State Permit Number WPCC 3131F/76
NPDES Permit Number DE 0000299
Effective Date: February 1, 2016
Expiration Date: January 31, 2021

AUTHORIZATION TO DISCHARGE UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND THE LAWS OF THE

STATE OF DELAWARE

In compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.) (hereinafter referred to as "the Act"), and pursuant to the provisions of 7 Del. C., §6003,

Allen Harim Foods, LLC
18752 Harbeson Rd.
Harbeson, Delaware 19951

is authorized to discharge from the facility
(Point Sources 001, 002, 003 and 004) located at

Route 5
Harbeson, Delaware

to receiving waters named

Beaverdam Creek

The effluent limitations, monitoring requirements and other permit conditions are set forth in Parts I, II and III hereof.

Bryan A Ashby

Bryan Ashby, Manager
Surface Water Discharges Section
Division of Water Resources
Department of Natural Resources and Environmental Control

12/18/15
Date Signed

Part I

A. General Description of Discharges and Facilities

1. Discharge Descriptions and Site Location Map

Discharge 001 consists of treated sanitary waste water, treated poultry process waste water and treated storm water. The treatment process consists of primary screening, grit removal and dissolved air flotation device, biological nutrient removal (anoxic basins followed by aerobic basins), clarifier, chlorination, and dechlorination. (Lat. 38.00° 43.00' 13.34", Long. -75.00° 17.00' 29.00")

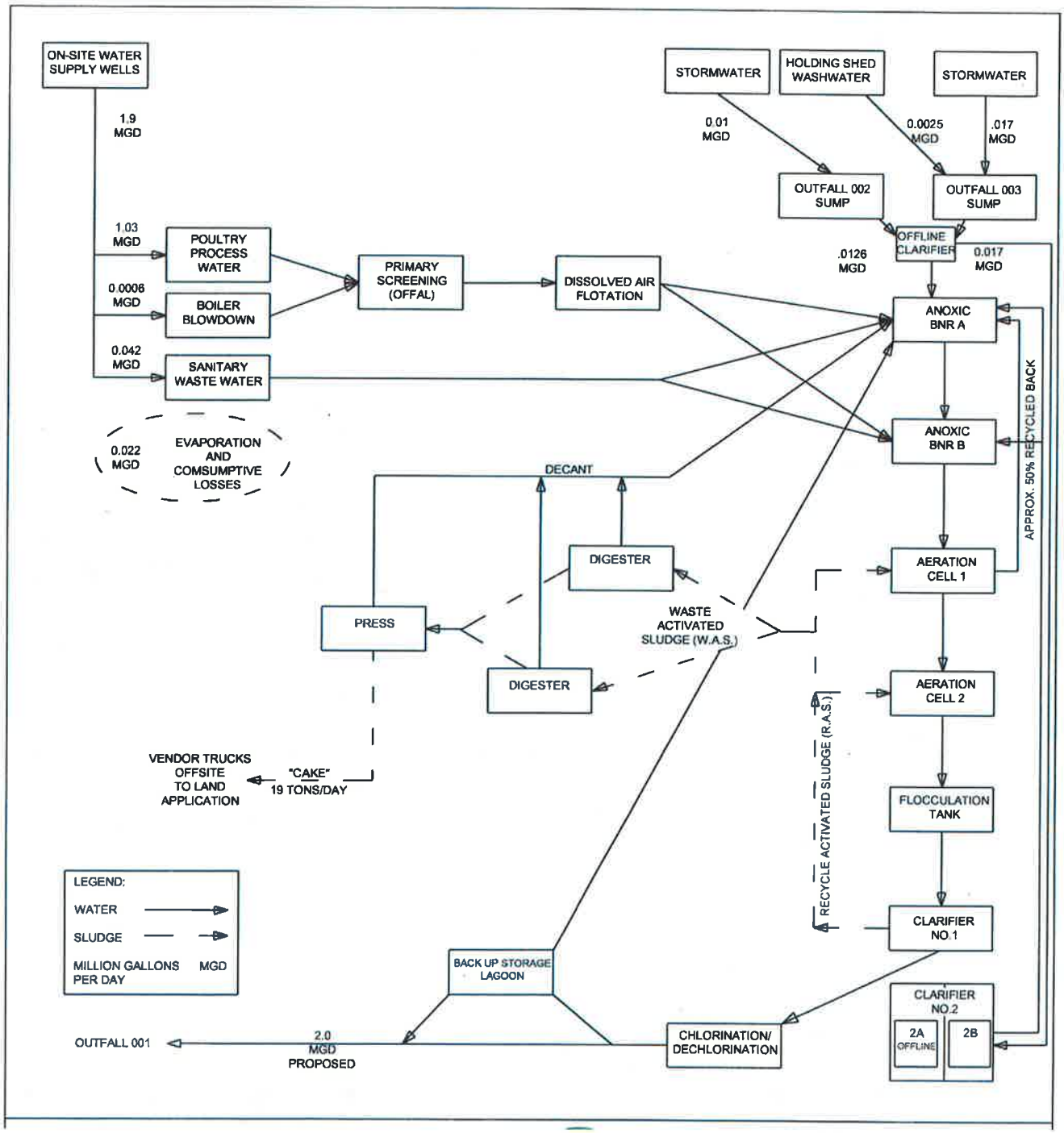
Discharge 002 consists of storm water runoff, after capture and treatment of the first flush, from the screening area, trucks parking, washing and cleaning area, loading and unloading area, and live holding shed area. (Lat. 38.00° 43.00' 10.80", Long. -75.00° 17.00' 28.40")

Discharge 003 consists of storm water runoff, after capture and treatment of the first flush, from the trucks parking and live holding shed area. (Lat. 38.00° 43.00' 8.44", Long. -75.00° 17.00' 25.93")

Discharge 004 consists of storm water runoff from access driveways and the employee parking area. (Lat. 38.00° 43.00' 19.29", Long. -75.00° 17.00' 19.75")

A. *General Description of Discharges and Facilities (continued)*

2. Process Schematic



B. Effluent Limitations and Monitoring Requirements

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS for Outfall 001

During the period beginning **effective date** and lasting through **42 months after effective date**, the permittee is authorized to discharge from point source 001[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations						Monitoring Requirements[2]	
	Load			Concentration			Measurement Frequency	Sample Type
	Daily Average	Daily Maximum	Units	Daily Average	Daily Maximum	Units		
Flow[3]	2.00		mgd	---	---	---	Continuous	Record/Totalize
Total Residual Chlorine	---	---	---	---	ND[4]	mg/L	Once per day	Grab
pH	The pH shall be between 6.0 S.U. and 9.0 S.U. at all times.						Once per day	Grab
BOD_5	104.3	156.5	lbs/day	6.25	9.38	mg/L	Once per week	Composite
Total Suspended Solids	152	228	lbs/day	9.1	13.7	mg/L	Once per week	Composite
Oil & Grease	83	125	lbs/day	5.0	7.5	mg/L	Once per week	Composite[5]
Total Phosphorus (as P)	5.21	7.82	lbs/day			mg/L	Once per week	Composite
Ammonia (as N)	10.4	15.6	lbs/day	0.62	0.93	mg/L	Once per week	Composite
Total Nitrogen (as N)[6]	467	574	lbs/day	28	34.4	mg/L	Once per week	Composite
Aluminum[6]			lbs/day			mg/L	Once per week	Composite
Enterococcus[7]	---	---	-	63	113	col/ 100mL	Once per week	Grab
Biomonitoring							One time[8]	Composite
The discharge shall be free from floating solids, sludge deposits, debris, oil and scum.								

Note: In the table above, a blank box indicates that a value must be reported, but there is no effluent limitation.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: after dechlorination and before final discharge.

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1 See discharge description on page 2 of this permit.
2 Report "nondetected" testing results on the discharge monitoring report (DMR) as "<" and the applicable test MDL. For example, if BOD5 is "nondetected" using a test method with an MDL of 2.4 mg/L, report "< 2.4 mg/L" on the DMR.
3 Report both average and maximum daily flow on the DMR.
4 See Part III.A., Special Condition No. 11 of this permit.
5 See Part III.A., Special Condition No. 4 of this permit.
6. See Part I.C Schedule of Compliance on page 8 of this permit.
7. The average effluent limit for enterococcus is based on a geometric mean.
8. See Part III.A., Special Condition No. 3 of this permit.

B. Effluent Limitations and Monitoring Requirements (continued)

2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS for Outfall 001

During the period beginning **42 months after effective date** and lasting through **expiration date**, the permittee is authorized to discharge from point source 001[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations						Monitoring Requirements[2]	
	Load			Concentration			Measurement Frequency	Sample Type
	Daily Average	Daily Maximum	Units	Daily Average	Daily Maximum	Units		
Flow[3]	2.00		mgd	---	---	---	Continuous	Record/Totalize
Total Residual Chlorine	---	---	---	---	ND[4]	mg/L	Once per day	Grab
pH	The pH shall be between 6.0 S.U. and 9.0 S.U. at all times.						Once per day	Grab
BOD_5	104.3	156.5	lbs/day	6.25	9.38	mg/L	Once per week	Composite
Total Suspended Solids	152	228	lbs/day	9.10	13.70	mg/L	Once per week	Composite
Oil & Grease	83	125	lbs/day	5.0	7.5	mg/L	Once per week	Composite[5]
Total Phosphorus (as P)	5.21	7.82	lbs/day			mg/L	Once per week	Composite
Ammonia (as N)	10.4	15.6	lbs/day	0.62	0.93	mg/L	Once per week	Composite
Total Nitrogen (as N) (Oct. 1 - Apr. 30)						mg/L	Once per week	Composite
Total Nitrogen (as N) (May 1 - Sep. 30)	73.0	109.5	lbs/day			mg/L	Once per week	Composite
Total Nitrogen (as N)[6]	Moving 12-Month Cumulative Load of 26,645 pounds[7]							
Aluminum[6]	1.90	3.80	lbs/day	0.114	0.228	mg/L	Once per week	Composite
Enterococcus[8]	---	---	---	63	113	col/ 100mL	Once per week	Grab
Biomonitoring	---	---	---	---	---	---	One time[9]	Composite
The discharge shall be free from floating solids, sludge deposits, debris, oil and scum.								

Note: In the table above, a blank box indicates that a value must be reported, but there is no effluent limitation.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: after dechlorination and before final discharge.

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1 See discharge description on page 2 of this permit
2 Report "non-detect" testing results on the discharge monitoring report (DMR) as "<" and the applicable test MDL. For example, if BOD5 is "non-detect" using a test method with an MDL of 2.4 mg/L, report "< 2.4 mg/L" on the DMR.
3 Report both average and maximum daily flow on the DMR.
4 See Part III.A., Special Condition No. 11 of this permit.
5 See Part III.A., Special Condition No. 4 this permit.
6. See Part I.C Schedule of Compliance on page 8 of this permit.
7. See Part III.A. Special Condition No. 6 of this permit.
8. The average effluent limit for enterococcus is based on a geometric mean.
9. See Part III.A. Special Condition No. 3 of this permit.

B. Effluent Limitations and Monitoring Requirements (continued)

3. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS for Outfalls 002 and 003

During the period beginning **effective date** and lasting through the **expiration date**, the permittee is authorized to discharge from point sources 002 and 003[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations						Monitoring Requirements[2]	
	Load			Concentration				
	Daily Average	Daily Maximum	Units	Daily Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow[3]			gal/min	-	-	-	Once per month	Estimate
pH	The pH shall be between 6.0 S.U. and 9.0 S.U. at all times.					S.U.		Grab
Oil & Grease	---	---	---	8.0	14.0			Grab
BOD_5	---	---	---	16.0	26.0	mg/L		Grab
Total Suspended Solids	---	---	---	20.0	30.0	mg/L		Grab
Total Phosphorus (as P)	---	---	---			mg/L		Grab
Ammonia (as N)	---	---	---	4.0	8.0	mg/L		Grab
Total Nitrogen (as N)	---	---	---	103	147	mg/L		Grab
Enterococcus	---	---	---	---	185	col/ 100mL		Grab
Only storm water may be discharged from these outfalls.								
The discharges shall be free from floating solids, sludge deposits, debris, oil and scum.								

Note: In the table above, a blank box indicates that a value must be reported, but there is no effluent limitation.

All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 consecutive hours from the previously measurable (greater than 0.1 inch rainfall) storm event. All samples shall be taken within 30 minutes after discharge starts, or as soon thereafter as practicable. No sample shall be taken under circumstances that have the potential to endanger the person taking the sample. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: at the discharge point of Outfalls 002 and 003 where water is flowing out of the collection sump and over the gravel weir.

1 See Discharge Descriptions on page 2 page of this permit.
2 Report "non-detect" testing results on the discharge monitoring report (DMR) as "<" and the applicable test MDL. For example, if BOD5 is "non-detect" using a test method with an MDL of 2.4 mg/L, report "< 2.4 mg/L" on the DMR.
3 Report estimated flow at the time of storm water sampling.

B. Effluent Limitations and Monitoring Requirements (continued)

4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS for Outfall 004

During the period beginning **effective date** and lasting through the **expiration date**, the permittee is authorized to discharge from point source 004[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations							Monitoring Requirements[2]	
	Load			Concentration				Measurement Frequency	Sample Type
	Daily Average	Daily Maximum	Units	Daily Average	Daily Maximum	Maximum Instantaneous	Units		
Only storm water may be discharged from this outfall.									
The discharge shall be free from floating solids, sludge deposits, debris, oil and scum.									

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: at the outlet of the storm water retention basin.

1 See discharge descriptions on page 2.
2. See Special Condition No. 5 of the permit.

C. Schedule of Compliance with Total Nitrogen (TN) and Aluminum Limits in Part I.B.2 of this permit.

1. For TN limits the permittee shall comply with the requirements herein as soon as possible, but in no event later than the dates set forth in the following schedule:

   a. No later than six (6) months after the effective date of this permit, the permittee shall complete design of proposed plant upgrades necessary for compliance with the final effluent limitations for TN.

   b. No later than 12 months after the effective date of this permit, the permittee shall initiate construction of proposed plant upgrades necessary for compliance with the final effluent limitations for TN.

   c. No later than 24 months after the effective date of this permit, the permittee shall submit a Progress Report identifying actions taken to date to achieve compliance with the final effluent limitations for TN.

   d. No later than 36 months after the effective date of this permit, the permittee shall complete construction of proposed plant upgrades necessary for compliance with the final effluent limitations for TN.

   e. No later than 42 months after the effective date of this permit, the permittee must achieve compliance with the final effluent limitations and monitoring requirements for TN at Outfall 001, as specified in Part I, B. 2. of this permit.

2. For Aluminum limits, the permittee shall comply with the requirements herein as soon as possible, but in no event later than the dates set forth in the following schedule:

   a. No later than six (6) months after the effective date of this permit, the permittee shall prepare a plan to achieve compliance with the aluminum limits.

   b. No later than 18 months after the effective date of this permit, the permittee shall begin implementation of the plan to achieve compliance with the Final Aluminum Limits.

   c. No later than 30 months after the effective date of this permit, the permittee shall submit a Progress Report identifying actions taken to date to achieve compliance with the Final Aluminum Limits.

   d. No later than 42 months after the effective date of this permit, the permittee must achieve compliance with the final effluent limitations and monitoring requirements for Aluminum at Outfall 001, as specified in Part I, B. 2. of this permit.

3. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

D. Monitoring and Reporting

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous one (1) month shall be summarized for each month and reported on a Discharge Monitoring Report Form ("DMR", EPA Form No. 3320-1),

a. The permittee shall submit results postmarked no later than the 28th day of the month following the completed reporting period. Electronically-generated DMR forms may be used, if approved by the Department in writing. Signed copies of these, and all other reports required herein, shall be submitted to the Department at the following address:

State Of Delaware Dept. Of Natural Resources And Environmental Control,
Division of Water, Surface Water Discharges Section,
R & R Building, 89 Kings Highway, Dover, Delaware 19901
TELEPHONE: (302) 739-9946; FACSIMILE: (302) 739-8369

b. The Department may provide written requirements for the permittee to submit DMR electronically (eDMR), no later than the 28th day of the month following the completed reporting period. These submittals must be electronically signed.

3. Definitions

a. "Average daily loading" means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.

b. "Average monthly discharge" or "daily average discharge" is the arithmetic mean of all daily discharges during a calendar month, calculated as the sum of all daily discharges sampled and/or measured during the month divided by the number of daily discharges sampled or measured during such month.

c. "Average monthly effluent limitation" or "daily average effluent limitation" means the highest allowable average of daily discharges over a calendar month.

d. "Best management practices" or "BMP's" means schedules of activities, prohibitions of practices, maintenance procedures and other management practices or measures to prevent or reduce the discharge of pollutants. BMP's include, but are not limited to: structural and nonstructural controls; treatment requirements; operating procedures and practices to control spills or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs can be applied before, during and after pollution generating activities to reduce or eliminate the introduction of pollutants into receiving waters.

e. "Biosolids" refers to the biomass or biological sludge generated or produced by biological wastewater treatment processes.

f. "Bypass" means the intentional diversion of wastes from any portion of a treatment facility.

g. "Composite sample" means a combination of individual samples obtained at specified intervals over a given time period, generally 24 hours.

In collecting a composite sample of a discharge other than a discharge of storm water or storm runoff (a non-storm water discharge), either: a) the volume of each individual sample is

proportional to the discharge flow rate or b) the sampling interval is proportional to the discharge flow rate and the volume of each individual sample is constant. For a continuous non-storm water discharge, a minimum of 24 individual grab samples shall be collected and combined to constitute a 24 hour composite sample. For intermittent non-storm water discharges 4 hours or more in duration, the number of individual grab samples collected and combined to constitute a composite sample shall at a minimum be equal to the duration of the discharge in hours but not less than 12. For intermittent non-storm water discharges of less than 4 hours, the minimum number of individual grab samples collected and combined to constitute a composite sample shall be equal to the duration of the discharge in hours times 3 but not less than 3 samples.

h. "Daily discharge" means the total discharge measured during a calendar day or any 24-hour period that reasonably represents the calendar day for sampling purposes. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of a pollutant discharged over a calendar day or the equivalent 24-hour period. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over a calendar day or the equivalent 24-hour period.

i. "Daily maximum effluent limitation" is the highest total mass of a pollutant allowed to be discharged during a calendar day or, in the case of a pollutant limited in terms other than mass, the highest average concentration or other measurement of the pollutant specified during the calendar day, or any 24-hour period that reasonably represents the calendar day for sampling purposes.

j. "Daily maximum temperature" is the highest arithmetic mean of the temperature observed for any two (2) consecutive hours during a 24-hour day, or during the operating day if flows are of shorter duration.

k. "Direct Responsible Charge" or "DRC" means on-location accountability for, and on-location performance of, active daily operation (including Technical Supervision, Administrative Supervision, or Maintenance Supervision) for a Wastewater Facility, an operating shift of a system or a facility, or a major segment of a system or facility.

l. "Estimate" is that based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

m. "Grab sample" is an individual sample collected in less than 15 minutes.

n. "I/S" (immersion stabilization) means the immersion of a calibrated device in the effluent stream until the reading is stabilized.

o. "Maximum instantaneous concentration" or "MIC" is the highest allowable measured concentration of a pollutant, obtained by analyzing a grab sample of the discharge.

p. "Measured flow" is any method of liquid volume measurement the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

q. "Method Detection Limit" or "MDL" means the lowest concentration of a substance which can be measured with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

r. "Minimum analytical level" or "MAL" means the lowest concentration of a substance that can be quantified within specified limits of interlaboratory precision and accuracy under routine laboratory operating conditions in the matrix of concern. When there is insufficient interlaboratory study data, the "MAL" may be determined through the use of a multiplier of 5 to 10 times the method detection level or "MDL".

s. "Monthly average temperature" is the arithmetic mean of temperature measurements made on an hourly basis, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar month, or during the operating month if flows are of shorter duration.

t. "Non-contact cooling water" is that which is contained within a leak-free system, i.e. has no contact with any gas, liquid or solid other than the container used for transport.

u. "Nuisance condition" is any condition that, as a result of pollutant addition to a surface water, causes unreasonable interference with the designated uses of the waters or the uses of the adjoining land areas.

v. "Operator" means any person employed or appointed by any owner, and who is designated by such owner to be the person controlling the operations of the treatment works, including direct actions, decisions or evaluations which affect the quality of the discharge, and whose duties include testing or evaluation to control treatment works operations.

w. "Pollution prevention" means any practice which results in a lesser quantity of emissions released or discharged prior to out-of-process recycling, treatment or control, as measured on a per-unit-of-production basis.

x. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

y. "Sewage" means the water carried human or animal wastes from septic tanks, water closets, residences, buildings, industrial establishments or other places together with such ground water infiltration, subsurface water, storm inflow, admixture of industrial wastes, or other wastes as may be present.

z. "Sewage sludge" means any solid, semi-solid or liquid residue removed during the treatment of municipal wastewater or domestic sewage including, but not limited to, solids removed during primary, secondary or advanced wastewater treatment, scum, septage, portable toilet pumpings and sewage sludge products.

aa. "Sludge" means the accumulated semi-liquid suspension, settled solids, or dried residue of these solids removed by any surface water or ground water treatment facility or any liquid waste treatment facility or works, whether or not such solids have undergone treatment.

bb. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. The basis for specific effluent limitations can be found in this permit's fact sheet. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

cc. "Whole effluent toxicity" means the aggregate toxic effect of an effluent or discharge measured directly by a toxicity test.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to the applicable test procedures identified in 40 C.F.R., Part 136, unless otherwise specified in this permit.

5. Quality Assurance Practices

The permittee is required to show the validity of all data by requiring its laboratory to adhere to the following minimum quality assurance practices:

a. Duplicate[1] and spiked[2] samples must be run for each constituent in the permit on 5% of the samples, or at least on one sample per month, whichever is greater. If the analysis frequency is less than one sample per month, duplicate and/or spiked samples must be run for each analysis.

b. For spiked samples, a known amount of each constituent is to be added to the discharge sample. The amount of constituent added should be approximately the same amount present in the unspiked sample, or must be approximately that stated as maximum or average in the discharge permit.

c. The data obtained in a and b shall be summarized in an annual report in terms of precision, percent recovery, and the number of duplicate and spiked samples run, date and laboratory log number of samples run, and name of analyst. The report shall cover the calendar year, January 1 through December 31, and shall be submitted to the Department, postmarked no later than the February 15 following the fourth quarter of reporting.

d. Precision shall be calculated by the formula, standard deviation $s = (\sum d^2/k)^{1/2}$, where d is the difference between duplicate results, and k is the number of duplicate pairs used in the calculations.

e. Percent recovery shall be reported on the basis of the formula $R = 100\ (F-I)/A$, where F is the analytical result of the spiked sample, I is the result before spiking of the sample, and A is the amount of constituent added to the sample.

f. The percent recovery, R, in e above shall be summarized yearly in terms of mean recovery and standard deviation from the mean. The formula, $s = (\sum(x-\bar{x})^2/(n-1))^{1/2}$, where s is the standard deviation around the mean $\bar{x}$, x is an individual recovery value, and n is the number of data points, shall be applied.

g. The permittee or its contract laboratory is required to annually analyze an external quality control reference sample for each pollutant. These are available through the EPA Regional Quality Assurance Coordinator, or other EPA-approved supplier. Results shall be included in the annual report, required in paragraph c above.

h. The permittee and/or its contract laboratory is required to maintain an up-to-date and continuous record of the method used, of any deviations from the method or options employed in the reference method, of reagent standardization, of equipment calibration and of the data obtained in a, b and f above.

i. If a contract laboratory is utilized, the permittee shall report the name and address of the laboratory and the parameters analyzed together with the monitoring data required.

6. Records

a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

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1 Duplicate samples are not required for the following parameters: color, temperature, and turbidity.

2 Spiked samples are not required for the following parameters: acidity, alkalinity, bacteriological, benzidine, chlorine, color, dissolved oxygen, hardness, pH, oil & grease, radiological, residues, temperature, turbidity, BOD_5, and total suspended solids. Procedures for spiking samples are available through the EPA Regional Quality Assurance Coordinator.

1) The date, exact place and time of sampling or measurements;

2) The person(s) who performed the sampling or measurements;

3) The date(s) and time(s) analyses were performed;

4) The individual(s) who performed each analysis;

5) The analytical techniques or methods used;

6) The results of each analysis; and

7) The quality assurance information as stated above.

b. An operator log must be kept on site at all times. This log should include time spent at the treatment facility on any date, and the nature of operation and maintenance performed.

7. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (EPA No. 3320-1). Such increased frequency shall also be indicated.

8. Records Retention

All records and information resulting from the monitoring activities required by this permit including hard copies of any electronically generated Discharge Monitoring Reports, all records of analyses performed, records of calibration and maintenance of instrumentation, and recording from continuous monitoring instrumentation shall be retained for three (3) years. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Department.

Part II

A. Management Requirements

1. Duty to Comply

   a. The permittee must comply with all the terms and conditions of this permit. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

   b. The discharge of any pollutant more frequently than, or at a level in excess of that identified and authorized herein, shall constitute a violation of the terms and conditions of this permit. The violation of any effluent limitation or of any other condition specified in this permit is a violation of 7 *Del. C.* Chapter 60, and the Act and is grounds for enforcement as provided in 7 *Del. C.* §§6005, 6013, and 6018, for permit termination or loss of authorization to discharge pursuant to this permit, for permit revocation and reissuance, or permit modification, or denial of a permit renewal application. The Department may seek voluntary compliance by way of warning, notice or other educational means, pursuant to 7 *Del. C.* §6019, or any other means authorized by law. However, the Law does not require that such voluntary means be used before proceeding by way of compulsory enforcement.

   c. Any person violating Sections 301, 302, 306, 307, 318, or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative, and/or criminal penalties as set forth in 40 C.F.R., Parts 122.41(a)(2) and 122.41(a)(3).

2. Notification

   a. Notification of Planned Changes

      The permittee shall notify the Department in writing of any anticipated expansion or alteration of this permitted facility, any production increases, process modifications, or other changes which could result in new, different or increased discharges of pollutants. Notice is required only when such alteration, addition or change:

      1) may justify the application of permit conditions that are different from those specified in this permit, or

      2) may justify the application of permit conditions that are absent from this permit, or

      3) meets any one of the following criteria:

         a) The alteration or addition to this permitted facility may meet one of the criteria for determining whether a facility is a new source, as defined in the section, "New Source", of Delaware's *Regulations Governing the Control of Water Pollution*, or

         b) As a result of the alteration or addition, the nature of the discharge is or could be substantially different from that represented in the application originally submitted for the discharge(s) authorized herein, upon which this permit is based; or

         c) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, including any uses or disposal sites not identified in the application for this permit or during this permit's issuance process; or

         d) The planned change in permitted facility or activity may result in noncompliance with the requirements of this permit.

Upon notification of a planned change, the Department may require the submission of a new application. The permittee is encouraged to notify the Department and submit any application well in advance of the scheduled date for the anticipated alteration or addition to allow sufficient time to process any modifications of this permit necessitated by the change and to avoid any resultant project delays.

b. Notification of Noncompliance

The permittee shall report all instances of noncompliance with this permit to the Department as outlined herein:

1) If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation or maximum instantaneous concentration specified in this permit, the permittee shall report such incident within 24 hours and provide the Department with the following information, in writing, within five (5) days of becoming aware of such conditions:

   a) A description of the discharge and cause of noncompliance;

   b) The period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time when the discharge will return to compliance; and

   c) Actions taken or to be taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

2) If, for any reason, the permittee does not comply with any daily average or average monthly effluent limitation or standard specified in this permit, the permittee shall provide the information outlined above in paragraph b.1) with the discharge monitoring report (DMR) submitted in accordance with Part I.D.2. of this permit.

3) In the case of any upset or unanticipated bypass that exceeds any permitted effluent or discharge limitation, the permittee shall notify the Department within 24 hours. If this notification is provided orally, a written report shall be submitted within 5 days.

4) In the case of any discharge subject to any toxic pollutant effluent standard under Section 307(a) of the Act, the permittee shall notify the Department within 24 hours from the time the permittee becomes aware of a noncomplying discharge. Notification shall include the information outlined above in paragraph b.1). If this information is provided orally, a written submission covering these points shall be provided within five days of the time the permittee becomes aware of the circumstances covered by this paragraph.

5) In the case of any other discharges which could constitute a threat to human health, welfare, or the environment, the information required above in paragraph b.1) shall be provided as quickly as possible upon discovery and after activating the appropriate emergency site plan, unless circumstances exist which make such a notification impossible. A delay in notification shall not be considered a violation of this permit when the act of reporting may delay the mitigation of the discharge and/or the protection of public health and the environment. A written submission covering these points must be provided within five days of the time the permittee becomes aware of the circumstances covered by this paragraph.

6) The permittee shall report all instances of noncompliance not otherwise reported under the preceding paragraphs at the time the discharge monitoring report (DMR) is submitted. The report shall contain the information outlined above in paragraph b.1).

7) The Department may waive the written report as required herein on a case-by-case basis, if an oral report was provided within 24 hours.

c. Reporting Discharge(s) of Pollutants Pursuant to 7 *Del. C.*, "Report of discharge of pollutant or air contaminant"

Any person who causes or contributes to the discharge of a pollutant into waters of the State or the United States either in excess of any conditions specified in this permit or in absence of a specific permit condition shall report such an incident to the Department as required under 7 *Del. C.*, "Report of discharge of pollutant or air contaminant".

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all collection and treatment facilities and systems (and related appurtenances) installed or used by the permittee for water pollution control and abatement to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance (based upon the facilities' design), adequate funding, effective management, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, when necessary, to achieve compliance with the terms and conditions of this permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to State waters resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and extent of the noncomplying discharge.

5. Failure

The permittee, in order to maintain compliance with this permit, shall control production and all discharges as necessary upon reduction, loss, or failure of the treatment facility until the treatment facility is restored or an alternative method of treatment is provided. The need to halt or reduce the permitted activity in order to maintain compliance with this permit shall not be a defense for a permittee in any enforcement action.

6. Alternative Power Source

In order to ensure compliance with the terms and conditions of this permit, the Department may require that the permittee provide an alternative power supply which is sufficient to operate the permittee's wastewater collection, conveyance and treatment facilities.

7. Removed Substances

Any solids, sludges, filter backwash, or other pollutants removed in the collection, conveyance or treatment of wastewater shall be disposed of in such manner as to prevent any pollutant from such materials from entering surface waters or ground waters.

8. Bypass

   a. The Secretary may prohibit the intentional diversion or bypass of waste streams from any portion of the facility regulated herein in consideration of the adverse effect of the proposed bypass or where the proposed bypass does not meet the conditions set forth below in Part II.A.8.b.

   b. The intentional diversion or bypass of waste streams from any portion of the facility regulated herein is prohibited unless:

      1) The bypass is necessary to perform essential maintenance and auxiliary equipment, a redundant or back-up system or an alternate mode of operation is utilized to maintain treatment performance; or

      2) The following four conditions are met:

         a) Bypass is unavoidable to prevent loss of human life, personal injury or severe property damage;

         b) There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, plant shutdown or maintenance during normal periods of equipment down-time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent the bypass;

         c) The permittee notifies the Department of the bypass or of the need to bypass as outlined below in paragraph 8.c below; and

         d) The permittee is utilizing or will utilize all available alternative operating procedures or interim control measures to reduce the impact of the bypass on State waters.

   c. Notice

      1) If the permittee knows in advance of the need for a bypass, the permittee shall notify the Secretary, in writing, at least ten days before the date of the bypass, if possible.

      2) In the event of an unanticipated or unintentional bypass, the permittee shall notify the Department within twenty-four hours of discovery. Notice may be provided orally, but shall be followed up with submission of a written report that provides the information outlined in Part II.A.2.b.1) within five (5) days.

      3) The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible.

9. Upset

   a. An upset shall constitute an affirmative defense to an action brought for noncompliance with any technology based permit effluent limitations established herein, if the requirements of Part II.A.9.b below are met.

   b. To establish an affirmative defense for an upset, the permittee shall demonstrate, through properly signed and authenticated, contemporaneous operating logs, or by other relevant evidence that:

      1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;

2) The permitted facility was at the time being operated in a prudent and workman like manner and in compliance with proper operation and maintenance procedures;

3) The permittee submitted notice of the upset as required in Part II.A.2.b.3) (i.e., within 24 hours of becoming aware of the upset); and

4) The permittee took all reasonable measures necessary to minimize any adverse impact to State waters.

c. Burden of proof. The permittee shall have the burden of proving an upset in any case where an upset is claimed as a defense.

B. Responsibility

1. Right of Entry

The permittee shall allow the Secretary of the Department, the EPA Regional Administrator, or their authorized representatives, jointly and severally, upon the presentation of his or her credentials:

a. To enter upon the permittee's premises where the regulated facility, treatment works, or discharge(s) is located or the regulated activity is conducted or where any records required to be kept under the terms and conditions of this permit are located;

b. To have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;

c. To inspect at reasonable times any monitoring equipment or monitoring method required in this permit;

d. To inspect at reasonable times any facilities, equipment, management or control practices, or operations regulated or required under this permit; and

e. To sample at reasonable times any discharge or substance at any location for the purpose of assuring compliance with this permit or otherwise determine whether a violation of the Law or these regulations exists, as provided in 7 *Del. C.*, "Right of Entry".

2. Duty to Provide Information Requested by the Department

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee shall also furnish, upon request, copies of records required to be kept by this permit.

3. Duty to Provide Information Found to be Missing or Inaccurate

When the permittee discovers that it failed to submit any relevant facts in a permit application or that it submitted any incorrect information in any permit application or in any report to the Department, it shall promptly submit such facts or information.

4. Availability of Reports

Except for any data and information that is deemed to be confidential and claimed as such when submitted, and that is entitled to protection as trade secrets under State law, all reports prepared

in accordance with the terms and conditions of this permit shall be available for public inspection at the Department's offices. This permit, the permit application and any information submitted to support the application (other than information entitled to protection as trade secrets pursuant to State law) and any effluent or discharge monitoring data shall not be deemed confidential and any claims of confidentiality will be denied. Knowingly making any false statement in any such report may result in the imposition of criminal penalties as provided under 7 *Del. C.*, Chapter 60, "Criminal penalties".

5. Signatory Requirements

   All applications, reports, or information submitted to the Department shall be signed and certified as required in the section "Identity of Signatories to NPDES Forms" of Delaware's *Regulations Governing the Control of Water Pollution*.

6. Permit Transfer

   a. This permit is not transferable to any person, except after notice to and with the concurrence of the Secretary.

   b. In the event of a change in ownership or control of the facilities from which the authorized discharge(s) emanate(s), this permit may be transferred if:

      1) The permittee notifies the Department, in writing, of the proposed transfer, in advance; and

      2) The permittee submits to the Department a written agreement signed by all parties to the transfer, containing a specific date for transfer of permit responsibility, coverage and liability to the new permittee. The written agreement shall expressly acknowledge the current permittee is responsible and liable for compliance with the terms and conditions of this permit up to the date of transfer and the new permittee is responsible and liable for compliance from that date on; and

      3) The Department within thirty (30) days of receipt of the notification of the proposed transfer does not notify the current permittee and the new permittee of its intent to modify, to revoke and reissue or to terminate this permit and require that a new application be submitted.

   c. The permittee is encouraged to provide as much advance notice as possible of any proposed transfer, to allow sufficient time for the Department to modify this permit to identify the new permittee and to incorporate such other requirements as may be necessary under the Law or the Act.

7. Modification, Termination, or Revocation and Reissuance

   This permit may be modified, terminated or revoked and reissued in whole or in part, during its term, for cause as provided in the section "Modification, Revocation and Reissuance, and Termination" of Delaware's *Regulations Governing the Control of Water Pollution*. The filing of a request for permit modification, or revocation and reissuance, or termination, or a notification of any planned changes or anticipated noncompliance does not stay any permit condition.

8. Reapplication for a Permit

   a. The permittee must apply for and obtain a new permit if the permittee wishes to continue the activity regulated by this permit beyond its expiration date;

b. At least 180 days before the expiration date of this permit, the permittee shall submit a new application or notify the Department of the permittee's intent to cease discharging by the expiration date;

c. In the event that a timely and sufficient reapplication has been submitted and the Department is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are continued and remain fully effective and enforceable;

9. Compliance with Effluent Standards for Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish such standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

10. Construction Authorization

This permit does not approve or authorize the construction, installation or modification of any wastewater/liquid waste collection, transmission or treatment facilities, system, or any other pollution control equipment or device necessary to achieve or to maintain compliance with the terms and conditions of this permit. Separate authorization for the construction, installation or modification of such pollution control facilities must be obtained from the Secretary.

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in navigable waters.

11. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privileges.

12. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under 7 *Del. C.* Chapter 60, or any other State law or regulation.

13. Severability

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected. If the application of any provision of this permit to any circumstance is held invalid, its application to other circumstances shall not be affected.

Part III

A. Special Conditions

1. Supersedes previous permit

   This permit supersedes NPDES Permit DE0000299 and State Permit WPCC 3131E/76, effective on May 1, 2006, effective date, as modified on September 6, 2011.

2. Permit Reopener Clause

   The Department or agencies under its supervision may perform or direct the performance of analyses or biosurveys on the receiving waters in the immediate vicinity of the permittee's discharge or further downstream, after the issuance of this permit. Such analyses or biosurveys may include evaluating impingement, entrainment, and thermal impacts the permittee's facility poses on its intake and receiving waters. If the results of these analyses or biosurveys suggest that the permittee's discharge is causing, or has the potential to cause, diminished attainment of designated protected uses (as defined by the State of Delaware's "Surface Water Quality Standards") then this permit may be reopened and modified after notice and opportunity for a public hearing. At that time, additional effluent limitations, monitoring requirements and/or special conditions may be included in the permit. If it is determined that additional equipment is needed to meet the revised permit conditions, the permittee shall install the necessary equipment.

3. Biomonitoring

   The permittee shall conduct a one-time chronic biomonitoring test on effluent in accordance with the following requirements. This test shall be conducted and submitted as part of the permit renewal application due six months before the permit expiration date. Dependent on the results of the initial tests, outlined in 3.a, the permittee may be required to perform confirmation testing as outlined in 3.b below. Dependent on the results of the confirmation testing, the permittee may be required to perform a Toxicity Reduction Evaluation as outlined in 3.c below.

   These tests shall be performed using a 100% representative composite effluent sample. All testing shall be performed in accordance with the test procedure requirements under 40 CFR 136. At a minimum these tests shall include the following:

   a. The permittee shall simultaneously perform EPA 7-day chronic test methods 1000.0 Pimphales promelas Larval Survival and Growth Test, and 1002.0 Ceriodaphnia Survival and Reproduction Test. Alternative species may be used, if approved by the Department in writing. Each test shall be initiated no later than 36 hours after the collection of the representative composite effluent sample.

      Within 30 days of the completion of these tests, the results shall be reported to the Department. This report shall follow the general format and include the information listed in Section 10, pages 55-57, of EPA/600/4-91/002.

   b. If either the survival, growth, or reproductability rate of the effluent is significantly less than (at the 95% confidence level using the Student T's Test) the same rate of the control, the permittee shall perform two (2) confirmation tests on species which was found to be the most sensitive in 3.a.

      Within 30 days of the completion of each test, the results shall be reported to the Department in accordance with the general format and information requirements referenced in 3.a.

c. If through either of the confirmation tests, the survival or reproductability rate of the effluent sample is found to be significantly less than the same rate of the control, the permittee shall submit a plan for reducing the effluent toxicity to the Department. This plan shall be submitted within 60 days of the completion date of the testing described in 3.b. This plan shall outline a schedule, as well as identify the test methods to be used for the plan to reduce effluent toxicity.

For a purpose of these tests, a representative composite sample is a 24-hour composite sample as defined in Part I, Section 3.f. If the instantaneous flow rate does not vary by more than +/- 15 percent of the average flow rate, a time-interval composite will be an acceptable representative sample. Otherwise, a flow-weighted composite sample must be used. All composite samples shall be representative of 24 hours of typical operations.

The Department shall be notified in writing at least thirty (30) days in advance of the day when a bioassay test is planned to commence. The permittee shall split the composite samples used to perform a bioassay test with the Department upon request. All documentation pertaining to these tests shall be maintained at the facility as required in Part I.D and shall be made available for inspection, upon request.

4. Compliance with Oil & Grease Limits

The permittee shall demonstrate compliance with the Oil and Grease limits using the 40 CFR 136 approved test procedure, EPA Method No. 1664A. The Department may approve use of an alternative test method in writing, if that alternative method is approved under 40 CFR 136.

a. On the sampling day, three grab samples shall be taken at evenly spaced time intervals; at least a four (4) hour time interval is required between each sample. Each grab sample shall be analyzed separately; for each sampling day,

1) "daily concentration" = arithmetic mean of the three grab samples.

2) "daily load" (lbs/day) = "daily concentration" (mg/L) x flow on sampling day (MGD) x 8.34 (lbs/gal)

b. For compliance purposes, results reported in the Discharge Monitoring Reports (DMR) for each reporting period shall be calculated as follows:

1) "Average concentration" = the arithmetic mean of all the "daily concentration" values,

2) "Maximum concentration" = the highest "daily concentration" value,

3) "Average Load" = the arithmetic mean of all the "daily load" values, and

4) "Maximum Load" = the highest "daily load" value.

5. Storm Water Plan

The permittee shall continue to implement and maintain a Storm Water Plan (SWP) that is designed to limit the exposure of industrial materials and activities to precipitation and to minimize the discharge of contaminated storm water from the permittee's facility. The SWP shall be implemented and maintained in accordance with the requirements of Section 9.1.5 of the Department's *Regulations Governing the Control of Water Pollution*.

In addition, the SWP shall specifically address the management practices needed to prevent or minimize the discharge of nutrients (nitrogen and phosphorus) and enterococci associated with

the runoff from the site. The permittee shall update and adjust those management practices as necessary to ensure their performance is adequate to satisfy the requirements of the "Total Maximum Daily Loads (TMDLs) Regulation for the Broadkill River Watershed, Delaware", dated December 1, 2006. An updated SWP must be submitted to the Department for review and approval within sixty (60) days of the permit effective date.

6. Moving 12-Month Cumulative Load Limit for Total Nitrogen

   The moving 12-month cumulative loads shall be calculated by adding the individual monthly discharge loads for the most current twelve months of operation. Individual monthly loads shall be calculated by using the following formula:

   average monthly concentration (mg/l) x total monthly flow (MG) x 8.34 (lb/gal) = monthly total discharge load (pounds/month)

   This load for the month will be added to the calculated loads for the previous eleven (11) months and reported on the DMR as the moving 12-month cumulative load.

7. Sludge Disposal – Requirements

   The permittee shall comply with all existing Federal and State laws and regulations that apply to its sludge use or disposal practice(s) including, but not limited to, federal regulations outlined in 40 C.F.R., Part 258, Section 28, *Liquids Restrictions,* 40 C.F.R., Part 503, *Standards for the Use and Disposal of Sludge* (February, 1993) and the Department's *Guidance and Regulations Governing the Land Treatment of Wastes*, including Part III.B., *The Regulations Governing the Use and Disposal of Wastewater Sludge* (October, 1999). If the Department determines that additional requirements or permit conditions are needed to insure compliance with the referenced regulations, or if the Federal Government promulgates new regulations under Section 405(d) of the Act governing, (a) the treatment or disposal of sewage sludge, (b) sewage sludge management practices, or (c) concentrations of pollutants in sewage sludge, this permit may be reopened, and after notice and opportunity for public hearing, modified accordingly during its term.

8. Sludge Disposal – Record Keeping

   The permittee shall maintain monthly sludge inventory data. This data shall include at a minimum (a) quantity of sludge generated, (b) quantity of sludge stored on site, and (c) quantity of sludge transported off site. Transportation records shall include the date, quantity, carrier used, and the final destination for each shipment. The inventory data shall be maintained at the facility and be made available to the Department in accordance with Part I.D.8. "Records Retention", of this permit, except that records shall be retained for five (5) years.

9. Sludge Disposal – Planned Changes

   Prior to any planned change in the permittee's sludge use or disposal practice(s), the permittee shall notify the Department in accordance with the requirements of Part II.A.2.a, "Notification of Planned Changes" of this permit. A change in the permittee's sludge use or disposal practice(s) shall be considered cause for this permit to be modified, or revoked and reissued, under Part II.B.7, "Modification, Termination, or Revocation and Reissuance" of this permit.

10. Wastewater Treatment Plant Operator Licensing

The wastewater treatment facility described in Part I.A. of this permit is a "Class IV" facility. The wastewater treatment facility shall be under the direct supervision of a Delaware licensed/certified wastewater treatment plant operator(s) in Direct Responsible Charge, whose competency is licensed by the Secretary in a classification corresponding to, or higher than, the classification of the wastewater treatment plant. All operators who perform duties of a wastewater treatment plant operator, shall be licensed by the Secretary. All activities and licensing shall comply with the "*State of Delaware Regulations for Licensing Operators of Wastewater Facilities*".

11. Compliance with "Non Detectable" Total Residual Chlorine Limits

The permittee shall demonstrate compliance with the "none detectable" total residual chlorine limit using the following 40 CFR 136.3 approved inorganic test procedures: Iodometric Method I; DPD Ferrous Titrimetric Method; DPD Colorimetric Method; or an equivalent method currently approved in 40 CFR 136. These methods also correspond to Standard Methods (18th Edition) test procedures 4500-Cl B, 4500-Cl F, and 4500-Cl G, respectively.

Unless otherwise notified in writing by the Department, the permittee shall use the most sensitive method of these test procedures appropriate for the sample matrix. Residual chlorine concentrations less than or equal to the minimum detection level for the selected test procedure shall be considered in compliance with the "none detectable" residual chlorine limit.