



State of New Jersey

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Governor

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SHAWN M. LATOURETTE
Commissioner

TAHESHA L. WAY
Lt. Governor

**Via Email Only
May 14, 2024**

To: Distribution List

Re: Final Surface Water Master General Permit Renewal
Category: CG - Non-Contact Cooling Water (GP)
NJPDES Permit No. NJ0070203
NJPDES Master General Permit Program Interest
Trenton City, Mercer County

Enclosed is a **final** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action which has been issued in accordance with N.J.A.C. 7:14A. This master general permit serves to renew the existing 2019 Master Non-Contact Cooling Water (Master NCCW) general permit (Category CG). A full copy of the renewal action, including a complete description of all effluent limitations and monitoring conditions, is available on the Department's website at https://www.nj.gov/dep/dwq/gp_CG.htm.

This permit renewal authorizes the discharge of non-contact cooling water, non-contact cooling water commingled with stormwater, cooling tower blowdown, boiler water discharge (i.e., boiler blowdown and boiler bleed-off), and/or air conditioning condensate water to eligible surface waters of the State. The Department has determined that these types of point sources require the same operating conditions and are more appropriately controlled under a general NJPDES permit as allowable under N.J.A.C. 7:14A-6.13. Increased monitoring frequencies are being incorporated into this Master NCCW in order to better characterize these waste streams across all seasons.

The draft NJPDES Surface Water Master General Permit Renewal No. NJ0070203 was issued on March 19, 2024. Notice of this draft action appeared in three newspapers as well as the March 20, 2024 *DEP Bulletin* as available here: www.nj.gov/dep/bulletin. The public notice was published in *The Atlantic Press* on March 28, 2024; *The Star Ledger* on March 27, 2024; and *The Times* on March 27, 2024 as shown here: www.njpublicnotices.com. The public comment period ended on April 26, 2024 and comments were received on the NJPDES draft permit action. A summary of the significant and relevant comments received on the draft action during the public comment period, the Department's responses, and an explanation of any changes from the draft action have been included in the Response to Comments document attached hereto as per N.J.A.C. 7:14A-15.16.

The facilities covered under this Master General CG Permit Renewal and their corresponding municipalities and discharge components are listed in the table below where individual Permit Summary Tables are included as part of this final permit action. Individual authorizations will be issued for the following facilities under this master general permit:

	NJPDES Number	Facility Name	Municipality	County
1	NJG0000329	Newark Refrigerated Warehouse, Inc.	Newark City	Essex
2	NJG0002011	Sika Corporation	Lyndhurst Borough	Bergen
3	NJG0003077	Christ Church	Rockaway Township	Morris
4	NJG0030457	Passaic Rubber Company	Wayne	Passaic
5	NJG0032913	HTI - Services, LLC	Lawrence Township	Mercer
6	NJG0033146	Penn Color, Inc.	Elmwood Park Borough	Bergen
7	NJG0034835	Ames Advanced Materials Corporation	South Plainfield	Middlesex
8	NJG0062731	Lassonde Pappas & Co., Inc.	Upper Deerfield	Cumberland
9	NJG0113433	COE Bridgewater, LLC	Bridgewater Township	Somerset
10	NJG0134902	Kappus Plastic Co.	Hampton Borough	Hunterdon
11	NJG0169897	Taylor Farms NJ Inc. (Formerly Univeg)	Logan Township	Gloucester
12	NJG0169943	PNJ1 Data Center	Piscataway	Middlesex
13	NJG0182176	Capital Health Medical Center - Hopewell	Hopewell Township	Mercer
14	NJG0220531	Linden Cogeneration Plant	Linden City	Union
15	NJG0233439	Prestone Products Corporation	Freehold Township	Monmouth
16	NJG0234966	Morris Plains NJ Facility	Morris Plains	Morris
17	NJG0330728	Our Lady of Mercy Church	Park Ridge Borough	Bergen

Upon issuance, individual renewal authorizations will become effective as stated within those authorizations. Until such time as the new permit takes effect, the existing permit conditions will continue to remain in full force and effect pursuant to N.J.A.C. 7:14A-2.8.

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

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

If you have questions or comments regarding the final action, please contact Jonathan Hanuschik (Jonathan.Hanuschik@dep.nj.gov) either by email or phone at (609) 292-4860.

Sincerely,



Susan Rosenwinkel
Assistant Director
Water Pollution Management Element

Enclosures

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

Table of Contents for the Final Permit

This permit package contains the items below:

- 1. Cover Letter – Final Permit**
- 2. Table of Contents for the Final Permit**
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- 12. Appendix B: RWBR Approval Status List**

List of Acronyms

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

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

Comments were received on the NJPDES draft Surface Water Master General Permit Renewal No. NJ0070203 issued on March 19, 2024. The thirty (30) day public comment period began on March 27, 2024 when the Public Notice was published in *The Press of Atlantic City*, *Star Ledger*, and *The Times* as shown here: www.njpublicnotices.com. The public comment period ended on April 26, 2024. The following person commented during the public comment period:

- A. Barry Durham, Environment Health and Safety (EHS) Manager, Linden Cogeneration Plant, in an email dated April 23, 2024

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

1. COMMENT:

We are in receipt of the draft general permit and the revised language for the permit for the Linden Cogeneration Plant, NJG0220531.

We do want to provide you with the following data regarding the WET results over the past 5 years as follows:

Aug 2019	>100%
March 2020	>100%
September 2020	>100%
March 2021	19.8%
September 2021	99.4%
March 2022	66.0%
September 2022	>100%
March 2023	>100%
September 2023	35.3%
March 2024	>100%

Please observe that 6 out of the 10 reporting efforts resulted in >100% survival and the average of all 10 efforts resulted in 82.05% survival.

The draft permit language would suggest that our results have been no better than 19.8%, certainly not an accurate representation of the overall data.

We request that the permit be revised to reflect the overall results and that the permit limit be revised to indicate a monitor only requirement. Thank you for your consideration.

RESPONSE:

As stated in this comment, the Department included a value of 19.8% for Chronic WET as an IC25 in the Wastewater Data column of the Permit Summary Table for this facility to present wastewater results for April 2019 through September 2023. The value of 19.8% is a minimum value. As part of the draft permit issuance, the Department reviewed available data. As part of the analysis of this data set, WET was found in quantifiable amounts in the effluent as shown above in 4 out of 10 samples. Since 2 of the samples were found to be reported as results less than the IC25% threshold, the Department imposed the threshold of $IC25 \geq 61\%$

as the applicable effluent limitation consistent with N.J.A.C. 7:14A-13. Specifically, the Department performed a cause and reasonable potential to cause analysis using this data and had found the discharge was found to cause an exceedance of the chronic interpretation of the narrative criteria for WET identified in the SWQS. Therefore, the Department has determined that this effluent limitation is necessary to ensure the protection of the receiving waterbody and has been maintained in the final permit. This limitation does not become effective until July 1, 2027.

Note that the final permit also contains the following language in Part IV.D.2.c:

- c. Where a chronic whole effluent toxicity requirement is imposed, the Department may issue a minor modification in accordance with N.J.A.C. 7:14A-16.5(a)1 to either reduce the monitoring frequency or eliminate the WET limit with continued monitoring. The criteria for any such reduction shall be based on a minimum of four WET data points that are greater than the chronic toxicity threshold of 61% as defined in the permit. Flow volumes may be taken into consideration in evaluating this request.

In the event that three consecutive data points collected after March 2024 show values greater than 61%, the permittee can petition the Department for a minor modification to remove the limitation. The permittee could also opt for an individual NJPDES permit (Category B) which could include conduct of a dilution study to better assess dilution effects with the receiving waterbody.

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

(#1) Newark Refrigerated Warehouse Corporation NJG0000329

Facility Description – Refrigerated Warehouse

Municipality / County: Newark/ Essex County

Source Water: Private Well

Discharge Types: Non-contact Cooling Water

The non-contact cooling water is used for the compressors and heat exchangers for the refrigerator systems.

Additives: None

Discharge Frequency: Continuous

Receiving Waterbody Information

Receiving Water: Elizabeth Channel (via the Newark Airport Peripheral Ditch)

Receiving Water Classification: SE3(C2)

OUTFALL: DSN001A

From the trough in the engine room, via a pipe to the Newark Airport Peripheral Ditch to the Elizabeth Channel SE3 (C2).

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 3/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	511,657 751,133	MR MR	MR MR	1/Month	1/Month	Estimated (2)
pH	s.u.	Instant Min. Instant Max.	6.5 8.0	6.0 9.0	6.0 9.0	1/Month	1/Month	Grab
Temperature	°C	Monthly Avg. Daily Max.	21 26	MR 30	MR 30	1/Month	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	7 14	MR 20	MR 20	1/Month	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	24 100	MR 50	MR 50	1/Month	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<5 <5	MR 10	MR 10	1/Month	1/Month	Grab
Tetrachloroethylene	ug/L	Monthly Avg. Daily Max.	9.78 9.78	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Mysid Bahia</i>)	% effluent	Minimum	>100	61	61	1/6 Months	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(1) The sample is taken from the trough in the machine room.

(2) The effluent flow is estimated based on the values obtained from the influent flow meter, which is located on the pipe that comes out of the on-site well.

(#2) Sika Corporation NJG0002011

Facility Description - Manufacturer of various chemical compounds and admixtures used in the construction and concrete industry

Municipality / County: Lyndhurst, Bergen County

Source Water: Public water supply

Discharge Types: Non-contact Cooling Water, Storm Water Runoff

Additives: Dechlorination chemical - "Captor" which is comprised of Calcium Thiosulfate. Sika has installed a Dechlorination system with aeration to meet the CPO effluent limitation.

Discharge Frequency: Continuous

Receiving Waterbody Information

Receiving Water: Berry's Creek

Receiving Water Classification: SE2

OUTFALL: DSN001A

The discharges (NCCW & stormwater) separately enter a manhole prior to entering a public storm sewer, which empties to wetlands, which then ultimately discharges to Berry's Creek

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	46,721 203,337	MR MR	MR MR	1/Month	1/Month	Calculated (2)
pH	s.u.	Instant Min. Instant Max.	6.2 8.2	6.0 9.0	6.0 9.0	1/Month	1/Month	Grab
Temperature	°C	Monthly Avg. Daily Max.	18 29	MR 30	MR 30	1/Month	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	9 41	MR 50	MR 50	1/Month	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	31 400	MR 100	MR 100	1/Month	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	11 30	MR 15	MR 15	1/Month	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	<0.02-0.22 0.22	MR 0.1	MR 0.1	1/Month	1/Month	Grab
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max.	28.9 47	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Mysid Bahía</i>) (3)	% effluent	Minimum	20	61	61	1/6 Months	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) The sample is taken from a manhole off the edge of the property where the NCCW and the stormwater separately enter the public storm sewer.
- (2) The effluent flow is calculated by adding up all incoming water from meters and subtracting out discharge to PVSC.
- (3) The test species is herein changed to *Mysid Bahía* based on the classification of the receiving waters.

(#3) Christ Church NJG0003077

Facility Description - Religious Organization

Municipality / County: Rockaway Township, Morris County

Source Water: Public Water Supply (Potable Water)

Discharge Types: Cooling tower blowdown, Boiler blowdown, Storm Water (from the parking lot). All “wastewater” from the site goes to the stormwater catch basins, and then to a “sumped” area and ultimately discharges via DSN002A.

Additives: Spectrus NX1106, T-3500, CW-250, CW-400

Discharge Frequency: Intermittent. The chiller system runs during the months of April through October which causes a steady discharge flow. During the other months of the year the discharge flow is weather dependent.

Receiving Waterbody Information

Receiving Water: Hibernia Brook

Receiving Water Classification: FW2-TM (C1)

OUTFALL: DSN002A

The discharge is piped from the “sumped” area to a concrete culvert of the Hibernia Brook

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE (1) TYPE
Flow	GPD	Monthly Avg. Daily Max.	483 2283	MR MR	MR MR	1/Quarter	1/Quarter	Estimated (2)
pH	s.u.	Instant Min. Instant Max.	6.7 8.5	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	14 23	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	2.6 3	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	23 41	MR 100	MR 100	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<5 <5	MR 15	MR 15	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	<0.02-0.42 0.71	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max.	10.99 19.9	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	--	MR	MR	1/5 Years	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(1) The sample is taken at the concrete culvert of the Hibernia Brook.

(2) The flow is estimated based on the volume of water collected and time then extrapolated out.

(#4) Passaic Rubber Co. NJG0030457

Facility Description - Fabrication of rubber products

Municipality / County: Wayne, Passaic County

Source Water: Private Wells (Primary Source for NCCW) and Public Water (Used for NCCW only if there is an issue with the private wells)

Discharge Type: Non-contact Cooling Water – The NCCW is used for extruded rubber products.

Additives: None

Discharge Frequency: Intermittent (Discharges only when there is production)

Receiving Waterbody Information

Receiving Water: Pompton River

Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN001A								
The discharge is to the Pompton River via a storm sewer								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	15,252 17,742	MR MR	MR MR	1/Quarter	1/Quarter	Calculated (2)
pH	s.u.	Instant Min. Instant Max.	7.0 8.1	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	15 18	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	5 20	MR 20	MR 20	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	15 29	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<5 <5	MR 10	MR 10	1/Quarter	1/Quarter	Grab
Tetrachloroethylene	ug/L	Monthly Avg. Daily Max.	5.97 8.7	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	>100	MR	MR	1/ 5 Years	1/ 5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(1) The sample is taken from at the outflow inspection point, prior to entering the public storm sewer.

(2) The effluent flow is calculated by determining how many days of the month the facility is in production and then the average is taken.

(#5) HTI – Services, LLC NJG0032913

Facility Description - Research & Development Center for Petroleum Technologies

Municipality / County: Lawrence Township, Mercer County

Source Water: Public Water Supply

Discharge Types: Non-contact Cooling Water, Boiler Blowdown, Condensate, and Stormwater (rainwater from containment areas is treated with a carbon absorption unit prior to discharge)

Additives: None

Discharge Frequency: Continuous

Receiving Waterbody Information

Receiving Water: Assunpink Creek

Receiving Water Classification: FW2-NT (C2)

OUTFALL: DSN001A

Via the “stormwater discharge” weir and underground pipe

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	42,971 282,000	MR MR	MR MR	1/Month	1/Month	Calculated (2)
pH	s.u.	Instant Min. Instant Max.	6.2 8.3	6.0 9.0	6.0 9.0	1/Month	1/Month	Grab
Temperature	°C	Monthly Avg. Daily Max.	17 29	MR 30	MR 30	1/Month	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	8 48	MR 50	MR 50	1/Month	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	23 75	MR 100	MR 100	1/Month	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	1.6 5.1	MR 15	MR 15	1/Month	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.02 0.06	MR 0.1	MR 0.1	1/Month	1/Month	Grab
Trichloroethylene	ug/L	Monthly Avg. Daily Max.	8.35 13	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max.	75.93 230	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	>100	MR	MR	1/Year	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) The sample is taken at the “stormwater discharge” weir to the Assunpink Creek.
- (2) The effluent flow is calculated at the “stormwater discharge” weir. An equation is used which measures the flow rate and height of the wastewater.

(#6) Penn Color, Inc. NJG0033146

Facility Description - Inks, Printing, Manufacturing

Municipality/County: Elmwood Park Borough/Bergen County
Source Water: Public Water Supply & Private Wells
Discharge Type: Non-contact Cooling Water and Stormwater
Additives: Sodium bisulfate tablets
Discharge Frequency: Intermittent

Receiving Waterbody Information:

Receiving Water: Fleisher's Brook
Receiving Water Classification: FW2-NT(C2)

OUTFALL DSN001A								
Via a private storm drain								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023 (1)	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (2)
Flow	GPD	Monthly Avg. Daily Max.	228 4620	MR MR	MR MR	1/Quarter	1/Quarter	Estimated (3)
pH	s.u.	Instant Min. Instant Max.	7.2 8.9	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	18 28	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	14 53	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	22 60	MR 100	MR 100	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<5-5 5	MR 15	MR 15	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.28 0.64	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Bromodichloromethane	ug/L	Monthly Avg. Daily Max.	7.86 13.1	-- --	MR MR	Annual	1/6 Months	Grab
Chlorodibromomethane	ug/L	Monthly Avg. Daily Max.	5.92 7.9	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	>100	MR	MR	1/5 Years	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) As clarified by the permittee during a phone conversation on 11/8/18, the permittee turned on equipment that is normally idle in order to force a discharge to fulfill their quarterly monitoring requirements. However, the permittee understands that going forward, they shall report NODI when NCCW is not discharged.
- (2) Samples are collected at a storm grate just before the flow crosses under the road and discharges into a storm drain located across from the facility.
- (3) The permittee expects to install an effluent flow meter in case of potential future discharge of NCCW.

(#7) Ames Advanced Materials Corporation NJG0034835

Facility Description - Secondary Processing of Non-Ferrous Metals

Municipality/County: South Plainfield/Middlesex County

Source Water: Public Water Supply & Private Wells

Discharge Type: Non-contact Cooling Water, Stormwater, and Reverse Osmosis Reject Water

Additives: None

Discharge Frequency: Mostly continuous; stormwater is weather dependent and there are rare periods when non-contact cooling water is not discharged.

Receiving Waterbody Information

Receiving Water: Unnamed tributary to Bound Brook

Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN001A								
Via a pipe at the outlet of a pond (detention basin)								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	303,034 908,000	MR MR	MR MR	1/Month	1/Month	Calculated (2)
pH	s.u.	Instant Min. Instant Max.	6.6 8.7	6.0 9.0	6.0 9.0	1/Month	1/Month	Grab
Temperature	°C	Monthly Avg. Daily Max.	17 27	MR 30	MR 30	1/Month	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	5.4 14	MR 50	MR 50	1/Month	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	12 38	MR 100	MR 100	1/Month	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	6 7	MR 15	MR 15	1/Month	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.05 0.10	MR 0.1	MR 0.1	1/Month	1/Month	Grab
Total Recoverable Arsenic	ug/L	Monthly Avg. Daily Max.	1.4 1.8	-- --	MR MR	Annual	1/6 Months	Grab
Bromodichloromethane	ug/L	Monthly Avg. Daily Max.	2 2	-- --	MR MR	Annual	1/6 Months	Grab
Carbon Tetrachloride	ug/L	Monthly Avg. Daily Max.	0.98 1.07	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Silver	ug/L	Monthly Avg. Daily Max.	11.7 22	-- --	MR MR	Annual	1/6 Months	Grab
Trichloroethylene	ug/L	Monthly Avg. Daily Max.	29.08 32.7	-- --	MR MR	Annual	1/6 Months	Grab
Tetrachloroethylene	ug/L	Monthly Avg. Daily Max.	4.72 5.89	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	92.2	MR	MR	1/ Year	1/ Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(1) Sampling is conducted at the pipe (outfall DSN001A) at the outlet of the pond.

(2) There is a detention basin (pond) with a remotely air operated valve at the outlet that can be closed if there is a catastrophic chemical discharge. The outlet consists of a 13-inch PVC pipe. The flow is calculated by measuring the velocity and the depth of the water flowing through the pipe.

(#8) Lassonde Pappas & Co., Inc. NJG0062731

Facility Description - Manufacturing and Bottling of Fruit Juice & Sauces

Municipality/County: Upper Deerfield/Cumberland County
Source Water: Private Wells (well water is disinfected using chlorine and pH adjusted with sodium hydroxide)
Discharge Type: Non-contact Cooling Water (dechlorinated using sodium bisulfite prior to discharge) and Stormwater
Additives: Chlorine, sodium hydroxide, sodium bisulfite
Discharge Frequency: Continuous

Receiving Waterbody Information

Receiving Water: Foster Run via Unnamed Tributary
Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN002A

Via a private storm drain

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	MGD	Monthly Avg. Daily Max.	1.58 2.65	MR MR	MR MR	1/Month	1/Month	Metered (2)
pH	s.u.	Instant Min. Instant Max.	5.9 7.8	6.0 9.0	6.0 9.0	1/Month	1/Month	Grab
Temperature	°C	Monthly Avg. Daily Max.	22 30	MR 30	MR 30	1/Month	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	5 25	MR 50	MR 50	1/Month	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	<10-15.5 21	MR 100	MR 100	1/Month	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<4.8-<6.5 <4.8-<6.5	MR 15	MR 15	1/Month	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	<0.02-<0.05 <0.02-<0.05	MR 0.1	MR 0.1	1/Month	1/Month	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	67.9	MR	MR	1/Year	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) Sampling is conducted at the weir, after comingling with stormwater and before discharging to their private storm drain.
- (2) Metered at the discharge point at the weir.

(#9) COE Bridgewater LLC NJG0113433

Facility Description – Technology research and development campus

Municipality / County: Bridgewater, Somerset County

Source Water: Public Water and Private Well

Discharge Types: Non-contact Cooling Water and Cooling Tower Blowdown

Additives: Spectrus OX1200, Spectrus NX1106, Foamtrol AF1440, Gengard GN8124, Control IS 105

Discharge Frequency: Intermittent, flow values vary based on seasonal conditions.

Receiving Waterbody Information

Receiving Water: Peters Brook

Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN001A								
Via an unnamed tributary								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	85,783 471,835	MR MR	MR MR	1/Month	1/Month	Metered (2)
pH	s.u.	Instant Min. Instant Max.	6.5 9.1	6.0 9.0	6.0 9.0	1/Month	1/Month	Grab
Temperature	°C	Monthly Avg. Daily Max.	22.1 29.5	MR 30	MR 30	1/Month	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	9.2 32	MR 20	MR 20	1/Month	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.03 0.09	MR 0.1	MR 0.1	1/Month	1/Month	Grab
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max.	8 23	MR 20	MR 20	1/Month	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	2.4 4.4	MR 10	MR 10	1/Month	1/Month	Grab
Total Recoverable Antimony	ug/L	Monthly Avg. Daily Max.	19.97 32	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Arsenic	ug/L	Monthly Avg. Daily Max.	7.5 11	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max.	288.85 671	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max.	54.73 153	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	100	MR	MR	1/Year	1/Year	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(1) Sampling is conducted using a test port on the discharge pipe.

(2) Flow is measured using a meter.

(#10) Kappus Plastic Co. Inc. NJG0134902

Facility Description - Plastics Fabrication

Municipality / County: Hampton Borough, Hunterdon County
Source Water: Public Water
Discharge Types: Non-contact Cooling Water
Additives: None
Discharge Frequency: Continuous

Receiving Waterbody Information

Receiving Water: Musconetcong River
Receiving Water Classification: FW2-TM (C1)

OUTFALL DSN001A								
Via a private storm sewer								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	2,526 6,563	MR MR	MR MR	1/Quarter	1/Quarter	Metered (2)
pH	s.u.	Instant Min. Instant Max.	7.6 8.5	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	16 24	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	13 24.2	MR 20	MR 20	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.03 0.09	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	<25-37 37	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<1.4-2.8 2.8	MR 10	MR 10	1/Quarter	1/Quarter	Grab
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max.	19.67 26	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	>100	MR	MR	1/ 5 Years	1/ 5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) Sampling is conducted at the cooling tower discharge pipe, prior to entering the storm sewer.
- (2) Flow was calculated in the existing permit; however, the facility installed an effluent flow meter in November 2018.

(#11) Taylors Farms NJ Inc NJG0169897

Facility Description - Produce farm

Municipality / County: Logan Township, Gloucester County
Source Water: Public Water
Discharge Types: Non-contact Cooling Water
Additives: Sodium Sulfite
Discharge Frequency: Intermittent, seasonal operation.

Receiving Waterbody Information

Receiving Water: Oldman's Creek
Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN001A								
Non-contact cooling water is sampled and is then commingled with stormwater in an unlined basin, prior to discharge								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE (1) TYPE
Flow	GPD	Monthly Avg. Daily Max.	1,590 9,870	MR MR	MR MR	1/Quarter	1/Quarter	Metered (2)
pH	s.u.	Instant Min. Instant Max.	7.4 8.8	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	22 30	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	17 112	MR 20	MR 20	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.06 0.09	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	17 42	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	1.45 1.6	MR 10	MR 10	1/Quarter	1/Quarter	Grab
Total Recoverable Arsenic	ug/L	Monthly Avg. Daily Max.	1.6 1.2	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max.	39.43 53.5	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max.	154.75 226	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	>100	MR	MR	1/5 Years	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) The sample is collected using an inline sampling port just after the flow meter.
- (2) The flow to the basin is measured using a meter.

(#11) Taylors Farms NJ Inc NJG0169897

New Outfall DSN002A:

OUTFALL DSN002A								
Non-contact cooling water is sampled and is then commingled with stormwater in an unlined basin, prior to discharge								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE (1) TYPE
Flow	GPD	Monthly Avg. Daily Max.	No Data Available (New Outfall)	MR MR	MR MR	1/Quarter	1/Quarter	Metered (2)
pH	s.u.	Instant Min. Instant Max.	No Data Available (New Outfall)	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	No Data Available (New Outfall)	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	No Data Available (New Outfall)	MR 20	MR 20	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	No Data Available (New Outfall)	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	No Data Available (New Outfall)	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	No Data Available (New Outfall)	MR 10	MR 10	1/Quarter	1/Quarter	Grab
Total Recoverable Arsenic	ug/L	Monthly Avg. Daily Max.	No Data Available (New Outfall)	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max.	No Data Available (New Outfall)	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max.	No Data Available (New Outfall)	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	No Data Available (New Outfall)	MR	MR	1/5 Years	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) The sample is collected using an inline sampling port just after the flow meter.
- (2) The flow to the basin is measured using a meter.

(#12) PNJ1 Data Center NJG0169943

Facility Description - Data storage center

Municipality / County: Piscataway Township, Middlesex County
Source Water: Public Water and Private Wells
Discharge Types: Non-contact Cooling Water and Stormwater
Additives: ControlBrom CB70, 3D TRASAR 3DT465, NALCO 90005, NALCO 7341, Metabisulfite (Dechlorination)
Discharge Frequency: Intermittent during the summer months and continuous during the winter.

Receiving Waterbody Information

Receiving Water: Ambrose Brook
Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN001A								
Non-contact cooling water is commingled with stormwater before discharge to a stormwater retention pond								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	15,196 65,497	MR MR	MR MR	1/Month	1/Quarter	Metered (2)
pH	s.u.	Instant Min. Instant Max.	7.3 9.9	6.0 9.0	6.0 9.0	1/Month	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	13 20	MR 30	MR 30	1/Month	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	21 54	MR 50	MR 50	1/Month	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	0.05 0.07	MR 0.1	MR 0.1	1/Month	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	40 78	MR 100	MR 100	1/Month	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	5 5	MR 15	MR 15	1/Month	1/Quarter	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	>100	MR	MR	1/Year	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) Sampling is conducted at the outfall after the retention pond.
- (2) Effluent flow is measured using a meter.

This facility is authorized to reuse under RWBR for restricted access for land application. During the summer months, the facility uses the commingled water for irrigation.

(#13) Capital Health Inc. Hopewell Campus NJG0182176

Facility Description – Hospital

Municipality / County: Hopewell Township/Mercer County

Source Water: Public Water

Discharge Types: Non-contact Cooling Water

The effluent consists of cooling tower blowdown from the air conditioning system.

Additives: None

Discharge Frequency: Intermittent (during warm weather months only).

Receiving Waterbody Information

Receiving Water: Ewing Creek

Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN001A

After sampling, the effluent is discharged thru the on-site private sewer system to a constructed wetlands basin, which enters the receiving waters via the private storm sewer system.

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE TYPE (1)
Flow	GPD	Monthly Avg. Daily Max.	11,372 58,008	MR MR	MR MR	1/Quarter	1/Quarter	Measured (2)
pH	s.u.	Instant Min. Instant Max.	7.1 8.7	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	22 27	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	<2.5-7.5 7.5	MR 20	MR 20	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	<0.02-0.05 0.05	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	14 62	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<5.0-5.2 5.2	MR 10	MR 10	1/Quarter	1/Quarter	Grab
Total Recoverable Copper	ug/L	Monthly Avg. Daily Max.	77.9 83.2	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	--	MR	MR	1/5 Years	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(1) The sample is taken prior to entering the on-site constructed wetlands basin.

(2) The flow is measured thru a flow meter, **prior** to entering the on-site private sewer system and constructed wetlands basin. Overflow discharges to the unnamed tributary to Ewing Creek. The discharge from the basin is dependent on the amount of precipitation.

(#14) Linden Cogeneration Plant NJG0220531

Facility Description – Electric power generator

Municipality / County: Linden City, Union County

Source Water: Public Water

Discharge Types: Non-contact Cooling Water, Stormwater

The effluent (collected in the detention basin) consists of: (1) about 400 gpd of fire pump test water; (2) about 5,000 gpd of unevaporated water from the cooling/fogging system; (3) about 100 gpd of wash water used to clean the outside coils condensers; (4) about 100 gpd of condensate from the air ejectors and (5) about 56,000 gpd of stormwater.

Additives: Optisperse SP8100, Steamate PAS4000, Optisperse HP54439, Optisperse HP54675, Cortrol OS7780, Optisperse

ADJ560, Hypersperse MDC775, Betz Dearborn DCL30, BL1794, BL1559, BL1280, RL9907, RL9093, RL1700 and RL124

Discharge Frequency: Intermittent

Receiving Waterbody Information

Receiving Water: Arthur Kill

Receiving Water Classification: FW2-NT/SE3 (C2)

OUTFALL DSN001A								
Via a Detention Basin								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE (1) TYPE
Flow	GPD	Monthly Avg. Daily Max.	474,804 967,904	MR MR	MR MR	1/Month	1/Month	Measured (2)
pH	s.u.	Instant Min. Instant Max.	7.1 8.7	6.0 9.0	6.0 9.0	1/Month	1/Month	Grab
Temperature	°C	Monthly Avg. Daily Max.	16 28	MR 30	MR 30	1/Month	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	5 29	MR 50	MR 50	1/Month	1/Month	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	<0.05-0.08 0.08	MR 0.1	MR 0.1	1/Month	1/Month	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	21 55	MR 100	MR 100	1/Month	1/Month	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<5.0 <5.0	MR 15	MR 15	1/Month	1/Month	Grab
Total Recoverable Zinc	ug/L	Monthly Avg. Daily Max.	585.75 1380	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (Mysid Bahia)	% effluent	Minimum	19.8	MR	61	1/6 Months	1/6 Months	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) The sample is collected from a sample port located on the discharge side of the discharge pumps, from the detention basin, which then discharges to the Arthur Kill.
- (2) The flow is calculated based on the water level (head) differential in the detention basin, prior to and after operating the discharge pump.

(#15) Prestone Products Corporation NJG0233439

Facility Description - Manufacturer of antifreeze, windshield washer and brake/ power/ transmission fluids

Municipality / County: Freehold Township, Monmouth County

Source Water: Public Water

Discharge Types: Non-contact Cooling Water

The NCCW is generated from the engine cooling water only.

Additives: None

Discharge Frequency: Intermittent, estimated to discharge approximately 500 gallons week

Receiving Waterbody Information

Receiving Water: Applegates Creek

Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN002A								
Via a retention pond								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE (1) TYPE
Flow	GPD	Monthly Avg. Daily Max.	67 500	MR MR	MR MR	1/Quarter	1/Quarter	Estimated (2)
pH	s.u.	Instant Min. Instant Max.	6.7 8.1	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	16 30	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	3 8	MR 20	MR 20	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	<0.02-<0.05 <0.02-<0.05	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	<5 <5	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	<5 <5	MR 10	MR 10	1/Quarter	1/Quarter	Grab
Bromodichloromethane	ug/L	Monthly Avg. Daily Max.	1.99 2.66	-- --	MR MR	Annual	1/6 Months	Grab
Chlorodibromomethane	ug/L	Monthly Avg. Daily Max.	0.86 1	-- --	MR MR	Annual	1/6 Months	Grab
Total Recoverable Lead	ug/L	Monthly Avg. Daily Max.	7.17 18	-- --	MR MR	Annual	1/6 Months	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	--	MR	MR	1/5 Years	1/5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

- (1) The sample is taken at a sample port after water is used in the engine cooling system, prior to entering the retention basin.
- (2) The flow is estimated (approximately 500 gallons per week) – based on how often the engine is run.

(#16) Morris Plains NJ Facility (185 Tabor Road) NJG0234966

Facility Description – Currently under development as a warehouse and office space

Municipality / County: Morris Plains, Morris County

Source Water: Public Water

Discharge Types: Non-contact Cooling Water

Additives: None

Discharge Frequency: Intermittent –discharge only occurs during a monthly test of the fire pump system. The discharge pipe is closed at all other times.

Receiving Waterbody Information

Receiving Water: Malapardis Brook

Receiving Water Classification: FW2-NT (C2)

OUTFALL DSN001A								
Via a storm drain								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE (1) TYPE
Flow	GPD	Monthly Avg. Daily Max.	No Data Available	MR MR	MR MR	1/Quarter	1/Quarter	Metered (2)
pH	s.u.	Instant Min. Instant Max.	No Data Available	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	No Data Available	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	No Data Available	MR 20	MR 20	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	No Data Available	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	No Data Available	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	No Data Available	MR 10	MR 10	1/Quarter	1/Quarter	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	No Data Available	MR	MR	1/ 5 Years	1/ 5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only

(1) The sample is taken directly before it enters the public storm sewer system

(2) The flow is metered directly prior to entering the storm sewer.

(#17) Our Lady of Mercy Church NJG0330728

Facility Description

Municipality / County: Park Ridge Borough, Bergen County
Source Water: Groundwater (Brunswick Formation)
Discharge Types: Non-contact Cooling Water
Additives: None
Discharge Frequency: Intermittent

Receiving Waterbody Information

Receiving Water: Bear Brook
Receiving Water Classification: FW2-TM(C1)

OUTFALL DSN001A								
Via a storm drain								
PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 4/2019 – 9/2023	EXISTING LIMITS	FINAL LIMITS	EXISTING MONITORING FREQUENCY	FINAL MONITORING FREQUENCY	SAMPLE (1) TYPE
Flow	GPD	Monthly Avg. Daily Max.	No Data Available	MR MR	MR MR	1/Quarter	1/Quarter	Metered (2)
pH	s.u.	Instant Min. Instant Max.	No Data Available	6.0 9.0	6.0 9.0	1/Quarter	1/Quarter	Grab
Temperature	°C	Monthly Avg. Daily Max.	No Data Available	MR 30	MR 30	1/Quarter	1/Quarter	Grab
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	No Data Available	MR 20	MR 20	1/Quarter	1/Quarter	Grab
Chlorine Produced Oxidants (CPO)	mg/L	Monthly Avg. Daily Max.	No Data Available	MR 0.1	MR 0.1	1/Quarter	1/Quarter	Grab
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	No Data Available	MR 50	MR 50	1/Quarter	1/Quarter	Grab
Petroleum Hydrocarbons	mg/L	Monthly Avg. Daily Max.	No Data Available	MR 10	MR 10	1/Quarter	1/Quarter	Grab
Chronic WET, IC25 (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	No Data Available	MR	MR	1/ 5 Years	1/ 5 Years	Composite

Footnotes & Abbreviations:

MR Monitor and Report only



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: NJ0070203

Final: Surface Water Master General Permit Renewal

Permittee:

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

Co-Permittee:

Property Owner:

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

Location Of Activity:

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

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
CG - Non-Contact Cooling Water (GP) - Renewal	05/14/2024	07/01/2024	06/30/2029

By Authority of:
Commissioner's Office

Susan Rosenwinkel

DEP AUTHORIZATION
Susan Rosenwinkel
Assistant Director
Water Pollution Management Element

(Terms, conditions and provisions attached hereto)

PART I GENERAL REQUIREMENTS: NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
 - Penalties for Violations N.J.A.C. 7:14-8.1 et seq.
 - Incorporation by Reference N.J.A.C. 7:14A-2.3
 - Toxic Pollutants N.J.A.C. 7:14A-6.2(a)4i
 - Duty to Comply N.J.A.C. 7:14A-6.2(a)1 & 4
 - Duty to Mitigate N.J.A.C. 7:14A-6.2(a)5 & 11
 - Inspection and Entry N.J.A.C. 7:14A-2.11(e)
 - Enforcement Action N.J.A.C. 7:14A-2.9
 - Duty to Reapply N.J.A.C. 7:14A-4.2(e)3
 - Signatory Requirements for Applications and Reports N.J.A.C. 7:14A-4.9
 - Effect of Permit/Other Laws N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
 - Severability N.J.A.C. 7:14A-2.2
 - Administrative Continuation of Permits N.J.A.C. 7:14A-2.8
 - Permit Actions N.J.A.C. 7:14A-2.7(c)
 - Reopener Clause N.J.A.C. 7:14A-6.2(a)10
 - Permit Duration and Renewal N.J.A.C. 7:14A-2.7(a) & (b)
 - Consolidation of Permit Process N.J.A.C. 7:14A-15.5
 - Confidentiality N.J.A.C. 7:14A-18.2 & 2.11(g)
 - Fee Schedule N.J.A.C. 7:14A-3.1
 - Treatment Works Approval N.J.A.C. 7:14A-22 & 23
- c. Operation And Maintenance
 - Need to Halt or Reduce not a Defense N.J.A.C. 7:14A-2.9(b)
 - Proper Operation and Maintenance N.J.A.C. 7:14A-6.12
- d. Monitoring And Records
 - Monitoring N.J.A.C. 7:14A-6.5
 - Recordkeeping N.J.A.C. 7:14A-6.6
 - Signatory Requirements for Monitoring Reports N.J.A.C. 7:14A-6.9
- e. Reporting Requirements
 - Planned Changes N.J.A.C. 7:14A-6.7
 - Reporting of Monitoring Results N.J.A.C. 7:14A-6.8
 - Noncompliance Reporting
 - Hotline/Two Hour & Twenty-four Hour Reporting N.J.A.C. 7:14A-6.10 & 6.8(h)
 - Written Reporting N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
 - Duty to Provide Information N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
 - Schedules of Compliance N.J.A.C. 7:14A-6.4
 - Transfer N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

- a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.
 - i. Surface Water Quality Standards N.J.A.C. 7:9B-1
 - ii. Water Quality Management Planning Regulations N.J.A.C. 7:15

B. General Conditions

1. Scope

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

2. Permit Renewal Requirement

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. Submit a complete permit renewal application at least 180 days prior to the expiration of the permit.

3. Notification of Non-Compliance

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

4. Notification of Facility 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 disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.

5. Notification of Change in Ownership and/or Permittee/Operating Entity

- a. As set forth at N.J.A.C. 7:14A-16.2, prior to any change in ownership and/or the permittee/operating entity, the current permittee shall provide written notice to the Department at least thirty (30) days prior to the proposed transfer date.

- i. Written notice to the Department shall be in the form of a completed Application for Transfer of a NJPDES Permit form, which is available on the Department's website or by contacting the appropriate permitting program.

6. Notification of Changes to the Facility/Permit Contacts

- a. The permittee shall notify the Department within thirty (30) days of a change in contact information for any of the following persons associated with the facility/permit:
 - i. Permittee/Operating Entity Contact, Property Owner Contact, Facility Contact, or Fee/Billing Contact
- b. Notification to the Department shall be in the form of a completed Contact Information Update form (i.e. NJPDES-2 form), which is available on the Department's website or by contacting the appropriate permitting program.

7. 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.

8. Intermittent Discharges (If applicable)

- a. The permittee is required to provide representative sampling of any regulated intermittent activity pursuant to N.J.A.C. 7:14A-6.5(a). Therefore, although a discharge may occur on an intermittent basis, it does not exempt the permittee from complying with the requirements of the permit. For example, if the permittee has a monthly monitoring and reporting requirement and the discharge occurs three separate times during the month, the permittee should sample during at least one of the discharge events occurring during the monitoring period. The permittee should report "No Discharge this monitoring period" on the monitoring report submittal form only if there are no discharge events during the entire reporting period.

9. Applicability of Numerical Limitations

- a. If only one analysis for a given parameter is made during any sampling period specified in this permit, the result of such analysis shall be construed as the average value of the parameter, as well as the maximum, for said sampling period. The permittee may take samples and have analysis made by a New Jersey Certified laboratory on additional occasions to those specified in this permit. If so, the average and the maximum values of all analytical results taken during the sampling period shall be reported as the applicable average and maximum values. However, for pH, minimum and maximum values are reported rather than average values.

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

- a. All required monitoring results reported on Monitoring Report Forms (MRFs) shall be electronically submitted to the Department via NJDEP's Electronic Monitoring Report Form (MRF) Submission Service.
- b. Any electronic MRF data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee.
- c. MRFs shall be submitted at the frequencies identified in Part III of this permit.
- d. All MRFs shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.

- e. The highest ranking official may delegate responsibility to certify the MRFs in his or her absence. Authorizations for other individuals to certify shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- f. Monitoring results shall be submitted in accordance with the current NJPDES Monitoring Report Form Reference Manual and any updates thereof.
- g. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.
- h. If, for a monitored location, there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results by checking the "No Discharge this monitoring period" box on the monitoring report submittal form.

11. Standard Reporting Requirements - Electronic Submission of NJPDES Information

- a. The below identified documents and reports, if required to be submitted by this permit, shall be electronically submitted to the NJDEP via the Department's designated Electronic Submission Service.
 - i. General permit authorization requests (i.e. RFAs)
 - ii. General permit termination/revocation requests

PART III

LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:

NCCW Table A

RECEIVING STREAM:

As Per Authorization

STREAM CLASSIFICATION:DISCHARGE CATEGORY(IES):

CG - Non-Contact Cooling Water (GP)

Location Description

Samples shall be taken in compliance with the specified monitoring requirements and at the discharge location identified on the authorization page.

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: for flows >0.1 MGD and a quarterly DMR for flows <0.1 MGD. DMRs must be submitted within twenty-five days after the end of the monthly or quarterly monitoring period beginning with EDP.

Comments:

Table A-NCCW only: Monthly monitoring and reporting is specified for flows >0.1 MGD whereas quarterly monitoring and reporting is specified for flows <0.1 MGD. Flow sample type will be specified in the individual authorization; Chronic WET, CPO and TOC requirements are applicable if specified in the individual authorization.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 07/01/2024**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	GPD	*****	*****	*****	*****	1/Month	Representative
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Daily Minimum	*****	9.0 Daily Maximum	SU	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	20 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	30 Daily Maximum	DEG.C	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Oxygen Demand, Chem. (High Level) (COD)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	50 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: for flows >0.1 MGD and a quarterly DMR for flows <0.1 MGD. DMRs must be submitted within twenty-five days after the end of the monthly or quarterly monitoring period beginning with EDP.

Comments:

Table A-NCCW only: Monthly monitoring and reporting is specified for flows >0.1 MGD whereas quarterly monitoring and reporting is specified for flows <0.1 MGD. Flow sample type will be specified in the individual authorization; Chronic WET, CPO and TOC requirements are applicable if specified in the individual authorization.

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

PHASE: Final PHASE Start Date: 07/01/2024 PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Petroleum Hydrocarbons	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	10 Daily Maximum	MG/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). The Annual WCR applies to Tables A and B.

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

PHASE: Final PHASE Start Date: 07/01/2024 PHASE End Date:

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

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). The Annual WCR applies to Tables A and B.

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 07/01/2024**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Thallium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Beryllium, Total Recoverable (as Be)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Barium, Total Recoverable (as Ba)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Nickel, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Silver, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Zinc, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Cadmium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Lead, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chromium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Copper, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Antimony, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Mercury Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,3-Dichloropropene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

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). The Annual WCR applies to Tables A and B.

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 07/01/2024**PHASE End Date:**

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

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). The Annual WCR applies to Tables A and B.

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 07/01/2024**PHASE End Date:**

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

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years The Semi-Annual WCR applies to Tables A and B and shall be conducted once per permit cycle.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 07/01/2024**PHASE End Date:** 12/31/2028

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

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years The Semi-Annual WCR applies to Tables A and B and shall be conducted once per permit cycle.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 07/01/2024**PHASE End Date:** 12/31/2028

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Fluorene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorocyclopentadiene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Isophorone	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodiphenylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodimethylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Nitrobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Phenanthrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pyrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(ghi)perylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2,4-Trichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years The Semi-Annual WCR applies to Tables A and B and shall be conducted once per permit cycle.

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

PHASE: Final **PHASE Start Date:** 07/01/2024 **PHASE End Date:** 12/31/2028

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Dibenzo(a,h) anthracene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chloronaphthalene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Di-n-octyl Phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,6-Dinitrotoluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
3,3'-Dichloro-benzidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Naphthalene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years The Semi-Annual WCR applies to Tables A and B and shall be conducted once per permit cycle.

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 07/01/2024**PHASE End Date:** 12/31/2028

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2,4,5-Tetrachloro-benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodiethyl-amine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosopyrrolidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-Nitrosodi-n-butylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,5-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dimethylphenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dinitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,6-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within 25 days after the end of the six month monitoring period beginning EDP + 4 years The Semi-Annual WCR applies to Tables A and B and shall be conducted once per permit cycle.

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

PHASE: Final **PHASE Start Date:** 07/01/2024 **PHASE End Date:** 12/31/2028

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pentachlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

MONITORED LOCATION:

NCSW Table B

RECEIVING STREAM:

As Per Authorization

STREAM CLASSIFICATION:
DISCHARGE CATEGORY(IES):

CG - Non-Contact Cooling Water (GP)

Location Description

Samples shall be taken in compliance with the specified monitoring requirements and at the discharge location identified on the authorization page.

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: for flows >0.1 MGD and a quarterly DMR for flows <0.1 MGD. DMRs must be submitted within twenty-five days after the end of the monthly or quarterly monitoring period beginning with EDP.

Comments:

Table B-NCCW and Stormwater: Monthly monitoring and reporting is specified for flows >0.1 MGD whereas quarterly monitoring and reporting is specified for flows <0.1 MGD. Flow sample type will be specified in the individual authorization; Chronic WET, CPO and TOC requirements are applicable if specified in the individual authorization.

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

PHASE Start Date: 07/01/2024

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	GPD	*****	*****	*****	*****	1/Quarter	Representative
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Daily Minimum	*****	9.0 Daily Maximum	SU	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	50 Daily Maximum	MG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	30 Daily Maximum	DEG.C	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			
Oxygen Demand, Chem. (High Level) (COD)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	100 Daily Maximum	MG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: for flows >0.1 MGD and a quarterly DMR for flows <0.1 MGD. DMRs must be submitted within twenty-five days after the end of the monthly or quarterly monitoring period beginning with EDP.

Comments:

Table B-NCCW and Stormwater: Monthly monitoring and reporting is specified for flows >0.1 MGD whereas quarterly monitoring and reporting is specified for flows <0.1 MGD. Flow sample type will be specified in the individual authorization; Chronic WET, CPO and TOC requirements are applicable if specified in the individual authorization.

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

PHASE:Final **PHASE Start Date:** 07/01/2024 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Petroleum Hydrocarbons	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	15 Daily Maximum	MG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Non-Contact Cooling Water (GP)

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

- a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.
- b. The permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136 unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- c. When more than one test procedure is approved for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 136, 122.21(e)(3), and 122.44(i)(1)(iv).
- d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.
- e. All monitoring shall be conducted as specified in Part III.
- f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported with the Monitoring Report Forms.
- g. Flow shall be measured using a meter unless specified otherwise in the individual authorization.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

- a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit, 3) all data used to complete the application for a NJPDES permit, and 4) monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.
- b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

C. FACILITY MANAGEMENT

1. Discharge Requirements

- a. The permittee shall discharge at the location(s) specified in PART III of the individual authorization.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that: 1) Forms objectionable deposits on the receiving water, 2) Forms floating masses producing a nuisance, or 3) Interferes with a designated use of the waterbody.
- c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.

2. Delaware River Basin Commission (DRBC) Requirements - applicable to those facilities which discharge to the Delaware River Basin

- a. The permittee shall comply with the DRBC "Water Quality Regulations."
- b. Except as otherwise authorized by this permit, if the permittee seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the permittee shall apply for approval from the DRBC Executive Director and NJDEP for a permit revision.
- c. Specific Requirements apply to facilities discharging to Zone 1 and its tributaries that are designated as Special Protection Waters by the DRBC.
 - i. Prior to the permittee initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16 of the Delaware River Basin Commission's Water Quality Regulations (18 CFR Part 410), a No Measurable Change to the Existing Water Quality Analysis must be conducted by the Delaware River Basin Commission. The No Measurable Change to Existing Water Quality Analysis shall be conducted prior to final design to ensure that the Commission can provide the permittee with proposed effluent limitations to be included in a future NJPDES permit for Special Protection Waters specific parameters as guidance for treatment design purposes. The permittee is encouraged to contact DRBC staff during the planning stages of any project that meets the definition of substantial alteration or additions, as per DRBC.
- d. Based upon the written recommendation of the DRBC staff, when the discharge is operated in accordance with the provisions and conditions established by this permit, then with respect to effluent quality and stream quality objectives, the project does not substantially impair or conflict with the Commission's Comprehensive Plan.

3. Applicability of Discharge Limitations and Effective Dates

- a. Surface Water Discharge Monitoring Report (DMR) Form Requirements
 - i. The final effluent monitoring conditions in Part III of the individual authorization apply for the full term of this permit action.
- b. Wastewater Characterization Report (WCR) Form Requirements
 - i. The final effluent monitoring conditions in Part III of the individual authorization apply for the full term of this permit action. Annual WCR requirements are included for metals, cyanide and volatiles that shall be monitored each year between for the five-year term of the permit. Semi-Annual WCR requirements are included for acid extractables and base/neutrals that shall be monitored once per permit cycle.

4. Chronic Toxicity Testing Requirements (applicable only if chronic toxicity requirements are specified in Part III)

- a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- b. Chronic toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- c. Any test that does not meet the specifications contained in the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Program" document must be repeated with 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- d. IC25 – Inhibition Concentration – Concentration of effluent which has an inhibitory effect on 25% of the test organisms for the monitored effect, as compared to the control (expressed as percent effluent).
- e. Test results shall be expressed as the IC25 for each test endpoint. Where a chronic toxicity testing endpoint yields IC25's from more than one test endpoint, the most sensitive endpoint will be used to evaluate effluent toxicity.
- f. The permittee shall submit a Chronic Methodology Questionnaire within 60 days of commencement of discharge or with any change in laboratory.
- g. If a semi-annual monitoring frequency is specified for Chronic WET: Submit a chronic whole effluent toxicity test report within twenty-five days after the end of every semi-annual monitoring period beginning from the effective date of the individual permit authorization (EDP).
- h. If an annual monitoring frequency is specified for Chronic WET: Submit a chronic whole effluent toxicity test report within twenty-five days after the end of every annual monitoring period beginning from the individual permit authorization (EDP).
- i. If a semi-annual (once per permit cycle) monitoring frequency is specified for Chronic WET: Submit a chronic whole effluent toxicity test report within twenty-five days after the end of every semi-annual monitoring period beginning from EDP + 4 years of the individual permit authorization.
 - i. Test reports shall be submitted electronically to:
biomonitoring@dep.nj.gov

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

- a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the toxicity limit specified in Part III of the individual authorization.
 - i. If the exceedance of the toxicity limit is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.

- b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limits in Part III. The monitoring frequency for toxicity testing shall be increased to semi-monthly (i.e. every two months). Up to 12 additional tests may be required.
 - i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the toxicity limit.
 - ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit in Part III, the permittee shall repeat Toxicity Reduction Implementation Requirements.
- c. The permittee shall initiate a preliminary toxicity identification (PTI) upon the fourth exceedance of the toxicity limit specified in Part III during toxicity characterization.
 - i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the Department and report the results for the most sensitive species on the DMR.
 - ii. As appropriate, the PTI shall include:
 - (1) Treatment plant performance evaluation,
 - (2) Evaluation of chemical use and processes at the facility, and
 - (3) an evaluation of incidental facility procedures and chemical spill disposal which may contribute to effluent toxicity.
 - iii. The permittee shall submit a Preliminary Toxicity Identification Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a CTI.
- d. The permittee must demonstrate compliance with the WET limitation in four consecutive WET tests to satisfy the requirements of the Toxicity Reduction Investigation Requirements. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.
- e. The permittee shall initiate a Comprehensive Toxicity Investigation (CTI) if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the toxicity limit in Part III cannot be made.
 - i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.
 - ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the toxicity limit in Part III, a Comprehensive Toxicity Investigation Workplan must be prepared and submitted within 90 days.
 - iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.
 - iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.
- f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.

- i. The permittee shall satisfy the requirements of the Toxicity Reduction Implementation Requirements and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the toxicity limit in Part III in four consecutive toxicity tests.
- ii. If the implemented corrective measures do not result in consistent compliance with the toxicity limit in Part III, the permittee shall submit a plan for resuming the CTI.
- iii. Documents regarding TRIR shall be sent to: biomonitoring@dep.nj.gov.

D. CONDITIONS FOR MODIFICATION

1. Notification Requirements

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

2. Causes for Modification

- a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.
- b. Where a chronic whole effluent toxicity requirement is imposed, the Department may issue a minor modification further deferring the effective date of the chronic whole effluent toxicity limitation if a facility is implementing the Toxicity Reduction Implementation Requirements (TRIR) in Part IV of this permit.
- c. Where a chronic whole effluent toxicity requirement is imposed, the Department may issue a minor modification in accordance with N.J.A.C. 7:14A-16.5(a)1 to either reduce the monitoring frequency or eliminate the WET limit with continued monitoring. The criteria for any such reduction shall be based on a minimum of four WET data points that are greater than the chronic toxicity threshold of 61% as defined in the permit. Flow volumes may be taken into consideration in evaluating this request.
- d. The Department may modify individual authorizations under this permit through a minor modification in accordance with N.J.A.C. 7:14A-16.5(a)1 to reduce conventional pollutant monitoring to quarterly or an alternate monitoring frequency. The criteria for such reduction is consistent compliance with the applicable limits for at least 12 data points. This change will be incorporated as a minor modification pursuant to N.J.A.C. 7:14A-16.5.

E. OPERATIONAL REQUIREMENTS

1. Use of Chemical Addition Agents

- a. The use of biocides or cooling water additives that contain Copper, Chromium and Zinc are not allowed under this general permit.
- b. If a permittee proposes addition of any chemical or treatment enhancement product in its treatment system in order to enhance treatment effectiveness and system performance, the permittee must obtain permission from the Department in writing prior to use of such compounds.

- c. The permittee shall submit a letter to the Department describing the use of such chemical addition agents, including information pertaining to dosage rates and frequency of dosage, and shall include a Safety Data Sheet for the product(s) that contains toxicological data. The letter shall be submitted electronically to the Bureau of Surface Water and Pretreatment Permitting at dwq_bswp@dep.nj.gov 30 days before the anticipated use. The Department will evaluate the submittal and notify the permittee in writing or via email as to whether the compound can be utilized under the conditions of the individual authorization. Please note that N.J.A.C. 7:14A-22.4(a)7 does not require a treatment works approval (TWA) modification for chemical addition where it is used for the purposes of improving treatment system performance.

2. Third Party Storm Sewers

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

3. Best Management Practices Plan (Comingled NCCW and Stormwater)

- a. In order to prevent or minimize the potential for the release of toxic substances and other pollutants from ancillary activities to the waters of the State, through plant runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage, the permittee shall develop and implement a Best Management Practices (BMP) Plan.
- b. These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as toxic under Section 307 (a)(1) of the Clean Water Act and who have ancillary manufacturing operations which could result in significant amounts of these pollutants reaching waters of the State. These operations include material handling areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas.
- c. The BMP Plan shall include such things as:
 - i. Routine Inspections
 - ii. Preventive Maintenance
 - iii. Good Housekeeping
 - iv. Materials Compatibility
- d. The facility must incorporate in the BMP Plan any appropriate procedures for adequately controlling spills and leaks of hazardous substances, as necessary.
- e. Specific information concerning the development of the BMP Plan with respect to stormwater management is available in the U.S. Environmental Protection Agency's publication entitled, "Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices", EPA 832-R-92-006, September 1992.

4. Revocation of an Individual Authorization under the Permit.

- a. If the permittee has permanently ceased its discharge to surface water, the permittee can request revocation of its individual authorization under the permit. The permittee can obtain the necessary revocation forms available on the Department's website or by contacting the Department's Permit Administration Section (PAS) at (609) 984-4428. The permittee can also contact the appropriate Regional Enforcement Office for further guidance on closure proceedings.
- b. Upon receipt of an administratively complete revocation request, the Department will verify with the appropriate regional Enforcement Office that the discharge has ceased. The Department will then revoke such individual authorization by preparing a copy of the individual authorization page showing the revocation date of the individual authorization and sending such to the permittee.
- c. For commingled discharges (NCCW and stormwater) covered under this permit, in the event that the permittee eliminates its non-contact cooling water discharge component, permit coverage may still be required for any remaining stormwater discharge(s) associated with industrial activities at the facility in accordance with N.J.A.C. 7:14A-24.2. The permittee must contact the Bureau of NJPDES Stormwater Permitting and Water Quality Management at (609) 633-7021 or access www.nj.gov/dep/dwq/forms_storm.htm to obtain the necessary application forms to regulate the remaining stormwater discharges associated with industrial activity prior to requesting revocation of this permit.

F. CUSTOM REQUIREMENTS

1. RWBR Requirements (if applicable)

- 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 effluent limitations specified in Part III of this permit.

2. RWBR Requirements for Restricted Access – Land Application and Non-Edible Crops (if applicable)

- a. The Restricted Access – Land Application and Non-Edible Crops reuse types authorized by this permit are those approved in the individual authorization.
- 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 approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.

3. RWBR Requirements for Restricted Access – Construction and Maintenance Operations (if applicable)

- a. The Restricted Access – Construction and Maintenance Operations reuse types authorized by this permit are those approved in the individual authorization.

4. RWBR Requirements for Restricted Access – Industrial Systems (if applicable)

- a. The Restricted Access – Industrial Systems reuse types authorized by this permit are those approved in the individual authorization.

5. RWBR Submittal Requirements (if applicable)

- a. For all types of RWBR, 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. Submit a Beneficial Reuse Annual Report: by February 1st of each year beginning from the effective date of the individual permit authorization (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.
- d. All submittals shall be emailed to: dwqrwbr@dep.nj.gov

6. RWBR Operational Requirements (if applicable)

- 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 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.

APPENDIX A:

**CHRONIC TOXICITY TESTING SPECIFICATIONS
FOR USE IN THE NJPDES PERMIT PROGRAM**

Version 3.0

May 2017

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VIII. REFERENCES

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

I. AUTHORITY AND PURPOSE

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

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

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

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

II. GENERAL CONDITIONS

A. LABORATORY SAFETY, GLASSWARE, ETC.

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

B. TEST CONCENTRATIONS / REPLICATES

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

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

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

C. DILUTION WATER

1. Marine and Estuarine Waters

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

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

2. Fresh Waters

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

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

D. EFFLUENT SAMPLE COLLECTION

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

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

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

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

E. PHYSICAL CHEMICAL MEASUREMENTS

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

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

- ☐ Temperature shall either be monitored continuously, measured daily in at least two locations in the environmental control system, or measured at the beginning and end of each 24 hr exposure period in at least one replicate for each treatment.
- ☐ Salinity shall be measured in all salt water tests at the beginning and end of each 24 hour exposure period, in at least one replicate for each treatment.
- ☐ For all freshwater tests, alkalinity, hardness and conductivity shall be measured in each new sample (100% effluent) and control.
- ☐ When natural salt water is used; nitrite, nitrate, and ammonia shall be measured in the control before each renewal in the mysid test only.
- ☐ For samples of discharges where concentrations of ammonia and/or chlorine are known or are suspected to be sufficient to cause toxicity, it is recommended that the concentrations of these pollutants be determined and submitted with the standardized report form. The laboratory is advised to consult with the permittee to determine if these parameters should be measured in the effluent. Where such measurements are deemed appropriate, measurements shall be conducted at the beginning of each 24 hour exposure period. Also, since a rise in the test pH can affect the toxicity of ammonia in the effluent, analysis of ammonia during the test may be appropriate if a rise in pH is accompanied by a significant increase in mortality.

F. STATISTICS

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

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

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

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

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

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

III. TEST ACCEPTABILITY CRITERIA

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

1. Tests must be performed by a laboratory approved for the conduct of chronic toxicity tests and certified for chronic toxicity testing under N.J.A.C. 7:18.
2. Test results may be rejected due to inappropriate sampling, including the use of less than three effluent samples in a test and/or use of procedures not specified in a permit or methodology questionnaire, use of frozen samples, not refrigerating samples upon collection, or unapproved pretreatment of an effluent sample.
3. Controls shall meet, at a minimum, the applicable performance criteria specified in the Table 2.0 and in the individual method specifications contained herein.
4. Acceptable and applicable Standard Reference Toxicant Data must be available for the test.
5. No unapproved deviations from the applicable test methodology may be present.
6. When using hypothesis testing techniques, a deviation from the dose response as explained in the statistical portion of this document shall not be present in the data.
7. If more stringent criteria are required within the chronic toxicity test method or rule, the more stringent criteria must be met.

Table 2.0:

CONTROL PERFORMANCE

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

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

IV. STANDARD REFERENCE TOXICANT TESTING

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

A. INITIAL STANDARD REFERENCE TOXICANT (SRT) TESTING REQUIREMENTS

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

B. SUBSEQUENT SRT TESTING REQUIREMENTS

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

1. Where organisms used in testing are cultured at the testing laboratory, SRT testing must be conducted at least once per month for each species/method.
2. Where the laboratory purchases organisms for the conduct of chronic toxicity testing for the test organism in question, the testing laboratory must conduct a concurrent SRT per lot of organisms, unless the supplier provides at least the most recent five monthly SRT's using the same toxicant and control conditions. SRT data provided by the supplier for each lot of organisms purchased is acceptable as long as the SRT test result falls within the control limits of the control chart established by the supplier for that organism. The laboratory using purchased organisms is responsible for the results of any compliance tests they perform.
3. A testing laboratory purchasing organisms from a supplier laboratory must still perform SRT testing on a monthly basis at a minimum, for each species they test with, in order to adequately document their own interlaboratory precision.
4. If a testing laboratory purchasing organisms elects not to use the SRT data from a "supplier laboratory" or such data is unavailable or where organisms are purchased from another organism supplier, the testing laboratory must conduct SRT testing on each lot of organisms purchased.
5. If a testing laboratory conducts testing for a species/method less frequently than monthly, then an SRT shall be run concurrent with the toxicity test.

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

C. CHANGING OF AN ESTABLISHED REFERENCE TOXICANT

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

1. A series of at least three reference toxicant tests are conducted with the new reference toxicant and the results of those tests are identified as satisfactory, in writing, by the Department.
2. Laboratories must continue using the already approved SRT in their ongoing QA/QC program, until such time as the letter referenced above, is received by the laboratory.

D. CONTROL CHARTS

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

1. The upper and lower control limits shall be calculated by determining \pm two standard deviations above and below the mean.
2. SRT test results which exhibit an IC25 that is greater than the highest concentration tested or less than the lowest concentration tested (i.e. a definitive endpoint cannot be determined), shall not be used to establish control charts.
3. SRT tests which do not meet the acceptability criteria for a specific species shall not be used to establish control charts.
4. All values used in the control charts should be as nominal concentrations. However, the control charts shall be accompanied by a chart tabulating the test results as measured concentrations.
5. An outlier (i.e. values which fall outside the upper and lower control limits) should be included on the control chart unless it is determined that the outlier was caused by factors not directly related to the test organisms (e.g., test concentration preparation) as the source of variability would not be directly applicable to effluent tests. In such case, the result and explanation shall be reported to the Department within 30 days of the completion of the SRT test.

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

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

1. Once a laboratory has completed twenty acceptable SRT tests for a test species, the upper and lower control limits shall be recalculated with those twenty values.
2. For each successive SRT test conducted after these first twenty tests, a moving average shall be calculated and the control limits reevaluated using the last twenty consecutive test results.
3. The upper and lower control limits shall be reported on the "NJPDES Biomonitoring Report Form - Chronic Toxicity Tests" along with the SRT test result.

E. UNACCEPTABLE SRT TEST RESULTS

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

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

F. ANNUAL SUBMITTALS

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

V. TEST CANCELLATION / RESCHEDULING EVENTS

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

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

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

VI. REPORTING

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

biomonitoring@dep.nj.gov

Toxicity@drbc.gov

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

VII. METHOD SPECIFICATIONS

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

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

VIII. REFERENCES

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

2. USEPA. 2002. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA-821-R-02-014. October 2002. Third Edition.
3. USEPA. 2002. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. EPA-821-R-02-013. October 2002. Fourth Edition.

**CHRONIC WHOLE EFFLUENT TOXICITY TESTING
TEST CANCELLATION / RESCHEDULING EVENT FORM**

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

NJPDES No.: _____

FACILITY NAME: _____

LOCATION: _____

CONTACT: _____ PHONE: _____

CANCELLATION EVENT:

LABORATORY NAME / NUMBER: _____

CONTACT: _____

TEST START DATE: ____/____/____ TEST END DATE: ____/____/____

REASON FOR CANCELLATION: _____

When is retest scheduled to be performed?

EFFLUENT SAMPLING:

SAMPLING POINT / DESCRIPTION OF SAMPLING SITE: _____

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

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

NUMBER OF EFFLUENT SAMPLES COLLECTED: _____

SAMPLE TYPE (GRAB/COMPOSITE): _____

RECEIVED IN LAB BY/FROM: _____

METHOD OF SHIPMENT: _____

(ALL APPLICABLE RAW DATA SHEETS MUST BE ATTACHED)

c: Permittees authorized agent.

Masterfile #: 39609

PI #: 50577

RWBR Approval Status List

The permittee is only authorized to utilize RWBR for the specific category, type and location that has been approved in the table below.

RWBR Category	Specific RWBR Type	Location	Status
RA-LA	Spray Irrigation within a fenced perimeter or otherwise restricted area (Without NH3 + NO3)	As specified in O.P.	Approved (with O.P. submittal)
RA-CM	Dust Control	As specified in O.P.	Approved (with O.P. submittal)
RA-CM	Fire Protection	As specified in O.P.	Approved (with O.P. submittal)
RA-CM	Vehicle Washing	As specified in O.P.	Approved (with O.P. submittal)
RA-CM	Composting	As specified in O.P.	Approved (with O.P. submittal)
RA-IS	Non-Contact Cooling Water	As specified in O.P.	Approved (with O.P. submittal)
RA-IS	Boiler Makeup Water	As specified in O.P.	Approved (with O.P. submittal)
RA-IS	Hydrostatic Testing	As specified in O.P.	Approved (with O.P. submittal)
RA-IS	Parts Washing	As specified in O.P.	Approved (with O.P. submittal)

Categories:

PA Public Access
RA-LA Restricted Access-Land Application and Non-Edible Crops
RA-CM Restricted Access--Construction and Maintenance Operations
RA-IS Restricted Access--Industrial Systems

Abbreviations:

NH3 - Ammonia
NO3 - Nitrate
STP - Sewage Treatment Plant
DPW - Dept. of Public Works

Annual Reuse Report

Any facility that has received an RWBR authorization is required to submit an Annual Reuse Report. The following information, at a minimum, shall be included in the report, due on February 1st of each year.

- (1) The total wastewater reused (R) by the facility in the previous calendar year. If no wastewater was reused in the previous calendar year, report R as zero and skip to (6) below;
R = _____ gallons
- (2) The total wastewater discharged (D) by the facility in the previous calendar year;
D = _____ gallons
- (3) The percent of wastewater reused (%R) by the facility in the previous calendar year, calculated as follows:
%R = $R/(R+D)$, expressed as a percent;
%R = _____ percent
- (4) The total wastewater that was reused for **each reuse type** in the previous calendar year. This information should be provided in the chart format utilized in the RWBR Usage Table below;

RWBR Usage Table

RWBR Category	Specific RWBR Type	Location	Flow (gallons)

Attach additional pages as necessary.

- (5) An update to the correlation between Total Suspended Solids and Turbidity, if necessary;
Correlation = _____

- (6) Submit a completed copy of this form to:

For paper copies:
ATTN: RWBR Review Team
Mail Code 401 – 02B
Division of Water Quality
Bureau of Surface Water and Pretreatment Permitting
P.O. Box 420
Trenton, NJ 08625-0420

For electronic copies:
DWQRWBR@dep.nj.gov

Annual Reuse Report - SAMPLE

Any facility that has received an RWBR authorization is required to submit an Annual Reuse Report. The following information, at a minimum, shall be included in the report, due on February 1st of each year.

- (1) The total wastewater reused (R) by the facility in the previous calendar year. If no wastewater was reused in the previous calendar year, report R as zero and skip to (6) below;
R = _____ gallons
- (2) The total wastewater discharged (D) by the facility in the previous calendar year;
D = _____ gallons
- (3) The percent of wastewater reused (%R) by the facility in the previous calendar year, calculated as follows:
 $\%R = R/(R+D)$, expressed as a percent;
%R = _____ percent
- (4) The total wastewater that was reused for **each reuse type** in the previous calendar year. This information should be provided in the chart format utilized in the RWBR Usage Table below;

RWBR Usage Table			
RWBR Category	Specific RWBR Type	Location	Flow (gallons)
	<i>For Example:</i>		
RA-CM	Street Sweeping	Local Township	42,000
RA-IS	Sanitary Sewer Jetting	Facility Sewer Service Area	15,000
RA-IS	STP Washdown	Sewage Treatment Plant	43,000
		Grand Total (R)	100,000

Attach additional pages as necessary.

- (5) An update to the correlation between Total Suspended Solids and Turbidity, if necessary;
Correlation = _____

- (6) Submit a completed copy of this form to:

For paper copies:
ATTN: RWBR Review Team
Mail Code 401 – 02B
Division of Water Quality
Bureau of Surface Water and Pretreatment Permitting
P.O. Box 420
Trenton, NJ 08625-0420

For electronic copies:
DWQRWBR@dep.nj.gov