



State of New Jersey

CHRIS CHRISTIE
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
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Bureau of Surface Water Permitting
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BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

To: Distribution List

March 19, 2015

Re: Draft NJPDES Discharge to Surface Water Master General Permit Renewal
Category: BGR – Non-petroleum Cleanup Permit
NJPDES Permit No. NJ0155438

Dear Interested Party:

Enclosed is a **draft** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. This master general permit serves to renew the existing general non-petroleum cleanup permit (BGR) which expires on June 30, 2015.

Notice of this draft permit will appear in the major Northern, Central and Southern NJ newspapers listed below. The public notice for this draft permit also appeared in the March 18, 2015 *DEP Bulletin*. The *DEP Bulletin* is available on the internet at <http://www.state.nj.us/dep/bulletin>. In accordance with N.J.A.C. 7:14A-15.10(c)1i, the public comment period will close thirty days after the latest newspaper's (listed below) publication date.

<i>Newspaper</i>
<i>The Press of Atlantic City</i>
<i>Star Ledger</i>
<i>Trenton Times</i>

As detailed in the *DEP Bulletin* and the aforementioned newspapers, written comments must be submitted in writing to Pilar Patterson, Division of Water Quality, Mail Code: 401-02B, Bureau of Surface Water Permitting, P.O. Box 420, Trenton, NJ 08625 by the close of the public comment period. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's tentative decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the public comment period.

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

Any existing discharges covered under the existing master general permit will be renewed under this general permit provided a renewal application has been submitted in a timely manner. Please submit a renewal application if you intend to continue discharging under the BGR permit. You may be in violation of the NJPDES regulations and thus subject to fines if an application is not received regarding your subject site and as it will be considered to be discharging without a permit after July 1, 2015. If your site has a short term discharge or it was recently issued a new permit, a renewal application may not be required. Please see the attached list of all current permittees.

If you have questions or comments regarding the preliminary draft action, please contact Brian Salvo or Kelly Perez via email at Brian.Salvo@dep.nj.gov or Kelly.Perez@dep.nj.gov or via telephone at (609) 292-4860.

Sincerely,



Melisse Carasia Auriti, Section Chief
Bureau of Surface Water Permitting

Enclosures
c: Permit Distribution List

Masterfile #: 39609; PI #: 50577

2015 BGR Facilities

	Facility Name	NJPDES Number	Township	County
1	Ames Rubber Corp Plant #1	NJG000141	Hamburg Boro	Sussex
2	Lowe's Home Center	NJG0002623	Eatontown	Monmouth
3	Oxford Textile Inc.	NJG0004901	Oxford	Warren
4	Hercules Groundwater Treatmt At Geo Spec Chem	NJG0005134	Gibbstown	Gloucester
5	Airtron Div/Litton Systems Inc	NJG0025739	Hanover	Morris
6	Honeywell International Inc.	NJG0031305	Morris Township	Morris
7	Carpenter Technology-Tube Div	NJG0052931	Union	Union
8	Mepco Electra	NJG0071030	Morris Township	Morris
9	Evonik Degussa Corp	NJG0082112	Middlesex	Middlesex
10	Evonik Degussa Corp	NJG0102270	Elizabeth	Union
11	Fisher Scientific Company	NJG0102792	Fair Lawn	Bergen
12	Haledon Remediation Facility	NJG0104451	Haledon	Passaic
13	Station Village at Avenel Urban Renewal LLC	NJG0105287	Avenel	Middlesex
14	RMP Pennsauken	NJG0105449	Pennsauken	Camden
15	ADT Security Sys Mfg (Former)	NJG0105490	Clifton	Passaic
16	Chemical Leaman Tank Lines Inc	NJG0105589	Logan Township	Gloucester
17	BICC Cables Corp	NJG0107247	New Brunswick	Middlesex
18	Shopwell Inc	NJG0109878	Tenafly	Bergen
19	Safer Textiles Facility (Former)	NJG0109908	Moonachie	Bergen
20	Former Handy & Harman Site	NJG0113794	Montvale	Bergen
21	Jcp&L Belmar Former Mfg Gas Plant	NJG0125130	Belmar	Monmouth
22	Clariant Corp - Fair Lawn	NJG0128236	Fair Lawn	Bergen
23	601 Nassau Street	NJG0129127	North Brunswick	Middlesex
24	Garden State Tile Distributors Inc	NJG0129526	South Brunswick	Middlesex
25	Pse&G Former Paterson Mfg Gas Plant	NJG0130907	Paterson	Passaic
26	Former Eco Pump Site	NJG0130982	South Plainfield	Middlesex
27	Fischbach Corporation	NJG0132489	New Providence	Union
28	Stearns & Foster Bedding Co Former	NJG0132829	Monmouth Junction	Middlesex
29	Denville Technical Park	NJG0133892	Denville Township	Morris
30	Former Laser Diode Facility	NJG0137758	New Brunswick City	Middlesex
31	30 Hudson	NJG0139661	Jersey City	Hudson
32	Electrolux Home Products Inc.	NJG0141992	Edison Township	Middlesex
33	Klockner & Klockner	NJG0156256	Rockaway Borough	Morris
34	Penn Color Inc Former Manville, NJ Facility	NJG0156922	Hillsborough Township	Somerset
35	Higgins Disposal Superfund Site	NJG0160946	Franklin Township	Somerset
36	Higgins Farm Superfund Site	NJG0167533	Franklin Township	Somerset
37	Somerset St Groundwater Treatment System	NJG0167916	Hopewell Borough	Mercer

	Facility Name	NJPDES Number	Township	County
38	I.Park Edgewater	NJG0168840	Edgewater Boro	Bergen
39	Ellis Property	NJG0171336	Evesham Township	Burlington
40	Standard Chlorine Chemical Co.	NJG0175102	Kearny Town	Hudson
41	Textile Research Institute	NJG0175412	Princeton Boro	Mercer
42	Former Nuodex Corp. Facility	NJG0197548	Woodbridge Township	Middlesex
43	Amusement & Water Park	NJG0205192	E. Rutherford Boro	Bergen
44	T-Mobile Wayne Switch Site	NJG0207802	Wayne Township	Passaic
45	Chemtura Corp. DBA Hatco Corp.	NJG0218014	Woodbridge Township	Passaic
46	Former Rexion Facility AKA Enjems Millworks	NJG0218316	Wayne Township	Passaic
47	Woodbridge Energy Center	NJG0225282	Woodbridge Township	Middlesex
48	Ramp Dry Cleaners	NJG0226629	East Windsor	Mercer
49	PSE&G River Road Substation	NJG0228508	North Bergen	Hudson
50	IMTT - Bayonne	NJG0231002	Bayonne	Hudson
51	Former Unified Data Products Site	NJG0231401	Fair Lawn Boro	Bergen
52	Branch Brook Substation Project	NJG0231762	Bloomfield	Essex
53	PSE&G Hudson and Marion Switching Station	NJG0232211	Jersey City	Hudson
54	PSE&G Southern Reinforcement Project	NJG0238350	Camden & Woodlynne	Camden

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

PUBLIC NOTICE

Notice is hereby given that the New Jersey Department of Environmental Protection (Department) proposes to renew the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) NJ0155438 in accordance with N.J.A.C. 7:14A-1 et seq., and by authority of the Water Pollution Control Act at N.J.S.A. 58:10A-1 et seq., for the following discharge:

Applicant or Permittee

NJDEP DIVISION OF WATER QUALITY
401 East State Street
Trenton, NJ 08625

Facility

NJPDES MASTER GENERAL PERMIT – Category BGR
Per Individual Authorization

This general permit is issued to authorize the discharge of treated groundwater into surface waters of the State or storm sewers, except those waters classified as FW-1, Category One and PL (Pinelands). This includes new and existing discharges of treated non-petroleum contaminated water from remediations, dewatering and pump tests. The Department has determined that these types of point sources require the same effluent limitations or monitoring conditions, and are more appropriately controlled under a general permit. If the Department determines that the applicant is not eligible for this general permit the applicant may pursue an individual permit. A full copy of the master general permit including a complete description of all effluent limitations and monitoring conditions is available at http://www.nj.gov/dep/dwq/gp_bgr.htm.

This master general permit serves to renew the existing general groundwater remediation clean-up permit which expires on June 30, 2015. Any existing discharges covered under the existing master general permit will be renewed under this general permit provided a renewal application has been submitted in a timely manner. Permits issued within the last 12 months will also be automatically renewed under this general permit.

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

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

Written comments or a request that the Department hold a non-adversarial public hearing on the draft document must be submitted in writing to Pilar Patterson, Chief, or Attention: Comments on Public Notice NJ0155438, at Mail Code 401-02B, Division of Water Quality, Bureau of Surface Water Permitting, P.O. Box 420, Trenton, NJ 08625-0420 by the close of the public comment period, which closes thirty calendar days after publication of this notice in the newspaper. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the public comment period.

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

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

FACT SHEET

Masterfile #: Varies

PI #: Varies

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

**PERMIT ACTION: NJPDES Discharge to Surface Water Master General Renewal Permit
Non-Petroleum Treated Water - Category BGR- NJ0155438**

1 Background and Description of the BGR Permit:

On March 9, 2005, in accordance with N.J.A.C. 7:14A-6.13(b)4, the New Jersey Department of Environmental Protection (hereafter "the Department") issued a new master general non-petroleum groundwater cleanup permit (BGR) for point source discharges. Issuance of the master BGR simplified and streamlined the NJPDES permitting process for these similar types of discharges. The master BGR permit was renewed on May 12, 2010. This permit action proposes to renew the 2010 master BGR general permit, which expires June 30, 2015. It also serves to authorize new discharges that meet the eligibility criteria.

2 Name and Address of the Applicant:

Name per Application
Address per Application

3 Name and Address of the Facility/Site:

Name per Application
Address per Application

4 Request for Authorization:

This master BGR permit serves to authorize existing and new discharges that seek coverage under the BGR.

Existing and new dischargers must request authorization to be covered under the general permit by submitting the appropriate NJPDES application forms. The BGR permit application forms can be found online at http://www.state.nj.us/dep/dwq/forms_surfacewater.htm. Based on the application, the Department shall determine if the facility meets the eligibility requirements prior to issuing an individual authorization under the master BGR permit number NJ0155438. New facilities will also be given a specific individual NJPDES general permit number. Existing facilities will retain their current NJPDES permit number. It can take up to 30 days for a BGR permit to be finalized and issued. The Department strongly recommends that applicants fill out and submit application forms as early in the project planning process as possible.

5 Discharge Location Information and Receiving Waterbody Classification:

The receiving waterbody classification and outfall name for each discharge is indicated on the individual authorization page for each facility. A copy of the appropriate section of a USGS quadrangle map indicating the location of the facility and discharge point(s) shall be included in each individual authorization.

Receiving waterbody classifications are obtained from N.J.A.C. 7:9B-1.1 *et seq.*, the New Jersey Surface Water Quality Standards (NJSWQS). In accordance with the NJSWQS, saline waters are considered to be those waters classified as SE1, SE2, SE3, or SC and fresh waters are considered to be those waters classified as FW1 or FW2 waters. For waters with two classifications (e.g. FW2-NT/SE1), the waterbody is defined as saline if the result of a salinity measurement exceeds 3.5 parts per thousand at mean high tide or as fresh if the salinity is less than or equal to 3.5 parts per thousand, in accordance with N.J.A.C. 7:9B-1.4. It is the responsibility of the applicant to determine the waterbody classification prior to applying for the BGR permit. Information regarding stream classifications can be found on the Departments website at <http://www.nj.gov/dep/wms/bwqsa/swqs.htm#1>. With respect to the Delaware River, the salt line is based on the seven-day average location of the 250 milligrams per liter chloride concentration. The salt line for the Delaware fluctuates and can be found online at <http://www.state.nj.us/drbc/hydrological/river/salt/>.

As per the Surface Water Quality Standards at N.J.A.C. 7:9B, the designated uses for the Freshwater 2 (FW2), Saline Estuary 1 (SE1), Saline Estuary 2 (SE2), Saline Estuary 3 (SE3), and Saline Coastal (SC) receiving waters are:

FW2:

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

SE1:

1. Shellfish harvesting in accordance with N.J.A.C. 7:12;
2. Maintenance, migration and propagation of the natural and established biota;
3. Primary and secondary contact recreation; and
4. Any other reasonable uses. AND/OR

SE2:

1. Maintenance, migration and propagation of the natural and established biota;
2. Migration of diadromous fish;
3. Maintenance of wildlife;
4. Secondary contact recreation; and
5. Any other reasonable uses. AND/OR

SE3:

1. Secondary contact recreation;
2. Maintenance and migration of fish populations;
3. Migration of diadromous fish;
4. Maintenance of wildlife; and
5. Any other reasonable uses. AND/OR

SC:

1. Shellfish harvesting in accordance with N.J.A.C. 7:12;
2. Primary and secondary contact recreation;
3. Maintenance, migration and propagation of the natural and established biota; and
4. Any other reasonable uses. AND/OR

The designated uses for the mainstem Delaware River and Delaware Bay are those contained in "Delaware River Basin Commission, Water Quality Regulations, Administrative Manual - Part III," Article 3, dated October 23, 1996, including all amendments and future supplements thereto and are described below:

Zone 1C:

Zone 1C is that part of the Delaware River extending from the U.S. Routes 6 and 209 bridge at Port Jervis, New York, R.M. 254.75, to Tocks Island Dam, 217.0 (proposed axis of dam).

The quality of Zone 1C waters shall be maintained in a safe and satisfactory condition for the following uses:

1. a. public water supplies after reasonable treatment,

- b. industrial water supplies after reasonable treatment,
- c. agricultural water supplies;
- 2. a. maintenance and propagation of resident game fish and other aquatic life,
b. spawning and nursery habitat for anadromous fish,
c. passage of anadromous fish,
d. wildlife; 29
- 3. recreation.

Zone 1D:

Zone 1D is that part of the Delaware River extending from Tocks Island Dam, R.M. 217.0 (proposed axis of dam), to the mouth of the Lehigh River at Easton, Pennsylvania, R.M. 183.66.

The quality of Zone 1D waters shall be maintained in a safe and satisfactory condition for the following uses:

- 1. a. public water supplies after reasonable treatment,
b. industrial water supplies after reasonable treatment,
c. agricultural water supplies;
- 2. a. maintenance and propagation of resident game fish and other aquatic life,
b. spawning and nursery habitat for anadromous fish,
c. passage of anadromous fish,
d. wildlife;
- 3. recreation.

Zone 1E:

Zone 1E is that part of the Delaware River extending from the mouth of the Lehigh River at Easton, Pennsylvania, R.M. 183.66, to the head of tidewater at Trenton, New Jersey, R.M. 133.4 (Trenton-Morrisville Toll Bridge).

The quality of Zone 1E waters shall be maintained in a safe and satisfactory condition for the following uses:

- 1. a. public water supplies after reasonable treatment,
b. industrial water supplies after reasonable treatment,
c. agricultural water supplies;
- 2. a. maintenance and propagation of resident game fish and other aquatic life,
b. spawning and nursery habitat for anadromous fish,
c. passage of anadromous fish,
d. wildlife;
- 3. recreation.

Zone N2:

Zone N2 is: 1. Clove Brook extending from its source in Steeny Kill Lake in New Jersey to its mouth in New York at R.M. 0.5 on the Neversink River; an unnamed tributary of Clove Brook extending from its source in New York to its mouth in New Jersey at R.M. 1.0 on Clove Brook; an unnamed tributary to the above unnamed tributary of Clove Brook extending from its source in New York to its mouth in New Jersey at R.M. 0.7 on the unnamed tributary of Clove Brook.

The quality of Zone N2 waters shall be maintained in a safe and satisfactory condition for the following uses:

- 1. a. public water supplies after reasonable treatment,
b. industrial water supplies after reasonable treatment,
c. agricultural water supplies;
- 2. a. maintenance and propagation of resident game fish and other aquatic life,
b. maintenance and propagation of trout,
c. wildlife;
- 3. recreation.

Zone 2:

Zone 2 is that part of the Delaware River extending from the head of tidewater at Trenton, New Jersey, R.M. (River Mile) 133.4 (Trenton-Morrisville Toll Bridge) to R.M. 108.4 below the mouth of Pennypack Creek, including the tidal portions of the tributaries thereof.

The quality of Zone 2 waters shall be maintained in a safe and satisfactory condition for the following uses:

- 1. a. public water supplies after reasonable treatment,
b. industrial water supplies after reasonable treatment,
c. agricultural water supplies;
- 2. a. maintenance and propagation of resident fish and other aquatic life,

- b. passage of anadromous fish,
- c. wildlife;
- 3. recreation;
- 4. navigation.

Zone 3:

Zone 3 is that part of the Delaware River extending from R.M. 108.4 to R.M. 95.0 below the mouth of Big Timber Creek, including the tidal portions of the tributaries thereof.

The quality of Zone 3 waters shall be maintained in a safe and satisfactory condition for the following uses:

- 1. a. public water supplies after reasonable treatment,
- b. industrial water supplies after reasonable treatment,
- c. agricultural water supplies;
- 2. a. maintenance of resident fish and other aquatic life,
- b. passage of anadromous fish,
- c. wildlife;
- 3. recreation - secondary contact;
- 4. navigation.

Zone 4:

Zone 4 is that part of the Delaware River extending from R.M. 95.0 to R.M. 78.8, the Pennsylvania-Delaware boundary line, including the tidal portions of the tributaries thereof.

The quality of Zone 4 waters shall be maintained in a safe and satisfactory condition for the following uses:

- 1. industrial water supplies after reasonable treatment;
- 2. a. maintenance of resident fish and other aquatic life, 64
- b. passage of anadromous fish,
- c. wildlife;
- 3. a. recreation - secondary contact above R.M. 81.8,
- b. recreation below R.M. 81.8;
- 4. navigation.

Zone 5.

Zone 5 is that part of the Delaware River extending from R.M. 78.8 to R.M. 48.2, Liston Point, including the tidal portions of the tributaries thereof.

The quality of waters in Zone 5 shall be maintained in a safe and satisfactory condition for the following uses:

- 1. industrial water supplies after reasonable treatment;
- 2. a. maintenance of resident fish and other aquatic life,
- b. propagation of resident fish from R.M. 70.0 to R.M. 48.2,
- c. passage of anadromous fish,
- d. wildlife;
- 3. recreation;
- 4. navigation.

Zone 6.

Zone 6 is Delaware Bay extending from R.M. 48.2 to R.M. 0.0, the Atlantic Ocean, including the tidal portions of the tributaries thereof.

The quality of Zone 6 waters shall be maintained in a safe and satisfactory condition for the following uses:

- 1. a. industrial water supplies after reasonable treatment,
- 2. a. maintenance and propagation of resident fish and other aquatic life,
- b. maintenance and propagation of shellfish,
- c. passage of anadromous fish,
- d. wildlife;
- 3. recreation;
- 4. navigation.

6 Type and Quantity of the Wastes or Pollutants:

This general permit regulates surface water discharges resulting from the treatment of non-petroleum contaminated water. Based on historical data, the typical non-petroleum pollutants include volatile organic compounds (VOC's), semi-volatile compounds (PAHs) and metals. Historical treated effluent data is summarized at the end of this fact sheet.

Residuals/Sludge Conditions:

All treatment works with a discharge regulated under N.J.A.C. 7:14A must have permits that implement applicable technical standards for residuals management. Generally, the permit issued to the treatment works generating the residual will include applicable residual quality monitoring as well as other general conditions required by N.J.A.C. 7:14A-6. In addition, the permit may include conditions related to any aspect of residual management developed on a case-by-case basis where the Department determines that such conditions are necessary to protect public health and the environment.

Existing and new discharges that generate a non-hazardous sludge may be required under an individual general permit authorization to submit quality, quantity and removal information on Residuals discharge monitoring reports pursuant to the Sludge Quality Assurance Regulations (SQAR, N.J.A.C. 7:14C). In cases where sludge quality information is required pursuant to SQAR, the industrial treatment works in the specified categories (see N.J.A.C. 7:14C-1.5) shall analyze the sludge removed for use or disposal for any of the parameters listed in the Appendix, Tables I through VII, that are expected to be present in the sludge removed from the facility. These tables may be found in N.J.A.C. 7:14C and are included as "Part III – Attachment Residuals" of the general permit. The monitoring requirements for existing discharges that generate a sludge subject to SQAR are included in Attachments 1 and 2 of the Fact Sheet.

The documents listed below have been used to establish the residual conditions of the Draft Permit:

- a. United States Environmental Protection Agency "Standards for the use or disposal of sewage sludge" (40 CFR Part 503),
- b. "New Jersey Pollutant Discharge Elimination System" (N.J.A.C. 7:14A),
- c. Technical Manual for Residuals Management, May 1998,
- d. USEPA Part 503 Implementation Guidance, EPA 833-R-95-001, October 1995. This document is a compilation of federal requirements, management practices and EPA recommended permit conditions for sewage sludge use and management practices,
- e. USEPA A Plain English Guide to the EPA Part 503 Biosolids Rule, EPA/832/R-93/003, September 1994,
- f. New Jersey "Statewide Sludge Management Plan", January 2006 and
- g. New Jersey "Sludge Quality Assurance Regulations" (SQAR), N.J.A.C. 7:14C.

7 Description of Facilities Covered by the Master BGR Permit:

This permit authorizes the discharge of point sources into surface waters of the State directly or via separate storm sewers, except those waters classified as FW-1, C1 (Category 1) and PL (Pinelands), in compliance with the limitations and conditions described below and in a manner that will not cause violation of the NJSWQS of N.J.A.C. 7:9B-1.1 et seq. and the Federal Surface Water Quality Standards, 40 CFR 131.

Facilities that discharge treated non-petroleum contaminated water to surface water are covered under this master BGR permit. For example, a remediation project where groundwater is being treated for VOC contamination and discharged to a surface waterbody via a storm water drain is covered by a BGR permit. Treated construction dewatering and other treated non-petroleum water, generally short term in nature (less than 6 months in duration), are also eligible under this master general permit.

All existing and new facilities considered eligible under this master general permit are rated as minor facilities by the Department in accordance with the United States Environmental Protection Agency (EPA) rating criteria.

The discharge of remediated groundwater associated with petroleum products shall typically be regulated under the Master General Petroleum Product Cleanup (GPPC permit or Category B4B permit) NJ0102709. However, a facility is eligible for a BGR if the main pollutant of concern is non-petroleum, but contains trace amounts of petroleum contaminants.

Short term construction dewatering projects of non-contaminated water shall request authorization under the Master General Construction Dewatering Permit (B7) NJ0134511.

Effluent limitations for the BGR are dependent on the contaminants detected or known to be present at the site, the duration of the effluent discharge and the receiving waterbody. Site specific effluent limits and monitoring requirements are included in the Master BGR Permit Summary Table Attachment and Part III of each individual authorization. The limits are based on the following two discharge types.

Table 1: Long term new and existing remediation discharges into waters classified as FW2-NT, FW2-TM, SE or SC where metals, volatile organics, acid extractables, base-neutral compounds, PCBs or pesticides are present.

Table 2 : Short term (typically less than 6 months in duration) dewatering, pump test or similar water discharges into waters classified as FW2-NT, FW2-TM, SE or SC which may contain metals, volatile organics, acid extractables, base-neutral compounds, PCBs or pesticides. Authorizations under this table are generally issued on a 6 month basis.

The Department will review applications for discharges on a case-by-case basis and reserves the right to deny authorization under the BGR permit.

Renewal Discharges

This master BGR permit serves to renew existing remediation discharge to surface water permits. The majority of existing permits contain effluent limitations and monitoring conditions consistent with Part III of this Master BGR permit. Existing limits that are more stringent than specified in this permit have been retained pursuant to N.J.A.C. 7:14A-13.19.

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

A. Basis for Effluent Limitations and Permit Conditions - General

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

1. NJPDES Regulations (N.J.A.C. 7:14A),
2. New Jersey Surface Water Quality Standards (N.J.A.C. 7:9B),
3. New Jersey's 2012 Integrated Water Quality Monitoring and Assessment Report (includes 305(b) Report and 303(d) List),
4. Requirements of the Delaware River Basin Commission (N.J.A.C. 7:9B-1.5(b)1) and/or Interstate Environmental Commission (N.J.A.C. 7:9B-1.5(b)2) and/or Pinelands Commission (N.J.A.C. 7:50-6.81 to 6.87) and/or the Highlands Commission (N.J.S.A. 13:20-1 et seq).,
5. Existing permit limitations in accordance with N.J.A.C. 7:14A-13.19 and 40 CFR 122.44 (antibacksliding requirements),
6. Permit limitations in accordance with N.J.A.C. 7:9B-1.5(d) (antidegradation requirements),
7. Statewide Water Quality Management Planning Rules (N.J.A.C. 7:15),
8. Sludge Quality Assurance Regulations (N.J.A.C. 7:14C).

Technology based limitations are authorized by Section 301 of the Clean Water Act, 40 CFR 122, N.J.S.A. 58:10A-4, and N.J.A.C. 7:14A-13.2(a)1.ii., 13.3(b), and 13.4. Best Professional Judgement (BPJ) determinations are authorized by Section 402 (a)(1) of the Clean Water Act.

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

Expression of all effluent limitations is in accordance with N.J.A.C. 7:14A-13.14 and 13.15. Whole effluent toxicity limitations are expressed as a minimum as a percent.

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

The pollutant limitations and monitoring requirements are included in Part III of the Master BGR permit and individual site specific limitations are included in the Master BGR permit summary table attachment. The basis for these requirements is described below.

1. Available Data

Influent data (untreated wastewater) is required in the applications for individual authorizations to determine eligibility and is considered in determining specific parameter monitoring requirements that are included with individual authorizations. The Department reviewed effluent data for the master BGR permits issued in 2005 and 2010 and found that in general, the available technology has enabled most permittees to meet most permit limitations. Effluent discharge monitoring report form (DMR) data for the time period of July 2010 to December 2014 has also been reviewed and was found in most cases, to be meeting permit limitations. A summary of the effluent data is included at the end of the fact sheet.

2. Dilution Credit

The Department has not considered site-specific dilution effects in the application of any effluent limits in this master BGR permit for new discharges. Consideration of site-specific dilution effects for each individual discharger is not feasible for a master general permit where effluent limits and conditions need to be streamlined.

3. Anti-backsliding and Anti-Degradation Determination for Existing Discharges

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

4. Conventional Pollutants included in the BGR

a. Flow

Monitoring for **flow** is required pursuant to N.J.A.C. 7:14A-13.13 and 13.14 and is consistent with existing NJPDES Discharge to Surface Water permits. Flow monitoring is necessary to ensure compliance with the effluent limits and treatment system designed flow. If the flow monitoring method will be something other than a flow meter, the applicant shall indicate so in its BGR permit application so that Part III can be adjusted accordingly.

b. Total Suspended Solids

The Total Suspended Solids (TSS) Daily Maximum limitation of 40 mg/L is equal to the NJSWQS at N.J.A.C. 7:9B-1.1 et seq. for FW2-NT waters. This limitation is economically and technologically achievable for all discharges based on the monitoring report form effluent data reviewed which shows average TSS levels below the proposed limitation of 40 mg/L.

The TSS daily maximum limitation of 25 mg/L for discharges to FW2-TM is also consistent with the NJSWQS at N.J.A.C. 7:9B-1.1 et seq. for FW2-TM waters. This limitation is economically and technologically achievable based on available monitoring report form effluent data.

c. Total Organic Carbon

In order to maintain a reasonable treatment efficiency level and in order to protect against pollutants which may be present in various concentrations in the effluent but where no specific numerical limitations have been imposed in this permit, the Department has imposed limitations for Total Organic Carbon (TOC). A daily maximum limitation of 20 mg/L is applied. This limit has proven to be technologically and economically achievable based on a review of at least 10 years of representative data.

d. pH

The pH range of 6.0 to 9.0 standard units is imposed for both fresh and saline waters. This range is routinely imposed on all wastewater discharges in the state and is technologically and economically achievable.

e. Oil & Grease

Oil & Grease was included in the 2010 BGR permit as a narrative requirement. However, since oil & grease is not a typical parameter found in these types of dischargers, specifically groundwater being remediated, this parameter is being removed from the permit.

5. Toxic parameters included in the BGR

Metals, Volatile Organics, Acid Extractables, Base Neutral Compounds, PCBs or Pesticides

Existing Discharges: Most effluent limitations and monitoring requirements are carried forward from the existing permit in accordance with the anti-backsliding provisions as cited in N.J.A.C. 7:14A-13.9. Each renewal application was reviewed, and application data was evaluated to determine whether or not additional compounds should be included in the permit. As stated in Part IV, the monitoring frequency may be reduced, which is consistent with N.J.A.C. 7:14A-14.2(a). Factors that the Department will consider in evaluating a monitoring frequency reduction for an existing discharger include consistent compliance, facility flow, amount of data and size of the receiving stream. Please see Attachment BGR to see any changes to the Permit Summary Table for each facility included in this renewal.

New Discharges: The Department will review the individual authorization application and evaluate whether or not any of these compounds are present in the untreated wastewater based on the data (eg. monitoring well) submitted. The Department will then limit any detected or known pollutants in Part III of the individual authorization where the limits are based on N.J.A.C. 7:14A-12 et seq; Appendix B Effluent Standards for Site Remediation Projects. Part III Attachment – BGR effluent Standards for Toxic Pollutants is included in this BGR permit listing the parameters and limits from Appendix B.

6. Whole Effluent Toxicity (WET)

Section 101(a) of the Clean Water Act (CWA) establishes a national policy of restoring and maintaining the chemical, physical and biological integrity of the Nation's waters. In addition, section 101(a)(3) of the CWA and the NJSWQS at N.J.A.C. 7:9B-1.5(a)3 state that the discharge of toxic pollutants in toxic amounts is prohibited. Further, 40 CFR 122.44(d) and N.J.A.C. 7:14A-13.6(a) require that where the Department

determines using site-specific WET data that a discharge causes, shows a reasonable potential to cause, or contributes to an excursion above the NJSWQS, the permitting authority must establish effluent limits for WET. In order to satisfy the requirements of the CWA, the NJSWQS and the NJPDES Regulations, the need for a WQBEL for WET was evaluated for these discharges.

There are two types of WET tests, acute toxicity testing which measures only the lethal effects (mortality) of the effluent on the test organisms, and chronic toxicity testing which measures the lethal and sublethal effects (ie. growth and/or reproduction) of the effluent on the test organisms. The type of WET test required for a particular facility is determined by evaluating the mixing characteristics of the effluent (ie dilution factor) in the receiving water. The acute mixing zone and the chronic mixing zone are compared, and whichever results in a more stringent limit is used to regulate the discharge.

Given the potential for whole effluent toxicity effects to be present in contaminated groundwater, WQBELs for acute and chronic WET were calculated in accordance with N.J.A.C. 7:14A-13.6 and USEPA's "Technical Support Document for Water Quality Based Toxics Control" (EPA/505/2-90-001), March 1991 (TSD).

When developing a general permit, conditions are streamlined to simplify the permit. In an effort to streamline the permit the Department did not consider site-specific dilution effects. As a result, in the master BGR permit for new discharges, WET limits are developed using an acute dilution factor (Df_a) of 1 and a chronic dilution factor (Df_c) of 1. The majority of discharges covered under the master BGR permit are routed to small waterbodies, therefore a dilution factor of 1 is reasonable. In the event that an applicant would prefer a site-specific dilution factor, the applicant always has the option to apply for an individual permit.

The Df_a and Df_c were used to determine acute and chronic Wasteload Allocations (WLAs) consistent with N.J.A.C. 7:14A-13.5, using a steady state model, as specified in section 5.4.1 of the TSD. Consistent with recommendations in the TSD, values of 0.3 acute toxic unit (TU_a) and 1.0 chronic toxic unit (TU_c) were used to interpret the narrative water quality criteria for WET contained at N.J.A.C. 7:9B-1.14(c) (see Response to Comments 13-74 through 13-89, 29 NJR 1861, (May 5, 1997)). The acute WLA (WLA_a) was translated to equivalent chronic toxic units (WLA_{ac}), to enable comparison of acute and chronic WET limits, by multiplying the WLA_a by a default acute to chronic ratio (ACR) of 10.

The acute and chronic WLAs were then converted to an acute Long Term Average (LTA_{ac}) of 0.96 TU_{acs} and a chronic LTA (LTA_c) of 0.53 TU_{cs} , using a default coefficient of variation (CV) of 0.6, and multipliers of 0.321 and 0.527 for the acute and chronic LTAs respectively. Those multipliers are based on the 99th percentile consistent with Response to Comments 13-74 through 13-89, 29 NJR 1861 and are found on Page 102 of the TSD. The resultant long term average values were evaluated and the more protective (e.g. lower) value selected for translation into a daily maximum WET limit using the applicable 99th percentile multiplier, as found on Page 103 of the TSD. The daily maximum chronic WET limit of 1.64 TU_{cs} was then converted to a permit limitation expressed as an IC25. The resultant applicable limitation is an IC25 = 61 % effluent.

The 2010 master BGR permit included WET requirements for new discharges. As a result, the Department used existing WET data for these discharges for consideration in this BGR master permit renewal. Existing WET data is summarized in the WET Data Table at the end of this Fact Sheet.

- **WET Requirements applicable to new remediation discharges (Part III, Table 1):**

Most of the data indicated no toxicity (i.e. results of > 100%), but some data showed toxicity. As a result, the Department has retained the chronic WET limitation of 61% in this master BGR permit renewal for new discharges. However, because new discharges do not have an existing WET database to assess whether or not toxicity is present, the Department determined it appropriate to impose WET requirements with a one year compliance schedule as described below.

The resulting WET limit for new long term remediation discharges is equivalent to an IC25=61%. This limitation is consistent with the limitation included in the 2010 master BGR permit.

Compliance schedule for new discharges only (i.e. not renewal authorizations): In accordance with N.J.A.C. 7:14A-6.4(a) and 13.21(b), a schedule to achieve compliance with the new chronic WET WQBEL has been included in this permit and is applicable for new discharges. Interim monitoring and reporting requirements have been included based on N.J.A.C. 7:14A-6.2(a)14 for the first year of the discharge authorization beginning with the commencement of pumping. After that time the referenced limit of 61% is imposed.

For new discharges to fresh waters: The test species method to be used for chronic testing shall be the *Ceriodaphnia dubia*, Survival and Reproduction Test, 40 CFR 136.3, method 1002.0 and will be indicated in Part III of the individual authorization. Such selection is based on the freshwater characteristics of the receiving stream, N.J.A.C. 7:9B-1.5 and the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Permit Program" document. This document is included as Appendix A of this permit, in accordance with N.J.A.C. 7:14A-6.5, 11.2(a)2.iv. and 40 CFR Part 136.

For new discharges to saline waters: The test species method to be used for chronic testing shall be the *Mysidopsis bahia*, Survival, Growth, and Fecundity Test, 40 CFR 136.3, method 1007.0 and will be indicated in Part III of the individual authorization. Such selection is based on the saline characteristics of the receiving stream, N.J.A.C. 7:9B-1.5 and the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Permit Program" document. This document is included as Appendix A of this permit, in accordance with N.J.A.C. 7:14A-6.5, 11.2(a)2.iv. and 40 CFR Part 136.

Monitoring Frequency for WET for existing discharges: In most cases, the monitoring frequency for WET testing shall be retained from the existing permit. However, based on consistent compliance and as specified in Part IV, the sampling frequency for some sites has been reduced. See the attached Permit Summary Table for changes for specific individual sites that are being proposed in this Draft permit action.

Monitoring Frequency for WET for new discharges: The monitoring frequency for chronic toxicity testing shall be **quarterly**. The Department reserves the right to impose a quarterly monitoring frequency depending on the size of the discharger and receiving waterbody. In addition, as specified in Part IV, the monitoring frequency for discharges may be reduced to annual if four consecutive data results are >100%. Any such reduction may be incorporated as a minor modification as indicated in Part IV.

- **WET Requirements applicable to new dewatering or pump test discharges (Table 2-short term):**

The Department has not established chronic WET requirements for Table 2 discharges (short term). Short term discharges are not expected to exhibit long term chronic effects. For the purposes of this permit, a short term discharge is considered to be 6 months or less.

- **WET Requirements applicable to existing remediation discharges:**

The Department has analyzed WET effluent data from the individual BGR permits. Following review of WET data from July 2010 to December 2014 the Department concludes the following:

- A total of 349 WET data points were reviewed. 325 data points met the limit included in the permit and 24 data points did not meet the limit. The majority (273 data points) of discharges showed results >100% indicating that the discharges did not show any toxicity effects.
- Approximately 14 sites had compliance issues and therefore further changes are included in the individual authorization as necessary (See Attachment BGR – Permit Summary Tables).

Site specific WET data is included in the Master BGR permit summary table attachment. Based on review of the data, WET limits are being retained from the existing authorization. The test species method for existing

discharges is specified in Part III of the individual authorizations, and in most all instances, has been retained from the existing permit.

For some sites, chronic or acute WET requirements were originally included in an individual permit based on site specific data and were retained in the 2005 and 2010 renewals and will also be retained in this Master BGR permit renewal. The limits for these sites were calculated based on site specific data and retained in accordance with N.J.A.C. 7:14- 13.19.

Action Level for Acute WET: An action level for acute WET is appropriate for any authorizations that contain an acute WET limitation of $LC50 \geq 50\%$. The NJPDES Rules were readopted on January 5, 2009. This readoption repealed N.J.A.C. 7:14A-5.3(a) which contained the state minimum effluent standard for acute WET and instead adopted an acute WET action level of $LC50 \geq 50\%$ at N.J.A.C. 7:14A-13.18(f). Therefore, consistent with this requirement, the existing and effective acute WET limitation of $LC50 \geq 50\%$ is being replaced with an acute WET action level of $LC50 \geq 50\%$ in this renewal for certain facilities. Monitoring and reporting will be required to determine whether the discharge causes, shows a reasonable potential to cause, or contributes to an excursion above the NJSWQS.

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

Toxicity Reduction Implementation Requirements (TRIR) for new and existing discharges

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

7. Monitoring Frequencies for New and Renewal Discharges

New Discharges under Table 1: A **monthly** monitoring frequency is specified for all parameters, with the exception of WET. This frequency is consistent with that for other remediation projects. Less frequent monitoring may be required based on the facility flow, size of the receiving stream and the type and level of contaminants present in the untreated water. As specified in Part IV, the monitoring frequency may be decreased based on consistent compliance.

New Discharges under Table 2: Due to the short term and intermittent nature of dewatering and pump test activities, the monitoring frequency is set as follows:

Short Term Monitoring Frequency			
Duration of Discharge	<u>1 Month</u>	<u>1 to 3 Months</u>	<u>Greater than 3 Months</u>
Sample Frequency	Once per 4 Days	Once per week	Once per 2 weeks

Short term applicants may request a reduction of monitoring frequency following the collection of at least 7 data points.

Existing Discharges: Monitoring for existing discharges shall be set at the frequency specified in Part III of the individual authorization (Also see Attachment BGR – Permit Summary Tables in this Draft permit). As stated in Part IV, the monitoring frequency may be reduced, which is consistent with N.J.A.C. 7:14A-14.2(a). Factors that the Department will consider in evaluating a monitoring frequency reduction for an existing discharger include consistent compliance, facility flow and number of data points.

8. Effective Date for New and Renewal Discharges

For new and existing discharges (Part III Table 1): Individual authorizations under Part III Table 1 will be effective from the effective date of the individual authorization to the expiration date of the master BGR permit unless requested otherwise.

For new discharges (Part III Table 2): Short term individual authorizations will be effective for no more than six months unless a request for an extension is approved. After such time the individual permit authorization will automatically expire. The permittee shall contact the Department at least 30 days before the permit expires if an extension is needed.

C. Sufficiently Sensitive Test Methods:

The U.S. Environmental Protection Agency (EPA) has finalized amendments to its CWA regulations under 40 CFR 122.21, 122.44, and 40 CFR 136 on August 19, 2014. These changes codify that under the National Pollutant Discharge Elimination System (NPDES) program, where EPA has promulgated or otherwise approved analytical methods under 40 CFR Part 136, or 40 CFR Chapter I, subchapters N and O, permit applicants must use “sufficiently sensitive” analytical test methods when completing an NPDES permit application. In addition, EPA has decreed states must require that only “sufficiently sensitive” methods be used for analyses of pollutants or pollutant parameters under their NPDES permit.

The purpose of this rulemaking is to clarify that NPDES applicants and permittees must use EPA-approved analytical methods that are capable of detecting and measuring the pollutants at, or below, the applicable water quality criteria or permit limits. Through these amendments EPA has modified existing NPDES application, compliance monitoring, and analytical methods regulations. This final rule became effective on September 18, 2014 and upon receipt of this letter all analytical monitoring shall be in compliance with the final rule. The amendments in this final rulemaking affect only chemical-specific methods; they do not apply to the WET or microbiological testing methods.

For the purposes of this requirement, a method approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O is considered ‘sufficiently sensitive when:

- A. The method minimum level (ML) is at or below the level of the effluent limit established in the permit or applicable water quality criterion for the measured pollutant or pollutant parameter; or
- B. The method ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility’s discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- C. The method has the lowest ML of the analytical methods approved under
- D. 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter.

Should you have any questions or comments regarding analytical monitoring methods, please contact the Office of Quality Assurance at (609) 292-3950. Should you have any questions or comments regarding how this could impact your permit, please contact the Bureau of Surface Water permitting at (609) 292-4860.

D. Reporting Requirements:

All data requested to be submitted by this permit shall be reported on the Discharge Monitoring Reports (DMRs) as appropriate and submitted to the Department as required by N.J.A.C. 7:14A-6.8(a).

E. General conditions:

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

F. Outfall Tag:

Pursuant to N.J.A.C. 7:14A-6.2(a)9, the permittee shall ensure that a tag is present to mark the location of the outfall pipe on or before the start of discharge. For short term discharges or mobile treatment units, a sign that is reasonable visible describing an outfall designation shall be displayed in a practical manner.

G. Operator Classification Number:

The operator classification requirement is not included in the individual requests for authorization. To obtain or determine the appropriate licensed operator classification for the treatment works utilized in each individual authorization, the permittee shall contact the Bureau of Construction and Connection Permits at (609) 633-1169.

H. Flow Related Conditions:

Groundwater remediations such as those regulated under this permit are not included in the applicable Water Quality Management Plan and/or Wastewater Management Plan for each individual request for authorization.

I. Treatment Works Approval:

Prior to discharge and upon issuance of a new individual authorization or where treatment has been modified, a General Industrial Treatment Works Approval (GI TWA) may be required for the construction of a treatment works (N.J.A.C. 7:14A-22) which will enable you to meet limits and conditions of the NJPDES permit. If you have any questions or comments regarding the TWA, please contact the General Industrial TWA Permits Section of the Bureau of Construction and Connection Permits at (609) 984-4429.

J. Water Allocation:

A Water Allocation Permit is required for the diversion of ground and/or surface water in excess of 100,000 gallons per day for a period of more than 30 days in a 365 consecutive day period, for purposes other than agriculture, aquaculture or horticulture. For temporary ground and surface water control (dewatering) diversions in excess of 100,000 gallons of water per day, the project owner must obtain a Dewatering Allocation Permit, or Dewatering Permit-by-Rule or Short Term Permit-by-Rule depending on the duration of the diversion and the method employed. Additional information can be found online at http://www.nj.gov/dep/watersupply/a_allocat.html or by contacting the Bureau of Water Allocation & Well Permitting at (609) 984-6831.

9 Variances to Permit Conditions:

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

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

Please refer to the procedures described in the public notice that is part of the draft permit. In addition to the DEP Bulletin, the public notice for this permit action is published in the following newspapers:

<i>Newspaper</i>
<i>Press of Atlantic City</i>
<i>Star Ledger</i>
<i>The Times</i>

11 Contact Information

If you have any questions regarding this permit action, please contact Brian Salvo or Kelly Perez of the Bureau of Surface Water Permitting at either (609) 292-4860 or via e-mail at brian.salvo@dep.nj.gov or kelly.perez@dep.nj.gov.

12 Effluent Limits Summary Table

Dashes (--) indicate there is no effluent data, no limitations, or no monitoring for this parameter depending on the column in which it appears.

Parameter	Units	Averaging Period	Table 1 – Final Limits (2) (3)	Table 2 - Final Limits (2) (3)
Flow	GPD	Monthly Avg. Daily Max.	MR MR	MR MR
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	MR 40 (1)	MR 40 (1)
Total Organic Carbon (TOC)	mg/L	Monthly Avg. Daily Max.	MR 20	MR 20
pH	S.U.	Daily Min. Daily Max.	6.0 9.0	6.0 9.0
Chronic Toxicity, IC25	%	Minimum	61 (4) (5)	--
Metals, Volatile Organics, Base/Neutral Compounds, Acid Extractables, Pesticides or PCBs	µg/L	Monthly Avg. Daily Max..	Part III – Individual Authorizations. Limits are specified for detected or known pollutants.	Part III – Individual Authorizations. Limits are specified for detected or known pollutants.

MR Monitor and report only

- (1) Daily maximum effluent limit is 25 mg/L for FW2-TP and FW2-TM waters.
- (2) Monitoring for residuals may be imposed for any of the parameters indicated in Part III-Residuals. Any such monitoring will be specified in Part III of the individual authorization and will be imposed on an annual basis.
- (3) Table 1 is for New Long Term Discharges, Table 2 is for New Short-term (less than 6 months) Discharges.
- (4) For new BGR authorizations, A WET limit of 61% shall become effective after 1 year from the start date of the permit.
- (5) Unless otherwise specified in the individual authorization, a WET limit is retained based on the existing permit.

Effluent Monitoring Report Data Summary

Conventional Pollutant Effluent Data- July 2010 to December 2014

Parameter	Units	Averaging Period	Results	Applicable BGR Permit Limit
Total Suspended Solids (TSS)	mg/L	Monthly Avg.	8.8	MR
		Daily Max.	308	40
		# of Data Points	867	
		Exceedances (1)	2	
Total Organic Carbon (TOC)	mg/L	Monthly Avg.	3.51	MR
		Daily Max.	480	20
		# of Data Points	770	
		Exceedances (1)	8	
pH	S.U.	Daily Min.	7.2 (Avg.)	6.0
		Daily Max.	7.29 (Avg.)	9.0
		# of Data Points	1,054	
		Exceedances (2)	9	

- MR Monitor and report only
(1) Number of data points with a value greater than the applicable limit.
(2) For pH, 7 data points were < 6.0 and 2 data points were > 9.0.

WET Data- July 2010 to December 2014

Parameter	Units	Averaging Period	Results	Applicable BGR Permit Limit
Chronic Toxicity, IC25	% Effluent	Minimum	5.2	61
		# of Data Points	302	
		Exceedances	23 (1)	
Acute Toxicity, LC50	% Effluent	Minimum	25.2	AL (2)
		# of Data Points	47	
		Exceedances	1	

- MR Monitor and report only
(1) Number of data points that were <61 % effluent.
(2) Acute WET Action Level of LC50 ≥ 50%.

Toxic Pollutant Effluent Data- July 2010 to December 2014

Pollutants	Non-Detect Values	Detected Values	N.J.A.C. 7:14A-12:		Appendix B Effluent Standards for Site Remediation (units in µg/L)
			Average (µg/L)	Maximum (µg/L)	
1,1,1-Trichloroethane	286	12	<1	2.45	21 / 54
1,1,2,2-Tetrachloroethane	99	0	<1	<1	NL / 10
1,1,2-Trichloroethane	191	0	<1	<1	NL / 12 (Freshwater) 21 / 54 (Saline)
1,1-Dichloroethane	259	55	<1	9.2	
1,1-Dichloroethylene	387	18	<1	3.2	NL / 6 (Freshwater) 16 / 25 (Saline)
1,2,4-Trichlorobenzene	76	2	<0.3	0.36	68 / 140
1,2-Dichlorobenzene	172	16	<1	5.5	77 / 163
1,2-Dichloroethane	257	13	<1	0.56	NL / 3 (Freshwater) 68 / 211 (Saline)
1,2-Dichloropropane	4	0	<0.5	<0.5	153 / 230
1,2-trans-Dichloroethylene	115	0	<0.46	<0.46	21 / 54
1,3-Dichlorobenzene	70	8	<1	1.8	31 / 44
1,3-Dichloropropene	59	0	<1	<1	10 / 20 (Freshwater) 29 / 44 (Saline)
1,4-Dichlorobenzene	85	14	<1	2.2	NL / 28
2,3,7,8- Tetrachlorodibenzo-p-dioxin	4	0	<0.001	<0.0024	0.01
2,4,6-Trichlorophenol	4	0	<0.86	<0.88	NL / 20
2,4-Dichlorophenol	17	0	<3	<11	39 / 112
2,4-Dimethylphenol	86	0	<1	<4.3	18 / 36
2,4-Dinitrophenol	4	0	<10	<11	71 / 123
2,4-Dinitrotoluene	4	0	<1.3	<1.3	NL / 10 (Freshwater) NL / 18.2 (Saline)
2,6-Dinitrotoluene	4	0	<1.2	<1.2	255 / 641
2-Chlorophenol	4	0	<0.95	<0.96	31 / 98
2-Nitrophenol	4	0	<0.75	<0.8	41 / 69
3,3-Dichlorobenzidine	4	0	<31	<32	NL / 60
4,4-DDD	25	0	<0.04	<0.04	0.04
4,4-DDE	34	0	<0.03	<0.1	0.04
4,4-DDT	65	0	<0.02	<0.07	0.04
4,6-Dinitro-o-cresol	4	0	<5.3	<5.4	NL / 60 (Freshwater) 78 / 277 (Saline)
4-Nitrophenol	4	0	<10	<11	72 / 124
Acenaphthene Acenaphthylene	134	0	<3	<4.5	670 (Freshwater)* 990 (Saline)* Based on N.J.A.C 7:9B
Acrolein	4	0	<7.4	<7.4	NL / 100
Acrylonitrile	4	0	<7.2	<7.2	NL / 50
Aldrin	4	0	<0.007	<0.0076	0.04
Alpha BHC	4	0	<0.0060	<0.0062	0.02
Alpha Endosulfan	4	0	<0.013	<0.014	0.02
Anthracene	4	0	<0.77	<0.78	22 / 59
Arsenic	228	178	7.34	70.3(1)	50 / 100

Pollutants	Non-Detect Values	Detected Values	Average		N.J.A.C. 7:14A-12: Appendix B Effluent Standards for Site Remediation (units in µg/L)
			(µg/L)	Maximum (µg/L)	
Benzene	400	8	<1	1.3	NL / 7 (Freshwater) 37 / 136 (Saline)
Benzidine	4	0	<44	<45	NL / 50
Benzo (a) Anthracene	35	0	<8	<11.1	NL / 10
Benzo (a) Pyrene	35	0	<10	<20	NL / 20
Benzo (b) Fluoranthene	35	0	<5	<10	NL / 10
Benzo (k) Fluoranthene	4	0	0.95	0.96	NL / 20
Beta BHC	4	0	<0.006	<0.0073	0.137 / 0.274 (Freshwater) 0.46 / 0.92 (Saline)
Beta Endosulfan	32	0	<0.09	<0.024	0.04
Bis(2-chloroethyl) ether	4	0	<1.2	<1.2	NL / 10
Bis(2-chloroisopropyl)ether	4	0	<0.9	<0.9	301 / 757
Bis (2-Ethylhexyl) Phthalate	66	5	<30	13	NL / 36 59 / 118
Bromoform	46	0	<1	<1	NL / 8.6 29 / 58
Butyl benzyl phthalate	50	0	<1	<3.3	NL / 24
Cadmium	63	13	1.35	4.8	50 / 100
Carbon Tetrachloride	245	30	0.42	3.8	NL / 6 (Freshwater) NL / 8.8 (Saline)
Chlordane	4	0	<0.059	<0.065	NL / 0.2
Chlorobenzene	242	15	0.44	3.7	15 / 28
Chlorodibromomethane	47	0	< 0.5	< 0.52	NL / 8.2 NL / 14
Chloroethane	14	3	2.96	6.54	104 / 268
Chloroform	235	65	4.07	16.7	NL / 11.4 21 / 46
Chromium	167	58	10	36	50 / 100
Chrysene	25	0	<20	<20	NL / 20
Copper (Total & TR)	200	97	9.1	57.8	50 / 100
Cyanide	57	19	30	115	100 / 200
Dibenzo (a,h) anthracene	23	0	<16	<22	NL / 20
Dichlorobromomethane	4	0	<0.5	<0.5	NL / 5
Dieldrin	38	2	0.02	0.028	NL / 0.03
Diethyl Phthalate	8	1	<1.6	0.89	81 / 203
Dimethyl Phthalate	8	1	<1	0.60	19 / 47
Di-N-Butyl Phthalate	9	2	0.75	0.84	27 / 57
Endosulfan	4	0	<0.02	<0.027	0.93 / 1.86 (Freshwater) 2 / 4 (Saline)
Endrin	4	0	<0.001	<0.011	NL / 0.04
Endrin Aldehyde	4	0	<0.016	<0.017	0.76 / 1.52
Ethylbenzene	267	3	0.23	0.31	32 / 108
Fluoranthene	20	0	<2	<4	25 / 68
Fluorene	40	0	<1	<10	22 / 59
Gamma BHC (Lindane)	19	1	0.03	0.03	NL / 0.08 (Freshwater) NL / 0.03 (Saline)
Heptachlor	4	0	<0.007	<0.007	NL / 0.02
Heptachlor Epoxide	4	0	<0.006	<0.0065	NL / 0.4

Pollutants	Non-Detect Values	Detected Values	N.J.A.C. 7:14A-12:		Appendix B Effluent Standards for Site Remediation (units in µg/L)
			Average (µg/L)	Maximum (µg/L)	
Hexachlorobenzene	4	0	<0.86	<0.86	NL / 10
Hexachlorobutadiene	4	0	<0.65	<0.66	NL / 10 (Freshwater) 20 / 49 (Saline)
Hexachlorocyclopentadiene	4	0	<10	<11	240 / 480 (Freshwater) NL / 1,800 (Saline)
Hexachloroethane	4	0	<0.85	<0.86	19 / 38 (Freshwater) 21 / 54 (Saline)
Indeno (1,2,3 c,d) Pyrene	4	0	<1.2	<1.2	NL / 20
Iron, T&TR	97	136	601	6,400 (2)	NL (RQL of 1,000 / 2,000)
Isophorone	8	1	<1	0.31	NL / 20
Lead, T&TR	227	42	6.8	46.9	50 / 100
Magnesium	2	48	30,594	174,000	NL
Manganese	35	77	223	4,380	NL
Mercury	138	12	0.15	0.59	NL / 1
Methyl Bromide	45	2	0.295	0.31	20 / 40
Methyl Chloride	9	0	<0.18	<1.0	86 / 190
MTBE	48	0	<70	<70	NL
Methylene Chloride	244	16	1.65	10	NL / 9.4 (Freshwater) 40 / 89 (Saline)
Naphthalene	223	32	0.84	8.7	22 / 59
Nickel (Total & TR)	169	141	9.3	65	72 / 144 (Freshwater) 50 / 100 (Saline)
Nitrobenzene	17	0	<10	<15	17 / 34 (Freshwater) 27 / 68 (Saline)
N-nitrosodimethylamine	4	0	<10	<11	NL / 20
N-Nitrosodiphenylamine	47	0	<1	<9.43	NL / 20
PCBs	52	1	<0.3	0.33	0.5
Pentachlorophenol	17	0	<30	<30	NL / 30
Phenanthrene	44	0	<10	<10	22 / 59
Phenols, Single	99	5	<1.2	16 (3)	15 / 26
Phenols	70	7	44	120	
Pyrene	39	0	<10	<20	25 / 67
Selenium	22	4	5.16	10	50 / 100
Silver, T&TR	40	3	1.6	4	25 / 50
Tetrachloroethylene	710	41	2.56	31.8	NL / 16 (Freshwater) 22 / 56 (Saline)
Toluene	297	12	0.22	0.58	26 / 80
Toxaphene	4	0	<0.65	<0.71	NL / 1
Trans-1,2-Dichloroethylene	54	0	<5	<5	21 / 54
Trichloroethene	338	30	1.06	4.3	NL / 5.4 (Freshwater) 21 / 54 (Saline)
Trichloroethylene	425	26	6.5	41.6	NL / 5.4 (Freshwater) 21 / 54 (Saline)
Vinyl Chloride	401	10	3.1	8	NL / 10 (Freshwater) 104 / 268 (Saline)
Zinc (Total & TR)	255	293	85	5,620	100 / 200

NL No Limit

- (1) For Arsenic, two data points of 4,830 µg/L and 5,530 µg/L were determined to be anomalies and were not used in the average or maximum summary.
- (2) For Iron, T & TR, two data points of 8,090 µg/L and 15,600 µg/L were determined to be anomalies and were not used in the average or maximum summary.
- (3) For Phenols, Single, one data point of 568 µg/L was determined to be an anomaly and was not used in the average or maximum summary

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Contents of the Administrative Record

The following items are used to establish the basis of the Draft Permit:

Rules and Regulations:

1. 33 U.S.C. 1251 *et seq.*, Federal Water Pollution Control Act. [C]
2. 40 CFR Part 131, Federal Water Quality Standards. [A] [C]
3. 40 CFR Part 122, National Pollutant Discharge Elimination System. [C]
4. N.J.S.A. 58:10A-1 *et seq.*, New Jersey Water Pollution Control Act. [A] [B]
5. N.J.A.C. 7:14A-1 *et seq.*, New Jersey Pollutant Discharge Elimination System Regulations. [A] [B]
6. N.J.A.C. 7:9B-1 *et seq.*, New Jersey Surface Water Quality Standards. [A] [B]
7. N.J.A.C. 7:15, Statewide Water Quality Management Planning Rules. [A] [B]
8. N.J.A.C. 7:14C, Sludge Quality Assurance Regulations. [B]
9. Delaware River Basin Commission: Administrative Manual – Part III Water Quality Regulations.
10. Interstate Environmental Commission Regulations, N.J.S.A. 32:18-1 *et seq.*

Guidance Documents / Reports:

1. "Field Sampling Procedures Manual", published by the NJDEP. [A]
2. "NJPDES Monitoring Report Form Reference Manual", updated December 2007, and available on the web at http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf.
3. "EPA Technical Support Document for Water Quality-based Toxics Control", EPA/505/2-90-001, March 1991. [A]
4. New Jersey's 2014 Integrated Water Quality Monitoring and Assessment Report (includes 305 (b) Report 303(d) List). [A] [B]
5. NJPDES/DSW General Petroleum Product Cleanup (GPPC) Permit No. NJ0102709 issued November 26, 2013.
6. NJPDES/DSW Discharge Monitoring Reports from July 1, 2010 to December 31, 2014.

Permits / Applications:

1. Existing NJPDES/DSW Permit NJ0155438, issued May 12, 2010 and effective July 1, 2010. [A]

Footnotes:

- [A] Denotes items that may be found in the NJPDES/DSW Administrative Record Library located in the NJDEP Central File Room, 401 East State Street, Trenton, New Jersey.
- [B] Denotes items that may be found on the New Jersey Department of Environmental Protection (NJDEP) website located at "<http://www.state.nj.us/dep/>".
- [C] Denotes items that may be found on the United States Environmental Protection Agency (USEPA) website at "<http://www.epa.gov/>".

Ames Rubber Corp. – NJG000141

Stream: Walkill River Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Total Dissolved Solids	mg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	15 22.5	15 22.5	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Quarter
(1) Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Mimimum	MR	MR	1/6 Months

(1) 9 of 10 effluent samples were >100% and 1 data point was 67.5%.

Lowe's Home Center – NJG0002623

Stream: Husky Brook Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	158 317	158 317	1/Month
Cadmium, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/6 Months
Copper, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Month
Toluene	µg/L	Monthly Average Daily Maximum	26 80	26 80	1/Month
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Iron, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	1000 2000	1/Month
Nickel, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	72 144	1/Month
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	100 200	1/Month
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
(1)NOAEC (<i>Pimephales promelas</i>)	% effluent	Mimimum	100	100	1/Year

(1) 4 of 4 effluent samples were >100%.

Oxford Textile Inc. – NJG0004901

Stream: Furnace Brook Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids	mg/L	Monthly Average Daily Maximum	158 317	158 317	1/Month
Cadmium, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/6 Months
Copper, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Month
Toluene	µg/L	Monthly Average Daily Maximum	26 80	26 80	1/Month
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
(1) Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Mimumum	--	61 (1)	1/Quarter

- (1) Based on the Master BGR, Chronic WET shall be sampled 1/Quarter with a 1 year compliance schedule. A monitoring and reporting requirement will be effective from the start of the permit until 1 year. The applicable limit of 61% shall become effective following 1 year from the start of the permit.

Hercules Groundwater Treatment at Geo Spec Chem. – NJG0005134

Stream: Delaware River (Zone 4) Stream Classification: Mainstem Delaware – Zone 4

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS (1)	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	Continuous
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Total Cyanide	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/6 Months
Total Recoverable Selenium	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
Total Cadmium	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/6 Months
Total Chromium	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/6 Months
Total Copper	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/6 Months

Total Lead	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/6 Months
Total Nickel	µg/L	Monthly Average Daily Maximum	72 144	72 144	1/6 Months
Total Silver	µg/L	Monthly Average Daily Maximum	25 50	25 50	1/6 Months
Total Zinc	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
Arsenic	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Mercury	µg/L	Monthly Average Daily Maximum	MR 1	MR 1	1/6 Months
Acenaphthylene	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Anthracene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Year
Benzo(b)fluoranthene (3,4-benzo)	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Year
Benzo(k)fluoranthene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
Benzo(a)pyrene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
Bis(2-chloroethyl) ether	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Year
Bis(2-chloroisopropyl) ether	µg/L	Monthly Average Daily Maximum	301 757	301 757	1/Year
Butyl benzyl phthalate	µg/L	Monthly Average Daily Maximum	MR 24	MR 24	1/Year
Chrysene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
Diethyl phthalate	µg/L	Monthly Average Daily Maximum	81 203	81 203	1/Year
Dimethyl phthalate	µg/L	Monthly Average Daily Maximum	19 47	19 47	1/Year
Fluoranthene	µg/L	Monthly Average Daily Maximum	25 68	25 68	1/Year
Fluorene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Year
Hexachlorocyclo-pentadi ene	µg/L	Monthly Average Daily Maximum	240 480	240 480	1/Year
Hexachloroethane	µg/L	Monthly Average Daily Maximum	19 38	19 38	1/Year
Indeno(1,2,3-cd)-pyrene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
Isophorone	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
N-nitrosodiphenylamine	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
N-nitrosodimethylamine	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
Nitrobenzene	µg/L	Monthly Average Daily Maximum	17 34	17 34	1/Year
Pyrene	µg/L	Monthly Average Daily Maximum	25 67	25 67	1/Year
Benzo(a)anthracene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Year
1,2-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	77 163	77 163	1/Year

1,2,4-Trichlorobenzene	µg/L	Monthly Average Daily Maximum	68 140	68 140	1/Year
Dibenzo(a,h) anthracene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
1,3-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	31 44	31 44	1/Year
1,4-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	MR 28	MR 28	1/Year
2,4-Dinitrotoluene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Year
2,6-Diitrotoluene	µg/L	Monthly Average Daily Maximum	255 641	255 641	1/Year
3,3'-Dichlorobenzidine	µg/L	Monthly Average Daily Maximum	MR 60	MR 60	1/Year
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Bis(2-ethylhexyl) phthalate	µg/L	Monthly Average Daily Maximum	MR 36	MR 36	1/Year
Di-n-butyl phthalate	µg/L	Monthly Average Daily Maximum	27 57	27 57	1/Year
Benzidine	µg/L	Monthly Average Daily Maximum	MR 50	MR 50	1/Year
Hexachlorobenzene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Year
Hexachlorobutadiene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Year
Dichlorobromomethane	µg/L	Monthly Average Daily Maximum	MR 5	MR 5	1/Year
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Year
Bromoform	µg/L	Monthly Average Daily Maximum	MR 8.6	MR 8.6	1/Year
Chloroform	µg/L	Monthly Average Daily Maximum	MR 11.4	MR 11.4	1/Year
Toluene	µg/L	Monthly Average Daily Maximum	26 80	26 80	1/Month
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Month
Acrolein	µg/L	Monthly Average Daily Maximum	MR 100	MR 100	1/Year
Acrylonitrile	µg/L	Monthly Average Daily Maximum	MR 50	MR 50	1/Year
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Year
Chlorodibromomethane	µg/L	Monthly Average Daily Maximum	MR 8.2	MR 8.2	1/Year
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Month
Methyl Bromide	µg/L	Monthly Average Daily Maximum	20 40	20 40	1/Year
Methyl Chloride	µg/L	Monthly Average Daily Maximum	86 190	86 190	1/Year
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 9.4	MR 9.4	1/Year
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
1,1-Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Year

1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Year
1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Year
1,1,2-Trichloroethane	µg/L	Monthly Average Daily Maximum	MR 12	MR 12	1/Year
1,1,2,2-Tetrachloroethane	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Year
1,2-Dichloropropane	µg/L	Monthly Average Daily Maximum	153 230	153 230	1/Year
1,2-trans-Dichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Year
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Year
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
Chloroethane	µg/L	Monthly Average Daily Maximum	104 268	104 268	1/Year
Phenols	µg/L	Monthly Average Daily Maximum	MR 300	MR 300	1/Month
Endosulfan Sulfate	µg/L	Monthly Average Daily Maximum	0.93 1.86	0.93 1.86	1/Year
Beta Endosulfan	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Year
Alpha Endosulfan	µg/L	Monthly Average Daily Maximum	MR 0.02	MR 0.02	1/Year
Endrin Aldehyde	µg/L	Monthly Average Daily Maximum	0.76 1.52	0.76 1.52	1/Year
PCB-1016 (Arochlor 1016)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Year
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	µg/L	Monthly Average Daily Maximum	MR 0.01	MR 0.01	1/Year
4,4'-DDT(p,p'-DDT)	µg/L	Monthly Average Daily Maximum	MR 0.06	MR 0.06	1/Year
4,4'-DDD(p,p'-DDD)	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Year
4,4'-DDE(p,p'-DDE)	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Year
Aldrin	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Year
Alpha BHC	µg/L	Monthly Average Daily Maximum	MR 0.02	MR 0.02	1/Year
Beta BHC	µg/L	Monthly Average Daily Maximum	0.137 0.274	0.137 0.274	1/Year
Gamma BHC (lindane)	µg/L	Monthly Average Daily Maximum	MR 0.08	MR 0.08	1/Year
Chlordane	µg/L	Monthly Average Daily Maximum	MR 0.2	MR 0.2	1/Year
Dieldrin	µg/L	Monthly Average Daily Maximum	MR 0.03	MR 0.03	1/Year
Endrin	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Year
Toxaphene	µg/L	Monthly Average Daily Maximum	MR 1	MR 1	1/Year
Heptachlor	µg/L	Monthly Average Daily Maximum	MR 0.02	MR 0.02	1/Year
Heptachlor Epoxide	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Year

PCB-1221 (Arochlor 1221)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Year
PCB-1232 (Arochlor 1232)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Year
PCB-1242 (Arochlor 1242)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Year
PCB-1248 (Arochlor 1248)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Year
PCB-1254 (Arochlor 1254)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Year
PCB-1260 (Arochlor 1260)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Year
2-Chlorophenol	µg/L	Monthly Average Daily Maximum	31 98	31 98	1/Year
2-Nitrophenol	µg/L	Monthly Average Daily Maximum	41 69	41 69	1/Year
2,4-Dichlorophenol	µg/L	Monthly Average Daily Maximum	39 112	39 112	1/Year
2,4-Dimethylphenol	µg/L	Monthly Average Daily Maximum	18 36	18 36	1/Year
2,4-Dinitrophenol	µg/L	Monthly Average Daily Maximum	71 123	71 123	1/Year
2,4,6-Trichlorophenol	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Year
4-Nitrophenol	µg/L	Monthly Average Daily Maximum	72 124	72 124	1/Year
4,6-Dinitro-o-cresol	µg/L	Monthly Average Daily Maximum	MR 60	MR 60	1/Year
Phenol Single Compound	µg/L	Monthly Average Daily Maximum	15 26	15 26	1/Month
Pentachlorophenol	µg/L	Monthly Average Daily Maximum	MR 30	MR 30	1/Year
(1)Chronic WET (Ceriodaphnia dubia)	% effluent	Mimimum	61	61	(1)1/6 Months

- (1) 10 of 19 effluent sample results were >100%. The remaining results were as follows: 45.5, 55, 65.3, 83.3, 85.2, 94.9, 95 and 96.7 %. Based on data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.

Honeywell International Inc – NJG0031305

Stream: Black Brook Stream Classification: FW2-NT(C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR 0.09	MR 0.09	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	30 45	30 45	1/Month
BOD5	mg/L	Monthly Average Daily Maximum	30 40	30 40	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Benzene	µg/L	Monthly Average Daily Maximum	37 136	37 136	1/Month
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Month

Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Month
PCB's	µg/L	Monthly Average Daily Maximum	MR 1.0	MR 1.0	1/Month
Ammonia	mg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
(1)Chronic WET (<i>Mysidopsis bahia</i>)	% effluent	Mimumum	61	61	(1)1/6 Months

- (1) 9 of 9 effluent sample results were >100%. Based on data results, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.

Carpenter Technology –Tube Division – NJG0052931
 Stream: Rahway River Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6 9	6 9	1/Quarter
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Quarter
(2)Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	-- --	MR 16	1/Quarter
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	(1)1/6 Months

- (1) 10 of 18 effluent sample results were >100%. The remaining results were as follows: 35.2, 55, 59.4, 62.4, 64.5, 35.3, 70, and 83.4 %. Based on data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.
- (2) This parameter was added based on detects in the renewal application data.

Mepco Electra – NJG0071030

Stream: Unnamed Tributary to Whippany River Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Total Organic Carbon (TOC)	mg/L	Monthly Average Daily Maximum	MR 25	MR 25	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
1,2-Trans-Dichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Quarter
Chronic Toxicity (<i>Pimephales promelas</i>)	% effluent	Minimum	MR	MR	1/6 Months

This facility has not discharged in the time period reviewed.

Evonik Degussa Corp. – NJG0082112

Stream: Ambrose Brook Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Chemical Oxygen Demand	mg/L	Monthly Average Daily Maximum	MR 50	MR 50	1/Quarter
Oil and Grease	mg/L	Monthly Average Daily Maximum	10 15	10 15	1/Quarter
Bis(2-ethylhexyl)phthalate	µg/L	Monthly Average Daily Maximum	MR 30	MR 30	1/6 Months
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
Chloroform	µg/L	Monthly Average Daily Maximum	MR 11	MR 11	1/Quarter
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/6 Months
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Quarter
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/6 Months
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
(1)Chronic WET (<i>Pimephales promelas</i>)	% effluent	Minimum	61	61	1/Year

(1) 4 of 4 effluent samples were >100%.

Evonik Degussa Corp. – NJG0102270

Stream: Newark Airport Peripheral Ditch Stream Classification: SE3 (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Chemical Oxygen Demand	mg/L	Monthly Average Daily Maximum	MR 50	MR 50	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Year
Bis(2-Ethylhexyl)Phthalate	µg/L	Monthly Average Daily Maximum	MR 30	MR 30	1/6 Months

Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/6 Months
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/6 Months
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/6 Months
Total Arsenic	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Year
Total Mercury	µg/L	Monthly Average Daily Maximum	MR 1	MR 1	1/Year
PCB-1242	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Year
PCB-1254	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Year
PCB-1221	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Year
PCB-1232	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Year
PCB-1248	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Year
PCB-1260	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Year
PCB-1016	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Year
(1)Chronic WET (<i>Mysidopsis Bahia</i>)	% effluent	Minimum	61	61	1/Year

- (1) 6 of 6 effluent samples were >100%.
- (2) Based on consistent compliance, and as requested by the permittee, the monitoring frequencies for chronic WET, Arsenic, Mercury, Napthalene and Benzene have been reduced in this renewal.

Fisher Scientific Company – NJG0102792

Stream: Henderson Brook Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Petroleum Hydrocarbons	mg/L	Monthly Average Daily Maximum	10 15	10 15	1/Quarter
Chemical Oxygen Demand (COD)	mg/L	Monthly Average Daily Maximum	50 75	50 75	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Quarter
Total Dissolved Solids (TDS)	mg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Arsenic, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	50 100	1/Quarter
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Quarter
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
Chloroform	µg/L	Monthly Average Daily Maximum	MR 11.4	MR 11.4	1/Quarter

1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Quarter
1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 9.4	MR 9.4	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
Temperature	°C	Monthly Average Daily Maximum	MR 30	MR 30	1/Quarter
(1)Acute WET - NOAEC (<i>Pimephales promelas</i>)	% effluent	Minimum	100	100	1/Year

(1) 5 of 5 effluent samples were >100%.

Haledon Remediation Facility– NJG0104451

Stream: Molly Ann Brook Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	46 91	46 91	1/6 Months
Total Organic Carbon (TOC)	mg/L	Monthly Average Daily Maximum	25 MR	25 MR	1/6 Months
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Quarter
(2)Total Recoverable Copper	µg/L	Monthly Average Daily Maximum	-- --	50 100	1/Quarter
(2)Total Recoverable Iron	µg/L	Monthly Average Daily Maximum	-- --	1000 2000	1/Quarter
1,2- Dichlorobenzene	µg/L	Monthly Average Daily Maximum	77 163	77 163	1/Quarter
1,3- Dichlorobenzene	µg/L	Monthly Average Daily Maximum	31 44	31 44	1/ 6 months
1,4- Dichlorobenzene	µg/L	Monthly Average Daily Maximum	MR 28	MR 28	1/ 6 months
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
1,2,4- Trichlorobenzene	µg/L	Monthly Average Daily Maximum	68 140	68 140	1/ 6 months
Total Recoverable Zinc	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Quarter
Total Phenols	µg/L	Monthly Average Daily Maximum	15 26	15 26	1/Quarter
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Quarter
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 9.4	MR 9.4	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Quarter

Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/ 6 months
Toluene	µg/L	Monthly Average Daily Maximum	26 80	26 80	1/Quarter
Methyl Isobutyl Ketone (MIBK)	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/6 Months
Phosphorus, Total	mg/L	Monthly Average Daily Maximum	1 MR	1 MR	1/6 Months
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	26	26	1/6 Months

- (1) 4 of 9 effluent sample results were >100%. The remaining results were as follows: 30.6, 51.2, 65.5, 67.9, and 72.8 %.
- (2) These parameters were added based on detects in the renewal application data.

Electric Boat Corporation – NJG0105287

Stream: Woodbridge Creek Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40.0	MR 40.0	1/Quarter
Petroleum Hydrocarbons	mg/L	Monthly Average Daily Maximum	10 15	10 15	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Quarter
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
Total Recoverable Iron	µg/L	Monthly Average Daily Maximum	1000 2000	1000 2000	1/Quarter
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Quarter
(1)Acute WET – NOAEC (<i>Pimephales promelas</i>)	% effluent	Minimum	100	100	1/Year

- (1) 5 of 5 effluent samples were >100%.

RMP Pennsauken – NJG0105449

Stream: S. Branch of Pennsauken Creek Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Chemical Oxygen Demand (COD)	mg/L	Monthly Average Daily Maximum	MR 50	MR 50	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter

Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Quarter
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
1,1-Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Quarter
1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
1,3-Dichloropropylene	µg/L	Monthly Average Daily Maximum	10 20	10 20	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Quarter
1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Quarter
(3)Chloroethane	µg/L	Monthly Average Daily Maximum	-- --	104 268	1/Quarter
(3)Methylene Chloride	µg/L	Monthly Average Daily Maximum	-- --	MR 9.4	1/Quarter
(3)Chloroform	µg/L	Monthly Average Daily Maximum	-- --	MR 11.4	1/Quarter
(3)Total Recoverable Zinc	µg/L	Monthly Average Daily Maximum	-- --	100 200	1/Quarter
(3)Dieldrin	µg/L	Monthly Average Daily Maximum	-- --	MR 0.03	1/Quarter
(3)4,4'-DDT(p,p'-DDT)	µg/L	Monthly Average Daily Maximum	-- --	MR 0.04	1/Quarter
(3)4,4'-DDD(p,p'-DDD)	µg/L	Monthly Average Daily Maximum	-- --	MR 0.04	1/Quarter
(3)4,4'-DDE(p,p'-DDE)	µg/L	Monthly Average Daily Maximum	-- --	MR 0.06	1/Quarter
(2)Acute WET (<i>Pimephales promelas</i>)	% effluent	Monthly Average Daily Maximum	50	MR (1)	1/ 2 Years
(2)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	MR	MR	1/6 Months

- (1) The permittee shall maintain toxicity levels which meet the Action Level of $LC50 \geq 50\%$.
- (2) 7 of 8 effluent sample results were $>100\%$ with 1 data point result of 60% chronic.
- (3) These parameters were added based on detects in the renewal application data.

ADT Security System MFG (Former)– NJG0105490

Stream: Third River Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	25 37.5	25 37.5	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	MR	MR	1/6 Months

(1) 3 effluent samples were found to be >100, 88.2 and 32.2%.

Chemical Leamen Tank Lines Inc. – NJG0105589

Stream: Moss Branch (Cedar Swamp) Stream Classification: FW2-NT/SE2 (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	Continuous
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	2/Month
1,2-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	77 163	77 163	1/Month
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
N-Nitrosodiphenylamine	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Quarter
Total Recoverable Arsenic	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Recoverable Cadmium	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Total Recoverable Chromium	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Recoverable Copper	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Recoverable Lead	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Recoverable Mercury	µg/L	Monthly Average Daily Maximum	MR 1.0	MR 1.0	1/Month
Total Recoverable Nickel	µg/L	Monthly Average Daily Maximum	72 144	72 144	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Total Recoverable Zinc	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
Total Recoverable Iron	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month

Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Month
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Month
Chlorodibromomethane	µg/L	Monthly Average Daily Maximum	MR 8.2	MR 8.2	1/Month
Chloroform	µg/L	Monthly Average Daily Maximum	MR 11.4	MR 11.4	1/Month
1,1-Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Month
1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
1,3-Dichloropropylene	µg/L	Monthly Average Daily Maximum	10 20	10 20	1/Month
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Month
Methyl Bromide	µg/L	Monthly Average Daily Maximum	20 40	20 40	1/Month
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 9.4	MR 9.4	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
Toluene	µg/L	Monthly Average Daily Maximum	26 80	26 80	1/Month
1,2-Trans-Dichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
Bromoform	µg/L	Monthly Average Daily Maximum	MR 8.6	MR 8.6	1/Month
1,1,2-Trichloroethane	µg/L	Monthly Average Daily Maximum	MR 12	MR 12	1/Month
1,1,1,2-Tetrachloroethane	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
(1)Chronic WET (<i>Pimephales promelas</i>)	% effluent	Minimum	61	61	(1)1/6 Months

- (1) 12 of 13 effluent sample results were >100% with 1 data point result of 74.8%. Based on data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.

BICC Cables Corp. – NJG0107247

Stream: Mile Run Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Month
1,1 Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter

1,1 Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 9.4	MR 9.4	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Quarter
Cis-1,2-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Quarter
Trans-1,2-Dichloroethylene	µg/L	Monthly Average Daily Maximum	-- --	21 54	1/Quarter
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	-- --	MR 10	1/Quarter
Arsenic, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	50 100	1/Quarter
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	100 200	1/Quarter
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

(1) 2 of 7 effluent sample results were >100% with the remaining results of 34, 65, 66, 72, and 80%.

Shopwell Inc. – NJG0109878

Stream: Tenakill Brook via North Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Petroleum Hydrocarbons	mg/L	Monthly Average Daily Maximum	10 15	10 15	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	25 MR	25 MR	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Quarter
Total Iron	µg/L	Monthly Average Daily Maximum	1,000 2,000	1,000 2,000	1/Quarter
Chloroethane	µg/L	Monthly Average Daily Maximum	104 268	104 268	1/Quarter
1,1-Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Quarter
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	19	19	1/Year

(1) 3 effluent samples results were 29.1, 55.6 and 62.5 %.

Safer Textiles Facility (Former)– NJG0109908

Stream: Losen Slofe Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Organic Carbon (TOC)	Mg/L	Monthly Average Daily Maximum	MR 25	MR 25	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 9	MR 9	1/Quarter
(1)1,2-trans-Dichloroethene	µg/L	Monthly Average Daily Maximum	-- --	21 54	1/Quarter
(1)Vinyl Chloride	µg/L	Monthly Average Daily Maximum	-- --	MR 10	1/Quarter
(1)Methyl tert-butyl Ether	µg/L	Monthly Average Daily Maximum	-- --	MR 70	1/Quarter
(1)1,1-Dichloroethane	µg/L	Monthly Average Daily Maximum	-- --	22 59	1/Quarter
(1)Toluene	µg/L	Monthly Average Daily Maximum	-- --	26 80	1/Quarter
Chronic Toxicity (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Quarter

(1) These parameters were added based on detects in the renewal application data.

Former Handy & Harman Site - NJG0113794

Stream: Bear Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Month
Benzene	µg/L	Monthly Average Daily Maximum	MR 0.15	MR 0.15	1/Month
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 0.29	MR 0.29	1/Month
1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 4.81	MR 4.81	1/Month
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 2.49	MR 2.49	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 0.39	MR 0.39	1/Month
1,2-trans-Dichloroethene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 1.09	MR 1.09	1/Month

1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Quarter

This facility has not discharged in the time period reviewed.

JCP&L Belmar Former Mfg. Gas Plant. – NJG0125130

Stream: Shark River via Storm Sewer Stream Classification: FW2-NT/SE-1

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Petroleum Hydrocarbons	mg/L	Monthly Average Daily Maximum	10 15	10 15	1/Quarter
Total Organic Carbon (TOC)	mg/L	Monthly Average Daily Maximum	MR 15	MR 15	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Acenaphthylene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Quarter
Fluorene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
Total Recoverable Chromium	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Quarter
Total Recoverable Iron	µg/L	Monthly Average Daily Maximum	MR 2000	MR 2000	1/Quarter
Total Recoverable Manganese	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/6 Months
Xylenes (Total)	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Year
Benzene	µg/L	Monthly Average Daily Maximum	37 136	37 136	1/Quarter
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Quarter
Toluene	µg/L	Monthly Average Daily Maximum	26 80	26 80	1/Quarter
(3)Anthracene	µg/L	Monthly Average Daily Maximum	-- --	22 59	1/Quarter
(3)Benzo(a)anthracene	µg/L	Monthly Average Daily Maximum	-- --	MR 10	1/Quarter
(3)Chrysene	µg/L	Monthly Average Daily Maximum	-- --	MR 20	1/Quarter
(3)Fluoranthene	µg/L	Monthly Average Daily Maximum	-- --	25 68	1/Quarter
(3)Phenanthrene	µg/L	Monthly Average Daily Maximum	-- --	22 59	1/6 Months
(3)Pyrene	µg/L	Monthly Average Daily Maximum	-- --	25 67	1/Year
(3)Gamma BHC	µg/L	Monthly Average Daily Maximum	-- --	MR 0.08	1/Quarter
(3)4,4'-DDT(p,p'-DDT)	µg/L	Monthly Average Daily Maximum	-- --	MR 0.06	1/Quarter

(3)Heptachlor Epoxide	µg/L	Monthly Average Daily Maximum	-- --	MR 0.4	1/Quarter
(1)Acute WET (<i>Mysidopsis Bahia</i>)	% effluent	Minimum	MR	MR (2)	1/Year

- (1) 4 of 4 effluent samples were >100 %
- (2) The permittee shall maintain toxicity levels which meet the Action Level of LC50≥50%.
- (3) These parameters were added based on detects in the renewal application data.

Clariant Corp. – Fair Lawn – NJG0128236

Stream: Passaic River Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Organic Carbon (TOC)	mg/L	Monthly Average Daily Maximum	MR 25	MR 25	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
1,2-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	77 163	77 163	1/Quarter
1,3-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	31 44	31 44	1/Quarter
1,4-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	MR 28	MR 28	1/Quarter
1,2,4-Trichlorobenzene	µg/L	Monthly Average Daily Maximum	68 140	68 140	1/Quarter
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Quarter
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Quarter
(3)Trichloroethene	µg/L	Monthly Average Daily Maximum	-- --	MR 5.4	1/Quarter
(3)Tetrachloroethene	µg/L	Monthly Average Daily Maximum	-- --	MR 16	1/Quarter
(3)Total Recoverable Iron	µg/L	Monthly Average Daily Maximum	-- --	1000 2000	1/Quarter
(2) Acute WET (<i>Pimephales promelas</i>)	% effluent	Minimum	MR	MR (1)	1/Year

- (1) The permittee shall maintain toxicity levels which meet the Action Level of LC50≥50%.
- (2) 5 of 5 effluent samples were >100 %
- (3) These parameters were added based on detects in the renewal application data.

601 Nassau Street Assoc. LLC– NJG0129127

Stream: Tributary to Mile Run Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Quarter

pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Quarter
1,1-Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Quarter
1,2-Trans-Dichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Quarter
1,1,1-Trichloroethene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Quarter
(1)Chronic Toxicity (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Year

(1) 4 of 4 effluent samples were >100 %

Garden State Tile Distributors Inc.– NJG0129526

Stream: Great Ditch Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.5 8.5	6.5 8.5	1/Quarter
Total Recoverable Copper	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Recoverable Nickel	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Total Recoverable Silver	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Quarter
1,2-Trans-Dichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Quarter
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Quarter
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Year

(1) 3 of 3 effluent samples were >100%.

PSEG – Former Patterson Manufactured Gas Plant - NJG0130907

Stream: Passaic River Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
Petroleum Hydrocarbons	mg/L	Monthly Average Daily Maximum	10 15	10 15	1/Quarter
Chemical Oxygen Demand (COD)	mg/L	Monthly Average Daily Maximum	50 75	50 75	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
Total Recoverable Arsenic	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Quarter
Total Cyanide	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Quarter
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Quarter
(3)Ethylbenzene	µg/L	Monthly Average Daily Maximum	-- --	32 108	1/Quarter
(2)Acute WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	MR	MR (1)	1/6 Months

- (1) The permittee shall maintain toxicity levels which meet the Action Level of LC50 \geq 50%.
- (2) 10 of 10 effluent samples were >100%
- (3) These parameters were added based on detects in the renewal application data.

Former Eco Pump Site - NJG0130982

Stream: Bound Brook Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	Continuous
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Petroleum Hydrocarbons	mg/L	Monthly Average Daily Maximum	10 15	10 15	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	30 45	30 45	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Quarter
Methylene Chloride	µg/L	Monthly Average Daily Maximum	86 190	86 190	1/Quarter
(2)1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	-- --	MR 6	1/Quarter
(2)Trichloroethene	µg/L	Monthly Average Daily Maximum	-- --	MR 5.4	1/Quarter

(2)Vinyl Chloride	µg/L	Monthly Average Daily Maximum	-- --	MR 10	1/Quarter
(2)1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	-- --	21 54	1/Quarter
(2)Tetrachloroethene	µg/L	Monthly Average Daily Maximum	-- --	MR 16	1/Quarter
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 8 of 8 effluent samples were >100%.
- (2) These parameters were added based on detects in the renewal application data.

Fischbach Corp. – NJG0132489

Stream: Unnamed Tributary to Passaic River Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	Continuous
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	40 MR	40 MR	1/Quarter
Petroleum Hydrocarbons	mg/l	Monthly Average Daily Maximum	10 15	10 15	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	25 37.5	25 37.5	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Naphthalene	mg/L	Monthly Average Daily Maximum	22 59	22 59	1/Quarter
Total Arsenic	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Quarter
Total Copper	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Quarter
Total Lead	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Quarter
Total Zinc	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Quarter
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Quarter
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Quarter
Chloroform	µg/L	Monthly Average Daily Maximum	MR 11.4	MR 11.4	1/Quarter
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Quarter
1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Quarter
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 9.4	MR 9.4	1/Quarter
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Quarter
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 2 of 4 effluent samples were >100% with 2 results of 65.9 and 84.4%.

Stearns and Foster Bedding Co. Former - NJG0132829

Stream: Oakey's Brook Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	Continuous
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Total Suspended Solids (TSS)	Mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/6 Months
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/6 Months
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/6 Months
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/6 Months
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/6 Months
(2)1,1-Dichloroethene	µg/L	Monthly Average Daily Maximum	-- --	MR 6	1/6 Months
(2)1,2-trans-Dichloroethene	µg/L	Monthly Average Daily Maximum	-- --	21 54	1/6 Months
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 14 of 17 effluent samples were >100% with 3 results of 77.4, 83.6 and 99%.
- (2) These parameters were added based on detects in the renewal application data.

Denville Technical Park - NJG0133892

Stream: Beaver Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	Continuous
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	25 37.5	25 37.5	1/Month
Chloroform	µg/L	Monthly Average Daily Maximum	MR 11.4	MR 11.4	1/Month
1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 8 of 9 effluent samples were >100% with 1 result of 95%.

30 Hudson – NJG0139661

Stream: Hudson River Stream Classification: SE2(C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average	MR	MR	Continuous
		Daily Maximum	MR	MR	
pH Range	S.U.	Daily Minimum	6.0	6.0	1/Quarter
		Daily Maximum	9.0	9.0	
Total Suspended Solids (TSS)	mg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	40	40	
Total Organic Carbon	mg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	20	20	
Zinc, Total Recoverable	µg/L	Monthly Average	100	100	1 Quarter
		Daily Maximum	200	200	
Chromium, Total Recoverable	µg/L	Monthly Average	50	50	1 Quarter
		Daily Maximum	100	100	
Tetrachloroethylene	µg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	16	16	
Trichloroethylene	µg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	5.4	5.4	
(1)Acute WET (<i>Mysid Bahia</i>)	% effluent	Minimum	MR	AL (2)	1/6 Months

- (1) 8 of 9 effluent samples were >100% with 1 result of 25.2 %.
- (2) The permittee shall maintain toxicity levels which meet the Action Level of LC50≥50%.

Electrolux Home Products Inc. – NJG0141992

Stream: Ambrose Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average	MR	MR	Continuous
		Daily Maximum	MR	MR	
pH Range	S.U.	Daily Minimum	6.0	6.0	1/Quarter
		Daily Maximum	9.0	9.0	
Total Suspended Solids (TSS)	mg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	40	40	
Total Organic Carbon (TOC)	mg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	20	20	
Chromium, Total Recoverable	µg/L	Monthly Average	50	50	1 Quarter
		Daily Maximum	100	100	
Tetrachloroethylene	µg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	16	16	
Trichloroethylene	µg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	5.4	5.4	
(2)Bis(2-ethylhexyl)phthalate	µg/L	Monthly Average	--	MR	1/Quarter
		Daily Maximum	--	36	
(2)Lead, Total Recoverable	µg/L	Monthly Average	--	50	1/Quarter
		Daily Maximum	--	100	
(2)Copper, Total Recoverable	µg/L	Monthly Average	--	50	1Quarter
		Daily Maximum	--	100	
(2)Iron, Total Recoverable	µg/L	Monthly Average	--	1000	1/Quarter
		Daily Maximum	--	2000	
(2)Nickel, Total Recoverable	µg/L	Monthly Average	--	72	1/Quarter
		Daily Maximum	--	144	

(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months
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- (1) 1 of 5 effluent samples were >100% with 4 results of 66.5, 75, 78.9, and 88.8.
 (2) These parameters were added based on detects in the renewal application data.

Klockner and Klockner - NJG0156256

Stream: Beaver Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Quarter
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Quarter
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Quarter
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/6 Months
Chromium, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/6 Months
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Quarter
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 9 of 10 effluent samples were >100% with 1 result of 82.7%..

Penn Color Inc. (Former Manville, NJ Facility) – NJG0156922

Stream: Royce Brook via unnamed tributary Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	Mg/L	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids	Mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon	Mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
1,2 Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
1,1 Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
1,1 Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
1,1,1 Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
1,1,2 Trichloroethane	µg/L	Monthly Average Daily Maximum	MR 12	MR 12	1/Month

1,2 trans-Dichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 17 of 20 effluent results were >100% with 3 results of 5.2, 7.3 and 24.4. Based on data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.

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Higgins Disposal Superfund Site – NJG0160946

Stream: Dirty Brook via unnamed tributary

Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	MGD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon (TOC)	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
1,2 Dichlorobenzene	µg/L	Monthly Average Daily Maximum	77 163	77 163	1/Month
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
Chloroform	µg/L	Monthly Average Daily Maximum	MR 11.4	MR 11.4	1/Month
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Month
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Month
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 9.4	MR 9.4	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
1,1 Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
1,1,1 Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
1,1,2 Trichloroethane	µg/L	Monthly Average Daily Maximum	MR 12	MR 12	1/Month
1,1,2,2 Tetrachloroethane	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 15 of 18 effluent results were >100% with 3 data results of 61.6, 84.9 and 95.4%. Based on data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.

Higgins Farm Superfund Site – NJG0167533

Stream: Carter’s Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	MR	MR	
pH Range	S.U.	Daily Minimum	6.0	6.0	1/Quarter
		Daily Maximum	9.0	9.0	
Total Suspended Solids	mg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	40	40	
Total Organic Carbon	mg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	20	20	
Tetrachloroethylene	µg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	16	16	
Trichloroethylene	µg/L	Monthly Average	MR	MR	1/Quarter
		Daily Maximum	5.4	5.4	
(2)1,1,2,2-Tetrachloroethane	µg/L	Monthly Average	--	MR	1/Quarter
		Daily Maximum	--	10	
(2)1,1,2-Trichloroethane	µg/L	Monthly Average	--	MR	1/Quarter
		Daily Maximum	--	12	
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

(1) 17 of 17 effluent results were >100%. Based on data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.

(2) These parameters were added based on detects in the renewal application data.

Somerset Street Groundwater Treatment System– NJG0167916

Stream: Beden Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
pH Range	S.U.	Daily Minimum	6.0	6.0	1/Month
		Daily Maximum	9.0	9.0	
Total Suspended Solids	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	40	40	
Total Organic Carbon	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	20	20	
Chloroform	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	11.4	11.4	
Tetrachloroethylene	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	16	16	
1,1 Dichloroethane	µg/L	Monthly Average	22	22	1/Month
		Daily Maximum	59	59	
1,1 Dichloroethylene	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	6	6	
Vinyl Chloride	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	10	10	
Trichloroethylene	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	5.4	5.4	
1,2-Trans- Dichloroethylene	µg/L	Monthly Average	21	21	1/Month
		Daily Maximum	54	54	

(2)1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	-- --	21 54	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 7 of 10 effluent results were >100% with 3 data results of 62.5, 75 and 77%. Based on data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.
- (2) This parameter was added based on detects in the renewal application data.

I Park Edgewater– NJG0168840 (1)

Stream: Hudson River Stream Classification: SE2

PARAMETER	UNITS	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	MR MR	MR MR	Once Per 4 Days
pH Range	S.U.	6.0 9.0	6.0 9.0	Once Per 4 Days
Total Suspended Solids	mg/L	MR 40	MR 40	Once Per 4 Days
Total Organic Carbon	mg/L	MR 20	MR 20	Once Per 4 Days
Lead, Total Recoverable	µg/L	50 100	50 100	Once Per 4 Days
Arsenic	µg/L	50 100	50 100	Once Per 4 Days
Anthracene	µg/L	22 59	22 59	Once Per 4 Days
Fluoranthene	µg/L	25 68	25 68	Once Per 4 Days
Pyrene	µg/L	25 67	25 67	Once Per 4 Days
Dibenzo (a,h) anthracene	µg/L	MR 20	MR 20	Once Per 4 Days
Bis (2-ethylhexyl) phthalate	µg/L	59 118	59 118	Once Per 4 Days
Benzene	µg/L	37 136	37 136	Once Per 4 Days
Ethylbenzene	µg/L	32 108	32 108	Once Per 4 Days
2,4 Dimethylphenol	µg/L	18 36	18 36	Once Per 4 Days

- (1) This facility has not discharged in the time period reviewed. This permit will expire on 6/30/2015 and will not be renewed under this Master BGR permit.

Ellis Property – NJG0171336

Stream: Sharps Run Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month

Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Arsenic, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
Nickel, Total Recoverable		Monthly Average Daily Maximum	100 200	100 200	1/Month
Lead, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
1,1 Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/6 Months

- (1) 14 of 15 effluent results were >100% with 1 data result of 28.9. Based on the data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months

Standard Chlorine Chemical Co. - NJG0175102

Stream: Hackensack River Stream Classification: SE2

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Magnesium	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Total Manganese	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
(2)Total Recoverable Iron	µg/L	Monthly Average Daily Maximum	-- --	1000 2000	1/Month
Total Recoverable Nickel	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Recoverable Zinc	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
Total Recoverable Lead	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Recoverable Chromium	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Recoverable Arsenic	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Total Mercury (as Hg)	µg/L	Monthly Average Daily Maximum	MR 1	MR 1	1/Month

Acenaphthene	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
1, 2-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	77 163	77 163	1/Month
1,2,4-Trichlorobenzene	µg/L	Monthly Average Daily Maximum	68 140	68 140	1/Month
1,3-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	31 44	31 44	1/Month
1,4-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	MR 28	MR 28	1/Month
(2)Naphthalene	µg/L	Monthly Average Daily Maximum	-- --	22 59	1/Month
(2)Bis(2-ethylhexyl) phthalate	µg/L	Monthly Average Daily Maximum	-- --	59 118	1/Month
Toluene	µg/L	Monthly Average Daily Maximum	26 80	26 80	1/Month
Benzene	µg/L	Monthly Average Daily Maximum	37 136	37 136	1/Month
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Month
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Month
Methylene Chloride	µg/L	Monthly Average Daily Maximum	40 89	40 89	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	22 56	22 56	1/Quarter
Trichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
2, 4-Dimethylphenol	µg/L	Monthly Average Daily Maximum	18 36	18 36	1/Month
Phenol	µg/L	Monthly Average Daily Maximum	15 26	15 26	1/Month
(1)Chronic WET* (Ceriodaphnia dubia)	% effluent	Minimum	61	61	1/Quarter

- (1) 7 of 11 effluent samples were >100% with 4 results of 26.7, 47.5, 56.3 and 80.3. Based on the data, the monitoring frequency is being reduced to 1/6 Months.
- (2) These parameters were added based on detects in the renewal application data.

Textile Research Institute. - NJG0175412

Stream: Millstone River Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Avg. Daily Max.	MR MR	1/Month
pH Range	S.U.	Instant Min. Instant Max.	6.0 9.0	1/Month
Total Suspended Solids	mg/L	Monthly Avg. Daily Max.	MR 40	1/Month
Total Organic Carbon	mg/L	Monthly Avg. Daily Max.	MR 20	1/Month
Zinc, Total Recoverable	µg/L	Monthly Avg. Daily Max.	100 200	1/Month
Arsenic, Total	µg/L	Monthly Avg. Daily Max.	50 100	1/Month

Lead, Total Recoverable	µg/L	Monthly Avg. Daily Max.	50 100	1/Month
Chromium, Total Recoverable	µg/L	Monthly Avg. Daily Max.	50 100	1/Month
Copper, Total Recoverable	µg/L	Monthly Avg. Daily Max.	MR MR	1/Month
Carbon Tetrachloride	µg/L	Monthly Avg. Daily Max.	MR 6.0	1/Month
Nickel, Total Recoverable	µg/L	Monthly Avg. Daily Max.	72 144	1/Month
Chloroform	µg/L	Monthly Avg. Daily Max.	MR 11.4	1/Month
Tetrachloroethylene	µg/L	Monthly Avg. Daily Max.	MR 16	1/Month
1,1,1- Trichloroethane	µg/L	Monthly Avg. Daily Max.	MR MR	1/Month
1,1,2- Trichloroethane	µg/L	Monthly Avg. Daily Max.	MR 12	1/Month
Trichloroethylene	µg/L	Monthly Avg. Daily Max.	MR 5.4	1/Month
Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	1/6 Months

- (1) 7 of 15 effluent samples were >100% with 8 data results of 11.4, 32.7, 66.7, 67.2, 69.8, 71, 77 and 84.5%. Based on data, the monitoring frequency is being reduced from 1/Quarter to 1/6 Months.

Former Nuodex Corp. – NJG0197548

Stream: Raritan River Stream Classification: FW2-NT/SE-1

PARAMETER DSN001, DSN002 and DSN003	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Magnesium, Total (as Mg)	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Manganese, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Radium 226 + 228	µg/L	Monthly Average Daily Maximum	-- 5.0	-- 5.0	1/Month
Cyanide, Total (as CN)	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
Cadmium, Total (as Cd)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Chromium, Total (as Cr)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Copper, Total (as Cu)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Iron, Total (as Fe)	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Lead, Total (as Pb)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month

Nickel, Total (as Ni)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Silver, Total (as Ag)	µg/L	Monthly Average Daily Maximum	25 50	25 50	1/Month
Zinc, Total (as Zn)	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
Aluminum, Total (as Al)	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Arsenic	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Mercury, Total (as Hg)	µg/L	Monthly Average Daily Maximum	MR 1	MR 1	1/Month
Anthracene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Benzo(b)fluoranthene(3,4-benzo)	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Benzo(k)fluoranthene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Benzo(a)pyrene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Bis(2-chloroethyl)ether	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Bis(2-chloroisopropyl)ether	µg/L	Monthly Average Daily Maximum	301 757	301 757	1/Month
Butyl benzyl phthalate	µg/L	Monthly Average Daily Maximum	MR 24	MR 24	1/Month
Chrysene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Diethyl phthalate	µg/L	Monthly Average Daily Maximum	81 203	81 203	1/Month
Dimethyl phthalate	µg/L	Monthly Average Daily Maximum	19 47	19 47	1/Month
Fluoranthene	µg/L	Monthly Average Daily Maximum	25 68	25 68	1/Month
Fluorene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Hexachlorocyclopentadiene	µg/L	Monthly Average Daily Maximum	240 480	240 480	1/Month
Hexachloroethane	µg/L	Monthly Average Daily Maximum	19 38	19 38	1/Month
Indeo(1,2,3-cd)-pyrene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Isophorone	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
N-nitrosodiphenylamine	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
N-nitrosodimethylamine	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Nitrobenzene	µg/L	Monthly Average Daily Maximum	17 34	17 34	1/Month
Pyrene	µg/L	Monthly Average Daily Maximum	25 67	25 67	1/Month
Benzo(a)anthracene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
1,2-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	77 163	77 163	1/Month
1,2,4-Trichlorobenzene	µg/L	Monthly Average Daily Maximum	68 140	68 140	1/Month

Dibenzo(a,h)anthracene	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
1,3-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	31 44	31 44	1/Month
1,4-Dichlorobenzene	µg/L	Monthly Average Daily Maximum	MR 28	MR 28	1/Month
2,4-Dinitrotoluene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
2,6-Dinitrotoluene	µg/L	Monthly Average Daily Maximum	255 641	255 641	1/Month
3,3'-Dichlorobenzidine	µg/L	Monthly Average Daily Maximum	MR 60	MR 60	1/Month
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Bis(2-ethylhexyl)phthalate	µg/L	Monthly Average Daily Maximum	MR 36	MR 36	1/Month
Di-n-butyl phthalate	µg/L	Monthly Average Daily Maximum	27 57	27 57	1/Month
Benzidine	µg/L	Monthly Average Daily Maximum	MR 50	MR 50	1/Month
Hexachlorobenzene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Hexachlorobutadiene	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Dichlorobromomethane	µg/L	Monthly Average Daily Maximum	MR 5	MR 5	1/Month
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Month
Bromoform	µg/L	Monthly Average Daily Maximum	MR 8.6	MR 8.6	1/Month
Chloroform	µg/L	Monthly Average Daily Maximum	MR 11.4	MR 11.4	1/Month
Toluene	µg/L	Monthly Average Daily Maximum	26 80	26 80	1/Month
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Month
Acrolein	µg/L	Monthly Average Daily Maximum	MR 100	MR 100	1/Month
Acrylonitrile	µg/L	Monthly Average Daily Maximum	MR 50	MR 50	1/Month
Chlorobenzene	µg/L	Monthly Average Daily Maximum	15 28	15 28	1/Month
Chlorodibromomethane	µg/L	Monthly Average Daily Maximum	MR 8.2	MR 8.2	1/Month
Ethylbenzene	µg/L	Monthly Average Daily Maximum	32 108	32 108	1/Month
Methyl Bromide	µg/L	Monthly Average Daily Maximum	20 40	20 40	1/Month
Methyl Chloride	µg/L	Monthly Average Daily Maximum	86 190	86 190	1/Month
Methylene Chloride	µg/L	Monthly Average Daily Maximum	MR 9.4	MR 9.4	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
1,1-Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month

1,1-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
1,1,2-Trichloroethane	µg/L	Monthly Average Daily Maximum	MR 12	MR 12	1/Month
1,1,2,2-Tetrachloroethane	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
1,2-Dichloropropane	µg/L	Monthly Average Daily Maximum	153 230	153 230	1/Month
1,2-trans-Dichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Trichloroethylene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
Methyl ethyl ketone	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Xylenes (Total)	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Acetone	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Chloroethane	µg/L	Monthly Average Daily Maximum	104 268	104 268	1/Month
Tertiary Butyl Alcohol (TBA)	µg/L	Monthly Average Daily Maximum	MR 500 MR	MR 500 MR	1/Month
Endosulfan Sulfate	µg/L	Monthly Average Daily Maximum	0.93 1.86	0.93 1.86	1/Month
Beta Endosulfan	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Month
Alpha Endosulfan	µg/L	Monthly Average Daily Maximum	MR 0.02	MR 0.02	1/Month
Endrin Aldehyde	µg/L	Monthly Average Daily Maximum	0.76 1.52	1.76 1.52	1/Month
PCB-1016 (Arochlor 1016)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
2,3,7,8-Tetrachloro-dibenzo- p-dioxin	µg/L	Monthly Average Daily Maximum	MR 0.01	MR 0.01	1/Month
4,4'-DDT(p,p'-DDT)	µg/L	Monthly Average Daily Maximum	MR 0.06	MR 0.06	1/Month
4,4'-DDD(p,p'-DDD)	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Month
4,4'-DDE(p,p'-DDE)	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Month
Aldrin	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Month
Alpha BHC	µg/L	Monthly Average Daily Maximum	MR 0.02	MR 0.02	1/Month
Beta BHC	µg/L	Monthly Average Daily Maximum	0.137 0.274	0.137 0.274	1/Month
Gamma BHC (lindane)	µg/L	Monthly Average Daily Maximum	MR 0.03	MR 0.03	1/Month
Chlordane	µg/L	Monthly Average Daily Maximum	MR 0.2	MR 0.2	1/Month
Dieldrin	µg/L	Monthly Average Daily Maximum	MR 0.03	MR 0.03	1/Month

Endrin	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Month
Toxaphene	µg/L	Monthly Average Daily Maximum	MR 1	MR 1	1/Month
Heptachlor	µg/L	Monthly Average Daily Maximum	MR 0.02	MR 0.02	1/Month
Heptachlor Epoxide	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Month
PCB-1221 (Arochlor 1221)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
PCB-1232 (Arochlor 1232)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
PCB-1242 (Arochlor 1242)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
PCB-1248 (Arochlor 1248)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
PCB-1254 (Arochlor 1254)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
PCB-1260 (Arochlor 1260)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
2-Chlorophenol	µg/L	Monthly Average Daily Maximum	31 98	31 98	1/Month
2-Nitrophenol	µg/L	Monthly Average Daily Maximum	41 69	41 69	1/Month
2,4-Dichlorophenol	µg/L	Monthly Average Daily Maximum	39 112	39 112	1/Month
2,4-Dimethylphenol	µg/L	Monthly Average Daily Maximum	18 36	18 36	1/Month
2,4-Dinitrophenol	µg/L	Monthly Average Daily Maximum	71 123	71 123	1/Month
2,4,6-Trichlorophenol	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
4-Nitrophenol	µg/L	Monthly Average Daily Maximum	72 124	72 124	1/Month
4,6-Dinitro-o-cresol	µg/L	Monthly Average Daily Maximum	MR 60	MR 60	1/Month
Phenol, Single Compound	µg/L	Monthly Average Daily Maximum	15 26	15 26	1/Month
Pentachlorophenol	µg/L	Monthly Average Daily Maximum	MR 30	MR 30	1/Month
Uranium, Total	µg/L	Monthly Average Daily Maximum	30	30	1/Month
Radiation – Gross Alpha	µg/L	Monthly Average Daily Maximum	15	15	1/Month
Radiation – Gross Alpha - Diss	µg/L	Monthly Average Daily Maximum	MR	MR	1/Month
Radiation- Gross Alpha - Susp	µg/L	Monthly Average Daily Maximum	MR	MR	1/Month
Radiation – Gross Beta	µg/L	Monthly Average Daily Maximum	50	50	1/Month
Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Quarter

This facility has not discharged in the time period reviewed.

Amusement and Water Park – NJG0205192 (1)

Stream: Cedar Creek Stream Classification: FW2-NT/SE-2

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
pH Range	S.U.	Daily Minimum	6.0	6.0	1/Month
		Daily Maximum	9.0	9.0	
Total Suspended Solids (TSS)	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	40	40	
Total Organic Carbon (TOC)	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	20	20	
Cyanide, Total (as CN)	µg/L	Monthly Average	100	100	1/Month
		Daily Maximum	200	200	
Selenium, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Cadmium, Total (as Cd)	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Chromium, Total (as Cr)	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Copper, Total (as Cu)	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Iron, Total (as Fe)	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
Lead, Total (as Pb)	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Nickel, Total (as Ni)	µg/L	Monthly Average	72	72	1/Month
		Daily Maximum	144	144	
Silver, Total (as Ag)	µg/L	Monthly Average	25	25	1/Month
		Daily Maximum	50	50	
Zinc, Total (as Zn)	µg/L	Monthly Average	100	100	1/Month
		Daily Maximum	200	200	
Arsenic	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Mercury, Total (as Hg)	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	1	1	
Benzo(b)fluoranthene (3,4-benzo)	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	10	10	
Benzo(a)pyrene	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	20	20	
Chrysene	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	20	20	
Fluoranthene	µg/L	Monthly Average	25	25	1/Month
		Daily Maximum	68	68	
Phenanthrene	µg/L	Monthly Average	22	22	1/Month
		Daily Maximum	59	59	
Pyrene	µg/L	Monthly Average	25	25	1/Month
		Daily Maximum	67	67	
Benzo(a)anthracene	µg/L	Monthly Average	--	--	1/Month
		Daily Maximum	10	10	
Bis(2-ethylhexyl)phthalate	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	36	36	
4,4'-DDT(p,p'-DDT)	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	0.06	0.06	
4,4'-DDD(p,p'-DDD)	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	0.04	0.04	

4,4'-DDE(p,p'-DDE)	µg/L	Monthly Average Daily Maximum	MR 0.04	MR 0.04	1/Month
PCB-1242 (Arochlor 1254)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
PCB-1245 (Arochlor 1254)	µg/L	Monthly Average Daily Maximum	MR 0.5	MR 0.5	1/Month
Toluene	µg/L	Monthly Average Daily Maximum	-- --	26 80	1/Month

- (1) This is a short term dewatering discharge and shall expire on 10/31/16.

T-Mobile Wayne Switch Site – NJG0207802

Stream: Pompton River Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon (TOC)	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Iron, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
(2)Arsenic, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	50 100	1/Month
(2)Chromium, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	50 100	1/Month
(2)Lead, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	50 100	1/Month
(2)Nickel, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	72 144	1/Month
(2)Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	-- --	100 200	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Quarter

- (1) 2 of 6 effluent samples were >100% with 4 results of 41, 43, 66, and 90.2%.
(2) These parameters were added based on detects in the renewal application data.

Chemtura Corp DBA Hatco Corp – NJG0218014 (1)

Stream: Crow's Mill Creek Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month

Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
PCB-1242 (Arochlor 1242)	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/4 Days
PCB-1248 (Arochlor 1248)		Monthly Average Daily Maximum	MR MR	MR MR	1/4 Days

(1) This permit is a temporary discharger and shall expire on October 31, 2015.

Former Rexon Facility AKA ENJEMS Millworks – NJG0218316
 Stream: Passaic River Stream Classification: FW2-NT (C2)

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Quarter
Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 25	MR 25	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Chloride (as Cl)	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Arsenic, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Copper, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Iron, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Nickel, Total Recoverable	µg/L	Monthly Average Daily Maximum	72 144	72 144	1/Month
Silver, Total Recoverable	µg/L	Monthly Average Daily Maximum	25 50	25 50	1/Month
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
Lead, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 79	50 79	1/Month
Diethyl phthalate	µg/L	Monthly Average Daily Maximum	81 203	81 203	1/Month
Dimethyl phthalate	µg/L	Monthly Average Daily Maximum	19 47	19 47	1/Month
Isophorone	µg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Phenanthrene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Di-n-butyl phthalate	µg/L	Monthly Average Daily Maximum	27 57	27 57	1/Month
Methyl tert-butyl Ether	µg/L	Monthly Average Daily Maximum	MR 70	MR 70	1/Month
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month

1,2-Dichloroethane	µg/L	Monthly Average Daily Maximum	MR 3	MR 3	1/Month
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Month
Methyl Chloride	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
Trichlorofluoromethane	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
1,1-Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
1,1 Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	MR 10	MR 10	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
Methyl ethyl ketone	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
Trans-1,2-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Phenols	µg/L	Monthly Average Daily Maximum	15 26	15 26	1/Month
Cis-1,2-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
(1)Methylene Chloride	µg/L	Monthly Average Daily Maximum	-- --	MR 9.4	1/Month
(1)Bis(2-ethylhexyl)phthalate	µg/L	Monthly Average Daily Maximum	-- --	MR 36	1/Month
(2)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	--	61	1/Quarter

- (1) These parameters were added based on detects in the renewal application data.
(2) Based on the Master BGR, Chronic WET shall be sampled 1/Quarter with a 1 year compliance schedule. A monitoring and reporting requirement will be effective from the start of the permit until 1 year. The applicable limit of 61% shall become effective following 1 year from the start of the permit.

Woodbridge Energy Center – NJG0225282 (1)

Stream: Unnamed Trib to Stream Classification: FW2-NT/SE-1

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Week
Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Week
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Week
Radium 226 + Radium 228	µg/L	Monthly Average Daily Maximum	MR	MR	1/Week

Cyanide, Total (as CN)	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Week
Chromium, Total (as Cr)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week
Copper, Total (as Cu)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week
Iron, Total (as Fe)	µg/L	Monthly Average Daily Maximum	1000 2000	1000 2000	1/Week
Lead, Total (as Pb)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week
Nickel, Total (as Ni)	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week
Silver, Total (as Ag)	µg/L	Monthly Average Daily Maximum	25 50	25 50	1/Week
Zinc, Total (as Zn)	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Week
Lead, Total Recoverable	µg/L	Monthly Average Daily Maximum	37 79	37 79	1/Week
Arsenic	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week
Di-n-butyl phthalate	µg/L	Monthly Average Daily Maximum	27 57	27 57	1/Week
Uranium, Total	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Week
Radiation- Gross Alpha	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Week
Radiation- Gross Beta	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Week

(1) This is a dewatering project and shall expire on 2/29/16.

Ramp Dry Cleaners – NJG0226629

Stream: Rocky Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Month
Iron, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Arsenic, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Nickel, Total Recoverable	µg/L	Monthly Average Daily Maximum	72 144	72 144	1/Month
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Month
Aluminum, Total (asAl)		Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Lead, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Chromium, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month

Copper, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
Cis-1,2-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Quarter

(1) There is no WET data available since this is a newly issued permit.

PSE&G River Road Substation – NJG0228508 (1)
 Stream: Hudson River Stream Classification: SE-2

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/4 Days
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/4 Days
Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/4 Days
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/4 Days
Iron, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/4 Days
Cyanide, Total	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/4 Days
Arsenic, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/4 Days
Selenium, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/4 Days
Nickel, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/4 Days
Silver, Total Recoverable	µg/L	Monthly Average Daily Maximum	25 50	25 50	1/4 Days
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/4 Days
Cadmium, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/4 Days
Lead, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/4 Days
Chromium, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/4 Days
Copper, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/4 Days
Mercury, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR 1	MR 1	1/4 Days
Fluorene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/4 Days
Phenanthrene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/4 Days
Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Quarter

(1) This is a dewatering project and shall expire on 12/31/15.

IMTT - Bayonne – NJG0231002

Stream: Kill Van Kull Stream Classification: SE-3

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
pH Range	S.U.	Daily Minimum	6.0	6.0	1/Month
		Daily Maximum	9.0	9.0	
Total Suspended Solids	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	40	40	
Total Organic Carbon	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	20	20	
Cyanide, Total (as CN)	µg/L	Monthly Average	100	100	1/Month
		Daily Maximum	200	200	
Arsenic, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Nickel, Total Recoverable		Monthly Average	100	100	1/Month
		Daily Maximum	200	200	
Zinc, Total Recoverable	µg/L	Monthly Average	100	100	1/Month
		Daily Maximum	200	200	
Cadmium, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Lead, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Chromium, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Copper, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Diethyl phthalate	µg/L	Monthly Average	81	81	1/Month
		Daily Maximum	203	203	
Phenanthrene	µg/L	Monthly Average	22	22	1/Month
		Daily Maximum	59	59	
Naphthalene	µg/L	Monthly Average	22	22	1/Month
		Daily Maximum	59	59	
Bis(2-ethylhexyl) phthalate	µg/L	Monthly Average	59	59	1/Month
		Daily Maximum	118	118	
Di-n-butyl phthalate	µg/L	Monthly Average	27	27	1/Month
		Daily Maximum	57	57	
Methyl tert-butyl Ether	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
1,2-Dichloroethane	µg/L	Monthly Average	68	68	1/Month
		Daily Maximum	211	211	
Chloroform	µg/L	Monthly Average	21	21	1/Month
		Daily Maximum	46	46	
Toluene	µg/L	Monthly Average	26	26	1/Month
		Daily Maximum	80	80	
Benzene	µg/L	Monthly Average	37	37	1/Month
		Daily Maximum	136	136	
Chlorobenzene	µg/L	Monthly Average	15	15	1/Month
		Daily Maximum	28	28	
Ethylbenzene	µg/L	Monthly Average	32	32	1/Month
		Daily Maximum	108	108	
Methylene Chloride	µg/L	Monthly Average	40	40	1/Month
		Daily Maximum	89	89	
Tetrachloroethylene	µg/L	Monthly Average	22	22	1/Month
		Daily Maximum	56	56	

1,1 Dichloroethane	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
1,1,1-Trichloroethane	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Vinyl Chloride	µg/L	Monthly Average Daily Maximum	104 268	104 268	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Trans-1,2-Dichloroethylene	µg/L	Monthly Average Daily Maximum	21 54	21 54	1/Month
Chloroethane	µg/L	Monthly Average Daily Maximum	104 268	104 268	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	--	61 (2)	1/Quarter

- (1) There is no WET data available since this is newly issued permit.
- (2) Based on the Master BGR, Chronic WET shall be sampled 1/Quarter with a 1 year compliance schedule. A monitoring and reporting requirement will be effective from the start of the permit until 1 year. The applicable limit of 61% shall become effective following 1 year from the start of the permit.

Former Unified Data Products Site – NJG0231401

Stream: Henderson/Little Diamond Brook Stream Classification: FW2-NT

PARAMETER	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/Month
Total Suspended Solids	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Month
Total Organic Carbon	mg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Iron, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Carbon Tetrachloride	µg/L	Monthly Average Daily Maximum	MR 6	MR 6	1/Month
Chloroform		Monthly Average Daily Maximum	MR 11.4	MR 11.4	1/Month
Tetrachloroethylene	µg/L	Monthly Average Daily Maximum	MR 16	MR 16	1/Month
1,1 Dichloroethylene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Trichloroethene	µg/L	Monthly Average Daily Maximum	MR 5.4	MR 5.4	1/Month
Cis-1,2-Dichloroethylene	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
(1)Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	--	61(2)	1/6 months

- (1) There is no WET data available since this is newly issued permit.
- (2) Based on the Master BGR, Chronic WET shall be sampled 1/Quarter with a 1 year compliance schedule. A monitoring and reporting requirement will be effective from the start of the permit until 1 year. The applicable limit of 61% shall become effective following 1 year from the start of the permit.

Branch Brook Substation Project – NJG0231762 (1)
 Stream: Passaic River Stream Classification: SE-3

PARAMETER DSN001 and DSN002	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
pH Range	S.U.	Daily Minimum	6.0	6.0	1/Month
		Daily Maximum	9.0	9.0	
Total Suspended Solids	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	40	40	
Total Organic Carbon	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	20	20	
Arsenic, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Nickel, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Zinc, Total Recoverable		Monthly Average	100	100	1/Month
		Daily Maximum	200	200	
Lead, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Chromium, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Copper, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Mercury, Total Recoverable	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	1	1	
Naphthalene	µg/L	Monthly Average	22	22	1/Month
		Daily Maximum	59	59	

(1) This is a dewatering project and shall expire on 12/31/15.

PSE&G Hudson and Marion Switching Station – NJG0232211 (1)
 Stream: Penhorn Creek UNT Stream Classification: SE-2

PARAMETER DSN001, DSN002 and DSN003	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
pH Range	S.U.	Daily Minimum	6.0	6.0	1/Month
		Daily Maximum	9.0	9.0	
Total Suspended Solids	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	40	40	
Total Organic Carbon	mg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	20	20	
Magnesium, Total (as Mg)	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
Iron, Total Recoverable	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
Manganese, Total Recoverable	µg/L	Monthly Average	MR	MR	1/Month
		Daily Maximum	MR	MR	
Arsenic, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Nickel, Total Recoverable	µg/L	Monthly Average	50	50	1/Month
		Daily Maximum	100	100	
Zinc, Total Recoverable	µg/L	Monthly Average	100	100	1/Month
		Daily Maximum	200	200	

Aluminum, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Month
Lead, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Chromium, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Copper, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Month
Mercury, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR 1	MR 1	1/Month
Naphthalene	µg/L	Monthly Average Daily Maximum	22 59	22 59	1/Month
Benzene	µg/L	Monthly Average Daily Maximum	MR 7	MR 7	1/Month
Chronic WET (<i>Ceriodaphnia dubia</i>)	% effluent	Minimum	61	61	1/Quarter

(1) This is a dewatering project and shall expire on 12/31/15.

PSE&G Southern Reinforcement Project – NJG0238350 (1)

Stream: North Branch Newton Creek Stream Classification: FW2-NT(C2)

PARAMETER DSN001 and DSN002	UNITS	AVERAGING PERIOD	EXISTING LIMITS	FINAL LIMITS	Final Monitoring Frequency
Flow	GPD	Monthly Average Daily Maximum	MR MR	MR MR	1/4 Days
pH Range	S.U.	Daily Minimum Daily Maximum	6.0 9.0	6.0 9.0	1/4 Days
Total Suspended Solids (TSS)	mg/L	Monthly Average Daily Maximum	MR 40	MR 40	1/Week
Total Organic Carbon (TOC)	mg/L	Monthly Average Daily Maximum	MR 20	MR 20	1/Week
Iron, Total Recoverable	µg/L	Monthly Average Daily Maximum	MR MR	MR MR	1/Week
Arsenic, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week
Nickel, Total Recoverable	µg/L	Monthly Average Daily Maximum	72 144	72 144	1/Week
Zinc, Total Recoverable	µg/L	Monthly Average Daily Maximum	100 200	100 200	1/Week
Lead, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week
Chromium, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week
Copper, Total Recoverable	µg/L	Monthly Average Daily Maximum	50 100	50 100	1/Week

(1) This is a dewatering project and shall expire on 12/31/15.



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: NJ0155438

Draft: Surface Water Master General Permit Renewal

Permittee:

NJPDES Master General Permit Program Interest
Per Individual Notice of Authorization

Co-Permittee:

Property Owner:

Per Individual Notice of Authorization
Division of Water Quality
Bureau of Surface Water Permitting
Mail Code 401-02B
Trenton, NJ 08625-0420

Location Of Activity:

NJPDES Master General Permit Program Interest
Per Individual Notice of Authorization

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
BGR -General Remediation Clean-up (GP)			

**By Authority of:
Commissioner's Office**

**DEP AUTHORIZATION
Melisse Carasia Auriti, Section Chief
Bureau of Surface Water Permitting
Division of Water Quality**

(Terms, conditions and provisions attached hereto)

Division of Water Quality

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 <u>et seq.</u> |
| Incorporation by Reference | N.J.A.C. 7:14A-2.3 |
| Toxic Pollutants | N.J.A.C. 7:14A-6.2(a)4i |
| Duty to Comply | N.J.A.C. 7:14A-6.2(a)1 & 4 |
| Duty to Mitigate | N.J.A.C. 7:14A-6.2(a)5 & 11 |
| Inspection and Entry | N.J.A.C. 7:14A-2.11(e) |
| Enforcement Action | N.J.A.C. 7:14A-2.9 |
| Duty to Reapply | N.J.A.C. 7:14A-4.2(e)3 |
| Signatory Requirements for Applications and Reports | N.J.A.C. 7:14A-4.9 |
| Effect of Permit/Other Laws | N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c) |
| Severability | N.J.A.C. 7:14A-2.2 |
| Administrative Continuation of Permits | N.J.A.C. 7:14A-2.8 |
| Permit Actions | N.J.A.C. 7:14A-2.7(c) |
| Reopener Clause | N.J.A.C. 7:14A-6.2(a)10 |
| Permit Duration and Renewal | N.J.A.C. 7:14A-2.7(a) & (b) |
| Consolidation of Permit Process | N.J.A.C. 7:14A-15.5 |
| Confidentiality | N.J.A.C. 7:14A-18.2 & 2.11(g) |
| Fee Schedule | N.J.A.C. 7:14A-3.1 |
| Treatment Works Approval | N.J.A.C. 7:14A-22 & 23 |
- c. Operation And Maintenance
- | | |
|--------------------------------------|-----------------------|
| Need to Halt or Reduce not a Defense | N.J.A.C. 7:14A-2.9(b) |
| Proper Operation and Maintenance | N.J.A.C. 7:14A-6.12 |
- d. Monitoring And Records
- | | |
|-----------------------------------------------|--------------------|
| Monitoring | N.J.A.C. 7:14A-6.5 |
| Recordkeeping | N.J.A.C. 7:14A-6.6 |
| Signatory Requirements for Monitoring Reports | N.J.A.C. 7:14A-6.9 |
- e. Reporting Requirements
- | | |
|-----------------------------------------------|---------------------------------------|
| Planned Changes | N.J.A.C. 7:14A-6.7 |
| Reporting of Monitoring Results | N.J.A.C. 7:14A-6.8 |
| Noncompliance Reporting | N.J.A.C. 7:14A-6.10 & 6.8(h) |
| Hotline/Two Hour & Twenty-four Hour Reporting | N.J.A.C. 7:14A-6.10(c) & (d) |
| Written Reporting | N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h) |
| Duty to Provide Information | N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1 |
| Schedules of Compliance | N.J.A.C. 7:14A-6.4 |
| Transfer | N.J.A.C. 7:14A-6.2(a)8 & 16.2 |

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

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

B. General Conditions

1. Scope

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

2. Permit Renewal Requirement

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. Submit a complete permit renewal application: 180 days before the.
- c. For short term discharges (typically 6 months or less), a renewal application is not required. However, written notice of at least 30 days prior to expiration shall be submitted to the Department for a permit modification to extend the expiration date.
- d. Requests for short term discharge extensions shall be submitted to the following:
Via Email: Brian.Salvo@dep.nj.gov or Kelly.Perez@dep.nj.gov
Or Via Mail: Brian Salvo or Kelly Perez
NJ Department of Environmental Protection
Bureau of Surface Water Permitting
Mail Code 401-02B
PO Box 420
Trenton, NJ 08625-0420
Or via phone at: (609) 292-4860

3. Notification of Non-Compliance

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

4. Notification of Changes

- a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.
- b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

5. Access to Information

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

6. Operator Certification

- a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.
 - i. Notifications shall be submitted to:
NJDEP
Bureau of Licensing and Pesticide Operations
Mail Code 401-04E
PO Box 420
Trenton, New Jersey 08625-0420
(609) 984-6507
- b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

7. Operation Restrictions

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

8. Residuals Management

- a. The permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:
 - i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;
 - ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;
 - iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;
 - iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;

- v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and
 - vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.
 - vii. Residual that is disposed in a municipal solid waste landfill unit shall meet the requirements in 40 CFR Part 258 and/or N.J.A.C. 7:26 concerning the quality of residual disposed in a municipal solid waste landfill unit. (That is, passes the Toxicity Characteristic Leaching Procedure and does not contain "free liquids" as defined at N.J.A.C. 7:14A-1.2.)
- b. If any applicable standard for residual use or disposal is promulgated under section 405(d) of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.
 - c. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtimes at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.
 - d. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.
 - e. The preparer must notify and provide information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements to the person who applies bulk residual to the land. This shall include, but not be limited to, the applicable recordkeeping requirements and certification statements of 40 CFR 503.17 as referenced at N.J.A.C. 7:14A-20.7(j).
 - f. The preparer who provides biosolids to another person who further prepares the biosolids for application to the land must provide this person with notification and information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements.
 - g. Any person who prepares bulk residual in New Jersey that is applied to land in a State other than New Jersey shall comply with the requirement at N.J.A.C. 7:14A-20.7(b)1.ix to provide written notice to the Department and to the permitting authority for the State in which the bulk residual is proposed to be applied.

PART III

LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:

ABGR Table 1

RECEIVING STREAM:

Varies

STREAM CLASSIFICATION:

DISCHARGE CATEGORY(IES):

BGR - General Remediation Clean-up
(GP)

Location Description

(NEW Applicants) - This table is utilized for new long term discharges into eligible waters classified as FW2-NT, FW2-TM, FW2-TP, SE or SC. Metals, volatile organics, acid extractables, base-neutrals, PCBs, pesticides and other pollutants (Priority Pollutant Scan) will be included for any parameter detected or suspected present. Limits for these parameters are specified in the BGR Effluent Standards for Toxic Pollutants attachment. Refer to Part III of the individual authorizations for limitations and monitoring requirements.

Contributing Waste Types

Groundwater Remediation

Surface Water DMR Reporting Requirements:

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

Comments:

For new authorizations a chronic whole effluent toxicity limit shall not be effective until one year from the effective start date of the permit.

Specific toxics will be included for parameters that are detected in the untreated representative sample or known suspected in place of the "Priority Pollutant Scan"

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

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	GPD	*****	*****	*****	*****	1/Month	Metered
	January thru December	QL	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	1/Month	Grab
	January thru December	QL	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	40 Daily Maximum	MG/L	1/Month	Grab
	January thru December	QL	***		***	***	***			
IC25 Statre 7day Chr Ceriodaphnia	Effluent Gross Value	*****	*****	*****	61 Report Per Minimum	*****	*****	%EFFL	1/Quarter	Grab
	January thru December	QL	***		***	***	***			

Surface Water DMR Reporting Requirements:

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

Comments:

For new authorizations a chronic whole effluent toxicity limit shall not be effective until one year from the effective start date of the permit.

Specific toxics will be included for parameters that are detected in the untreated representative sample or known suspected in place of the "Priority Pollutant Scan"

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

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Carbon, Tot Organic (TOC)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	20 Daily Maximum	MG/L	1/Month	Grab
	January thru December	QL	***		***	***	***			
Priority Pollutant Scan	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Grab
	January thru December	QL	***		***	***	***			

MONITORED LOCATION:

BBGR Table 2

RECEIVING STREAM:

Varies

STREAM CLASSIFICATION:

DISCHARGE CATEGORY(IES):

BGR - General Remediation Clean-up (GP)

Location Description

(Short Term) This table is utilized on a case-by-case basis for short term (less than 6 months) discharges into eligible waters classified as FW2-NT, FW2-TM, FW2-TP, SE or SC. Metals, volatile organics, acid extractables, base-neutrals, PCBs, pesticides and other pollutants (Priority Pollutant Scan) will be included for any parameter detected or suspected present. Limits for these parameters are specified in the BGR Effluent Standards for Toxic Pollutants attachment. Refer to Part III of the individual authorizations for limitations and monitoring requirements.

Contributing Waste Types

Groundwater Remediation

Surface Water DMR Reporting Requirements:

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

Comments:

A monitoring frequency of 1/4 days shall apply for discharges lasting for 1 month or less. 1/week for discharges lasting from 1 month to 3 months. And 1/2 weeks for discharges lasting greater than 3 months. Specific toxics will be included in place of the "Priority Pollutant Scan" on a case-by-case basis.

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

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	GPD	*****	*****	*****	*****	1/4 Days	Metered
	January thru December	QL	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	1/4 Days	Grab
	January thru December	QL	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	40 Daily Maximum	MG/L	1/4 Days	Grab
	January thru December	QL	***		***	***	***			
Carbon, Tot Organic (TOC)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	20 Daily Maximum	MG/L	1/4 Days	Grab
	January thru December	QL	***		***	***	***			

Surface Water DMR Reporting Requirements:

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

Comments:

A monitoring frequency of 1/4 days shall apply for discharges lasting for 1 month or less. 1/week for discharges lasting from 1 month to 3 months. And 1/2 weeks for discharges lasting greater than 3 months. Specific toxics will be included in place of the "Priority Pollutant Scan" on a case-by-case basis.

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

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Priority Pollutant Scan January thru December	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/4 Days	Grab
	QL	***	***		***	***	***			

MONITORED LOCATION:

SI6A Residuals Requirements

DISCHARGE CATEGORY(IES):

BGR - General Remediation Clean-up
(GP)

Location Description

Sludge sampling and analysis determined on a case-by-case basis and in conformance with the Sludge Quality Assurance Regulations (SQAR, N.J.A.C. 7:14C).

Contributing Waste Types

Ind Residual-Other

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Comments:

Sampling and analysis of the sludge for the parameters contained on "Part III - Attachment Residuals" determined on a case-by-case basis. For existing dischargers, please refer to tables in Attachments 1 and 2 for the requirements that will be contained in the individual authorizations.

Table III - C - 1: Residuals DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids, Total January thru December	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	%TS	1/Year	Composite
	QL	***	***		***	***	***			

Residuals WCR - Annual Reporting Requirements:

Submit an Annual WCR: due 60 calendar days after the end of each calendar year.

Table III - C - 3: Residuals WCR - Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Amt Sludge Rmvd, Wet Cubic Yards	Industrial Residuals	REPORT	WCY/YR	Calculated	January thru December
Amt Sludge Rmvd, Wet Metric Tons	Industrial Residuals	REPORT	WMT/YR	Calculated	January thru December
Amt Sludge Rmvd, Gallons	Industrial Residuals	REPORT	GAL/YEAR	Calculated	January thru December
Total Amount of Sludge Removed	Industrial Residuals	REPORT	DMT/YR	Calculated	January thru December
Solids, Total	Industrial Residuals	REPORT	%TS	Composite	January thru December

Residuals Transfer Reporting Requirements:

Submit an Annual RTR: due 60 calendar days after the end of each calendar year.

Toxic Pollutant Limits if Known or Suspected Present

In addition to complying with the effluent limitations and monitoring conditions listed on the Tables in Part III in this Master BGR permit, each parameter listed below that is detected or known to be present will be included in Part III- Surface Water DMR Reporting Requirements of the individual authorization. The limits are based on N.J.A.C. 7:14A-12 Appendix B Effluent Standards for Site Remediation Projects.

All units are in µg/L. MR is defined as monitoring and reporting.

Parameter	<u>FW2 Waters</u>		<u>SE, SC Waters</u>	
	Monthly / Daily <u>Average / Maximum</u>		Monthly / Daily <u>Average / Maximum</u>	
<i>Volatile Organics</i>				
Acrolein	MR	100	MR	100
Acrylonitrile	MR	50	MR	50
Benzene	MR	7	37	136
Bromoform	MR	8.6	29	58
Carbon Tetrachloride	MR	6	8.8	MR
Chlorobenzene	15	28	15	28
Chlorodibromomethane	MR	8.2	MR	14
Chlorethane	104	268	104	268
Chloroform	MR	11.4	21	46
Dichlorobromomethane	MR	5	MR	12
1,1-Dichloroethane	22	59	22	59
1,2-Dichloroethane	MR	3	68	211
1, 1-Dichloroethylene	MR	6	16	25
1,2-Dichloropropane	153	230	153	230
1,3-Dichloropropylene	10	20	29	44
Ethylbenzene	32	108	32	108
Methyl Bromide	20	40	20	40
Methyl Chloride	86	190	86	190
Methylene Chloride	MR	9.4	40	89
1,1,2,2 Tetrachloroethane	MR	10	MR	10
Tetrachloroethylene	MR	16	22	56
Toluene	26	80	26	80
1,2-Trans-Dichloroethylene	21	54	21	54
1,1,1-Trichloroethane	21	54	21	54
1,1,2-Trichloroethane	MR	12	21	54
Trichloroethylene	MR	5.4	21	54
Vinyl Chloride	MR	10	104	268
<i>Acid Compounds</i>				
2-Chlorophenol	31	98	31	98
2,4 Dichlorophenol	39	112	39	112
2,4 Dimethylphenol	18	36	18	36
4,6 Dinitro-O-Cresol	MR	60	78	277
2,4 Dinitrophenol	71	123	71	123
2-Nitrophenol	41	69	41	69
4-Nitrophenol	72	124	72	124
Pentachlorophenol	MR	30	MR	30
Phenol	15	26	15	26
2,4,6 Trichlorophenol	MR	20	MR	20

Parameter	<u>FW2 Waters</u>		<u>SE, SC Waters</u>	
	<u>Monthly /</u> <u>Average /</u>	<u>Daily</u> <u>Maximum</u>	<u>Monthly /</u> <u>Average/</u>	<u>Daily</u> <u>Maximum</u>
<i>Base/Neutral Compounds</i>				
Anthracene	22	59	22	59
Benidine	MR	50	MR	50
Benzo (a) Anthracene	MR	10	MR	10
Benzo (a) Pyrene	MR	20	MR	20
Benzo (b) fluoranthene	MR	10	MR	10
Benzo (k) fluoranthene	MR	20	MR	20
Bis (2-Chloroethyl) Ether	MR	10	MR	10
Bis (2-Chloroisopropyl) Ether	301	757	301	757
Bis (2-Ethylhexyl)Phthalate	MR	36	59	118
Butyl Benzyl Phthalate	MR	24	MR	24
Chrysene	MR	20	MR	20
Dibenzo (a,h) Anthracene	MR	20	MR	20
1,2 Dichlorobenzene	77	163	77	163
1,3 Dichlorobenzene	31	44	31	44
1,4 Dichlorobenzene	MR	28	MR	28
3,3 Dichlorobenzidine	MR	60	MR	60
Diethyl Phthalate	81	203	81	203
Dimethyl Phthalate	19	47	19	47
Di-N-Butyl Phthalate	27	57	27	57
2,4 Dinitrotoluene	MR	10	MR	18.2
2,6 Dinitrotoluene	255	641	255	641
Fluoranthene	25	68	25	68
Fluorene	22	59	22	59
Hexachlorobenzene	MR	10	MR	10
Hexachlorobutadiene	MR	10	20	49
Hexchloropentadiene	240	480	MR	1800
Hexachloroethane	19	38	21	54
Ideno (1,2,3-cd) Pyrene	MR	20	MR	20
Isophorone	MR	20	MR	20
Naphthalene	22	59	22	59
Nitrobenzene	17	34	27	68
N-Nitrosodimethylamine	MR	20	MR	20
N-Nitrosodiphenylamine	MR	20	MR	20
Phenanthrene	22	59	22	59
Pyrene	25	67	25	67
1,2,4 Trichlorobenzene	68	140	68	140
<i>Pesticides</i>				
Aldrin	MR	0.04	MR	0.04
Alpha-BHC	MR	0.02	MR	0.02
Beta-BHC	0.137	0.274	0.46	0.92
Gamma-BHC (Lindane)	MR	0.08	MR	0.03
Chlordane	MR	0.2	MR	0.2

Parameter	<u>FW2 Waters</u>		<u>SE, SC Waters</u>	
	Monthly / Average	Daily / Maximum	Monthly / Average	Daily / Maximum
<i>Pesticides (continued)</i>				
4,4'-DDT	MR	0.06	MR	0.06
4,4'-DDE	MR	0.04	MR	0.04
4,4'-DDD	MR	0.04	MR	0.04
Dieldrin	MR	0.03	MR	0.03
Alpha-Endosulfan	MR	0.02	MR	0.02
Beta-Endosulfan	MR	0.04	MR	0.04
Endosulfan Sulfate	0.93	1.86	2	4
Endrin	MR	0.04	MR	0.04
Endrin Aldehyde	0.76	1.52	0.81	1.62
Heptachlor	MR	0.02	MR	0.02
Heptachlor Epoxide	MR	0.4	MR	0.4
Toxaphene	MR	1	MR	1
<i>Metals and Cyanide</i>				
Arsenic	50	100	50	100
Cadmium	50	100	50	100
Chromium	50	100	50	100
Copper	50	100	50	100
Iron	MR	MR	MR	MR
Lead	37	79	37	79
Mercury	MR	1	MR	1
Nickel	72	144	50	100
Selenium	50	100	50	100
Silver	25	50	25	50
Zinc	100	200	100	200
Cyanide	100	200	100	200
<i>Dioxin</i>				
2,3,7,8-Tetrachlorodibenzo- p-dioxin	MR	0.01	MR	0.01
<i>PCBs</i>				
PCBs- 1242, 1254, 1221, 1232, 1248, 1260 and 1016	MR	0.5	MR	0.5
<i>Other</i>				
Methyl-Tert-Butyl Ether (MTBE)	MR	70	MR	70
Tert-Butyl-Alcohol (TBA)	500	MR	500	MR

Appendix - Monitoring Parameter Tables**Table I**
Primary Metals and Selected Chemical Parameters

Total Solids, (percent by weight)
Arsenic, total
Beryllium, total
Cadmium, total
Calcium, total
Chromium, total
Copper, total
Lead, total
Mercury, total
Molybdenum, total
Nickel, total
Nitrogen, Total Kjeldahl (TKN)
Nitrogen, Ammonia (NH₃-N)
Nitrogen, Nitrate (NO₃-N)
Phosphorous, total
Potassium, total
Selenium, total
Zinc, total
Radionuclides (pCi/g)¹
Dioxins and PCBs²

Notes:

¹ Radionuclides are required to be tested in the sludge if the industrial or domestic treatment works receives source water or uses additives known to or suspected of having elevated radionuclide concentrations. The radionuclides required to be tested for include, but are not limited to, radium-226, radium-228, uranium-238, uranium-234, uranium-235, and thorium-232.

² Dioxin and dioxin-like compounds, including dibenzofurans, and individual PCB congeners are required to be tested in the sludge on a case by case basis as established in a NJPDES permit issued pursuant to N.J.A.C. 7:14A.

Table II
Additional Miscellaneous Compounds

<u>Parameter</u>	<u>CAS RN</u> ¹
Antimony, total	
Silver, total	
Thallium, total	
Cyanide, total	57-12-5

Notes:

¹ Chemical Abstracts Service registry number

Table III
Volatile Organic Compounds

<u>Parameter - Name(s)</u>	<u>CAS RN¹</u>
Acrolein; (2-Propenal)	107-02-8
Acrylonitrile; (2-Propenenitrile)	107-13-1
Benzene	71-43-2
Bromoform; (Tribromomethane)	75-25-2
Carbon Tetrachloride; (Tetrachloromethane)	56-23-5
Chlorobenzene	108-90-7
Chlorodibromomethane; (Dibromochloromethane)	124-48-1
Chloroethane; (Ethyl chloride)	75-00-3
2-Chloroethylvinyl Ether	110-75-8
Choroform; (Trichloromethane)	67-66-3
Dichlorobromomethane; (Bromodichloromethane)	75-27-4
1,1-Dichloroethane; (Ethylidene chloride)	75-34-3
1,2-Dichloroethane; (Ethylene dichloride)	107-06-2
1,1-Dichloroethylene; (1,1-Dichloroethene); (Vinylidene chloride)	75-35-4
1,2-Dichloropropane; (Propylene dichloride)	78-87-5
trans-1,3-Dichloropropene	10061-02-6
Ethylbenzene	100-41-4
Methyl bromide; (Bromomethane)	74-83-9
Methyl chloride; (Chloromethane)	74-87-3
Methylene chloride; (Dichloromethane)	75-09-2
1,1,2,2-Tetrachloroethane	79-34-5
Tetrachloroethylene; (Tetrachloroethene); (Perchloroethylene)	127-18-4
Toluene; (Methylbenzene)	108-88-3
1,2-trans-Dichloroethylene; (trans-1,2-Dichloroethene)	156-60-5
1,1,1-Trichloroethane; (Methylchloroform)	71-55-6
1,1,2-Trichloroethane	79-00-5
Trichloroethylene; (Trichloroethene)	79-01-6
Vinyl Chloride; (Chloroethene)	75-01-4

Notes:

¹ Chemical Abstracts Service registry number

Table IV
Acid-extractable compounds

<u>Parameter</u>	<u>CAS RN¹</u>
2-Chlorophenol	95-57-8
2,4-Dichlorophenol	120-83-2
2,4-Dimethylphenol; (m-Xylenol)	105-67-9
4,6-Dinitro-o-cresol; (4,6-Dinitro-2-methylphenol)	534-52-1
2,4-Dinitrophenol	51-28-5
2-Nitrophenol; (o-Nitrophenol)	88-75-5
4-Nitrophenol; (p-Nitrophenol)	100-02-7
p-Chloro-m-cresol; (4-Chloro-3-methylphenol)	59-50-7
Pentachlorophenol	87-86-5
Phenol	108-95-2
2,4,6-Trichlorophenol	88-06-2

Notes:

¹ Chemical Abstracts Service registry number

Table V
Base-Neutral Compounds

<u>Parameter</u>	<u>CAS RN</u>¹
Acenaphthene; (1,2-dihydro-Acenaphthylene)	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7
Benzidine	92-87-5
Benzo(a)anthracene	56-55-3
Benzo(a)pyrene	50-32-8
3,4-Benzofluoranthene; (Benzo(b)fluoranthene)	205-99-2
Benzo(g,h,i)perylene	191-24-2
Benzo(k)Fluoranthene	207-08-9
bis(2-Chloroethoxy)methane	111-91-1
bis(2-Chloroethyl)ether	111-44-4
bis(2-Chloroisopropyl)ether; (Bis(2-chloro-1-methylethyl)ether)	108-60-1
bis(2-Ethylhexyl)phthalate	117-81-7
4-Bromophenyl phenyl ether; (1-bromo-4-phenoxy Benzene)	101-55-3
Butyl benzyl phthalate; (Benzyl butyl phthalate)	85-68-7
2-Chloronaphthalene	91-58-7
4-Chlorophenyl phenyl ether;	7005-72-3
Chrysene	218-01-9
Dibenzo(a,h)anthracene	53-70-3
1,2-Dichlorobenzene; (o-Dichlorobenzene)	95-50-1
1,3-Dichlorobenzene; (m-Dichlorobenzene)	541-73-1
1,4-Dichlorobenzene; (p-Dichlorobenzene)	106-46-7
3,3-Dichlorobenzidine	91-94-1
Diethyl phthalate	84-66-2
Dimethyl phthalate	131-11-3
Di-n-butyl phthalate	84-74-2
2,4-Dinitrotoluene; (1-methyl-2,4-dinitrobenzene)	121-14-2
2,6-Dinitrotoluene; (2-methyl-1,3-dinitrobenzene)	606-20-2
Di-n-octyl phthalate	117-84-0
1,2-Diphenylhydrazine	122-66-7
Fluoranthene	206-44-0
Fluorene	86-73-7
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3
Hexachlorocyclopentadiene	77-47-4
Hexachloroethane	67-72-1
Indeno(1,2,3-c,d)pyrene	193-39-5
Isophorone	78-59-1
Naphthalene	91-20-3

Nitrobenzene	98-95-3
N-Nitrosodimethylamine	62-75-9
N-Nitrosodi-n-propylamine; (N-Nitrosodipropylamine) (Di-n-propylnitrosamine)	621-64-7
N-Nitrosodiphenylamine	86-30-6
Phenanthrene	85-01-8
Pyrene	129-00-0
1,2,4-Trichlorobenzene	120-82-1

Notes:

¹ Chemical Abstracts Service registry number

Table VI
Pesticides and PCB

<u>Parameter</u>	<u>CAS RN</u> ¹
Aldrin	309-00-2
alpha-BHC	319-84-6
beta-BHC	319-85-7
gamma-BHC; (Lindane)	58-89-9
delta-BHC	319-86-8
Chlordane	(see note 2)
4,4'-DDT	50-29-3
4,4'-DDE	72-55-9
4,4'-DDD	72-54-8
Dieldrin	60-57-1
alpha-Endosulfan	959-98-8
beta-Endosulfan	33213-65-9
Endosulfan sulfate	1031-07-8
Endrin	72-20-8
Endrin aldehyde	7421-93-4
Heptachlor	76-44-8
Heptachlor epoxide	1024-57-3
PCB-1242	53469-21-9
PCB-1254	11097-69-1
PCB-1221	11104-28-2
PCB-1232	11141-16-5
PCB-1248	12672-29-6
PCB-1260	11096-82-5
PCB-1016	12674-11-2
Toxaphene	8001-35-2

Notes:

¹ Chemical Abstracts Service registry number

² Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6).

Table VII
Conventional and Nonconventional Pollutants

Parameter

Aluminum, Total
 Barium, Total
 Boron, Total
 Cobalt, Total
 Iron, Total
 Magnesium, Total
 Manganese, Total
 Strontium, Total
 Tin, Total
 Titanium, Total
 Vanadium, Total
 Zirconium, Total

Hazardous Substances

Parameter

CAS RN¹

Acetone; (2-Propanone)	67-64-1
Acetonitrile; (Methyl cyanide)	75-05-8
Acetophenone	98-86-2
2-Acetylaminofluorene; (2-AFF)	53-96-3
Acrylamide	79-06-1
Allyl chloride	107-05-1
4-Aminobiphenyl	92-67-1
Atrazine	1912-24-9
Benzaldehyde	100-52-7
Benzyl alcohol	100-51-6
1,1 Biphenyl	92-52-4
Bromochloromethane; (Chlorobromomethane)	74-97-5
Caprolactam	105-60-2
Carbazole	86-74-8
Carbon disulfide	75-15-0
p-Chloroaniline; (4-chlorobenzenamine)	106-47-8
Chlorobenzilate	510-15-6
Chloroprene; (2-chloro-1,3-butadiene)	126-99-8
m-Cresol; (3-methylphenol)	108-39-4
o-Cresol; (2-methylphenol)	95-48-7
p-Cresol; (4-methylphenol)	106-44-5
2,4-D; (2, 4-Dichlorophenoxyacetic acid)	94-75-7
Diallate	2303-16-4

Dibenzofuran	132-64-9
1,2-Dibromo-3-chloropropane; (DBCP)	96-12-8
1,2-Dibromoethane; (Ethylene dibromide); (EDB)	106-93-4
trans-1,4-Dichloro-2-butene	110-57-6
Dichlorodifluoromethane; (CFC 12)	75-71-8
cis-1,2-Dichloroethylene; (cis-1,2-Dichloroethene)	156-59-2
2,6-Dichlorophenol	87-65-0
1,3-Dichloropropane; (Trimethylene dichloride)	142-28-9
2,2-Dichloropropane; (Isopropylidene chloride)	594-20-7
1,1- Dichloropropene	563-58-6
cis-1,3-Dichloropropene	10061-01-5
0,0-Diethyl 0-2-pyrazinyl phosphorothioate; (Thionazin)	297-97-2
Dimethoate	60-51-5
p-(Dimethylamino)azobenzene	60-11-7
7,12-Dimethylbenz[a]anthracene	57-97-6
3,3-Dimethylbenzidine	119-93-7
m-Dinitrobenzene; (1,3-dinitrobenzene)	99-65-0
Dinoseb; (DNBP)	88-85-7
Diphenylamine; (N-phenylbenzenamine)	122-39-4
Disulfoton	298-04-4
Ethylbenzene	100-41-4
Ethyl methacrylate	97-63-2
Ethyl methanesulfonate	62-50-0
Famphur	52-85-7
Hexachloropropene	1888-71-7
2-Hexanone; (Methyl butyl ketone)	591-78-6
Isobutyl alcohol	78-83-1
Isodrin	465-73-6
Isosafrole	120-58-1
Kepone	143-50-0
Methacrylonitrile	126-98-7
Methapyrilene	91-80-5
Methoxychlor	72-43-5
Methyl acetate	79-20-9
3-Methylcholanthrene	56-49-5
Methylcyclohexane	108-87-2
Methylene bromide; (Dibromomethane)	74-95-3
Methyl ethyl ketone; (MEK); (2-Butanone)	78-93-3
Methyl iodide; (Iodomethane)	74-88-4
Methyl methacrylate	80-62-6
Methyl methanesulfonate	66-27-3
2-Methylnaphthalene	91-57-6
Methyl parathion; (Parathion methyl)	298-00-0
4-Methyl-2-pentanone; (Methyl isobutyl ketone)	108-10-1
Methyl-tert-butyl ether (MTBE)	1634-04-4

1,4-Naphthoquinone; (1,4-Naphthalenedione)	130-15-4
1-Naphthylamine; (1-Naphthalenamine)	134-31-7
2-Naphthylamine; (2-Naphthalenamine)	91-59-8
o-Nitroaniline; (2-Nitroaniline); (2-nitrobenzenamine)	88-74-4
m-Nitroaniline; (3-Nitroaniline); (3-nitrobenzenemine)	99-09-2
p-Nitroaniline; (4-Nitroaniline); (4-nitrobenzenamine)	100-01-6
N-Nitrosodi-n-butylamine	924-16-3
N-Nitrosodiethylamine	55-18-5
N-Nitrosomethylethalamine	10595-95-6
N-Nitrosopiperidine	100-75-4
N-Nitrosopyrrolidine	930-55-2
5-Nitro-o-toluidine	99-55-8
Parathion	56-38-2
Pentachlorobenzene	606-93-5
Pentachloronitrobenzene	82-68-8
Phenacetin	62-44-2
p-Phenylenediamine; (1,4-Benzenediamine)	106-50-3
Phorate	298-02-2
Pronamide	23950-58-5
Propionitrile; (Ethyl cyanide); (Propanenitrile)	107-12-0
Safrole	94-59-7
Silvex; (2,4,5-TP); [2-(2,4,5-Trichlorophenoxy)propanoic acid]	93-72-1
Styrene	100-42-5
Sulfide	18496-25-8
2,4,5-T; (2,4,5-Trichlorophenoxyacetic acid)	93-76-5
Tertiary butyl alcohol (TBA)	75-65-0
1,2,4,5-Tetrachlorobenzene	95-94-3
1,1,1,2-Tetrachloroethane	630-20-6
2,3,4,6-Tetrachlorophenol	58-90-2
o-Toluidine	95-53-4
Trichlorofluoromethane; (CFC- 11)	75-69-4
2,4,5-Trichlorophenol	95-95-4
1,2,3-Trichloropropane	96-18-4
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1
0,0,0-Triethyl phosphorothioate	126-68-1
sym-Trinitrobenzene; (1,3,5-trinitrobenzene)	99-35-4
Vinyl acetate	108-05-4
Xylene (total)²	

Notes:

¹ Chemical Abstracts Service registry number

² Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7).

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

General Remediation Clean-up (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. Further information regarding analytical testing methods can be found at <http://water.epa.gov/scitech/methods/cwa/index.cfm>. If you have further questions or comments regarding analytical methods, please contact NJDEP, Office of Quality Assurance at (609) 292-3950.
- c. The permittee shall utilize analytical methods that will ensure compliance with the Quantification Levels (QLs) listed in PART III. If the permittee and/or contract laboratory determines that the QLs achieved for any pollutant(s) generally will not be as sensitive as the QLs specified in PART III, the permittee must submit a justification of such to the Bureau of Surface Water Permitting. For limited parameters with no QL specified, the sample analysis shall use a detection level at least as sensitive as the effluent limit.
- d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.
- e. All monitoring shall be conducted as specified in Part III.
- f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.
- g. If annual and semi-annual wastewater testing is specified, it shall be conducted in a different quarter of each year so that tests are conducted in each of the four permit quarters of the permit cycle. Testing may be conducted during any month of the permit quarters.
- h. The permittee shall perform all residual analyses in accordance with the analytical test procedures specified in 40 CFR 503.8 and the Sludge Quality Assurance Regulations (N.J.A.C. 7:14C) unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- i. Flow shall be measured using a meter unless specified otherwise in the individual authorization. If the flow monitoring method will be something other than a flow meter, the applicant shall indicate so in its BGR permit application so that Part III can be adjusted accordingly.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

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

C. REPORTING

1. Standard Reporting Requirements

- a. The permittee shall submit all required monitoring results to the Department on the forms provided to them. The Monitoring Report Forms (MRFs) may be provided to the permittee in either a paper format or in an electronic file format. Unless otherwise noted, all requirements below pertain to both paper and electronic formats.
- b. Any MRFs in paper format shall be submitted to the following addresses:
 - i. NJDEP
Division of Water Quality
Bureau of Permit Management
Mailcode 401-02B
P.O. Box 420
Trenton, New Jersey 08625-0420
 - ii. (if requested by the Water Compliance and Enforcement Bureau)
NJDEP: Northern Bureau of Water Compliance and Enforcement
7 Ridgedale Avenue
Cedar Knolls, New Jersey 07927
(Counties of Bergen, Essex, Hudson, Hunterdon, Morris, Passaic, Somerset, Sussex and Warren)
 - iii. (if requested by the Water Compliance and Enforcement Bureau)
NJDEP: Central Bureau of Water Compliance and Enforcement
Mail Code: 44-03
401 East State Street
P.O. Box 420
Trenton, NJ 08625-0420
(Counties of Mercer, Middlesex, Monmouth, Ocean and Union)
 - iv. (if requested by the Water Compliance and Enforcement Bureau)
NJDEP: Southern Bureau of Water Compliance and Enforcement
2 Riverside Drive, Suite 201
Camden, New Jersey 08103
(Counties of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem)

- c. Any electronic data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee. Paper copies must be available for on-site inspection by DEP personnel or provided to the DEP upon written request.
- d. All monitoring report forms shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.
- e. The highest ranking official may delegate responsibility to certify the monitoring report forms in his or her absence. Authorizations for other individuals to sign shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- f. Monitoring results shall be submitted in accordance with the current Discharge Monitoring Report 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. For intermittent discharges, the permittee shall obtain a sample during at least one of the discharge events occurring during a monitoring period.
- i. If there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results. This is accomplished by placing a check mark in the "No Discharge this monitoring period" box on the paper or electronic version of the monitoring report submittal form.

D. SUBMITTALS

1. Standard Submittal Requirements

- a. The permittee shall prepare/update the Operation and Maintenance (O&M) Manual including an emergency plan in accordance with requirements of N.J.A.C. 7:14A-6.12(c).
- b. The permittee shall amend the Operation & Maintenance Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.

E. FACILITY MANAGEMENT

1. Discharge Requirements

- a. The permittee shall discharge at the location(s) specified in PART III of this permit.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that: 1) Forms objectionable deposits on the receiving water, 2) Forms floating masses producing a nuisance, or 3) Interferes with a designated use of the waterbody.
- c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.
- e. When quantification levels (QL) and effluent limits are both specified for a given parameter in Part III, and the QL is less stringent than the effluent limit, effluent compliance will be determined by comparing the reported value against the QL.

2. Operation, Maintenance and Emergency conditions

- a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation & Maintenance Manual.
- b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with NJAC 7:14A-6.12(d).

3. Acute Toxicity Testing Requirements (applicable only if a acute toxicity limit is specified in Part III)

- a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- b. Acute toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- c. Any test that does not meet the specifications of N.J.A.C. 7:18, laboratory certification regulations, must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- d. The permittee shall submit an Acute Methodology Questionnaire within 60 days of commencement of discharge or of any change in laboratory.
- e. Submit an acute whole effluent toxicity test report along with your Discharge Monitoring Reports within twenty-five days after the end of every month during which an acute whole effluent toxicity test was performed. These toxicity tests shall be performed according to the frequency specified in the individual General Permit Authorization. The permittee shall submit toxicity test results on the appropriate forms.
- f. New Jersey Department of Environmental Protection
 Division of Water Quality
 Bureau of Surface Water Permitting
 Mail Code: 401-02B
 P.O. Box 420
 Trenton, New Jersey 08625-0420

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

- a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- b. Chronic toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- c. Any test that does not meet the specifications contained in the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Program" document must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- d. IC25 - Inhibition Concentration - Concentration of effluent which has an inhibitory effect on 25% of the test organisms for the monitored effect, as compared to the control (expressed as percent effluent).

- e. Test results shall be expressed as the IC25 for each test endpoint. Where a chronic toxicity testing endpoint yields IC25's from more than one test endpoint, the most sensitive endpoint will be used to evaluate effluent toxicity.
- f. The permittee shall submit a Chronic Methodology Questionnaire within 60 days of commencement of discharge or of any change in laboratory.
- g. Submit a chronic whole effluent toxicity test report along with your Discharge Monitoring Reports within twenty-five days after the end of every month during which a chronic whole effluent toxicity test was performed. These toxicity tests shall be performed according to the frequency specified in the individual General Permit Authorization. The permittee shall submit toxicity test results on appropriate forms.
- h. New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water Permitting
Mail Code: 401-02B
P.O. Box 420
Trenton, New Jersey 08625-0420

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 this Permit.
 - i. If the exceedence of the toxicity limit/ action level is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.
- b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limit/action level in Part III. The monitoring frequency for toxicity testing shall be increased to semi-monthly (i.e. every two months). Up to 12 additional tests may be required.
 - i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the toxicity limit/action level.
 - ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit/action level in Part III, the permittee shall repeat Toxicity Reduction Implementation Requirements.
- c. The permittee shall initiate a preliminary toxicity identification (PTI) upon the fourth exceedence of the toxicity limit/action level specified in Part III during toxicity characterization.
 - i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.

- ii. As appropriate, the PTI shall include:
 - (1) treatment plant performance evaluation,
 - (2) evaluation of chemical use and processes at the facility, and
 - (3) an evaluation of incidental facility procedures and chemical spill disposal which may contribute to effluent toxicity.
- iii. The permittee shall submit a Preliminary Toxicity Identification Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a CTI.
- d. The permittee must demonstrate compliance with the WET limitation/action level in four consecutive WET tests to satisfy the requirements of the Toxicity Reduction Investigation Requirements. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.
- e. The permittee shall initiate a Comprehensive Toxicity Investigation (CTI) if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the toxicity limit/action level in Part III can not be made.
 - i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.
 - ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the toxicity limit/action level in Part III, a Comprehensive Toxicity Investigation Workplan must be prepared and submitted within 90 days.
 - iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.
 - iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.
- f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.
 - i. The permittee shall satisfy the requirements of the Toxicity Reduction Implementation Requirements and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the toxicity limit/action level in Part III in four consecutive toxicity tests.
 - ii. If the implemented corrective measures do not result in consistent compliance with the toxicity limit/action level in Part III, the permittee shall submit a plan for resuming the CTI.

F. CONDITIONS FOR MODIFICATION

1. Notification requirements

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

2. Causes for modification

- a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.
- b. The permittee may request a minor modification for a reduction in monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using the specified QL.
- c. For new dischargers 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.
- 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 WET monitoring to either semi-annual or annual. The criteria for such reduction is consistent compliance with the WET limit for a minimum of 4 data points with a result of >100. The Department may also consider site-specific characteristics such as discharge volume, location and wastewater constituents.
- e. 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 toxics and conventionals 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.

G. OPERATIONAL ISSUES

1. Operational Requirements

- a. The treatment works shall operate at the optimal average design flow rate for maximum groundwater clean-up.
- b. Filter backwash water must be returned through the treatment system prior to discharge.
- c. The permittee shall not attain any effluent limitations by dilution pursuant to N.J.A.C. 7:14A-6.2. Specifically, the permittee shall not pump from a recovery well and divert such waters to the treatment system for the purposes of diluting groundwater from other contaminated recovery wells.
- d. Samples taken in compliance with the specified monitoring requirements shall be taken at the discharge outfall(s) specified in Part III of this permit authorization at the nearest accessible point after final treatment but prior to actual discharge.

2. Use of Chemical Addition Agents

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

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

3. Third Party Storm Sewers

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

4. Permanent Cessation of Discharge to Surface Waters

- a. If the permittee permanently discontinues its discharge to surface waters the appropriate Regional Bureau of Water and Compliance Enforcement shall be notified:
 - i. NORTHERN BUREAU (Counties of Bergen, Essex, Hudson, Hunterdon, Morris, Passaic, Somerset, Sussex and Warren) - (973) 656-4099.
 - ii. CENTRAL BUREAU (Counties of Mercer, Middlesex, Monmouth, Ocean and Union) - (609) 292-3010.
 - iii. SOUTHERN BUREAU (Counties of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem) - (856) 614-3655.

5. 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 BGR permit. The permittee can obtain the necessary revocation forms by accessing www.state.nj.us/dep/dwq or by contacting the Department's Office of Permit Management at (609) 984-4428. The permittee can also contact the appropriate Regional Enforcement Office for further guidance on closure proceedings.
- b. Upon receipt of an administratively complete revocation request, the Department will verify with the appropriate Regional Enforcement Office that the discharge has ceased and that the treatment works has undergone closure, in conformance with N.J.A.C. 7:14A-23.34. The Department will then revoke such individual authorization by preparing a copy of the individual authorization page showing the revocation date of the individual authorization and sending such to the permittee.
- c. For short term discharges, the individual authorization will expire consistent with the permit expiration date without the permit revocation procedure described in b. above.

6. Correspondence for the BGR Surface Water Permit:

- a. Via Email: Brian.Salvo@dep.nj.gov or Kelly.Perez@dep.nj.gov
Or Via Mail at: NJ Department of Environmental Protection
Bureau of Surface Water Permitting
Mail Code 401-02B
PO Box 420
Trenton, NJ 08625-0420
Or via phone at: (609) 292-4860

NJPDES MASTER GENERAL PERMIT PROGRAM INTEREST, Trenton

Permit No.NJ0155438
DSW150001 Surface Water Master General Permit Renewal

APPENDIX A:

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

Version 2.1

May 1997

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

I. AUTHORITY AND PURPOSE

These methods specifications for the conduct of whole effluent chronic toxicity testing are established under the authority of the NJPDES permitting program, N.J.A.C. 7:14A-6.5(a)2 and 40 CFR 136, for discharges to waters of the State. The methods referenced herein are included by reference in 40 CFR 136, Table 1.A. and, therefore, constitute approved methods for chronic toxicity testing. The information contained herein serves to clarify testing requirements not sufficiently clarified in those methods documents and also serves to outline and implement the interlaboratory Standard Reference Toxicant Program until a formal laboratory certification program is established 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 test organism specific method specifications 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 be within the existing acute toxicity testing laboratory certification program established under N.J.A.C. 7:18, as required by N.J.A.C. 7:9B-1.5(c)5.

Testing shall be in conformance with the subchapter on chronic toxicity testing within the N.J.A.C. 7:18 when such regulations become effective. The laboratory performing the toxicity testing shall be within the chronic toxicity testing laboratory certification program to be established under that subchapter, when it becomes effective.

These methods are incorporated into discharge permits as enforceable permit conditions. Each discharge permit will specify in Part 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 second version of the NJDEP's interim chronic methodologies. This version contains no significant changes to the test methods themselves. However, in keeping with the Department's continued emphasis on good laboratory practices and quality control, the areas addressing the Standard Reference Toxicant Program, data analysis and data reporting, have been significantly revised.

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. If hypothesis testing will be used to determine the test endpoint, one effluent concentration shall be the chronic permit limitation, unless the existing data for the discharge indicate that the NOEC is expected to be significantly less than the permit limit. The use of the 0.5 dilution factor may require more than five dilutions to cover the entire range of effluent concentrations as well as the chronic permit limit, since the permit limit will often not be one of the nominal concentrations in a 0.5 dilution series. In such an instance, the 0.5 dilution series may be altered by including an additional test concentration equal to the permit limit in the dilution series, or by changing the concentration closest to the permit toxicity limit to be equal to that limit. The Department recommends the use of the 0.75 dilution factor using Table 1.0 to determine test concentrations. That table establishes test concentrations based on the chronic toxicity limitation.

For either the 0.5 or 0.75 dilution factor, there shall be at least one test concentration above the permit limitation and at least three test concentrations below the permit limit along with the dilution water control unless the permit limitation prohibits such (e.g., limitations greater than 75% effluent). An effort shall be made to bracket the anticipated test result.

To use Table 1.0, locate the permit limit in column 4. The dilution series becomes the row that corresponds to the permit limit in column 4. For example, a permit limit of 41 would require a dilution series of the dilution water control, 17%, 23%, 31%, 41% and 55% effluent.

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.

Table 1.0: 0.75 DILUTION SERIES INDEXED BY PERMIT LIMIT

			Permit Limit					Permit Limit			
Col #	1	2	3	4	5	Col #	1	2	3	4	5
	0.4	0.6	0.8	1	1.3		22	29	38	51	68
	0.8	1.1	1.5	2	2.7		22	29	39	52	69
	1.3	1.7	2.3	3	4		22	30	40	53	71
	1.7	2.3	3	4	5.3		23	30	41	54	72
	2.1	2.8	3.8	5	6.7		23	31	41	55	73
	2.5	3.4	4.5	6	8		24	32	42	56	75
	3	4	5	7	9		24	32	43	57	76
	3	5	6	8	11		24	33	44	58	77
	4	5	7	9	12		25	33	44	59	79
	4	6	8	10	13		25	34	45	60	80
	5	6	8	11	15		26	34	46	61	81
	5	7	9	12	16		26	35	47	62	83
	5	7	10	13	17		27	35	47	63	84
	6	8	11	14	19		27	36	48	64	85
	6	8	11	15	20		27	37	49	65	87
	7	9	12	16	21		28	37	50	66	88
	7	10	13	17	23		28	38	50	67	89
	8	10	14	18	24		29	38	51	68	91
	8	11	14	19	25		29	39	52	69	92
	8	11	15	20	27		30	39	53	70	93
	9	12	16	21	28		30	40	53	71	95
	9	12	17	22	29		30	41	54	72	96
	10	13	17	23	31		31	41	55	73	97
	10	14	18	24	32		31	42	56	74	99
	11	14	19	25	33		32	42	56	75	100
	11	15	20	26	35	24	32	43	57	76	
	11	15	20	27	36	24	32	43	58	77	
	12	16	21	28	37	25	33	44	59	78	
	12	16	22	29	39	25	33	44	59	79	
	13	17	23	30	40	25	34	45	60	80	
	13	17	23	31	41	26	34	46	61	81	
	14	18	24	32	43	26	35	46	62	82	
	14	19	25	33	44	26	35	47	62	83	
	14	19	26	34	45	27	35	47	63	84	
	15	20	26	35	47	27	36	48	64	85	
	15	20	27	36	48	27	36	48	65	86	
	16	21	28	37	49	28	37	49	65	87	
	16	21	29	38	51	28	37	50	66	88	
	16	22	29	39	52	28	38	50	67	89	
	17	23	30	40	53	28	38	51	68	90	
	17	23	31	41	55	29	38	51	68	91	
	18	24	32	42	56	29	39	52	69	92	
	18	24	32	43	57	29	39	52	70	93	
	19	25	33	44	59	30	40	53	71	94	
	19	25	34	45	60	30	40	53	71	95	
	19	26	35	46	61	30	41	54	72	96	
	20	26	35	47	63	31	41	55	73	97	
	20	27	36	48	64	31	41	55	74	98	
	21	28	37	49	65	31	42	56	74	99	
	21	28	38	50	67	32	42	56	75	100	

* Select the dilution series by finding the row which contains the permit limit in column #4.
NOTE: All values are in units of "% effluent" not toxic units.

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 a dilution water for a permittee may not be changed without the prior approval of the Department.

The standard test salinity shall be 25 ppt, except for *Champia parvula*, which shall be tested at 30 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 strongly 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 a 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. 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 industrial dischargers with a combined process/sanitary waste stream, effluent sampling shall be after chlorination, unless otherwise designated in the 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. At a minimum, three samples shall be collected as specified above, one every other day. The first sample shall be used for test initiation and the first renewal. The second sample for the next two renewals. The third sample shall be used for the final three renewals. For the *Champia* and *Selenastrum* tests, a single sample shall be collected not more than 24 hours prior to test initiation. No effluent sample shall be over 72 hours old at the time of its use to initiate or renew solutions in a test. 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 will be 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. 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:

- pH and dissolved oxygen shall be measured at the beginning and end of each 24 hour exposure period, in at least one chamber, of the high, medium and low test concentrations 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 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 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.
- 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

The use of both hypothesis testing techniques and point estimate techniques are currently in use by the Department or by permittees for compliance purposes. The NJPDES permit should be checked to determine which type of analysis is required and appropriate for each specific facility. It is not acceptable to simply evaluate any data by "visual data review" unless in the analysis of survival data, no mortality occurred in the test. All data sets must be appropriately statistically evaluated.

For hypothesis testing techniques, statistical analysis shall follow the protocols in USEPA (1988, 1989) to evaluate adverse effects. A significance level of 0.05 shall be utilized to evaluate such effects. Use of a protocol not contained in these documents must be accompanied by a reference and explanation addressing its

applicability to the particular data set. Please note the following when evaluating data using hypothesis testing techniques.

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.

Where hypothesis testing is used for compliance purposes, if the results of hypothesis testing indicate that a deviation from the dose response occurs such that two test concentrations are deemed statistically significant from the control but an intermediate test concentration is not, the test is deemed unacceptable and cannot be used for compliance testing purposes.

For point estimate techniques, statistical analysis should follow the protocol contained in "A Linear Interpolation Method for Sublethal Toxicity: The Inhibition Concentration (IC_p) Approach (Version 2.0), July 1993, National Effluent Toxicity Assessment Center Technical Report 03-93." Copies of the program can be obtained by contacting the Department. 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 "Discharge Monitoring Report (DMR) Instruction Manual, December 1993." IC₂₅ values shall be reported under the parameter code listed as "NOEC" on the DMR, until the DMR's are adjusted accordingly.

If the result reported by the IC_p method is greater than the highest concentration tested, the test result is reported as "greater than C" where "C" is the highest tested concentration. If the IC_p is lower than the lowest concentration tested, the test result is reported as "less than C" where "C" is the lowest tested concentration.

If separate NOEC's/IC₂₅'s can be calculated from multiple test endpoints, for example a reproductive endpoint and a growth endpoint, the lowest NOEC/IC₂₅ value expressed in units of "% effluent" will be used to determine permit compliance and should, therefore, be reported as the NOEC/IC₂₅ value for the test. If the NOEC value for growth and/or reproduction is not lower than that for survival, the NOEC/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 these acceptability criteria will not be used by the Department for any purpose and must be repeated as soon as practicable, with a freshly collected sample.

1. Tests must be performed by a laboratory approved for the conduct of chronic toxicity tests and certified for acute 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 or unrefrigerated samples or unapproved pretreatment of an effluent sample.
3. Controls shall meet 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.

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%	0.2 mg per mysid avg	egg production by 50% of control females if fecundity is used as an endpoint.
<i>Champia parvula</i>	100%	N/A	≥ 10 cystocarps per plant Plants in controls and lower test concentrations shall not fragment so that individual plants cannot be identified.

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 should 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 either address listed in the reporting requirements section herein. The initial series of a least five SRT tests for a specific test species method shall be completed and approved in writing by the Department 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 should be conducted once per month for each species/method.
2. Where the laboratory purchases organisms from a laboratory certified in New Jersey for the conduct of acute toxicity testing and approved for the conduct of chronic toxicity testing for the test organism in question (i.e. the "supplier laboratory"), SRT data provided by the "supplier laboratory" 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 laboratory" 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 quarterly 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. For industrial laboratories certified under N.J.A.C. 7:18 to conduct acute toxicity tests, only the SRT testing conditions specified in 2. through 4. above apply. Where that laboratory/facility cultures their own test organisms, the frequency of SRT testing required will be determined on a case by case basis, based on the frequency of testing for that facility.

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

C. CHANGING OF AN ESTABLISHED REFERENCE TOXICANT

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

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

D. CONTROL CHARTS

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

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

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

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

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

E. UNACCEPTABLE SRT TEST RESULTS

If a laboratory produces any SRT test results which are outside the established upper and lower control limits for a test species at a frequency greater than one test in any ten tests, a report shall be forwarded to the Department at the address contained herein. This report shall include any identified problem which caused the values to fall outside the expected range and the corresponding actions that have been taken by the laboratory. 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 ten test results which are outside the established upper and lower limits for a specific test species, the laboratory shall be unapproved to conduct chronic toxicity tests for compliance purposes for that test species. Reapproval shall 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

Control charts shall be forwarded to the Department on an annual basis, on the anniversary of approval for the test species.

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 or at the request of the permittee, 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 appropriate biomonitoring program at the address above 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 for all endpoints analyzed shall be included with the report submitted to the Department. Two copies of all chronic toxicity test report forms shall be submitted to the following address as applicable:

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Surface Water Permitting
Mail Code 401-02B
PO Box 420
Trenton, NJ 08625-0420

It is not necessary to attach a copy of a test report form to the Discharge Monitoring Report (DMR) form when submitting this form to the Department. However, the results of all chronic toxicity tests conducted for compliance purposes 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
- G. *Champia parvula*, Sexual Reproduction Test, method 1009.0

VIII. REFERENCES

1. Keating, K. 1985. The influence of Vitamin B12 deficiency on the reproduction of Daphnia pulex Leydig (Cladocera). *J. Crustacean Biology* 5:130-136.
2. Keating, K. 1988. N.J.D.E.P. Project C29589, Fiscal 1988 Third Quarter Summary Report. Producing Nutritionally Competent Daphnids for Use in Bioassay. 44p.
3. Keating, K., and B. Dagbusan. 1984. Effect of selenium deficiency on cuticle integrity in Cladocera (Crustacea). *Proc. Natl. Acad. Sci. USA* 81:3433-3437.
4. NJDEP, 1993. Discharge Monitoring Report (DMR) Instruction Manual.
5. USEPA. 1994. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA-600/4-91-003. July 1994. Second Edition.
6. USEPA. 1994. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. EPA/600/4-91/002. July 1994. Third 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: _____

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.