CSO (number of days).

iv. Quality of the flow discharged from each CSO, which shall include pathogen monitoring at a minimum.

v. Rainfall monitoring in the vicinity of each CSO/municipality.

c. The above monitoring must be completed for the baseline CMP Report and then at intervals as determined by the Department as established in a future permit action based on the implementation schedule in the approved LTCP. The results must be submitted in the Progress Reports required in Section D.4.

d. For the purposes of Part IV.G.9.b, the permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information. A list of the studies performed on the receiving waters is included in Appendix C in the renewal permit.

10. Permittee's LTCP Responsibilities

a. The permittee is responsible for submitting an LTCP that addresses all nine elements in Part IV.G. Where multiple permittees own/operate different portions of a hydraulically connected CSS, the permittee is required to work cooperatively with all other CSO permittees to ensure the LTCPs are consistent. The LTCP documents must be based on the same data, characterization, models, engineering and cost studies, and other information, where appropriate. Each permittee is required to prepare the necessary information for only the portion of the hydraulically connected system that the permittee owns/operates and provide this information to the other permittees within the hydraulically connected system in a timely manner for LTCP submission.