



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

DOUGLAS R. ANSEL
Interim Director

July 21, 2023

Stefanie Harding, Site Leader
Entegris, Inc.
333 Neils Eddy Rd
Riegelwood, NC 28456

Subject: Draft NPDES Stormwater Permit
NPDES Permit NCS000533
Entegris, Inc.
Columbus County

Dear Permittee:

The Division of Energy, Mineral, and Land Resources (DEMLR) Stormwater Permitting Program acknowledges receipt of your renewal application for coverage under NPDES Permit **NCS000533** on **August 19, 2015**. Enclosed with this letter is a copy of the draft stormwater permit for your facility. Please review the draft carefully to ensure thorough understanding of the conditions and requirements it contains.

The draft permit contains the following significant changes from the current permit:

1. Monitoring increased from semi-annually to quarterly for all parameters (qualitative and quantitative).
2. Units of measure for several benchmarks have been changed from mg/L to µg/L.
3. "No discharge" clarifications were made.
4. Feasibility study has been removed.
5. Outfall specific monitoring has been implemented.
6. eDMR reporting requirement was added.
7. Boilerplate language has been moved into the body of the permit. There is no longer a boilerplate attachment to the permit.
8. Stormwater Pollution Prevention Plan (SWPPP) requirements updated to incorporate superfund site clean-up activities.
9. The receiving stream has been updated based on information provided by the permittee in April 2022.
10. Outfalls have been defined in the permit with associated required monitoring.



11. Total hardness monitoring added for all outfalls that also require monitoring for hardness dependent metals.
12. Monitoring for dissolved oxygen and total manganese have been removed.
13. Monitoring for total kjeldahl nitrogen (TKN) and Nitrate + Nitrite have been replaced with monitoring for Total Nitrogen for all outfalls.
14. Aquatic toxicity monitoring condition has been updated and monitoring frequency has been increased to quarterly.
15. Changes have been made to monitoring parameters. Stormwater benchmarks are not permit limits, but rather guidelines for implementing the Stormwater Pollution Prevention Plan (SWPPP). A benchmark exceedance is not a permit violation; however, the permittee must respond to exceedances as directed in the Tiers.

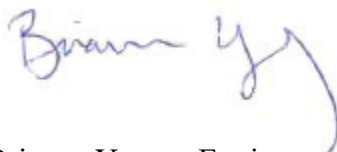
Threatened and Endangered Species: Please note that your facility drains to an area where there are threatened and endangered species. The Bigleaf Grass-of-Parnassus (*Parnassia grandifolia*), Spring-flowering Goldenrod (*Solidago verna*), Eastern Diamondback Rattlesnake (*Crotalus adamanteus*), Savanna Indigo-bush (*Amorpha confuse*), Rough-leaf Loosestrife (*Lysimachia asperulifolia*), Venus Flytrap (*Dionaea muscipula*), and Northern Pinesnake (*Pituophis melanoleucus melanoleucus*) are threatened and endangered species that have been identified near your facility. Failure to abide by your stormwater permit may constitute violation of the Threatened and Endangered Species Act.

With this notification, the Division will solicit public comment on this draft permit by publishing a notice in newspapers having circulation in the general Columbus County area, per EPA requirements. **Please provide your comments, if any, to me no later than 30 days after receiving this draft permit.** Comments may be emailed to Brianna.Young@ncdenr.gov or mailed to:

NC DEMLR
Stormwater Permitting Program
Attn: Brianna Young
1612 Mail Service Center
Raleigh, NC 27699-1612

Following the 30-day public comment period, the Division will review all pertinent comments and take appropriate action prior to issuing a final permit. If you have questions concerning the draft, please contact me at Brianna.Young@deq.nc.gov or call 919-707-3647.

Sincerely,



Brianna Young, Environmental Program Consultant
DEMLR Stormwater Program



Attachment: Draft Permit NCS000533

cc: NPDES Stormwater Program Files (Laserfiche)
Wilmington Regional Office
WSS/Aquatic Toxicology Branch
Qu Qi, DWM/Superfund Section
David Mattison, DWM/Superfund Section
USFWS
NCWRC
Adam Acker, US EPA, Superfund Program
Craig Zeller, US EPA, Superfund Program
Regina Ward, EHS Specialist, Entegris, LLC



North Carolina Department of Environmental Quality | Division of Energy, Mineral and Land Resources
512 North Salisbury Street | 1612 Mail Service Center | Raleigh, North Carolina 27699-1612
919.707.9200

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES

PERMIT

TO DISCHARGE STORMWATER UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES)

In compliance with the provisions of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended,

Entegris, Inc.

is hereby authorized to discharge stormwater from a facility located at:

Entegris, Inc.
333 Neils Eddy Road
Riegelwood, NC
Columbus County

to receiving waters designated as an unnamed tributary to Mill Creek, a Class C; Sw stream, in the Cape Fear River Basin, in accordance with the discharge limitations, monitoring requirements, and other conditions set forth in Parts A through J hereof.

This permit shall become effective

This permit and the authorization to discharge shall expire at midnight on _____, 2028.

Signed this day

Michael Lawyer, Stormwater Program Supervisor
Division of Energy, Mineral and Land Resources
By the Authority of the Environmental Management Commission

TABLE OF CONTENTS

PART A: INDIVIDUAL PERMIT COVERAGE

PART B: STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

- B-1. Responsible Party
- B-2. General Location Map
- B-3. Site Map
- B-4. Narrative Description of Industrial Processes
- B-5. Evaluation of Stormwater Outfalls
- B-6. Narrative Description of Stormwater SCMs/BMPs
- B-7. Facility Inspections
- B-8. Secondary Containment Plan
- B-9. Spill Prevention and Response Procedures
- B-10. Preventative Maintenance and Good Housekeeping Program
- B-11. Employee Training
- B-12. Representative Outfall Status
- B-13. Annual SWPPP Review and Update
- B-14. Annual On-Line SWPPP Certification when Available
- B-15. Notice to Modify SWPPP
- B-16. SWPPP Documentation

PART C: QUALITATIVE MONITORING OF STORMWATER DISCHARGES

- C-1. Visual Inspections
- C-2. Qualitative Monitoring Response

PART D: ANALYTICAL MONITORING REQUIREMENTS

- D-1. Required Baseline Sampling
- D-2. Baseline Sampling Benchmarks
- D-3. Methodology for Collecting Samples
- D-4. Locations for Collecting Samples
- D-5. Tier One Response: Single Benchmark Exceedance
- D-6. Tier Two Response: Two Consecutive Benchmark Exceedances
- D-7. Tier Three Response: Four Benchmark Exceedances Within 5 Years

PART E: SUBMITTAL OF DISCHARGE MONITORING REPORTS (DMRs)

- E-1. Deadlines for Submittal of Discharge Monitoring Reports
- E-2. Electronic Discharge Monitoring Reporting (eDMR) Process
- E-3. Occurrences of No Discharge
- E-4. Reports if More Frequent Monitoring Has Occurred
- E-5. Report if Begin Discharging to a New Stormwater Discharge Outfall
- E-6. Qualitative Monitoring Reports
- E-7. Monitoring Report Retention
- E-8. Waivers from Electronic Reporting

PART F: OTHER OCCURENCES THAT MUST BE REPORTED

PART G: PERMIT ADMINISTRATION

- G-1. Signatory Requirements
- G-2. Permit Expiration

- G-3. Planned Changes
- G-4. Transfers
- G-5. Sale or Closure
- G-6. Permit Modification, Revocation and Reissuance, or Termination
- G-7. Anticipated Noncompliance
- G-8. Requirement to Report Incorrect Information
- G-9. Annual Administering and Compliance Monitoring Fee Requirements
- G-10. Flow Measurements
- G-11. Test Procedures
- G-12. Representative Outfall
- G-13. Availability of Reports
- G-14. Permit Actions
- G-15. Recording Results

PART H: OPERATION AND MAINTENANCE of POLLUTION CONTROLS

- H-1. Proper Operation and Maintenance
- H-2. Corrective Actions
- H-3. Draw Down of Treatment Facilities for Essential Maintenance
- H-4. Bypasses of Stormwater Control Facilities
- H-5. Upsets
- H-6. Required Notice for Bypass or Upset

PART I: COMPLIANCE AND LIABILITY

- I-1. Compliance Schedule
- I-2. Duty to Comply
- I-3. Duty to Mitigate
- I-4. Civil and Criminal Liability
- I-5. Oil and Hazardous Substance Liability
- I-6. Property Rights
- I-7. Severability
- I-8. Duty to Provide Information
- I-9. Penalties for Tampering
- I-10. Penalties for Falsification of Reports
- I-11. Onshore or Offshore Construction
- I-12. Duty to Reapply
- I-13. Inspection and Entry
- I-14. Need to Halt or Reduce Not a Defense

PART J: DEFINITIONS

APPENDIX A: ACUTE TOXICITY PASS/FAIL MONITORING (QUARTERLY)

- I. Quarterly Testing (Pass/Fail Acute Toxicity Testing)
- II. Actions for Failure of Pass/Fail Testing
- III. Actions if Monthly Monitoring is Instituted (Multiple Dilution Testing)
- IV. Actions for Failure of Multiple Dilution Tests (TRE, TRI, or Other Measures)
- V. Measures Applicable to All Tests

PART A: INDIVIDUAL PERMIT COVERAGE

During the period beginning on the effective date of the permit and lasting until expiration, the [permittee](#) is authorized to discharge [stormwater associated with industrial activity](#). Such discharges shall be controlled, limited and monitored as specified in this permit.

If industrial materials and activities are not exposed to precipitation or runoff as described in 40 CFR §122.26(g), the facility may qualify for a [No Exposure](#) Certification from NPDES stormwater discharge permit requirements. Any owner or operator wishing to obtain a No Exposure Certification must:

- (a) Submit a No Exposure Certification application form to the Division of Energy, Mineral and Land Resources (Division),
- (b) Receive approval from the Division,
- (c) Maintain no exposure conditions unless authorized to discharge under a valid NPDES stormwater permit, and
- (d) Recertify the No Exposure Certification annually.

Until this permit expires or is modified or revoked, the permittee is authorized to discharge stormwater to the surface waters of North Carolina or separate storm sewer system that has been adequately treated and managed in accordance with the terms and conditions of this permit.

Any other [point source discharge](#) to surface waters of the state is prohibited unless it is an allowable [non-stormwater discharge](#) or is covered by another permit, authorization, or approval. The stormwater discharges allowed by this permit shall not cause or contribute to violations of Water Quality Standards.

This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule, standard, ordinance, order, judgment, or decree.

PART B: STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The permittee shall develop and implement a [Stormwater Pollution Prevention Plan \(SWPPP\)](#). The SWPPP shall be maintained on site unless exempted from this requirement by the [Division](#). The permittee shall implement the SWPPP and all [Best Management Practices \(BMPs\)](#) consistent with the provisions of this permit, to control contaminants entering surface waters. These items shall exist for the duration of the permit term and be made available to the Director upon request, and shall also be sent to the Wilmington Regional Office upon request. The SWPPP shall be considered public information in accordance with Part [G-13](#) of this Individual Permit. The SWPPP should also specifically and separately address deconstruction, demolition, and/or superfund site hauling or disposal activities.

The SWPPP shall include, at a minimum, the following items:

B-1. Responsible Party

The SWPPP shall identify (a) specific position(s) responsible for the overall coordination, development, implementation, and revision of the SWPPP. Responsibilities for all components of the SWPPP shall be documented and position assignments provided.

B-2. General Location Map

The General Location Map shall be a USGS quadrangle map or appropriately drafted equivalent map that includes:

- (a) The facility's location in relation to transportation routes and surface waters;
- (b) The name of the receiving waters to which the stormwater outfalls discharge, or if the discharge is to a [Municipal Separate Storm Sewer System \(MS4\)](#), the name of the municipality and the ultimate receiving waters; and
- (c) Any receiving waters that exceed criteria for one or more parameters or if the site is located in a watershed for which a [Total Maximum Daily Load \(TMDL\)](#) has been established and, if so, a list of the parameter(s) of concern.

B-3. Site Map

The Site Map shall include the following at a scale sufficient to clearly depict all required features. At a minimum, the map shall include:

- (a) Site property/permit boundary;
- (b) Site topography and finished grade;
- (c) Buildings, roads, parking areas and other built-upon areas;
- (d) Industrial activity areas (including: fueling, [vehicle maintenance](#) and repair, washing of materials or equipment, storage of materials, disposal areas, process areas, loading and unloading areas, and haul roads);
- (e) A table of [stormwater discharge outfalls](#) and their latitudes and longitudes;
- (f) Drainage area for each outfall with an estimation of impervious area percentage;
- (g) [Stormwater Control Measures \(SCMs\)](#);
- (h) All stormwater collection/drainage features, structures and direction of flow;
- (i) On-site and adjacent surface waters and wetlands; and
- (j) A graphic scale and north arrow.

Location Map:



Latitude: 34° 19' 35" N
Longitude: 78° 12' 07" W
County: Columbus
Receiving Stream: UT to Mill Creek
Stream Class: C; Sw
Sub-basin: 03-06-17 (Cape Fear River Basin)



Approximate Facility Location

NCS000533
Entegris, LLC

B-4. Narrative Description of Industrial Processes

The narrative description shall include:

- (a) Storage practices;
- (b) Loading and unloading activities;
- (c) Outdoor process areas;
- (d) Dust or particulate generating and control processes;
- (e) Waste disposal practices; and
- (f) A list of the potential pollutants that could be expected to be present in the stormwater discharge from each outfall.
- (g) The SWPPP should also specifically and separately address deconstruction, demolition, and/or superfund site hauling or disposal activities.

B-5. Evaluation of Stormwater Outfalls

On an annual basis, the permittee shall evaluate all stormwater outfalls for the presence of non-stormwater discharges. If non-stormwater discharges are present, the permittee shall identify the source and record whether the discharge is otherwise permitted by rule or a different permit. The permittee shall evaluate the environmental significance of the non-stormwater discharges and include a summary written record and certification statement. The certification statement and summary written record shall be retained with the SWPPP and shall be dated and signed in accordance with the requirements found in Part [G-1](#) of this permit.

B-6. Narrative Description of Stormwater SCMs/BMPs

A narrative description of structural [Stormwater Control Measures \(SCMs\)](#) and non-structural [Best Management Practices \(BMPs\)](#) on site shall be provided. Appropriate SCMs/BMPs may include, but are not limited to, vegetative swales, berms, and reuse of collected stormwater (such as for an industrial process or as an irrigation source) in a manner that reduces pollutants in stormwater discharges leaving the site. The installation and implementation of SCMs/BMPs shall be based on the assessment of the potential for sources to contribute significant quantities of pollutants to stormwater discharges and on data collected through monitoring of stormwater discharges. The Narrative Description of SCMs/BMPs shall be reviewed and updated annually.

The narrative description of stormwater SCMs/BMPs shall include:

- (a) A written record of the specific rationale for installation and implementation of the selected site SCMs and/or BMPs; and
- (b) BMPs for [vehicle maintenance activities](#).
- (c) The SWPPP should also specifically and separately address deconstruction, demolition, and/or superfund site hauling or disposal activities.

B-7. Facility Inspections

Inspections of the facility and all stormwater systems (including tanks, pipes, and equipment) shall occur as part of the Preventative Maintenance and Good Housekeeping Program at a minimum on a quarterly schedule, with at least 30 days separating inspection dates (unless performed more frequently than

quarterly). These facility inspections are different from, and in addition to, the stormwater discharge characteristic monitoring at the outfalls required in Parts C and D of this permit.

B-8. Secondary Containment Plan

In order to prevent leaks and spills from contaminating [stormwater runoff](#), secondary containment is required for: [bulk storage of liquid materials](#) including petroleum products; storage in any amount of water priority chemicals listed in [Section 313](#) of Title III of the Superfund Amendments and Reauthorization Act (SARA); and storage of [hazardous substances](#) in any amount.

For facilities subject to the federal Spill Prevention, Control, and Countermeasure (SPCC) regulation, the SPCC Plan may be used to support compliance with this requirement.

The Secondary Containment Plan shall include:

- (a) A table or summary of tanks and stored materials equipped with secondary containment systems;
- (b) Manually activated valves or other similar devices that are securely closed with a locking mechanism if the secondary containment devices are connected to stormwater conveyance system;
- (c) A commitment to visually observe any accumulated stormwater prior to release for color, foam, outfall staining, visible sheens, and dry weather flow. Accumulated stormwater may be released if found to be uncontaminated by any material. Accumulated stormwater found to be contaminated shall not be released from the containment area;
- (d) Records on every release from a secondary containment system that include: the individual making the observation, a description of the accumulated stormwater, and the date and time of the release. These records shall be kept for a period of five (5) years.

B-9. Spill Prevention and Response Procedures

A responsible person shall be on-site at all times during facility operations that have potential to contaminate [stormwater runoff](#) through spills or exposure of materials associated with the facility operations. For facilities subject to the federal Spill Control and Countermeasure (SPCC) regulation, the SPCC Plan may be used to support compliance with this permit. The Spill Prevention and Response Procedures (SPRP) shall incorporate an assessment of potential pollutant sources based on a materials inventory of the facility. The SPRP must be site specific. An oil SPCC Plan may be a component of the SPRP. The common elements of the SPCC used to meet the SPRP shall be incorporated by reference into the SPRP.

The Spill Prevention and Response Procedures (SPRP) shall include at minimum:

- (a) An assessment of areas of the facility where there is the potential for spills;
- (b) A list of trained facility personnel responsible for implementing the SPRP;
- (c) A signed and dated acknowledgement in which staff members accept responsibilities for the SPRP;
- (d) A supply of spill response materials and equipment and the locations for storing these items;
- (e) Written procedures for proper cleanup and disposal of spilled materials; and
- (f) A list of [significant spills](#) or leaks of pollutants that have occurred during the previous three (3) years and any corrective actions taken to mitigate spill impacts or the notation that no spills have occurred. This list shall be updated on annual basis.

B-10. Preventative Maintenance and Good Housekeeping Program

A preventative maintenance and good housekeeping program (PMGHP) shall be developed and implemented. The program shall address all stormwater control measures (SCMs) (if applicable), [stormwater discharge outfalls](#), all on-site and adjacent surface waters and wetlands, industrial activity areas (including material storage areas, material handling areas, disposal areas, process areas, loading and unloading areas, and haul roads), all drainage features and structures, and existing structural SCMs and non-structural BMPs.

The PMGHP shall include:

- (a) A schedule of inspections, maintenance and housekeeping measures for industrial activity areas including, at a minimum, all material storage and handling areas, disposal areas, process areas, loading and unloading areas, haul roads, and vehicle maintenance areas. Inspections shall occur at a minimum on a quarterly schedule. A minimum of thirty (30) days must separate each inspection:
 - i. Period 1: January 1 – March 31
 - ii. Period 2: April 1 – June 30
 - iii. Period 3: July 1 – September 30
 - iv. Period 4: October 1 – December 31
- (b) A plan for disposing spent lubricants and fuels properly and in accordance with applicable federal disposal regulations (if applicable); and
- (c) A record of inspections, maintenance, and housekeeping activities.
- (d) The SWPPP should also specifically and separately address deconstruction, demolition, and/or superfund site hauling or disposal activities. The Good Housekeeping Program shall also include, but not be limited to, BMPs to accomplish the following:
 - i. Minimize contamination of stormwater runoff from oil-bearing equipment;
 - ii. Minimize contamination of stormwater runoff from delivery vehicles arriving and departing the plant site;
 - iii. Inspect all residue-hauling vehicles for proper covering over the load, adequate gate-sealing, and overall integrity of the container body. Repair vehicles as necessary; and
 - iv. Reduce or control the tracking of residue from superfund clean-up loading and storage areas;

B-11. Employee Training

Training programs shall be provided at a minimum on an annual basis for facility personnel with responsibilities for: spill response and cleanup, preventative maintenance activities, and for any of the facility's operations that have the potential to contaminate [stormwater runoff](#). The facility personnel responsible for implementing the training shall be identified, and their annual training shall be documented by the signature of each employee trained.

The annual employee training shall include, at a minimum, the following topics:

- (a) General stormwater awareness;
- (b) Spill response and cleanup procedures;
- (c) Preventative maintenance and good housekeeping activities;

- (d) Secondary containment releases; and
- (e) Fueling procedures (if applicable).

B-12. Representative Outfall Status

If the Division has granted [representative outfall status \(ROS\)](#), written documentation from the Division shall be part of the SWPPP. The permittee shall notify the Division of any site or activity modifications that result in a change to ROS.

B-13. Annual SWPPP Review and Update

All aspects of the SWPPP shall be reviewed and updated on an annual basis. The permittee shall amend the SWPPP whenever there is a change in design, construction, operation, site drainage, maintenance, or configuration of the physical features which may have a significant effect on the potential for the discharge of pollutants to surface waters.

In addition to the other items in Part B of the permit, the SWPPP update shall include:

- (a) An updated list of [significant spills](#) or leaks of pollutants for the previous three (3) years, or the notation that no spills have occurred;
- (b) A written certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges;
- (c) A documented re-evaluation of the effectiveness of the on-site SCMs and BMPs in minimizing the contamination of stormwater runoff, including a summarization of all SCM inspections conducted throughout the year preceding the annual update;
- (d) A statement that annual training requirements were met in the past year; and
- (e) A review and comparison of sample analytical data to benchmark values (if applicable) over the past year, including an evaluation of Tiered Response status.

B-14. Annual On-Line SWPPP Certification when Available

After the Division's ePermitting system develops the capability to receive this information, an online certification that the SWPPP annual update has been completed in a manner that meets the conditions of this permit shall be submitted annually.

B-15. Notice to Modify SWPPP

The Director may notify the permittee when the SWPPP does not meet one or more of the minimum requirements of the permit. Within 30 days of such notice, the permittee shall submit a time schedule to the Director for modifying the SWPPP to meet minimum requirements. The permittee shall provide certification in writing (in accordance with Part [G-1](#) of this permit) to the Director that the changes have been made.

B-16. SWPPP Documentation

Documentation of all monitoring, measurements, inspections, maintenance activities, and training provided to employees, including the log of the sampling data and of actions taken to implement SCMs and BMPs associated with the industrial activities, including [vehicle maintenance activities](#). Such documentation shall be kept on-site for a period of five (5) years and made available to the [Division](#) immediately upon request.

PART C: QUALITATIVE MONITORING OF STORMWATER DISCHARGES

The purpose of qualitative monitoring is to implement a quick and inexpensive way to evaluate the effectiveness of the permittee's SWPPP, to identify the potential for new sources of stormwater pollution, and to prompt the permittee's response to pollution.

C-1. Visual Inspections

- (a) Visual inspections shall be made at each [stormwater discharge outfall \(SDO\)](#) that discharges [stormwater associated with industrial activity](#) unless [representative outfall status](#) specifically for visual monitoring has been approved in writing by the Division.
- (b) Visual inspections shall be performed **concurrent with required analytical monitoring on a quarterly basis**. Note: These monitoring requirements will increase to a monthly basis when responding to Tier Two status.
- (c) Visual inspections are not required to be performed outside of the facility's normal operating hours.
- (d) Visual inspections shall be recorded on the Division's Stormwater Discharge Outfall Qualitative Monitoring Report (QMR) form and shall include observations of:
 - i. Color;
 - ii. Odor;
 - iii. Clarity;
 - iv. Floating Solids;
 - v. Suspended Solids;
 - vi. Foam;
 - vii. Oil Sheen;
 - viii. Deposition at or immediately below the outfall;
 - ix. Erosion at or immediately below the outfall; and
 - x. Other obvious indicators of stormwater pollution.
- (e) Inability to perform inspections because of [adverse weather](#) or lack of discharge during the monitoring period shall not constitute a failure to monitor if the event is documented in the SWPPP and recorded on the Qualitative Monitoring Report.

C-2. Qualitative Monitoring Response

- (a) If the permittee's qualitative monitoring indicates that the SWPPP and/or existing stormwater BMPs are ineffective, or that significant stormwater contamination is present, then the permittee shall investigate potential causes, evaluate the feasibility of corrective actions, and implement those feasible corrective actions within sixty (60) days.
- (b) A written record of the permittee's investigation, evaluation, and response actions shall be kept in the SWPPP.

PART D: ANALYTICAL MONITORING REQUIREMENTS

This part applies to [industrial stormwater discharges](#) of stormwater-only flows from drainage areas where industrial activities are performed.

D-1. Required Baseline Sampling

The permittee shall perform baseline sampling of all stormwater discharge outfalls and/or authorized representative discharge outfalls in accordance with this part.

- (a) [Grab samples](#) shall be collected, analyzed, and reported for all the parameters listed in Table 1 below, except for Total Rainfall which shall be monitored using a rain gauge.
- (b) In addition to the grab samples, the average monthly usage of new motor and hydraulic oil for the facility shall be tracked, recorded, and reported to the Division if it exceeds an average of 55 gallons per month.
- (c) The total rainfall amount for each sampling event shall be recorded in inches. Total rainfall shall be determined from an on-site rain gauge or a regional rain gauge located within one (1) mile of the facility.
- (d) Samples shall be collected from four separate monitoring periods per year, unless the facility is in Tier Two or Tier Three status. A minimum of thirty (30) days must separate any two sampling events during the following periods:
 - i. Period 1: January 1 – March 31
 - ii. Period 2: April 1 – June 30
 - iii. Period 3: July 1 – September 30
 - iv. Period 4: October 1 – December 31
- (e) If the facility was in Tier Two or Tier Three status under the previous permit, the facility shall continue monthly monitoring and reporting requirements until relieved by the provisions of this permit or the Division.

D-2. Baseline Sampling Benchmarks

- (a) Analytical results for each parameter shall be compared to the benchmark values for the appropriate receiving stream classification as provided in Table 1. An exceedance of a benchmark value is not a permit violation; however, failure to respond in accordance with part [D-2\(b\)](#) of this permit is a permit violation.
- (b) An exceedance of any benchmark value in Table 1 shall require a tiered response for that parameter. A single exceedance of a benchmark value shall require a Tier One response for that parameter. Two benchmark value exceedances in a row shall require a Tier Two response for that parameter. Four benchmark exceedances for a parameter within a five (5) year period shall require a Tier Three response for that parameter.
- (c) Baseline sampling benchmarks shall be in accordance with Table 1 below.

Table 1. Summary of Quarterly Baseline Sampling Requirements for Stormwater Discharges for Outfalls SW001, SW002, SW005, and SW010

Parameter Code for Reporting	Parameter	Frequency ¹	Benchmark
CO530	Total Suspended Solids (TSS)	Quarterly	100 mg/L
00400	pH ^{2,4}	Quarterly	6 s.u. – 9 s.u.
46529	Total Rainfall of Sampled Event (inches) ³	-	-
00552	Non-Polar Oil & Grease for drainage areas that use >55 gallons/month of oil on average per EPA Method 1664 (SGT-HEM)	Quarterly	15 mg/L
NCOIL	Estimated Average Monthly Oil Usage at the Facility (gallons)	-	-
CO310	Biochemical Oxygen Demand (BOD ₅)	Quarterly	30 mg/L
00340	Chemical Oxygen Demand (COD)	Quarterly	120 mg/L
CO600	Total Nitrogen	Quarterly	30 mg/L
CO665	Total Phosphorus	Quarterly	2 mg/L
CO610	Ammonia Nitrogen (Summer)*	Quarterly	5.6 mg/L
CO610	Ammonia Nitrogen (Winter)*	Quarterly	15 mg/L
50060	Total Residual Chlorine	Quarterly	28 µg/L
	Hexamine	Quarterly	25,000 mg/L
71880	Formaldehyde	Quarterly	0.5 mg/L
77885	Total Methanol	Quarterly	6,400 mg/L
01042	Total Copper	Quarterly	10 µg/L
01051	Total Lead	Quarterly	75 µg/L
01092	Total Zinc	Quarterly	126 µg/L
00900	Hardness – Total as [CaCO ₃ or (Ca + Mg)] ⁵	Quarterly	-
TGA3B	Acute Toxicity ⁶	Quarterly	See Appendix A

*Summer: April 1 – October 31

*Winter: November 1 – March 31

Footnotes:

1. Measurement frequency: Quarterly during a measurable storm event. If the facility is monitoring monthly due to Tier Two or Tier Three response actions, the facility shall continue a monthly monitoring and reporting schedule in Tier Two or Tier Three status until relief is granted.
 2. If pH values outside this range are recorded in sampled stormwater discharges, but ambient precipitation pH levels are lower, then the lower threshold of this benchmark range is the pH of the precipitation (within instrument accuracy) instead of 6 s.u.. Readings from an on-site or local rain gauge (or local precipitation data) must be documented to demonstrate background concentrations were below the benchmark pH range.
 3. For each sampled measurable storm event, the total precipitation must be recorded. An on-site rain gauge is required. Where isolated sites are unmanned for extended periods of time, a local rain gauge reading may be substitute for an on-site reading.
 4. **Monitoring for pH shall be conducted at the effluent, upstream, and downstream of the discharge point.**
 5. Hardness sampling should be performed in conjunction with testing for hardness dependent metals (copper, lead, and zinc).
 6. Acute toxicity shall be performed in accordance with Appendix A. Acute Toxicity Pass/Fail Monitoring (Quarterly).
- Outfall SW001: Drainage area includes drum warehouse chemical storage area, maintenance shop area, and a lined monofil pond from adjacent manufacturer Oak-Bark Corp.
 - Outfall SW002: Drainage area includes the Low Volume Manufacturing Area, chemical storage area, and runoff from adjacent manufacturer Bakelite and their methanol tanks and formaldehyde operation.
 - Outfall SW005: Drainage area includes hazardous waste tank storage tanks, High Volume Manufacturing Area, chemical staging areas, a filtration area, and methanol unloading and formaldehyde production from adjacent manufacturer Bakelite.
 - Outfall SW010: Drainage area includes potential runoff from chemical storage areas, Low Volume Production Area, and a building containing a centrifugal distillation unit that processes non-hazardous material.

Should the permittee identify or create any new stormwater outfalls, remove any stormwater outfalls identified in this permit, or alter any drainage areas that change the potential pollutants in runoff discharged through corresponding outfalls, the permittee will submit a request to NC DEMLR to modify this permit. For any newly discovered pipes or outfalls, the permittee must evaluate the structure and provide a report of the status and planned actions to NC DEQ within 14 days. The permittee must either (1) request modification of this permit and modify the SWPPP accordingly, or (2) eliminate potential discharges by removal, plugging, or combination of both.

D-3. Methodology for Collecting Samples

- (a) Outfall monitoring efforts shall begin with the first [measurable storm event](#) that occurs during the facility's normal operating hours and begins at least 72 hours after the previous measurable storm event.
- (b) [Grab samples](#) shall be collected within the first 30 minutes of discharge. If physical separation between outfalls prevents collecting samples from all outfalls within the first 30 minutes of discharge, then the permittee may continue collecting samples until all outfalls that are discharging have been sampled.
- (c) Outfalls that are not discharging during or after the first measurable storm event shall be sampled during the next measurable storm event, until a sample has been collected from every outfall.
- (d) If, during an entire monitoring period, there is no discharge from an outfall during any [measurable storm event](#) that occurs during the facility's normal operating hours and begins at least 72 hours after the previous measurable storm event, then the permittee shall report "No Discharge" in the DMR and shall record "No Discharge" in the [SWPPP](#). In this case, the DMR shall be submitted within 30 days after the end of the monitoring period. Lack of a discharge from an outfall for the monitoring period shall not constitute failure to monitor as long as this condition is met.
- (e) Sampling is not required to be performed outside of the facility's normal operating hours or during [adverse weather](#) conditions.
- (f) Samples collected shall be characteristic of the volume and nature of the permitted discharge.
- (g) If the sampled storm event coincides with a known non-stormwater discharge that is deemed permitted under 15A NCAC 02H .0106, then this shall be noted on the stormwater discharge monitoring report.

D-4. Locations for Collecting Samples

Samples shall be collected at all stormwater discharge outfalls (SDOs) that discharge stormwater associated with industrial activity. If the Division has issued a representative outfall status (ROS) approval letter, then the permittee shall collect samples from all SDOs in accordance with the ROS approval letter.

- (a) All samples shall be taken before the discharge joins or is diluted by any other waste stream, body of water, or substance.
- (b) Monitoring points as specified in this permit shall not be changed without written notification to and approval by the Division [40 CFR 122.41(j)].

D-5. Tier One Response: Single Benchmark Exceedance

The outfall(s) will remain in Tier One status until three consecutive samples are under the benchmark or are inside the benchmark range for all parameters.

- (a) If any sampling result is above the benchmark value for any parameter at any outfall, then the permittee shall respond in accordance with Table 2 to identify and address the source of that exceedance for the parameter(s).

- (b) Each required response shall be documented in the SWPPP as each action occurs including; the date and value of the benchmark exceedance, the date the Division’s Wilmington Regional Office was notified of the exceedance, the inspection date, the personnel conducting the inspection, the selected feasible actions, and the date the selected feasible actions were completed.
- (c) Each exceedance of a benchmark parameter shall individually require a Tier One response.
- (d) The Tier One response shall be in accordance with Table 2 below:

Table 2: Tier One Response for a Benchmark Exceedance

Timeline from Receipt of Sampling Results	Tier One Required Response/Action
Continuously	i. Document the exceedance and each required response/action in the SWPPP in accordance with Part D-5 of the permit.
Within two weeks	ii. Notify the Division’s Wilmington Regional Office of the exceedance date and value via email or, when it is developed, an electronic form created by the Division for reporting exceedances. iii. Conduct a stormwater management inspection. iv. Identify and evaluate possible causes of the benchmark exceedance.
Within one month	v. Select specific, feasible courses of action to reduce concentrations of the parameter(s) of concern including, but not limited to, source controls, operational controls, or physical improvements.
Within two months	vi. Implement the selected feasible actions.

D-6. Tier Two Response: Two Consecutive Benchmark Exceedances

The outfall(s) will remain in Tier Two status until three consecutive samples are under the benchmark or are inside the benchmark range for all parameters.

- (a) If any two consecutive sampling results in a row are above the benchmark value for any parameter at an outfall, then the permittee shall respond in accordance with Table 3 to identify and address the source of exceedances for that parameter at that outfall.
- (b) After implementing the specific feasible courses of action, perform monthly monitoring for all analytical monitoring parameters at outfall(s) in Tier Two status until three samples in a row are below the benchmark value.
- (c) Each required response shall be documented in the SWPPP as each action occurs including; the dates and values of the benchmark exceedances, the date the Division’s Wilmington Regional Office was notified of the consecutive exceedances, the inspection date, the personnel conducting the inspection, the selected feasible actions, the date the selected feasible actions were completed, and the monthly monitoring results.
- (d) Each pair of two consecutive exceedances of a single benchmark parameter at a single outfall shall constitute an event that requires a Tier Two response. Subsequent events shall not include the same exceedances that have been addressed in a Tier Two response.
- (e) The Tier Two response shall be in accordance with Table 3 below.

- (f) Alternatively, in lieu of the steps listed above, the permittee may, after two consecutive exceedances exercise the option of contacting the DEMLR Regional Engineer as provided below in Tier Three. The Regional Engineer may require additional response actions on the part of the permittee as provided in Tier Three, including reduced or additional sampling parameters or frequency.

Table 3: Tier Two Response for Two Consecutive Benchmark Exceedances

Timeline from Receipt of Sampling Results	Tier Two Required Response/Action
Continuously	i. Document the exceedance and each required response/action in the SWPPP in accordance with Part D-6 of the permit. ii. Monitor all parameters monthly (qualitative and quantitative) at appropriate outfall(s)
Within two weeks	iii. Notify the Division's Wilmington Regional Office in writing of the exceedance date and value. iv. Conduct a stormwater management inspection. v. Identify and evaluate possible causes of the benchmark exceedance.
Within one month	vi. Select specific, feasible courses of action to reduce concentrations of the parameter(s) of concern including, but not limited to, source controls, operational controls, or physical improvements.

D-7. Tier Three Response: Four Benchmark Exceedances Within 5 Years

The outfall(s) will remain in Tier Three status until three consecutive samples are under the benchmark or are inside the benchmark range for all parameters.

- (a) If any four sampling results within a five-year period for any single parameter are above the benchmark value at a sampled outfall, then the permittee shall respond in accordance with Table 4 to identify and address the source of exceedances for that parameter at that outfall.
- (b) The permittee shall prepare a written Action Plan and submit to the Division's Wilmington Regional Office for review and approval within thirty (30) days of receipt of the fourth analytical monitoring data point that exceeds the benchmark value. See Section G-1. (b) for reporting requirements. At a minimum, the Action Plan shall include:
- i. documentation of the four benchmark exceedances;
 - ii. an inspection report that covers the industrial activities within the drainage area of the outfall with the exceedances (including the date of the inspection and the personnel conducting the inspection);
 - iii. an evaluation of standard operating procedures and good housekeeping procedures;
 - iv. identification of the source(s) of exceedances;
 - v. specific actions that will be taken to remedy the identified source(s) with a schedule for completing those actions; and

- vi. a monitoring plan to verify that the Action Plan has addressed the source(s).
- (c) The permittee shall keep the Action Plan in the SWPPP and document when each specific action was carried out and by whom.
- (d) The permittee shall contact the Division's Wilmington Regional Office when all actions in the Action Plan are completed.
- (e) The Division may, but is not limited to, require the permittee to:
 - i. Revise, increase, or decrease the monitoring and reporting frequency for some or all of the parameters herein;
 - ii. Perform additional sampling or sample for substitute parameters;
 - iii. Install structural stormwater control measures;
 - iv. Implement other stormwater control measures;
 - v. Perform upstream and downstream monitoring to characterize impacts on receiving waters;
 - vi. Implement site modifications to qualify for a No Exposure Exclusion; and/or
 - vii. Continue Tier Three obligations through the permit renewal process.
- (f) The Tier Three response shall be in accordance with Table 4 below.

Table 4: Tier Three Response for Four Benchmark Exceedances Within Five Years

Timeline from Receipt of Fourth Sampling Result	Tier Three Required Response/Action
Continuously	<ul style="list-style-type: none"> i. Document the exceedances and each required response/action in the SWPPP in accordance with Part D-7 of the permit. ii. Monitor all parameters monthly (qualitative and quantitative) at appropriate outfall(s).
Within two weeks	<ul style="list-style-type: none"> iii. Notify the Division's Wilmington Regional Office in writing of the affected outfall, four exceedance dates and values. iv. Conduct a stormwater management inspection. v. Identify and evaluate possible causes of the benchmark exceedance.
Within one month	<ul style="list-style-type: none"> vi. Prepare an Action Plan and submit to the Division's Wilmington Regional Office for review and approval.
Upon DEQ Approval	<ul style="list-style-type: none"> vii. Implement the approved Action Plan.
Upon Completion of Approved Action Plan	<ul style="list-style-type: none"> viii. Notify the Division's Wilmington Regional Office of Action Plan completion.

PART E: SUBMITTAL OF DISCHARGE MONITORING REPORTS (DMRs)

E-1. Deadlines for Submittal of Discharge Monitoring Reports

Discharge Monitoring Reports (DMRs) shall be submitted in accordance with Table 5 below. For permits issued between March 1-31, June 1-30, September 1-30 or December 1-31, sampling shall not commence until the next sampling period following initial issuance of the permit.

Table 5: Reporting Requirements

Monitoring Period	Deadline
January 1 – March 30	April 30
April 1 – June 30	July 30
July 1 – September 30	October 30
October 1 – December 31	January 30

E-2. Electronic Discharge Monitoring Reporting (eDMR) Process

Unless otherwise informed by the Director, permittees are required to register for eDMR within 30 days of the permit issuance date. Permittees shall follow the guidelines for submitting data that are set forth in the Stormwater eDMR User Manual, available on the [Division's](http://deq.nc.gov/SW-eDMR) website at deq.nc.gov/SW-eDMR.

E-3. Occurrences of No Discharge

If no discharge occurs during the sampling period, the permittee must record within 30 days of the end of the sampling period in the facility's monitoring records in accordance with the guidelines for submitting data that are set forth in the Stormwater eDMR User Manual, available on the [Division's](http://deq.nc.gov/SW-eDMR) website at deq.nc.gov/SW-eDMR.

E-4. Reports if More Frequent Monitoring Has Occurred

If the permittee monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 and at a sampling location specified in this permit, the results of such monitoring shall be included in the data submitted on the DMR. However, for purposes of benchmark comparison and Tiered response actions, the permittee shall use the analytical results from the first sample with valid results within the monitoring period and submit it no later than 30 days from that date the facility receives the sampling results.

E-5. Report if Begin Discharging to a New Stormwater Discharge Outfall

The permittee shall submit a letter describing the modification and an updated site map to the Division prior to discharging to a new [SDO](#). Division approval must be granted in writing prior to discharging to a new SDO.

E-6. Qualitative Monitoring Reports

The permittee shall record the required qualitative monitoring observations on the SDO Qualitative Monitoring Report form provided by the Division at deq.nc.gov/SW-industrial and shall retain the completed forms on site. Qualitative monitoring results shall not be submitted to the Division, except upon the Division's specific requirement to do so. Qualitative Monitoring Report forms are available on the Division's website.

E-7. Monitoring Report Retention

Copies of the following reports shall be maintained on-site or be available electronically to the Division upon request. These records or copies shall be maintained for a period of at least five (5) years from the date of the sample, measurement, report, permit renewal, or permit application. This period may be extended by request of the Director at any time [40 CFR 122.41].

- (a) Calibration and maintenance records,
- (b) Original strip chart recordings for continuous monitoring instrumentation,
- (c) Discharge Monitoring Reports (DMRs) and eDMR or other electronic DMR report submissions,
- (d) Visual monitoring records, and
- (e) Copies of all data used to complete the permit application.

E-8. Waivers from Electronic Reporting

- (a) If a permittee is unable to use the eDMR system due to a demonstrated hardship or due to the facility being physically located in an area where less than 10 percent of the households have broadband access, then a temporary waiver from the NPDES electronic reporting requirements may be granted and discharge monitoring data may be submitted on paper DMR forms or alternative forms approved by the Director. Duplicate signed copies shall be submitted to the mailing address above. See "How to Request a Waiver from Electronic Reporting" section below.
- (b) The permittee may seek a temporary electronic reporting waiver from the Division. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to the Division. Requests for temporary electronic reporting waivers must be submitted in writing to the Division for written approval at least sixty (60) days prior to the date the facility would be required under this permit to begin submitting monitoring data and reports. The duration of a temporary waiver shall not exceed five (5) years and shall thereupon expire. At such time, monitoring data and reports shall be submitted electronically to the Division unless the permittee re-applies for and is granted a new temporary electronic reporting waiver by the Division. Approved electronic reporting waivers are not transferrable. Only permittees with an approved reporting waiver request may submit monitoring data and reports on paper to the Division for the period that the approved reporting waiver request is effective.
- (c) Information on eDMR and the application for a temporary electronic reporting waiver are found on the DEQ web page at deq.nc.gov/SW-eDMR.

PART F: OTHER OCCURENCES THAT MUST BE REPORTED

After becoming aware of an occurrence that must be reported, the permittee shall contact the Division's Wilmington Regional Office within the timeframes and in accordance with the other requirements listed in Table 6 below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

The permittee shall report all instances of noncompliance not reported under 24-hour reporting at the time monitoring reports are submitted [40 CFR 122.41(1)(7)].

Table 6: Other Occurrences that Shall Be Reported

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
<p><u>Visible Sedimentation</u> in a stream or wetland</p>	<p>(a) <i>Within 24 hours</i>, an oral or electronic notification.</p> <p>(b) <i>Within 7 calendar days</i>, a report that contains a description of the sedimentation event and permittee actions taken to address it.</p>
<p>Oil spills if they are:</p> <ul style="list-style-type: none"> • 25 gallons or more, • less than 25 gallons but cannot be cleaned up within 24 hours, • cause sheen on surface waters (regardless of volume), or • are within 100 feet of surface waters (regardless of volume). 	<p>(c) <i>Within 24 hours</i>, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.</p>
<p>Releases of <u>hazardous substances</u> in excess of reportable quantities under Section 311 of the Clean Water Act Ref: 40 CFR 110.3 and 40 CFR 117.3) or section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85</p>	<p>(d) <i>Within 24 hours</i>, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.</p>
<p>Noncompliance with the conditions of this permit that may endanger health or the environment. [40 CFR 122.41(1)(7)]</p>	<p>(e) <i>Within 24 hours</i>, an oral or electronic notification.</p> <p>(f) <i>Within 7 calendar days</i>, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(1)(6).</p> <p>(g) Division staff may waive the requirement for a written report on a case-by-case basis.</p>

PART G: PERMIT ADMINISTRATION

G-1. Signatory Requirements

All applications, reports, or information submitted to the [Director](#) shall be signed and certified [40 CFR 122.41(k)].

- (a) All permit applications shall be signed as follows:
- i. For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - ii. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - iii. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official [40 CFR 122.22].
- (b) All reports required by the permit and other information requested by the [Director](#) shall be signed by a person described in paragraph (a). above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- i. The authorization is made in writing by a person described above;
 - ii. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - iii. The written authorization is submitted to the [Director](#) [40 CFR 122.22].
- (c) Changes to authorization: If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative [40 CFR 122.22].

- (d) Certification. Any person signing a document under paragraphs (a) or (b) of this section, or submitting an electronic report (e.g., eDMR), shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED.

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

G-2. Permit Expiration

The [permittee](#) is not authorized to discharge after the expiration date. In order to receive automatic authorization to discharge beyond the expiration date, the permittee shall submit forms and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date, unless permission for a later date has been granted by the [Director](#). (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit) [40 CFR 122.21(d)]. Any permittee that has not requested renewal at least 180 days prior to expiration, or any permittee that does not have a permit after the expiration and has not requested renewal at least 180 days prior to expiration, will be subjected to enforcement procedures as provided in NCGS §143-215.36 and 33 USC 1251 et. seq.

G-3. Planned Changes

The permittee shall give notice to the [Director](#) as soon as possible of any planned changes at the permitted facility which could significantly alter the nature or quantity of pollutants discharged [40 CFR 122.41(l)]. This notification requirement includes pollutants which are not specifically listed in the permit or subject to notification requirements under 40 CFR Part 122.42(a).

G-4. Transfers

This permit is not transferable to any person without prior written notice to and approval from the [Director](#) in accordance with 40 CFR 122.61. The Director may condition approval in accordance with NCGS 143-215.1, in particular NCGS 143-215.1(b)(4)b.2. and may require modification or revocation and reissuance of the permit, or a minor modification, to identify the new permittee and incorporate such other requirements as may be necessary under the CWA [40 CFR 122.41(l)(3), 122.61] or state statute.

G-5. Sale or Closure

The Permittee is required to notify the [Division](#) in writing in the event the permitted facility is sold or closed.

G-6. Permit Modification, Revocation and Reissuance, or Termination

The issuance of this permit does not prohibit the [Director](#) from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws,

rules, and regulations contained in Title 40, Code of Federal Regulations, Parts 122 and 123; Title 15A of the North Carolina Administrative Code, Subchapter 2H .0100; and North Carolina General Statute 143-215.1 et al. After public notice and opportunity for a hearing, the permit may be terminated for cause. The filing of a request for a permit modification, revocation and reissuance, or termination does not stay any permit condition.

G-7. Anticipated Noncompliance

The permittee shall give advanced notice to the [Director](#) of any planned changes at the permitted facility which may result in noncompliance with the permit [40 CFR 22.41(1)(2)].

G-8. Requirement to Report Incorrect Information

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the [Director](#), it shall promptly submit such facts or information [40 CFR 122.41(1)(8)].

G-9. Annual Administering and Compliance Monitoring Fee Requirements

The permittee must pay the administering and compliance monitoring fee within 30 (thirty) days after being billed by the Division. Failure to pay the fee in timely manner in accordance with 15A NCAC 2H .0105(b)(2) may cause this [Division](#) to initiate action to revoke coverage under this permit.

G-10. Flow Measurements

Where required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges.

G-11. Test Procedures

Test procedures for the analysis of pollutants shall conform to the [EMC](#) regulations published pursuant to NCGS 143-215.63 et. seq, the Water and Air Quality Reporting Acts, and to regulations published pursuant to Section 304(g), 33 USC 1314, of the Federal Water Pollution Control Act, as Amended, and Regulation 40 CFR 136.

To meet the intent of the monitoring required by this permit, all test procedures must produce minimum detection and reporting levels and all data generated must be reported down to the minimum detection or lower reporting level of the procedure.

If no approved methods are determined capable of achieving minimum detection and reporting levels below the permit discharge requirements, then the most sensitive (method with the lowest possible detection and reporting level) approved method must be used.

G-12. Representative Outfall

If a facility has multiple discharge locations with substantially identical stormwater discharges that are required to be sampled, the permittee may petition the [Director](#) for representative outfall status. If it is established that the stormwater discharges are substantially identical, and the permittee is granted representative outfall status, then analytical sampling requirements may be performed at a reduced number of outfalls.

G-13. Availability of Reports

Except for data determined to be confidential under NCGS 143-215.3(a)(2) or Section 308 of the Federal Act, 33 USC 1318, all reports prepared in accordance with the terms shall be available for public inspection at the offices of the [Division](#). As required by the Act, analytical data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NCGS 143-215.6B or in Section 309 of the Federal Clean Water Act.

G-14. Permit Actions

The permit may be modified, revoked and reissued, or terminated for cause. The notification of planned changes or anticipated noncompliance does not stay any permit condition [40 CFR 122.41(f)].

G-15. Recording Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information [40 CFR 122.41]:

- (a) The date, exact place, and time of sampling or measurements;
- (b) The individual(s) who performed the sampling or measurements;
- (c) The date(s) analyses were performed;
- (d) The individual(s) who performed the analyses;
- (e) The analytical techniques or methods used; and
- (f) The results of such analyses.

PART H: OPERATION AND MAINTENANCE of POLLUTION CONTROLS

H-1. Proper Operation and Maintenance

The permittee shall at all times:

- (a) Properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit.
- (b) Implement laboratory controls and quality assurance procedures for onsite labs and field parameter testing.
- (c) Operate back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit [40 CFR 122.41(e)].

H-2. Corrective Actions

The permittee shall take corrective actions if self-inspections required by this permit identify a need for corrective actions, a facility fails to perform satisfactorily, or a facility creates nuisance conditions.

Corrective actions shall include, but not be limited to: maintenance, modifications, or additions to existing control measures, the construction of additional or replacement treatment or disposal facilities, or implementation of new [BMPs](#). Corrective actions shall be completed as soon as possible considering adverse weather and site conditions.

H-3. Draw Down of Treatment Facilities for Essential Maintenance

The permittee may draw down stormwater and wastewater treatment facilities if the drawdown is for essential maintenance to assure efficient operation and one of the following conditions is met:

- (a) Either treatment facilities shall be drawn down from the surface, or
- (b) Analytical sampling data of the water stored in the treatment facility demonstrates that the discharge will not exceed benchmarks or violate effluent limitations in this permit. The sampling data shall be collected no more than 14 calendar days prior to the draw down.

H-4. Bypasses of Stormwater Control Facilities

[Bypass](#) is prohibited, and the [Division](#) may take enforcement action against a permittee for bypass unless the permittee provides engineering evidence that all three of the following conditions are met:

- (a) The bypass was unavoidable to prevent loss of life, personal injury or [severe property damage](#);
- (b) There were no feasible alternatives to the bypass, such as the use of auxiliary control facilities, retention of stormwater, or maintenance during normal periods of equipment downtime or dry weather. This condition is not satisfied if adequate backup controls should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

- (c) The permittee submitted notices and identified the reason(s) for the bypass as required under Part [H-6](#) of this permit.

If the [Director](#) determines that it will meet the three conditions listed above, the Director may approve an anticipated bypass after considering its adverse effects.

H-5. Upsets

Diversions of stormwater and wastewater from treatment facilities may be considered as an upset if the permittee can demonstrate to the [Director](#) that all of the following conditions have been met. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

- (a) The permittee demonstrates that the upset was not caused by operational error, improperly designed treatment or control facilities, lack of preventive maintenance, or careless or improper operation.
- (b) The permittee agrees to take remedial measures if necessary.
- (c) The permittee submitted notice of the upset and identified the cause(s) of the upset as required under part [H-6](#) of this permit.

H-6. Required Notice for Bypass or Upset

After a permittee becomes aware of an occurrence that must be reported, the permittee shall contact the Division's Wilmington Regional Office within the timeframes and in accordance with the requirements listed in Table 7 below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Hotline at (800) 858-0368.

Table 7: Bypass and Upset Reporting Requirements

Event [40 CFR 122.41(m)(3)]	Reporting Requirements
Anticipated Bypass	<i>Written report at least ten days prior to the anticipated bypass.</i> The written report shall include an evaluation of the anticipated quantity, quality and effect of the bypass.
Unanticipated Bypass or Upset	<i>Oral or electronic notification within 24 hours of the event, and Written report within 7 calendar days of the event.</i> The written report shall include an evaluation of the quantity, quality and effect of the bypass.

PART I: COMPLIANCE AND LIABILITY

I-1. Compliance Schedule

The permittee shall comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

- (a) **Facilities applying for permit renewal:** All requirements, conditions, limitations, and controls contained in this permit (except new SWPPP elements in this permit renewal) shall become effective immediately upon issuance of this permit. New elements of the Stormwater Pollution Prevention Plan for this permit renewal shall be developed and implemented within 6 months of the effective date of this permit and updated thereafter on an annual basis. Secondary containment, as specified in [B-9](#) of this permit shall be accomplished prior to the beginning of stormwater discharges from the operation of the industrial activity.

I-2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the [Clean Water Act](#) (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit upon renewal application [40 CFR 122.41].

- (a) The permittee shall comply with standards or prohibitions established under section 307(a) of the CWA for [toxic pollutants](#) within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement [40 CFR 122.41].
- (b) The CWA provides that any person who violates section[s] 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$51,570 per day for each violation [33 USC 1319(d) and 40 CFR 122.41(a)(2)].
- (c) The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both [33 USC 1319(c)(1) and 40 CFR 122.41(a)(2)].
- (d) Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than

\$100,000 per day of violation, or imprisonment of not more than 6 years, or both [33 USC 1319(c)(2) and 40 CFR 122.41(a)(2)].

- (e) Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR 122.41(a)(2)].
- (f) Under state law, a civil penalty of not more than \$25,000 per violation may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of a permit [North Carolina General Statutes § 143-215.6A].
- (g) Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$20,628 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$51,570. Penalties for Class II violations are not to exceed \$20,628 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$257,848 [33 USC 1319(g)(2) and 40 CFR 122.41(a)(3)].

I-3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment [40 CFR 122.41(d)].

I-4. Civil and Criminal Liability

Except as provided in Part [H-4](#) of this permit regarding bypassing of stormwater control facilities, nothing in this permit shall be construed to relieve the permittee from any responsibilities, liabilities, or penalties for noncompliance pursuant to NCGS 143-215.3, 143-215.6, or Section 309 of the Federal Act, 33 USC 1319. Furthermore, the permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

I-5. Oil and Hazardous Substance Liability

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 to under NCGS 143-215.75 et seq. or Section 311 of the Federal Act, 33 USC 1321.

I-6. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations [40 CFR 122.41(g)].

I-7. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby [NCGS 150B-23].

I-8. Duty to Provide Information

The permittee shall furnish to the [Director](#), within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit issued pursuant to this permit or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

I-9. Penalties for Tampering

The [Clean Water Act](#) provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both [40 CFR 122.41].

I-10. Penalties for Falsification of Reports

The [Clean Water Act](#) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR 122.41].

I-11. Onshore or Offshore Construction

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 any navigable waters.

I-12. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit [40 CFR 122.41(b)].

I-13. Inspection and Entry

The permittee shall allow the [Director](#), or an authorized representative (including

an authorized contractor acting as a representative of the Director), or in the case of a facility which discharges through a municipal separate storm sewer system, an authorized representative of a municipal operator or the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location [40 CFR 122.41(i)].

I-14. Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the condition of this permit [40 CFR 122.41(c)].

PART J: DEFINITIONS

Act

See Clean Water Act.

Adverse Weather

Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical. When adverse weather conditions prevent the collection of samples during the sample period, the permittee must take a substitute sample or perform a visual assessment during the next qualifying storm event. Documentation of an adverse event (with date, time and written narrative) and the rationale must be included with SWPPP records. Adverse weather does not exempt the permittee from having to file a monitoring report in accordance with the sampling schedule. Adverse events and failures to monitor must also be explained and reported on the relevant DMR.

Allowable Non-Stormwater Discharges

This permit regulates stormwater discharges. However, non-stormwater discharges which shall be allowed in the stormwater conveyance system include:

- (a) All other discharges that are authorized by a non-stormwater NPDES permit.
- (b) Uncontaminated groundwater, foundation drains, air-conditioner condensate without added chemicals, springs, discharges of uncontaminated potable water, waterline and fire hydrant flushings, water from footing drains, flows from riparian habitats and wetlands.
- (c) Discharges resulting from fire-fighting or fire-fighting training, or emergency shower or eye wash as a result of use in the event of an emergency.

Best Management Practices (BMPs)

Measures or practices used to reduce the amount of pollution entering surface waters. BMPs may take the form of a process, activity, or physical structure. More information on BMPs can be found on the Environmental Protection Agency's website.

Bypass

A bypass is the known diversion of stormwater from any portion of a stormwater control facility including the collection system, which is not a designed or established operating mode for the facility.

Bulk Storage of Liquid Materials

Liquid raw materials, intermediate products, manufactured products, waste materials, or by-products with a single above ground storage container having a capacity of greater than 660 gallons or with multiple above ground storage containers having a total combined storage capacity of greater than 1,320 gallons.

Clean Water Act

The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 USC 1251, et. seq.

Division or DEMLR

The Division of Energy, Mineral, and Land Resources, Department of Environmental Quality.

Director

The Director of the Division of Energy, Mineral, and Land Resources, the permit issuing authority.

EMC

The North Carolina Environmental Management Commission.

Grab Sample

An individual sample collected instantaneously. Grab samples that will be analyzed (quantitatively or qualitatively) must be taken within the first 30 minutes of discharge.

Hazardous Substance

Any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.

High Quality Waters (HQW)

Supplemental North Carolina water quality classification intended to protect waters which are rated excellent based on biological and physical/chemical characteristics through Division monitoring or special studies, or HQW by definition:

- (a) Water Supply Watershed I (WS-I),
- (b) Water Supply Watershed II (WS-II),
- (c) SA waters (commercial shellfish),
- (d) Outstanding Resource Waters (ORW),
- (e) Primary Nursery Areas and other functional nursery areas designated by Marine Fisheries Commission, or
- (f) Waters for which the Division of Water Resources has received a petition for reclassification to either WS-I or WS-II.

Impaired Waters

Streams, rivers and other bodies of water that do not meet water quality standards and may require development of a Total Maximum Daily Load (TMDL) per Section 303(d) of the federal Clean Water Act.

Landfill

A disposal facility or part of a disposal facility where waste is placed in or on land and which is not a land treatment facility, a surface impoundment, an injection well, a hazardous waste long-term storage facility or a surface storage facility.

Measurable Storm Event

A storm event that results in an actual discharge from the permitted site outfall. The previous measurable storm event must have been at least 72 hours prior. The 72-hour storm interval may not apply if the permittee is able to document that a shorter interval is representative for local

storm events during the sampling period and obtains approval from the local DEMLR Wilmington Regional Office. Two copies of this information and a written request letter shall be sent to the local DEMLR Wilmington Regional Office. After authorization by the DEMLR Wilmington Regional Office, a written approval letter must be kept on site in the permittee's SWPPP.

Municipal Separate Storm Sewer System (MS4)

A stormwater collection system within an incorporated area of local self-government such as a city or town.

No Exposure

A condition of no exposure means that all industrial materials and activities are protected by a storm-resistant shelter or acceptable storage containers to prevent exposure to rain, snow, snowmelt, or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products [40 CFR 122.26 (b)(14)]. DEMLR may grant a No Exposure Exclusion from NPDES Stormwater Permitting requirements only if a facility complies with the terms and conditions described in 40 CFR §122.26(g).

Outstanding Resource Water (ORW)

Supplemental North Carolina water quality classification intended to protect unique and special waters having excellent water quality and being of exceptional state or national, ecological or recreational significance. To qualify, waters must be rated "excellent" by the NC Division of Water Resources, and have one of the following outstanding resource values:

- (a) Outstanding fish habitat and fisheries,
- (b) Unusually high level of water-based recreation or potential for such kind of recreation,
- (c) Some special designation such as N.C. Scenic/Natural River, or National Wildlife Refuge,
- (d) Important component of state or national park or forest; or
- (e) Special ecological or scientific significance (rare or endangered species habitat, research or educational areas).

All ORWs are also considered High Quality Waters (HQW) by supplemental classification.

Permittee

The owner or operator issued this permit, who is the legally responsible party for compliance.

Point Source Discharge of Stormwater

Any discernible, confined and discrete conveyance including, but not specifically limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which stormwater is or may be discharged to waters of the state.

Representative Outfall Status

When it is established that the discharge of stormwater runoff from a single outfall is representative of the discharges at multiple outfalls, the Division may grant representative outfall

status. Representative outfall status allows the permittee to perform analytical monitoring at a reduced number of outfalls.

Secondary Containment

Spill containment for the contents of the single largest tank within the containment structure plus sufficient freeboard to contain the 25-year, 24-hour storm event.

Section 313 Water Priority Chemical

A chemical or chemical category which:

- (a) Is listed in 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986;
- (b) Is present at or above threshold levels at a facility subject to SARA title III, Section 313 reporting requirements; and
- (c) Meets at least one of the following criteria:
 - 1. Is listed in appendix D of 40 CFR part 122 on Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table IV (certain [toxic pollutants](#) and hazardous substances);
 - 2. Is listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or
 - 3. Is a pollutant for which EPA has published acute or chronic water quality criteria.

Severe Property Damage

Substantial physical damage to property, damage to the control facilities which causes 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.

Significant Materials

Includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

Significant Spills

Includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or section 102 of CERCLA (Ref: 40 CFR 302.4).

Stormwater Discharge Associated with Industrial Activity

This term is defined in 40 CFR 122.26(14).

Stormwater Control Measure (SCM)

A permanent structural device that is designed, constructed, and maintained to remove pollutants from stormwater runoff by promoting settling or filtration or mimic the natural hydrologic cycle by promoting infiltration, evapotranspiration, post-filtration discharge, reuse of stormwater, or a combination thereof.

Stormwater Control Systems

All systems at present at the facility used for the control and facilitation of stormwater, including but not limited to, all drainage systems and all stormwater control measures and best management practices.

Stormwater Discharge Outfall (SDO)

The point of departure of stormwater from a discernible, confined, or discrete conveyance, including but not limited to, storm sewer pipes, drainage ditches, channels, spillways, or channelized collection areas, from which stormwater flows directly or indirectly into waters of the State of North Carolina.

Stormwater Runoff

The flow of water which results from precipitation and which occurs immediately following rainfall or as a result of snowmelt.

Stormwater Associated with Industrial Activity

The discharge from any point source which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw material storage areas at an industrial site. Facilities considered to be engaged in "industrial activities" include those activities defined in 40 CFR 122.26(b)(14). The term does not include discharges from facilities or activities excluded from the NPDES program.

Stormwater Pollution Prevention Plan (SWPPP)

A comprehensive site-specific plan which details measures and practices to reduce stormwater pollution and is based on an evaluation of the pollution potential of the site.

Total Maximum Daily Load (TMDL)

TMDLs are written plans for attaining and maintaining water quality standards, in all seasons, for a specific water body and pollutant. A list of approved TMDLs for the state of North Carolina can be found on the Division's website.

Toxic Pollutant

Any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act.

Trout Water (Tr)

Supplemental NC water quality classification intended to protect freshwaters for natural trout propagation and survival of stocked trout on a year round basis. This is not the same as the NC Wildlife Resources Commission's Designated Public Mountain Trout Waters.

Upset

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. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment or control facilities, inadequate treatment or control facilities, lack of preventive maintenance, or careless or improper operation.

Vehicle Maintenance Activity

Vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, vehicle cleaning operations, or airport deicing operations. This definition includes equipment maintenance activity that uses hydraulic oil and that is stored or used outside, or otherwise exposed to stormwater.

Visible Sedimentation

Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin which can be seen with the unaided eye.

10-year, 24-hour Storm Event

The maximum 24-hour precipitation event expected to be equaled or exceeded, on the average, once in 10 years.

25-year, 24-hour Storm Event

The maximum 24-hour precipitation event expected to be equaled or exceeded, on the average, once in 25 years.

APPENDIX A: ACUTE TOXICITY PASS/FAIL MONITORING (QUARTERLY)**I. Quarterly Testing (Pass/Fail Acute Toxicity Testing)**

The permittee shall conduct acute toxicity tests on a **quarterly** basis using protocols defined in the North Carolina Procedure Document entitled “Pass/Fail Methodology For Determining Acute Toxicity In A Single Effluent Concentration” (Revised December 2010, or subsequent versions). The monitoring shall be performed as a *Ceriodaphnia dubia* 48-hour static test. The stormwater concentration at which there may be at no time significant acute mortality is **90 %** (defined as treatment two in the procedure document). Stormwater samples for self-monitoring purposes must be obtained during representative stormwater discharge below all waste treatment. The tests will be performed **during the first month of each quarter (January-March, April-June, July-September, October-December)**. **If a sample cannot be collected during the first month of the quarter, a sample shall be collected at the next qualifying storm event.** Stormwater samples shall be collected as a single grab sample. Samples for self-monitoring purposes must be obtained during a representative storm event. If at any time there is significant mortality at a stormwater effluent concentration of 90%, the results will be considered as a benchmark exceedance of toxicity.

All toxicity testing results required as part of this permit condition will be entered electronically using the Division’s eDMR system for the month in which it was performed, using the parameter code **TGA3B**. Additionally, DWR Form **AT-2** (original) is to be sent to the following address:

North Carolina Division of Water Resources
Water Sciences Section/Aquatic Toxicology Branch
1621 Mail Service Center
Raleigh, NC 27699-1621

Or, results can be sent to the email ATForms.ATB@ncdenr.gov.

Completed Aquatic Toxicity Test Forms shall be filed with the Water Sciences Section no later than 30 days after the end of the reporting period for which the report is made.

Test data shall be complete, accurate, include all supporting chemical/physical measurements and all concentration/response data, and be certified by laboratory supervisor or approved designate signature. Total residual chlorine of the stormwater toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of stormwater from the facility during a month in which toxicity monitoring is required, the permittee will complete the information located at the top of the aquatic toxicity (AT) test form indicating the facility name, permit number, stormwater outfall number, county, and the month/year of the report with the notation of “No Flow” in the comment area of the form. The report shall be submitted to the Water Sciences Section at the address cited above. **The permittee shall submit acute toxicity monitoring as outlined above at the next available representative storm event during the appropriate quarter.**

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Resources and/or the Division of Energy, Mineral, and Land Resources (DEMLR) indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

Should it be determined by the North Carolina Division of Water Resources that the facility's discharge frequency and duration enable chronic sampling according to either the North Carolina Ceriodaphnia Chronic Whole Effluent Toxicity Procedure or to Section 8.3, in Methods EPA-821-R-02-013, the permit may be re-opened and modified to include chronic toxicity tests.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival and appropriate environmental controls, shall constitute an **invalid test** and will require immediate follow-up testing to be completed no later than the last day of the month following the month of the initial monitoring.

II. Actions for Failure of Pass/Fail Testing

Should any single scheduled monitoring indicate a failure to meet toxicity benchmark levels, within thirty (30) calendar days from availability of the test results, the permittee shall contact the Division of Energy, Mineral, and Land Resources (DEMLR) Stormwater Permitting Unit (SPU) Central Office and the Regional Office Supervisor **in writing**.

- 1) If other stormwater monitoring parameters have exceeded benchmark values, the Regional Office may exempt the permittee from additional acute toxicity monitoring (other than regularly scheduled test periods) at the Regional Office's discretion. The permittee shall continue to address all other stormwater parameter benchmark exceedances.
- 2) If the permittee has not exceeded other benchmark values, or if the Regional Office does not exempt the permittee from additional monitoring, the permittee shall immediately institute monthly acute toxicity monitoring with a 48-hour multiple dilution test per U.S. EPA Method 2002.0. "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms," EPA 821-R-02-012 (October 2002).

III. Actions if Monthly Monitoring is Instituted (Multiple Dilution Testing)

If monthly acute toxicity monitoring is instituted per Section II above, the permittee shall perform the tests per the following conditions:

- 1) An LC50 greater than 100% shall be used as a benchmark passing endpoint; the DEMLR SPU Central Office may determine alternative endpoints as "passing" on a case-by-case basis, depending on the specific characteristics of the facility's stormwater discharge. Multiple dilution tests will be run at **100%, 50%, 25%, 12.5%, 6.25% and 0%** stormwater unless other test concentrations are determined appropriate by the DEMLR SPU Central Office.
- 2) Multiple Dilution Test Results shall be submitted on form **AT-1** for Acute Multiple Dilution Tests. The parameter code is **TAA3B**. The permittee shall:
 - a. Submit form AT-1 (original) to the DWR Environmental Sciences Section.
 - b. Send a completed Stormwater eDMR form (copy) with an attached form AT-1 (copy) to the appropriate DEMLR Regional Office.

- 3) The permittee shall perform monthly acute toxicity monitoring until one of the following permit conditions is met.
 - a. Three (3) consecutive multiple dilution tests pass. No further tests need to be performed until the next regularly scheduled test period.
-OR-
 - b. Either of the following occurs:
 - i. A total of five (5) multiple dilution tests fail.
-OR-
 - ii. Three (3) consecutive multiple dilution tests fail.

If either of the above occurs, **further actions are necessary**. See Section IV. below.

- 4) The permittee shall submit a summary of all test results for the multiple dilution test series along with complete copies of the test reports as received from the laboratory to the DEMLR Regional Office and DEMLR Central Office. These shall be sent and postmarked within thirty (30) calendar days of receipt of the last failed or passed multiple dilution test (as described above in Section III. 3).

IV. Actions for Failure of Multiple Dilution Tests (TRE, TRI, or Other Measures)

If the permittee fails either a total of five (5) multiple dilution tests or the third consecutive multiple dilution test as described in Section III 3) b., the permittee shall execute the following:

- 1) A toxicity reduction evaluation (TRE) shall be automatically instituted. Within thirty (30) calendar days from availability of the test results, the permittee shall contact the DEMLR Central Office and DEMLR Regional Office Supervisor in writing.
 - a. The permittee shall submit one copy of a plan for conducting a TRE to the DEMLR SPU and one copy to the DWR Water Sciences Section. These copies shall be submitted within sixty (60) calendar days of the date of DEMLR SPU's direction to perform the TRE.
 - b. This plan must be approved by DEMLR SPU before the TRE begins. A schedule for completing the TRE shall be established in the plan approval. A Toxicity Identification Evaluation (TIE) may be a component of the TRE.
 - c. Upon DEMLR's approval, the TRE schedule may be modified if toxicity is intermittent during the TRE investigations. A revised WET test schedule may be established by DEMLR for this period.
- 2) Additionally, after the first year that TRE results have been collected and submitted, depending on results, the DEMLR Regional Office may (among options):
 - a. Require the permittee to install structural stormwater controls;
 - b. Require the permittee to implement other stormwater control measures or BMPs;
 - c. Require the permittee to collect and treat the discharge and/or eliminate the discharge;
 - d. Require that the permittee implement site modifications to qualify for the No Exposure Exclusion; or
 - e. Require that the permittee perform upstream and downstream biological assessments in the receiving water.

V. Measures Applicable to All Tests

All acute toxicity test results shall be submitted in a concise summary at the end of the five (5) year permit term. One copy of this report shall be sent to the DEMLR Regional Office Supervisor and one copy to the DWR Water Sciences Section. Should any test data from either these monitoring requirements or tests performed by DWR indicate potential impacts to the receiving stream, this permit may be reopened and modified to include alternate monitoring requirements. If the Permittee monitors for any pollutant more frequently than required by this permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted on the eDMR and all Acute Toxicity Forms submitted.

DRAFT