State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

Industrial Code:	**3471**	SPDES Number:	**NY0003808**
Discharge Class (CL):	**03**	DEC Number:	**7-0346-00032/00007**
Toxic Class (TX):	**T**	Effective Date (EDP):	**EDP**
Major Drainage Basin:	**06**	Expiration Date (ExDP):	**ExDP**
Sub Drainage Basin:	**03**	Modification Dates: (EDPM)	
Water Index Number:	**SR (Portion 4)**		
Compact Area:	**SRBC**		

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS					
Name:	**i3 Electronics, Inc.**	Attention:	**Paul Speranza**		
Street:	**1701 North Street**				
City:	**Endicott**	State:	**NY**	Zip Code:	**13760**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS													
Name:	**i3 Electronics Huron Campus Industrial Waste Treatment Plant**												
Location (C,T,V):	**Union (T)**								County:	**Broome**			
Facility Address:	**1701 North Street**												
City:	**Endicott**					State:	**NY**		Zip Code:	**13760**			
From Outfall No.:	**001**	at Latitude:	**42**	°	**05**	’	**38**	”	& Longitude:	**76**	°	**03**	’	**13**	”
into receiving waters known as:	**Susquehanna River**								Class:	**A**			

and (list other Outfalls, Receiving Waters & Water Classification)
Outfall 017, Susquehanna River, Class A

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS					
Mailing Name:	**i3 Electronics, Inc. Director of Environmental Services**				
Street:	**1701 North Street**				
City:	**Endicott**	State:	**NY**	Zip Code:	**13760**
Responsible Official or Agent:	**Paul Speranza**		Phone:	**(607) 755-6179**	

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator
RWE
RPA
USEPA Region 2
SRBC
NYSDOH District Office

Permit Administrator:	
Address: 625 Broadway Albany, NY 12233-1750	
Signature:	Date: / /

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.	See below	See below

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COMPLIANCE LEVEL / ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This Minimum Level (ML) can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Notes:

1. EFFLUENT LIMIT TYPES:
   a. DAILY DISCHARGE: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
   b. DAILY MAX: The highest allowable daily discharge. DAILY MIN: The lowest allowable daily discharge.
   c. MONTHLY AVG: The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
   d. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week.
   e. 30 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
   f. 7 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar week.
   g. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

2. ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Printed Circuit Board Manufacturing and Assembly, Leachate, Groundwater Remediation, Airport de-icing fluids, Noncontact Cooling Water, and Wastewater from Dr. Reddy's Laboratories	Susquehanna River	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Weekly	Grab	
Temperature	----	90	°F	Weekly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow Rate	Monitor	Monitor	----	----	MGD	Continuous	Recorded	6
Total Cyanide	0.45	0.76	----	----	lbs/day	Weekly	Grab	4
Oil & Grease	----	15	----	----	mg/L	Weekly	Grab	
Total Suspended Solids	41	145	----	----	lbs/day	Weekly	24-hr. Comp.	3
BOD_5	36	109	----	----	lbs/day	Weekly	24-hr. Comp.	3
Cadmium, Total	0.76	2.0	----	----	lbs/day	Weekly	24-hr. Comp.	3
Chromium, Total	4.0	8.0	----	----	lbs/day	Weekly	24-hr. Comp.	4
Hexavalent Chromium	1.0	1.9	----	----	lbs/day	Weekly	24-hr. Comp.	4
Copper, Total	3.5	7.3	----	----	lbs/day	Weekly	24-hr. Comp.	3
Nickel, Total	6.9	12	----	----	lbs/day	Weekly	24-hr. Comp.	3
Iron, Total	4.4	6.64	----	----	lbs/day	Weekly	24-hr. Comp.	3
Lead, Total	1.3	2.0	----	----	lbs/day	Weekly	24-hr. Comp.	3
Silver, Total	0.70	1.3	----	----	lbs/day	Weekly	24-hr. Comp.	3
Zinc, Total	4.6	8.0	----	----	lbs/day	Weekly	24-hr. Comp.	3
Fluoride, Total	234	468	----	----	lbs/day	Weekly	24-hr. Comp.	3
Ammonia, Total (as N)	----	Monitor	----	----	mg/L	Monthly	24-hr. Comp.	
Dissolved Solids, Total	----	Monitor	----	----	mg/L	Monthly	24-hr. Comp.	
Arsenic, Total	50	100	----	----	µg/L	Monthly	24-hr. Comp.	
1,2-Dichloroethane	----	0.44	----	----	lbs/day	Monthly	Grab	4
1,1-Dichloroethene	----	10	----	----	µg/L	Monthly	Grab	
1,1-Dichloroethene	0.044	----	----	----	lbs/day	Monthly	Grab	
Methylene Chloride	----	0.073	----	----	lbs/day	Monthly	Grab	4

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Trichloroethene	----	10	----	----	µg/L	Monthly	Grab	
Trichloroethene	----	0.17	----	----	lbs/day	Monthly	Grab	
1,1,1-Trichloroethane	----	0.073	----	----	lbs/day	Monthly	Grab	4
Tetrachloroethene	----	10	----	----	µg/L	Monthly	Grab	
Tetrachloroethene	----	0.17	----	----	lbs/day	Monthly	Grab	
Toluene	----	0.055	----	----	lbs/day	Monthly	Grab	4
Trichlorotrifluoroethane (Freon 113)	----	10	----	----	µg/L	Monthly	Grab	
Trichlorotrifluoroethane (Freon 113)	----	0.80	----	----	lbs/day	Monthly	Grab	
Xylenes, Total	----	0.080	----	----	lbs/day	Monthly	Grab	4
Total Toxic Organics (TTO)	----	Monitor	----	----	mg/L	Monthly	Grab	2
Total Toxic Organics (TTO)	----	6.2	----	----	lbs/day	Monthly	Grab	2
cis-1,2-Dichloroethene	----	10	----	----	µg/L	Monthly	Grab	
cis-1,2-Dichloroethene	----	Monitor	----	----	lbs/day	Monthly	Grab	
Vinyl Chloride	----	10	----	----	µg/L	Monthly	Grab	
Vinyl Chloride	----	Monitor	----	----	lbs/day	Monthly	Grab	
4-Methylphenol	0.14	0.49	----	----	lbs/day	Monthly	Grab	4
Phenol	0.70	2.4	----	----	lbs/day	Monthly	Grab	4
Acetone	5.3	20	----	----	lbs/day	Monthly	Grab	3
Acetophenone	0.038	0.080	----	----	lbs/day	Monthly	Grab	4
2-Butanone (MEK)	1.2	3.2	----	----	lbs/day	Monthly	Grab	4
2-Methylphenol	0.38	1.3	----	----	lbs/day	Monthly	Grab	4
Pyridine	0.12	0.25	----	----	lbs/day	Monthly	Grab	4
2,4,6-Trichlorophenol	0.070	0.10	----	----	lbs/day	Monthly	Grab	4
Mercury, Total	----	50	----	----	ng/L	Quarterly	Grab	5
Whole Effluent Toxicity (WET) Testing								
WET - Acute Invertebrate	----	----	----	15	TUa	Quarterly	See footnote	1
WET - Acute Vertebrate	----	----	----	15	TUa	Quarterly	See footnote	1
WET - Chronic Invertebrate	----	----	----	100	TUc	Quarterly	See footnote	1
WET - Chronic Vertebrate	----	----	----	100	TUc	Quarterly	See footnote	1

FOOTNOTES: See page **6** of this Permit.

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
017	Reverse Osmosis Reject (Currently Sent to Outfall 001)	Susquehanna River	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Monthly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow Rate	Monitor	Monitor	----	----	GPD	Continuous	Recorded	
Chromium, Total	----	1.6	----	----	mg/l	Monthly	Grab	
Copper, Total	----	0.15	----	----	mg/l	Monthly	Grab	
Iron, Total	----	0.2	----	----	mg/l	Monthly	Grab	
Nickel, Total	----	3.2	----	----	mg/l	Monthly	Grab	

FOOTNOTES:

1. **Whole Effluent Toxicity (WET) Testing:**
   Testing Requirements - WET testing shall consist of **Acute and if necessary Chronic. The Department will notify the permittee if Chronic testing becomes necessary.** WET testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be *Ceriodaphnia dubia* (water flea - invertebrate) and *Pimephales promelas* (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24 hr composite samples with one renewal for Acute tests and three 24 hr composite samples with two renewals for Chronic tests). The appropriate dilution series bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 50:1 for acute, and 100:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

   Monitoring Period - WET testing shall be performed at the specified sample frequency for the duration of the permit during calendar years ending in **2** and **7**.

   Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48 hr LC50) or (100)/(48 hr EC50) (note that Acute data is generated by both Acute and Chronic testing) and TUc = (100)/(NOEC) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48 hr LC50 or 48 hr EC50 and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TUc. Report a TUa of 0.3 if there is no statistically significant toxicity in 100% effluent as compared to control.

   The complete test report including all corresponding results, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period to the Toxicity Testing Unit, Bureau of Watershed Assessment and Management, 625 Broadway, Fourth Floor, Albany, NY 12233-3502. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48 hr LC50 or 48 hr EC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

   WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

2. Permittee shall sample for pollutants listed under 40 CFR 433.11(e) which are reasonably expected to be present in the effluent, and submit data of all detected parameters as an attachment to the DMR. Sampling exclusion allowance for polychlorinated biphenyls (PCBs), 2,3,7,8-tetrachlorodibenzo-*p*-dioxin and pesticides will be contingent on an annual certification from all landfill leachate sources. The certification shall include leachate sampling of the parameters in question and a statement indicating that no wastes associated with those parameters have been accepted. This certification shall be submitted before allowance is granted, and then annually thereafter to the addresses listed on **page 23** of this permit. Compliance with the TTO limit is determined by the summation of all quantifiable values greater than 0.01 mg/L for the pollutants analyzed under 40 CFR 433.11(e).

3. The permittee shall report on the Discharge Monitoring Reports the monthly average and/or daily max concentration(s) in mg/L for the same effluent limit type(s) that the parameter is limited by.

4. The permittee shall report on the Discharge Monitoring Reports the monthly average and/or daily max concentration(s) in µg/L for the same effluent limit type(s) that the parameter is limited by.

5. Sampling for mercury, and the 50 ng/l limit, are enforceable upon issuance of the permit.

6. The permittee shall not treat more than an equivalent amount of 80,000 gallons/day of raw leachate. When calculating the total daily volume, one gallon of Seneca Meadows leachate concentrate is to be considered equal to 4 gallons of raw leachate.

Additional Requirements

1. The permittee shall, within 30 days of resuming operation of Outfall 017, submit to the NYSDEC offices in Syracuse and Albany at the addresses listed on page 24 of this permit, a letter summarizing the reuse of Outfall 017.

2. The permittee shall, as an attachment to the monthly DMR, provide the monthly Greater Binghamton Regional Airport deicing wastewater sampling results.

3. The following tank integrity inspections shall be completed:

   Leachate Storage Tanks: Leachate storage tanks will be inspected in accordance with 6 NYCRR 360-6.3(d) as follows:

   The exposed exterior of all aboveground and on-ground tanks must be inspected weekly by the facility operator for adequacy of the cathodic protection system, leaks, corrosion, and maintenance deficiencies. Interior inspection of the tanks must be performed whenever the tank is drained. If the inspection reveals a tank or equipment deficiency, leak or any other deficiency which could result in failure of the tank to contain the liquid, the NYSDEC Spills hotline (1-800-457-7362) shall be informed within 24 hours, and remedial measures must be taken immediately to eliminate the leak or correct the deficiency. Inspection reports must be maintained and made available to the Department upon request for the lifetime of the liquid storage system; and

   Within one year of the issuance date of this permit and every 5 years thereafter, the leachate storage tanks shall be drained and inspected by a NY State licensed professional engineer as part of an integrity evaluation. If the inspection reveals a tank or equipment deficiency, leak or any other deficiency which could result in failure of the tank to contain the liquid, remedial measures must be taken immediately to eliminate the leak or correct the deficiency. Inspection reports must be maintained and made available to the department upon request for the lifetime of the liquid storage system.

   Wastewater Storage Tanks: The permittee shall prepare and submit a wastewater treatment tank inspection plan. The plan shall include, at a minimum:

   (a) a detailed description of each tank holding or storing liquid, including age of tank, its function, the material type of the tank's construction, and whether there is secondary containment for the tank;
   (b) the date of the last conducted internal inspection for each tank;
   (c) a recommended schedule for future inspections of each tanks with justification for the inspection type and frequency;
   (d) a report for each inspection, maintained on site and available for Department review.

   The plan will be submitted to the department within 1 year of permit issuance (EDP + 12 months). Once the plan is approved by the Department, it will become an enforceable part of this permit.

4. The Department may perform semiannual sampling of the permittee's discharge for all parameters listed on pages 3-5 of this permit. The permittee shall pay for the proper analysis of the samples taken by the Department at an independent laboratory.

PERMIT LIMITS, LEVELS AND MONITORING: Chesapeake Bay TMDL Implementation

OUTFALL No.: 001	CHESAPEAKE BAY NUTRIENT MONITORING - PHOSPHORUS					EFFECTIVE : EDP			EXPIRING: ExDP
PARAMETER	ENFORCEABLE EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS			FN
								Location	
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Total Phosphorus, as P	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp		X	
Phosphate (PO_4), as P	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp		X	
Total Phosphorus, as P, month load	Monthly Total	NA	NA	Monitor	lbs/month	1/month	Calculated		X	1
Total Phosphorus, as P, 12 month load	12 Month Total	NA	NA	1,325	lbs/year	1/month	Calculated		X	2
Total Phosphorus, as P, credit	12 Month total	NA	NA	Monitor	lbs/year	1/month	Calculated		X	3

FOOTNOTES FOR CHESAPEAKE BAY NITROGEN WQ BASED EFFLUENT LIMITS AND MONITORING

1. The **Total Phosphorus, as P, Month Load** is calculated as the Total Phosphorus, as P monthly average load multiplied by the number of days in the month.

2. The **Total Phosphorus, as P, 12 month load [TP 12-ML]** is calculated as the current **Total Phosphorus, as P month load** added to the **Total Phosphorus, as P month loads** from the previous eleven months for your facility. The permittee is not required to begin calculating the 12-month load until **EDPM + 12 months**, when 12 monthly loads are available.

3. The **Total Phosphorus, as P, credit [TP credit]** is calculated as [12 month load TP limit] - [actual TP 12-ML]. Should the result of this calculation be zero or less than zero, the permittee shall report "0" for this parameter.

PERMIT LIMITS, LEVELS AND MONITORING: Chesapeake Bay TMDL Implementation (continued)

Chesapeake Bay TMDL Implementation - Water Quality Based Effluent Limits and Monitoring:

OUTFALL No.: 001	CHESAPEAKE BAY NUTRIENT MONITORING - NITROGEN					EFFECTIVE: EDP			EXPIRING: EDP + 47 months	
PARAMETER	ENFORCEABLE EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Total Kjeldahl Nitrogen (TKN), as N	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp		X	1, 7
Nitrate (NO_3), as N	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp		X	1, 7
Nitrite (NO_2), as N	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp		X	1, 7
Total Nitrogen, as N	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	Calculated		X	1, 7
Total Nitrogen, as N, month load	Monthly Total	NA	NA	Monitor	lbs/month	1/month	Calculated		X	2
Total Nitrogen, as N, 12 month load	12 Month Total	NA	NA	Monitor	lbs/year	1/month	Calculated		X	3
Total Nitrogen, available from TP credit	12 Month Total	NA	NA	Monitor	lbs/year	1/month	Calculated		X	4
Total Nitrogen, as N, Adjusted	12 Month Total	NA	NA	95,000	lbs/year	1/month	Calculated		X	5
Total Nitrogen, as N, Delivered	12 Month Total	NA	NA	Monitor	lbs/year	1/month	Calculated		X	6

FOOTNOTES FOR CHESAPEAKE BAY NITROGEN WQ BASED EFFLUENT LIMITS AND MONITORING

1. **Total Nitrogen, as N** = [Total Kjeldahl Nitrogen (TKN), as N] + [Nitrite (NO_2), as N] + [Nitrate (NO_3), as N].

2. **Total Nitrogen, as N, Month Load** is calculated as the monthly average Total Nitrogen, as N load multiplied by number of days in the month.

3. **Total Nitrogen, as N**, **12 month load [TN 12-ML]** for your facility is defined as the current **Total Nitrogen, as N, month load** added to the **Total Nitrogen, as N, month loads** from the previous eleven months for your facility. The permittee is not required to begin calculating the 12-month load until **EDP + 12 months**, when 12 monthly loads are available.

4. **Total Nitrogen, available from TP credit [TNAP]** is calculated as [TP credit] * [N:P ratio] where the TP credit is as reported on the Phosphorus limits page and the **[N:P ratio]** for your facility is **3.97**. Should the result of this calculation be zero or less than zero, the permittee shall report "0" for this parameter.

5. **Total Nitrogen, as N, Adjusted [TNA 12-ML]** is calculated as [TN 12-ML] - [TNAP]. At **EDP + 12 months,** compliance with the TNA 12-ML limitation will be assessed.

6. **Total Nitrogen Delivered, as N, 12-ML [TND 12-ML]** is calculated as [TN 12-ML] * [Nitrogen Delivery Factor (DF_n)] where DF_n for i3 Electronics = 0.55.

7. **From EDP to EDP + 6 months,** the footnoted parameters shall also be sampled after the organic waste treatment clarification, but before the organic waste treatment sand filtration. Flow shall be calculated using engineering estimates of the influent. The weekly sampling results for the footnoted parameters and flow shall be submitted by attachment to the monthly DMR.

PERMIT LIMITS, LEVELS AND MONITORING: Chesapeake Bay TMDL Implementation (continued)

Chesapeake Bay TMDL Implementation - Water Quality Based Effluent Limits and Monitoring:

OUTFALL No.: 001	CHESAPEAKE BAY NUTRIENT MONITORING - NITROGEN					EFFECTIVE : EDP + 48 months			EXPIRING: ExDP	
PARAMETER	ENFORCEABLE EFFLUENT LIMITATIONS					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Total Kjeldahl Nitrogen (TKN), as N	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp		X	1
Nitrate (NO_3), as N	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp		X	1
Nitrite (NO_2), as N	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	24-hr comp		X	1
Total Nitrogen, as N	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	Calculated		X	1
Total Nitrogen, as N, month load	Monthly Total	NA	NA	Monitor	lbs/month	1/month	Calculated		X	2
Total Nitrogen, as N, 12 month load	12 Month Total	NA	NA	Monitor	lbs/year	1/month	Calculated		X	3
Total Nitrogen, available from TP credit	12 Month Total	NA	NA	Monitor	lbs/year	1/month	Calculated		X	4
Total Nitrogen, as N, Adjusted	12 Month Total	NA	NA	60,000	lbs/year	1/month	Calculated		X	5, 7
Total Nitrogen, as N, Delivered	12 Month Total	NA	NA	Monitor	lbs/year	1/month	Calculated		X	6

FOOTNOTES FOR CHESAPEAKE BAY NITROGEN WQ BASED EFFLUENT LIMITS AND MONITORING

1. **Total Nitrogen, as N** = [Total Kjeldahl Nitrogen (TKN), as N] + [Nitrite (NO_2), as N] + [Nitrate (NO_3), as N].

2. **Total Nitrogen, as N, Month Load** is calculated as the monthly average Total Nitrogen, as N load multiplied by number of days in the month.

3. **Total Nitrogen, as N**, **12 month load [TN 12-ML]** is calculated as the current **Total Nitrogen, as N, month load** added to the **Total Nitrogen, as N, month loads** from the previous eleven months.

4. **Total Nitrogen, available from TP credit [TNAP]** is calculated as [TP credit] * [N:P ratio] where the TP credit is as reported on the Phosphorus limits page and the **[N:P ratio]** for your facility is **3.97**. Should the result of this calculation be zero or less than zero, the permittee shall report "0" for this parameter.

5. **Total Nitrogen, as N, Adjusted [TNA 12-ML]** is calculated as [TN 12-ML] - [TNAP]. At **EDP + 48 months**, compliance with the TNA 12-ML limitation will be assessed.

6. **Total Nitrogen Delivered, as N, 12-ML [TND 12-ML]** is calculated as [TN 12-ML] * [Nitrogen Delivery Factor (DF_n)] where DF_n for i3 Electronics = 0.55.

7. A final effluent limit of 21,200 lbs/year will become effective on January 1, 2025.

SPECIAL CONDITIONS – INDUSTRY BEST MANAGEMENT PRACTICES

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

2. **Compliance Deadlines** - The permittee submitted the most recent BMP update on March 1, 2015 to the Regional Water Engineer. The BMP plan shall be implemented within 6 months of submission, unless a different time frame is approved by the Department. The BMP plan shall be reviewed annually and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions (with the exception of SWPPPs - see item (5.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan (or of any SWPPPs) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** – The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at http://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit.

4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

    1. BMP Pollution Prevention Team
    2. Reporting of BMP Incidents
    3. Risk Identification & Assessment
    4. Employee Training
    5. Inspections and Records
    6. Security
    7. Preventive Maintenance
    8. Good Housekeeping
    9. Materials/Waste Handling, Storage, & Compatibility
    10. Spill Prevention & Response
    11. Erosion & Sediment Control
    12. Management of Runoff
    13. Street Sweeping

    Note that for some facilities, especially those with few employees, some of the above BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

SPECIAL CONDITIONS – INDUSTRY BEST MANAGEMENT PRACTICES (continued)

5. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters** - As part of BMP #11, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity to groundwaters. The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual,* unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

6. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater and/or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.

7. **Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.

   A. Spill Cleanup - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants it may be discharged. Otherwise it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.

   B. Discharge Operation - Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

SPECIAL CONDITIONS – INDUSTRY BEST MANAGEMENT PRACTICES (continued)

C. Discharge Screening - Prior to each discharge from a secondary containment system the stormwater must be screened for contamination*. All stormwater must be inspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of the overall BMP Plan, e.g. the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compounds. If the screening indicates contamination, the permittee must collect and analyze a representative sample** of the stormwater. If the water contains no pollutants it may be discharged. Otherwise it must either be disposed of in an on site or off site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Engineer can be contacted to determine if it may be discharged without treatment.

D. Discharge Monitoring - Unless the discharge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit effluent and monitoring requirements, the permittee shall monitor the outlet as follows:

(i) *Bulk Storage Secondary Containment Systems:*

(a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge* following any cleaned up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present**.

(b) Every fourth discharge* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present**.

(ii) *Transfer Area Secondary Containment Systems:*

The first discharge* following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present**.

E. Discharge Reporting - Any results of monitoring required above, excluding screening data, must be submitted to the Department by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.

F. Prohibited Discharges - **In all cases, any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited.** The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills or leaks, tank bottoms, maintenance wastewaters, wash waters where detergents or other chemicals have been used, tank hydrotest and ballast waters, contained fire fighting runoff, fire training water contaminated by contact with pollutants or containing foam or fire retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.

* Discharge includes stormwater discharges and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessment.

** If the stored substance is gasoline or aviation fuel then sample for oil & grease, benzene, ethylbenzene, naphthalene, toluene and total xylenes (EPA method 602). If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (EPA method 610). If the substance(s) are listed in Tables 6-8 of SPDES application form NY-2C then sampling is required. If the substance(s) are listed in NY-2C Tables 9-10 sampling for appropriate indicator parameters may be required, e.g. BOD5 or toxicity testing. Contact the facility inspector for further guidance. In all cases flow and pH monitoring is required.

MERCURY MINIMIZATION PROGRAM – Industrial Facilities

1. **General** - The permittee shall develop, implement, maintain, and submit a Mercury Minimization Program (MMP) for those outfalls which have mercury effluent limits by EDP + 6 months. The submittal shall be sent to the Regional Water Engineer and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505. The MMP is required because the 50 ng/L permit limit exceeds the statewide water quality based effluent limit (WQBEL) of 0.70 nanograms/liter (ng/L) for Total Mercury. The goal of the MMP is to reduce mercury effluent levels in pursuit of the WQBEL. Note – the mercury-related requirements in this permit conform to the mercury Multiple Discharge Variance specified in NYSDEC policy *DOW 1.3.10*. In addition to the MMP, an annual status report as outlined in 2(C) below shall be submitted.

2. **MMP Elements** - The MMP shall be documented in narrative form and shall include any necessary drawings or maps. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP shall include an on-going program consisting of: periodic monitoring; an acceptable control strategy which will become enforceable under this permit; and, submission of periodic status reports.

A. Monitoring - The permittee shall conduct periodic monitoring designed to quantify and, over time, track the reduction of mercury. Wastewater treatment plant influents and effluents, and other outfalls shall be monitored in accordance with the minimum frequency specified on the mercury permit limits page. Additionally, key locations in the wastewater and/or stormwater collection systems, and known or potential mercury sources, including raw materials, shall be monitored at the above frequency during the first year of the MMP. Monitoring of key locations and known/potential sources may be reduced during subsequent years if downstream outfalls have maintained mercury levels less than 50 ng/l during the previous year. Additional monitoring must be completed as may be required elsewhere in this permit or upon Department request. Monitoring shall be coordinated so that the results can be effectively compared between internal locations and final outfalls.

All permit-related wastewater and stormwater mercury compliance point (outfall) monitoring shall be performed using EPA Method 1631. Use of EPA Method 1669 during sample collection is recommended. Unless otherwise specified, all samples should be grabs. Monitoring at influent and other locations tributary to compliance points may be performed using either EPA Methods 1631 or 245.7. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate.

B. Control Strategy - An acceptable control strategy is required for reducing mercury discharges via cost-effective measures, which may include, but is not limited to: source identification; replacement of mercury-containing equipment, materials, and products with mercury-free alternatives where environmentally preferable; more stringent control of tributary waste streams; remediation; and/or installation of new or improved treatment facilities. Required monitoring shall also be used, and supplemented as appropriate, to determine the most effective way to operate the wastewater treatment system(s) to ensure effective removal of mercury while maintaining compliance with other permit requirements.

C. Annual Status Report - An annual status report shall be submitted to the Regional Water Engineer and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, summarizing: (a) all MMP monitoring results for the previous year; (b) a list of known and potential mercury sources; (c) all action undertaken pursuant to the strategy during the previous year; (d) actions planned for the upcoming year; and, (e) progress toward the goal. The first annual status report is due one year after the permit is modified to include the MMP requirement and follow-up status reports are due annually thereafter. A file shall be maintained containing all MMP documentation which shall be available for review by NYSDEC representatives. Copies shall be provided upon request.

3. **MMP Modification** - The MMP shall be modified whenever: (a) changes at the facility or within the collection system increase the potential for mercury discharges; (b) actual discharges exceed 50 ng/L; (c) a letter from the Department identifies inadequacies in the MMP; or (d) pursuant to a permit modification.

DISCHARGE NOTIFICATION REQUIREMENTS

(a) Except as provided in (c) and (g) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed before initiation of any discharge.

(b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address :

NYSDEC Division of Water Regional Phone: ( ) - ### -####

(e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of five years

(f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

DISCHARGE NOTIFICATION REQUIREMENTS (continued)

(g) All requirements of the Discharge Notification Act, including public repository requirements, are waived for any outfall meeting any of the following circumstances, provided Department notification is made in accordance with (h) below:

(i) such sign would be inconsistent with any other state or federal statute;

(ii) the Discharge Notification Requirements contained herein would require that such sign could only be located in an area that is damaged by ice or flooding due to a one-year storm or storms of less severity;

(iii) instances in which the outfall to the receiving water is located on private or government property which is restricted to the public through fencing, patrolling, or other control mechanisms. Property which is posted only, without additional control mechanisms, does not qualify for this provision;

(iv) instances where the outfall pipe or channel discharges to another outfall pipe or channel, before discharge to a receiving water; or

(v) instances in which the discharge from the outfall is located in the receiving water, two-hundred or more feet from the shoreline of the receiving water.

(h) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the waiver criteria listed in (g) above, notification (form enclosed) must be made to the Department's Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, of such fact, and, provided there is no objection by the Department, a sign and DMR repository for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time, and take appropriate measures to assure that the ECL and associated regulations are complied with.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Parameter(s) Affected	Interim Effluent Limit(s)	Compliance Action	Due Date
001	Total Nitrogen	95,000 lb/year at EDP 60,000 lb/year at EDP + 48 months	The permittee shall submit a Nutrient Removal Study that will recommend a strategy for reducing Total Nitrogen. The report shall, at a minimum, evaluate new treatment technologies and adjustments of influent waste streams. The permittee shall conduct and submit an internal preliminary Nutrient Removal Study of the options available for the reduction of Total Nitrogen by **EDP + 9 months**. Progress reports of the Nutrient Removal Study shall be submitted every six (6) months following the submittal of the internal Nutrient Removal Study. The final Nutrient Removal Study shall be submitted by **EDP + 27 months** and final design and specifications shall be submitted by **EDP + 33 months**. The final design, specifications, and study shall be submitted electronically and in triplicate hardcopies, with one copy submitted to the Regional Water Engineer and two copies to the Bureau of Water Permits. The engineering study, plans, and specifications shall be prepared and bear the seal and signature of a professional engineer currently licensed and registered to practice in New York State. The report shall include a proposed implementation schedule for the reduction of Total Nitrogen, with the goal of meeting 60,000 lbs/yr Total Nitrogen by **EDP + 48 months**, and 21,200 lbs/yr Total Nitrogen by January 1, 2025. Permittee shall meet the limit for Total Nitrogen as shown on page 10 of 23 of this permit.	EDP + 9 months EDP + 15, 21, 27, and 33 months EDP + 48 months
The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the "SPDES NOTICE/RENEWAL APPLICATION/PERMIT" letter.				

b) For any action where the compliance date is greater than 9 months past the previous compliance due date, the permittee shall submit interim progress reports to the Department every nine (9) months until the due date for these compliance items are met.

c) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. A description or any factors which tend to explain or mitigate the non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

The permittee shall submit copies of any document required by the above schedule of compliance to the NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, unless otherwise specified in this permit or in writing by the Department.

SCHEDULE OF SUBMITTALS

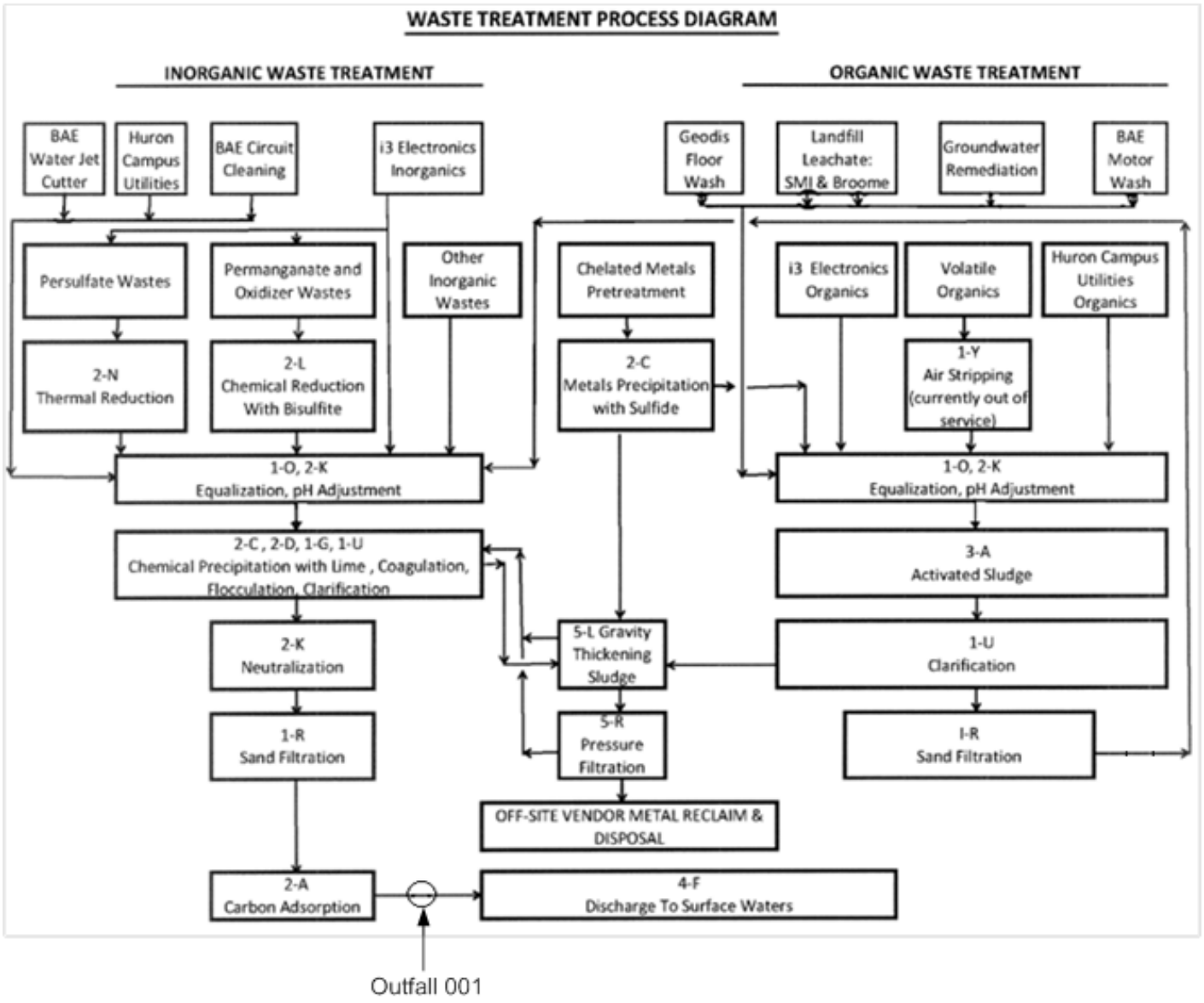
a) The permittee shall submit the following information to the Regional Water Engineer at the address listed on the Recording, Reporting and Monitoring page of this Permit, and to the Bureau of Water Permits, 625 Broadway, Albany NY 12233-3505:

Outfall	Parameter(s) Affected	Required Action	Due Date
001	Total Coliforms	Short Term High Intensity Monitoring (STHIM): The permittee shall collect 10 samples representative of normal discharge conditions and treatment plant operations over a 4 week period for the identified parameter. The permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentration of the parameter listed. The permittee shall submit a summary of the results of the analyses to the addresses listed above.	EDP + 2 Months
		If the STHIM results exceed or show a reasonable potential to exceed the water quality limits for total coliforms in 6 NYCRR Part 703.4(a), the permittee shall complete and submit a report that evaluates cost effective methods to reduce Total Coliforms in both the leachate and Outfall 001. The permittee shall submit the report to the addresses listed above.	EDP + 8 Months
001	Conventional Volatile Acid Base/Neutral Ethyl Alcohol Methyl Tert-Butyl Ether	Influent Sampling of Dr. Reddy's Laboratory Wastewater: The permittee shall scan the influent wastewater from Dr. Reddy's Laboratory for conventional, volatile, acid, base/neutral parameters, Ethyl Alcohol, and Methyl Tert-Butyl Ether. The permittee shall submit the results to the addresses listed above.	EDP + 6 Months

b) Unless noted otherwise, the above actions are one time requirements. The permittee shall submit the results of the above actions to the satisfaction of the Department. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the above submittal(s), unless noted otherwise. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location specified below:



MONITORING LOCATIONS (continued)

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location specified below:

GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through I as follows:

B. General Conditions

1.	Duty to comply	6 NYCRR 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR 750-1.16(a)
3.	Need to halt or reduce activity not a defense	6 NYCRR 750-2.1(g)
4.	Duty to mitigate	6 NYCRR 750-2.7(f)
5.	Permit actions	6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR 750-2.2(b)
7.	Duty to provide information	6 NYCRR 750-2.1(i)
8.	Inspection and entry	6 NYCRR 750-2.1(a) & 2.3

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR 750-2.8
2.	Bypass	6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

1.	Monitoring and records	6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d)
2.	Signatory requirements	6 NYCRR 750-1.8 & 2.5(b)

E. Reporting Requirements

1.	Reporting requirements for non-POTWs	6 NYCRR 750-2.5, 2.6, 2.7, &1.17
2.	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)

GENERAL REQUIREMENTS (continued)

F. Sludge Management
The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

G. SPDES Permit Program Fee
The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

H. Water Treatment Chemicals (WTCs)
New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the Department.
2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.
3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be attached to either the December DMR or the annual monitoring report required below.

The *WTC Notification Form and WTC Annual Report Form* are available from the Department's website at:
http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

[X] (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

[ ] (if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

[ ] (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:
[ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency specified below

Send the **original** (top sheet) of each DMR page to:
Department of Environmental Conservation
Division of Water, Bureau of Water Compliance
625 Broadway
Albany, New York 12233-3506

Phone: (518) 402-8177

Send the **first copy** (second sheet) of each DMR page to:
Department of Environmental Conservation
Regional Water Engineer, Region 7
615 Erie Boulevard West
Syracuse, New York 13204-2400

Phone: (315) 426-7500

Send an **additional copy** of each DMR page to:

B. Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

C. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

D. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

E. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

F. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.