

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

LINDA CULPEPPER
Director



NORTH CAROLINA
Environmental Quality

July 2, 2019

Ms. Robyn Gross
Director, Assets Management America
Badin Business Park, LLC
201 Isabella St.
Pittsburg, PA 15212

Subject: Final NPDES Permit
Permit NC0004308
Badin Business Park LLC.
Stanly County
Class I Facility

Dear Ms. Gross:

The Division is forwarding herewith the NPDES permit for Badin Business Park LLC, modified as stipulated in the Settlement Agreement executed on May 3, 2019. This permit is issued pursuant to the requirements of North Carolina General Statute 143-215.1 and the Memorandum of Agreement between North Carolina and the U.S. Environmental Protection Agency dated October 15, 2007 (or as subsequently amended).

The final permit maintains the following significant changes identified in the letter sent on May 14, 2019:

- Outfalls 018 and 022 were moved to the stormwater section. These two outfalls are stormwater outfalls collecting surface runoff from the Alcoa-Badin Landfill. The outfalls will be sampled according to the stormwater sampling protocol [see Section B.(1.)].
- Language was added to A.(5.) for outfall 019 (section A.(6.) in the 2017 final permit) stating that "If no parameters are detected during the permit cycle, this outfall may be removed from the permit after a public notice process and consideration of public comments".
- Footnote was included in section A.(1.) for outfall 005 stating that "The Division shall consider all effluent TRC values reported below 50 µg/ L to be in compliance with the permit. However, the Permittee shall continue to record and submit all values reported by a North Carolina certified laboratory (including field certified), even if these values fall below 50 µg/L".
- Permittee has submitted priority pollutant scans (PPAs) for outfalls 005, 012, 013, 018 and 022. No parameters were detected except Total Cyanide for outfall 012 which was within



the permit limits. No PPA is required for outfall 011 since it is the overflow for outfall 012. Therefore, special condition A.(9.), Priority Pollutant Analysis, was removed from the final permit.

- As a condition of the settlement agreement, Badin Business Park submitted PPA for outfall 004. No parameter was detected in the pollutant scan except Fluoride which is below the water quality standard. Therefore, no effluent limitations and monitoring requirements need to be added to the permit.
- The outfall coordinates in the final permit were revised (see Table 1).
- Mixing zone analysis for outfall 012 – Based on the submitted CORMIX dilution model, special condition C.(7.), Mixing Zone (Outfall 012), was modified to include the boundary of the mixing zone and the locations of three instream sampling stations.
- Cyanide limits for outfall 012 - Based on the submitted CORMIX dilution model, Total Cyanide monthly average and daily maximum limits have been modified to 242 µg/L (Dilution Factor of 48.4) and 285 µg/L (Dilution Factor of 6.12), respectively [See section A.(3.)].
- Trichloroethylene (TCE) limits for outfall 012 - Based on the submitted CORMIX dilution model, the monthly average and daily maximum limits for TCE have been modified to 121 µg/L (Dilution Factor of 48.4) and 181.5 µg/L (Dilution factor of 6.12), respectively [See section A.(3.)].
- Special condition A.(8.), Monitoring Study, has been removed from the permit in light of the fact that the Permittee has committed to conduct similar study under the Division of Waste Management (DWM).

If any parts, measurement frequencies or sampling requirements contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing upon written request within thirty (30) days following receipt of this letter. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings (6714 Mail Service Center, Raleigh, North Carolina 27699-6714). Unless such demand is made, this decision shall be final and binding.

Please note that this permit is not transferable except after notice to the Division. The Division may require modification or revocation and reissuance of the permit. This permit does not affect the legal requirements to obtain other permits which may be required by the Division of Water Resources or any other Federal, State, or Local governmental regulations.

If you have any questions concerning this permit, please contact Qais Banihani at (919) 707-3607 or via email at Qais.Banihani@ncdenr.gov.

Sincerely,

Original Signed by Jeff Poupart

Linda Culpepper, Director
Division of Water Resources, NCDEQ

Hardcopy: NPDES Files
Central Files
Mooresville Regional Office/Water Quality

Ecopy: US EPA Region 4
WSS/Aquatic Toxicology Branch/Susan Meadows
NC DEQ / DWR / PWS Regional Engineer/ Clinton Cook
DWM/Hazardous Waste Section/Robert McDaniel
Annette Lucas/ DEMLR

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER RESOURCES

PERMIT

TO DISCHARGE WASTEWATER AND STORMWATER UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

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,

Badin Business Park, LLC.

is hereby authorized to discharge wastewater and stormwater from a facility located at the

Badin Business Park
NC Hwy. 740 & NCSR 1719
Stanly County

to receiving waters designated as UT to Little Mountain Creek and Badin Lake (Yadkin River) in the Yadkin - Pee Dee River Basin

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III of this permit.

This permit shall become effective **August 01, 2019**.

This permit and the authorization to discharge shall expire at midnight on **October 31, 2022**.

Signed this day **July 02, 2019**.

Original Signed by Jeff Poupart

Linda Culpepper, Director
Division of Water Resources
By Authority of the Environmental Management Commission

SUPPLEMENT TO PERMIT COVER SHEET

The authority to operate and discharge from this facility arises exclusively under the terms and conditions of this NPDES Permit. Therefore, upon the effective date of this permit, any and all previous NPDES Permits issued for this facility and bearing this permit number are revoked.

Badin Business Park, LLC.

is hereby authorized to:

1. Discharge the following:

- stormwater at Outfalls 002, 004, 017, 018, 020, and 022
- groundwater, stormwater and or fire protection water at Outfalls 005, 012, 011 when flows exceed the capacity of the diffuser, and 013;
- overflow from stormwater retention pond at Outfall 019.

all outfalls being located at or near Badin Business Park in Stanly County; and

2. Discharge such groundwater, stormwater and/or fire protection water from locations specified on the attached map into an unnamed tributary to Little Mountain Creek (Outfalls 004, 005, 017, 018, and 022) and into Badin Lake (Yadkin River) (Outfalls 002, 011, 012, 013, 019, 020) which are classified as Class "WS-IV" waters and Class "WS-IV CA & B" waters, respectively, in the Yadkin-Pee Dee River Basin.

All discharges shall be in accordance with the attached schedules as follows:

Part I: Monitoring, Controls, and Limitations for Permitted Discharges

A. Effluent Limitations and Monitoring Requirements

B. Stormwater Management Requirements

C. Special Conditions

Part II: Standard Conditions for NPDES Permits

Part III: Other Requirements

Any other point source discharge to surface waters of the state is prohibited unless covered by another permit, authorization, or approval.

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 I

SECTION A - EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge wastewater and stormwater associated with the activities described in its current NPDES permit application. Such discharges shall be monitored, controlled, and limited as specified below.

A.(1) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Outfall 005 [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the Permittee is authorized to discharge *groundwater, stormwater, and fire protection water* at Outfall 005 subject to the following effluent limitations and monitoring¹ requirements:

PARAMETER	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²
Flow				Monthly	Instantaneous	E
Total Suspended Solids				Quarterly	Composite ³	E
pH	Shall remain within the range of 6.0 to 9.0 standard units at all times			Monthly	Grab	E
Total Aluminum				Quarterly	Composite ³	E
Total Fluoride ⁴	1.8 mg/l		24 mg/l	Monthly	Composite ³	E
Total Cyanide ⁴	5 µg/l		46.6 µg/l	Monthly	Grab	E
Total Residual Chlorine ⁴			17 µg/l	Monthly	Grab	E
Acute Toxicity ⁵				Quarterly	Composite ³	E

Footnotes:

1. Submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition C.(6).
2. Sample locations: E - Effluent.
3. The Permittee may use time-proportionate compositing or other sampling method provided that the alternate method yields samples that are reasonably representative of the discharge during the monitoring period.
4. The permittee shall use sufficiently sensitive test procedures approved under 40 CFR part 136 for the analysis of pollutants. A method is "sufficiently sensitive" when: (1) The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or (2) the method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The Division shall consider all effluent TRC values reported below 50 µg/ L to be in compliance with the permit. However, the Permittee shall continue to record and submit all values reported by a North Carolina certified laboratory (including field certified), even if these values fall below 50 µg/L.
5. Acute Toxicity P/F Quarterly; see Special Condition C.(1).

A.(2.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Outfall 011 [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the Permittee is authorized to discharge *fire protection waters, groundwater, and stormwater* exceeding the Outfall 012 diffuser capacity at Outfall 011 subject to the following effluent limitations and monitoring¹ requirements:

PARAMETER	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²
Flow				Monthly	Instantaneous	E
Total Aluminum				Quarterly	Grab	E
Total Fluoride ³			24 mg/l	Monthly	Grab	E
Total Cyanide ³			46.6 µg/l	Monthly	Grab	E
Total Suspended Solids				Quarterly	Grab	E
Trichloroethylene (TCE) ^{3,4}			3.7 µg/l	Monthly	Grab	E
pH	Shall remain within the range of 6.0 to 9.0 standard units at all times			Quarterly	Grab	E
Acute Toxicity ⁵				Quarterly	Grab	E

Footnotes:

1. Submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition C.(6).
2. Sample locations: E - Effluent.
3. The permittee shall use sufficiently sensitive test procedures approved under 40 CFR part 136 for the analysis of pollutants. A method is "sufficiently sensitive" when: (1) The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or (2) the method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The Permittee shall report on its Discharge Monitoring Reports the actual laboratory results for each effluent sample tested.
4. The facility may request that the Division review the data after collection of at least 12 data points to determine if there is reasonable potential to exceed the water quality standard or EPA criteria. If no reasonable potential exists, the Division may remove the limit and/or reduce the monitoring frequency.
5. Acute Toxicity Monitoring Quarterly; see Special Condition C.(2).

A.(3.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Outfall 012 [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the Permittee is authorized to discharge *fire protection waters, groundwater, and stormwater* at Outfall 012 (diffuser) subject to the following effluent limitations and monitoring¹ requirements:

PARAMETER	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²
Flow				Monthly	Instantaneous	E
Total Suspended Solids				Quarterly	Composite ³	E
pH	Shall remain within the range of 6.0 to 9.0 standard units at all times			Monthly	Grab	E
Total Cyanide ⁴	242 µg/l		285 µg/l	Monthly	Grab	E
Total Fluoride ⁴				Quarterly	Composite ³	E
Total Aluminum				Quarterly	Composite ³	E
Trichloroethylene (TCE) ^{4,5}	121 µg/l		181.5 µg/l	Monthly	Grab	E
Chronic Toxicity ⁶				Quarterly	Composite ³	E

Footnotes:

1. Submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition C.(6).
2. Sample locations: E - Effluent.
3. The Permittee may use time-proportionate compositing or other sampling method provided that the alternate method yields samples that are reasonably representative of the discharge during the monitoring period.
4. The permittee shall use sufficiently sensitive test procedures approved under 40 CFR part 136 for the analysis of pollutants. A method is "sufficiently sensitive" when: (1) The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or (2) the method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The Permittee shall report on its Discharge Monitoring Reports the actual laboratory results for each effluent sample tested.
5. The facility may request that the Division review the data after collection of at least 12 data points to determine if there is reasonable potential to exceed the water quality standard or EPA criteria. If no reasonable potential exists, the Division may remove the limit and/or reduce the monitoring frequency.
6. Chronic Toxicity Pass/Fail Quarterly; see Special Condition C.(3).

A.(4.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Outfall 013 [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the Permittee is authorized to discharge *groundwater and stormwater* at Outfall 013 subject to the following effluent limitations and monitoring¹ requirements:

PARAMETER	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²
Flow				Monthly	Instantaneous	E
Total Suspended Solids				Quarterly	Composite ³	E
Total Aluminum				Quarterly	Composite ³	E
Total Fluoride				Quarterly	Composite ³	E
Total Cyanide ⁴	5 µg/l		46.6 µg/l	Monthly	Grab	E
pH	Shall remain within the range of 6.0 to 9.0 standard units at all times			Monthly	Grab	E
Acute Toxicity ⁵				Quarterly	Composite ³	E

Footnotes:

1. Submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition C.(6).
2. Sample locations: E - Effluent.
3. The Permittee may use time-proportionate compositing or other sampling method provided that the alternate method yields samples that are reasonably representative of the discharge during the monitoring period.
4. The permittee shall use sufficiently sensitive test procedures approved under 40 CFR part 136 for the analysis of pollutants. A method is "sufficiently sensitive" when: (1) The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or (2) the method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The Permittee shall report on its Discharge Monitoring Reports the actual laboratory results for each effluent sample tested.
5. Acute Toxicity Monitoring Quarterly; see Special Condition C.(2).

A.(5.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Outfall 019 [15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the Permittee is authorized to discharge *overflow from the retention pond at the Old Brick Landfill* at Outfall 019 subject to the following effluent limitations and monitoring¹ requirements:

PARAMETER	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²
Flow				Semi-annual	Instantaneous	E
Total Rainfall (inches) ³				Semi-annual	Rain gauge	---
Total Suspended Solids				Semi-annual	Grab	E
Total Aluminum				Semi-annual	Grab	E
Total Fluoride ⁴				Semi-annual	Grab	E
Total Cyanide ⁴				Semi-annual	Grab	E
pH	Shall remain within the range of 6.0 to 9.0 standard units at all times			Semi-annual	Grab	E
Acute Toxicity ⁵				Annual	Grab	E

Footnotes:

1. Submit Discharge Monitoring Reports electronically using NC DWR's eDMR application system. Please See Special Condition C.(6).
2. Sample locations: E - Effluent.
3. For each sampled representative storm event the total precipitation must be recorded. An on-site rain gauge or local rain gauge reading must be recorded.
4. The permittee shall use sufficiently sensitive test procedures approved under 40 CFR part 136 for the analysis of pollutants. A method is "sufficiently sensitive" when: (1) The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or (2) the method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The Permittee shall report on its Discharge Monitoring Reports the actual laboratory results for each effluent sample tested.
5. Acute Toxicity Monitoring Annual; see Special Condition C.(4).

If no parameters are detected during the permit cycle, this outfall may be removed from the permit after a public notice process and consideration of public comments.

SECTION B - STORMWATER MANAGEMENT REQUIREMENTS [G.S. 143-215.1(A) et seq., 15A NCAC 02H .0126 et seq.]

B.(1.) STORMWATER MONITORING REQUIREMENTS - Outfalls 002, 004, 017, 018, 020 & 022

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the Permittee is authorized to discharge *stormwater* at Outfalls 002, 004, 017, 018, 020 and 022. Such discharges shall be controlled, limited, and monitored as specified in this permit.

1. Analytical Monitoring:

Analytical monitoring of stormwater discharges shall be performed as specified below. All analytical monitoring shall be performed during a **measurable storm event**.

A **measurable storm event** is 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 does not apply if the permittee is able to document that a shorter interval is representative for local storm events during the sampling period, and the permittee obtains approval from the local DEMLR Regional Engineer (*See Definitions*).

Analytical Monitoring Requirements

Discharge Characteristics	Units	Measurement Frequency ¹	Sample Type ²	Sample Location ³
Total Suspended Solids (TSS)	mg/L	semi-annual	Grab	SDO
Chemical Oxygen Demand (COD)	mg/L	semi-annual	Grab	SDO
Aluminum, Total Recoverable	mg/L	semi-annual	Grab	SDO
Total Cyanide	mg/L	semi-annual	Grab	SDO
Total Fluoride	mg/L	semi-annual	Grab	SDO
Total Rainfall ⁴	inches	semi-annual	Rain Gauge	-

Footnotes:

1. Measurement Frequency: Twice per year (unless other provisions of this permit prompt monthly sampling) during a measurable storm event, until either another permit is issued for this facility or until this permit is revoked or rescinded. If the facility is monitoring monthly because of Tier Two or Three response actions under the previous permit, the facility shall continue a monthly monitoring and reporting schedule in Tier Two or Tier Three status until relieved by the provisions of this permit by DEMLR.
2. Grab samples shall be collected within the first 30 minutes of discharge. When physical separation between outfalls prevents collecting all samples within the first 30 minutes, sampling shall begin within the first 30 minutes, and shall continue until completed.
3. Sample Location: Samples shall be collected at each stormwater discharge outfall (SDO) unless representative outfall status (ROS) has been granted. A copy of DEMLR's letter granting ROS shall be kept on site.
4. 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 substituted for an on-site reading.

The permittee shall complete the analytical samplings in accordance with the schedule specified below, unless *adverse weather* conditions prevent sample collection. A **minimum of 60 days must separate Period 1 and Period 2 sample dates**, unless monthly monitoring has been instituted under a Tier Two response. Inability to sample because of adverse weather conditions must be documented in the Stormwater Pollution Prevention Plan (SPPP) and recorded on the DMR. The permittee must report the results from each sample taken within the monitoring period (see Part II, Section D). 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.

Monitoring Schedule

Semi-Annual Monitoring Events ^{1,2}	Start Date (All Years) ³	End Date (All Years) ³
Period 1	January 1	June 30
Period 2	July 1	December 31

Footnotes:

- 1 Maintain semi-annual monitoring until either another permit is issued for this facility or until this permit is revoked or rescinded. The permittee must submit an application for renewal of coverage before the submittal deadline (180 days before expiration) to be considered for renewed coverage under the permit. The permittee must continue analytical monitoring throughout the permit renewal process, even if a renewal permit is not issued until after expiration of this permit.
- 2 If no discharge occurs during the sampling period, the permittee must submit a monitoring report indicating “No Flow” or “No Discharge” within 30 days of the end of the sampling period.
- 3 Monitoring periods remain consistent through the permit term and through the renewal process.

Failure to monitor semi-annually per permit terms may result in DEMLR requiring **monthly monitoring** for all parameters for a specified time period. “No discharge” from an outfall during a monitoring period does not constitute failure to monitor, as long as it is properly recorded and reported.

The permittee shall compare monitoring results to the benchmark values below. Exceedances of benchmark values require the permittee to increase monitoring, increase management actions, increase record keeping, and/or install stormwater Best Management Practices (BMPs) in a tiered program. See below the descriptions of **Tier One**, **Tier Two**, and **Tier Three** response actions. In the event that DEMLR releases the permittee from continued monthly monitoring and reporting under Tier Two or Tier Three, DEMLR’s release letter may remain in effect through subsequent reissuance of this permit, unless the release letter provides for other conditions or duration.

Benchmark Values for Analytical Monitoring

Discharge Characteristics	Units	Benchmark
Total Suspended Solids (TSS)	mg/L	100
Chemical Oxygen Demand	mg/L	120
Aluminum, Total Recoverable	mg/L	0.75
Total Cyanide	mg/L	0.02
Total Fluoride	mg/L	6

The benchmark values above are not permit limits but should be used as guidelines for implementation of the permittee's SPPP. An **exceedance of a stormwater benchmark value is not a permit violation**; however, failure to respond to the exceedance as outlined in this permit is a violation of permit conditions.

Tier One

If: The **first valid sampling results** are above a benchmark value for any parameter at any outfall;

Then: The permittee shall:

1. Conduct a stormwater management inspection of the facility **within two weeks of receiving sampling results**.
2. Identify and evaluate possible causes of the benchmark value exceedance.
3. Identify potential, and select the specific feasible: source controls, operational controls, or physical improvements to reduce concentrations of the parameters of concern.
4. Implement the selected feasible actions **within two months of the inspection**.
5. Record each instance of a Tier One response in the SPPP. Include the date and value of the benchmark exceedance, the inspection date, the personnel conducting the inspection, the selected actions, and the date the selected actions were implemented.
6. Note: Benchmark exceedances for a different parameter separately trigger a tiered response.

Tier Two

If: The **first valid sampling results** from two consecutive monitoring periods are above the benchmark values for any specific parameter at a specific discharge outfall;

Then: The permittee shall:

1. Repeat all the required actions outlined above in Tier One.
2. Immediately institute monthly monitoring and reporting for all parameters. The permittee shall conduct monthly monitoring at every outfall where a sampling result exceeded the benchmark value for two consecutive samples. Monthly (analytical and qualitative) monitoring shall continue until three consecutive sample results are below the benchmark values or within benchmark range.
3. If no discharge occurs during the sampling period, the permittee is required to submit a monthly monitoring report indicating "No Flow" to comply with reporting requirements.
4. *Alternatively*, in lieu of steps 2 and 3, 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 direct the response actions on the part of the permittee as provided in Tier Three, including reduced or additional sampling parameters or frequency.
5. Maintain a record of the Tier Two response in the SPPP.
6. Continue Tier Two response obligations throughout the permit renewal process.

Tier Three

If: The **valid sampling results required for the permit monitoring periods** exceed the benchmark value for any specific parameter at any specific outfall on **four occasions**, the permittee shall notify the DEMLR Regional Engineer in writing **within 30 days of receipt** of the fourth analytical results;

Then: The Division **may but is not limited to:**

- require that the permittee revise, increase, or decrease the monitoring and reporting frequency for some or all of the parameters herein;
- require sampling of additional or substitute parameters;
- require the permittee to install structural stormwater controls;
- require the permittee to implement other stormwater control measures;
- require the permittee to perform upstream and downstream monitoring to characterize impacts on receiving waters; or
- require the permittee implement site modifications to qualify for a No Exposure Exclusion;
- require the permittee to continue Tier Three obligations through the permit renewal process.

2. Qualitative Monitoring Requirements

The purpose of qualitative monitoring is to evaluate the effectiveness of the Stormwater Pollution Prevention Plan (SPPP) and identify new potential sources of stormwater pollution. Qualitative monitoring of stormwater outfalls must be performed during a **measurable storm event**.

Qualitative monitoring requires a visual inspection of each stormwater outfall *regardless of* representative outfall status. Qualitative monitoring shall be performed semi-annually as specified below, and during required analytical monitoring events (unless the permittee is required to perform further qualitative monitoring per the **Qualitative Monitoring Response**, below). Inability to monitor because of adverse weather conditions must be documented in the SPPP and recorded on the Qualitative Monitoring Report form (see *Adverse Weather* in Definitions). Only SDOs discharging *stormwater associated with industrial activity* must be monitored (See Definitions).

In the event an atypical condition is noted at a stormwater discharge outfall, the permittee shall document the suspected cause of the condition and any actions taken in response to the discovery. This documentation will be maintained with the SPPP.

Qualitative Monitoring Requirements

Discharge Characteristics	Frequency ¹	Monitoring Location ²
Color	semi-annual	SDO
Odor	semi-annual	SDO
Clarity	semi-annual	SDO
Floating Solids	semi-annual	SDO
Suspended Solids	semi-annual	SDO
Foam	semi-annual	SDO
Oil Sheen	semi-annual	SDO
Erosion or deposition at the outfall	semi-annual	SDO
Other obvious indicators of stormwater pollution	semi-annual	SDO

Footnotes:

1. Monitoring Frequency: Twice per year during a **measurable storm event** unless other provisions of this permit prompt monthly monitoring. See schedule of monitoring periods through the end of this permitting cycle. The permittee must continue qualitative monitoring throughout the permit renewal process until a new permit is issued.
2. Monitoring Location: Qualitative monitoring shall be performed at each stormwater discharge outfall (SDO) regardless of representative outfall status.

A minimum of 60 days must separate monitoring dates, *unless additional sampling has been instituted as part of other analytical monitoring requirements in this permit.*

If the permittee's qualitative monitoring indicates that existing stormwater Best Management Practices (BMPs) are ineffective, or that significant stormwater contamination is present, the permittee shall investigate potential causes, evaluate the feasibility of corrective action, and implement those corrective actions within 60 days, per the **Qualitative Monitoring Response**, below. A written record of the permittee's investigation, evaluation, and response actions shall be kept in the SPPP.

Qualitative Monitoring Response
<p>Qualitative monitoring is for the purposes of evaluating SPPP effectiveness, identifying new potential sources of stormwater pollution, and prompting the permittee's response to pollution. If the permittee repeatedly fails to respond effectively to correct problems identified by qualitative monitoring, or if the discharge causes or contributes to a water quality standard violation, DEMLR may but is not limited to:</p> <ul style="list-style-type: none"> • require that the permittee revise, increase, or decrease the monitoring frequency for some or all parameters (analytical or qualitative) • require the permittee to install structural stormwater controls; • require the permittee to implement other stormwater control measures; • require the permittee to perform upstream and downstream monitoring to characterize impacts on receiving waters; or • require the permittee implement site modifications to qualify for a No Exposure Exclusion.

B.(2.) STORMWATER POLLUTION PREVENTION PLAN

The permittee shall **develop and implement** a Stormwater Pollution Prevention Plan (SPPP). The SPPP shall be maintained on site unless exempted from this requirement by DEMLR. The SPPP is public information in accordance with Part II, Standard Conditions, Section E Paragraph 10 of this permit. The SPPP shall include, at a minimum, the following items:

1. **Site Overview.** The Site Overview shall provide a description of the physical facility and the potential pollutant sources that may be expected to contribute to contamination of stormwater discharges. The Site Overview shall contain the following:
 - (a) A general **location map** (USGS quadrangle map or appropriately drafted equivalent map), showing the facility's location in relation to transportation routes and surface waters; the name of the receiving waters to which the stormwater outfalls discharge, or if the discharge is to a municipal separate storm sewer system, the name of the municipality and the ultimate receiving waters; and accurate latitude and longitude of the points of stormwater discharge associated with industrial activity. The general location map (or alternatively the site map) shall identify whether any receiving waters are **impaired** (on the state's 303(d) list of impaired waters) or if the site is located in a **watershed for which a TMDL has been established**, and what the parameters of concern are.
 - (b) A **narrative description** of storage practices, loading and unloading activities, outdoor process areas, dust or particulate generating or control processes, and waste disposal practices. A **narrative description** of the potential pollutants that could be expected to be present in the stormwater discharge from each outfall.
 - (c) A **site map** drawn at a scale sufficient to clearly depict: the site property boundary; the stormwater discharge outfalls; all on-site and adjacent surface waters and wetlands; industrial activity areas (including storage of materials, disposal areas, process areas, loading and unloading areas, and haul roads); site topography and finished grade; all drainage features and structures; drainage area boundaries and total contributing area for each outfall; direction of flow in each drainage area; industrial activities occurring in each drainage area; buildings; stormwater Best Management Practices (BMPs); and impervious surfaces. The site map must indicate the percentage of each drainage area that is impervious, and the site map must include a graphic scale indication and north arrow.
 - (d) A **list of significant spills or leaks** of pollutants during the previous three (3) years and any corrective actions taken to mitigate spill impacts.
 - (e) Certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. **The permittee shall re-certify annually that the stormwater outfalls have been evaluated 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 with the certification. The certification statement and summary written record shall be retained with the SPPP, and shall be dated and signed in accordance with the requirements found in Standard Conditions for NPDES Permits, Part II, Section B.11(b).
 - (f) If a permanent source of non-stormwater flow is identified in accordance with B. (2) 1. (e) the permittee shall notify DWR and DEMLR. The notification must include a description and frequency of discharge for the identified non-stormwater flow. The notification must be submitted to the following addresses:

DWR/NPDES Complex Permitting Unit
1617 Mail Service Center
Raleigh, NC 27699-1617

DEMLR / Stormwater Permitting Program
1612 Mail Service Center
Raleigh, NC 27699-1612.

2. **Stormwater Management Strategy.** The Stormwater Management Strategy shall contain a narrative description of the materials management practices employed which control or minimize the stormwater exposure of significant materials, including structural and nonstructural measures. The Stormwater Management Strategy, at a minimum, shall incorporate the following:
- (a) **Feasibility Study.** A review of the technical and economic feasibility of changing the methods of operations and/or storage practices to eliminate or reduce exposure of materials and processes to rainfall and run-on flows. Wherever practical, the permittee shall prevent exposure of all storage areas, material handling operations, and manufacturing or fueling operations. In areas where elimination of exposure is not practical, this review shall document the feasibility of diverting the stormwater run-on away from areas of potential contamination.
 - (b) **Secondary Containment Requirements and Records.** Secondary containment is required for: bulk storage of liquid materials; storage in any amount of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals; and storage in any amount of hazardous substances, in order to prevent leaks and spills from contaminating stormwater runoff. A table or summary of all such tanks and stored materials and their associated secondary containment areas shall be maintained. If the secondary containment devices are connected to stormwater conveyance systems, the connection shall be controlled by manually activated valves or other similar devices (which shall be secured closed with a locking mechanism). Any stormwater that accumulates in the containment area shall be at a minimum visually observed for color, foam, outfall staining, visible sheens and dry weather flow, prior to release of the accumulated stormwater. Accumulated stormwater shall be released if found to be uncontaminated by any material. Records documenting the individual making the observation, the description of the accumulated stormwater, and the date and time of the release shall be kept for a period of five (5) years. For facilities subject to a federal oil Spill Prevention, Control, and Countermeasure Plan (SPCC), any portion of the SPCC Plan fully compliant with the requirements of this permit may be used to demonstrate compliance with this permit.
 - (c) **BMP Summary.** A listing of site structural and non-structural Best Management Practices (BMPs) shall be provided. The installation and implementation of 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 BMP Summary shall include a written record of the specific rationale for installation and implementation of the selected site BMPs. The BMP Summary shall be reviewed and updated annually.
3. **Spill Prevention and Response Procedures.** The Spill Prevention and Response Procedures (SPRP) shall incorporate an assessment of potential pollutant sources based on a materials inventory of the facility. Facility personnel responsible for implementing the SPRP shall be identified in a written list incorporated into the SPRP and signed and dated by each individual acknowledging their responsibilities for the plan. A responsible person shall be on-site at all times during facility operations that have increased potential to contaminate stormwater runoff through spills or exposure of materials associated with the facility operations. The SPRP must be site stormwater specific. Therefore, an oil Spill Prevention Control and Countermeasure plan (SPCC) may be a component of the SPRP, but may not be sufficient to completely

address the stormwater aspects of the SPRP. The common elements of the SPCC with the SPRP may be incorporated by reference into the SPRP.

4. **Preventative Maintenance and Good Housekeeping Program.** A preventative maintenance and good housekeeping program shall be developed and implemented. The program shall address all stormwater control systems (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 BMPs. The program shall establish schedules of inspections, maintenance, and housekeeping activities of stormwater control systems, as well as facility equipment, facility areas, and facility systems that present a potential for stormwater exposure or stormwater pollution where not already addressed under another element of the SPPP. Inspection of material handling areas and regular cleaning schedules of these areas shall be incorporated into the program. Timely compliance with the established schedules for inspections, maintenance, and housekeeping shall be recorded and maintained in the SPPP.
5. **Facility Inspections.** Inspections of the facility and all stormwater *systems* shall occur as part of the Preventative Maintenance and Good Housekeeping Program at a minimum on a semi-annual schedule, once during the first half of the year (January to June), and once during the second half (July to December), with at least 60 days separating inspection dates (unless performed more frequently than semi-annually). These facility inspections are different from, and in addition to, the stormwater discharge characteristic monitoring *at the outfalls* required in Part I Section B.(1.).
6. **Employee Training.** Training programs shall be developed and training 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.
7. **Responsible Party.** The SPPP shall identify a specific position or positions responsible for the overall coordination, development, implementation, and revision of the SPPP. Responsibilities for all components of the SPPP shall be documented and position assignments provided.
8. **SPPP Amendment and Annual Update.** The permittee shall amend the SPPP 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. **All aspects of the SPPP shall be reviewed and updated on an annual basis.** The annual 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 (element of the **Site Overview**);
 - (b) a written *re-certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges* (element of the **Site Overview**);
 - (c) a documented re-evaluation of the effectiveness of the on-site stormwater BMPs (*BMP Summary* element of the **Stormwater Management Strategy**).
 - (d) a *review and comparison of sample analytical data* to benchmark values (if applicable) over the past year, including a discussion about Tiered Response status. The permittee shall use the Annual Summary Data Monitoring Report (DMR) form, available from the DEMLR Stormwater Permitting Program's website (See 'Monitoring Forms' here: <http://portal.ncdenr.org/web/lr/npdes-stormwater>).

The Director may notify the permittee when the SPPP 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 SPPP to meet minimum requirements. The permittee shall provide

certification in writing in accordance with Part II, Standard Conditions, Section B, Paragraph 11 to the Director that the changes have been made.

9. **SPPP Implementation.** The permittee shall implement the Stormwater Pollution Prevention Plan and all appropriate BMPs consistent with the provisions of this permit, in order to control contaminants entering surface waters via stormwater. Implementation of the SPPP shall include 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 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 Director or the Director's authorized representative immediately upon request.

B.(3.) STORMWATER DEFINITIONS

1. 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 your SPPP 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.
2. Allowable Non-Stormwater Discharges
Non-stormwater discharges which shall be allowed in the stormwater conveyance system include:
 - a. 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.
 - b. 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.
3. 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 at: <https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu>.
4. Bypass (stormwater)
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.
5. Bulk Storage of Liquid Products
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 located in close proximity to each other having a total combined storage capacity of greater than 1,320 gallons.
6. DEMLR
The Division of Energy, Mineral, and Land Resources.

7. 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.
8. Measureable 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 Regional Office. Two copies of this information and a written request letter shall be sent to the local DEMLR Regional Office. After authorization by the DEMLR Regional Office, a written approval letter must be kept on site in the permittee's SPPP.
9. 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).
10. 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.
11. 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.
12. 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.
13. 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:
 - i. 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);
 - ii. Is listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or
 - iii. Is a pollutant for which EPA has published acute or chronic water quality criteria.

14. 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.
15. 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).
16. 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.
17. Stormwater Runoff
The flow of water which results from precipitation and which occurs immediately following rainfall or as a result of snowmelt.
18. 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.
19. Stormwater Pollution Prevention Plan
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.
20. 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 at <http://portal.ncdenr.org/web/wq/ps/mtu/tmdl>.
21. Vehicle Maintenance Activity
Vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, vehicle cleaning operations, or airport deicing operations.
22. 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.
23. 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.

SECTION C - SPECIAL CONDITIONS**C.(1.) ACUTE TOXICITY PASS/FAIL PERMIT LIMIT (Quarterly; Outfall 005) [15A NCAC 02B .0200 et seq.]**

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 Fathead Minnow (*Pimephales promelas*) 24 hour static test. The effluent concentration at which there may be at no time significant acute mortality is **90%** (defined as treatment two in the procedure document). The tests will be performed **once during each calendar quarter (January-March, April-June, July-September and October-December)**. Effluent sampling for this testing must be obtained during representative effluent discharge and shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

Should any single quarterly monitoring indicate a failure to meet specified limits, then monthly monitoring will begin immediately until such time that a single test is passed. Upon passing, this monthly test requirement will revert to quarterly in the months specified above.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the month in which it was performed, using the parameter code TGE6C. Additionally, DWR Form AT-2 (original) is to be sent to the following address:

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

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

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow 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, pipe 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 Environmental Sciences Section at the address cited above.

Should the permittee fail to monitor during a month in which toxicity monitoring is required, then monthly monitoring will begin immediately until such time that a single test is passed. Upon passing, this monthly test requirement will revert to quarterly in the months specified above. Assessment of toxicity compliance is based on the toxicity testing quarter, which is the three month time interval that begins on the first day of the month in which toxicity testing is required by this permit and continues until the final day of the third month.

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

If the Permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included in the calculation & reporting of the data submitted on the DMR & all AT Form submitted.

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.

C.(2.) ACUTE TOXICITY MONITORING (Quarterly; Outfalls 011 and 013) [15A NCAC 02B .0200 et seq.]

The permittee shall conduct acute toxicity tests on a **quarterly** basis using protocols defined as definitive in E.P.A. Document EPA/600/4-90/027 entitled "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms." The monitoring shall be performed as a **Fathead Minnow (*Pimephales promelas*) 24-hour static test**. Effluent samples for self-monitoring purposes must be obtained during representative effluent discharge below all waste treatment. The tests will be performed **on a discharge event during each calendar quarter (January-March, April-June, July-September and October-December)**.

The parameter code for this test is **TAE6C**. All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Form (MR-1) for the month in which it was performed, using the appropriate parameter code. Additionally, DWR Form AT-1 (original) is to be sent to the following address:

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

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

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during a quarter 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, pipe 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 Environmental Sciences Branch at the address cited above.

Should any test data from this monitoring requirement or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

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.

C.(3.) CHRONIC TOXICITY PASS/FAIL PERMIT LIMIT (Quarterly; Outfall 012) [15A NCAC 02B .0200 et seq.]

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to *Ceriodaphnia dubia* at an effluent concentration of **3.8 % at Outfall 012**.

The permit holder shall perform at a minimum, **quarterly** monitoring using test procedures outlined in the "North Carolina Ceriodaphnia Chronic Effluent Bioassay Procedure," Revised February 1998, or subsequent versions or "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-February 1998) or subsequent versions. Effluent samples for self-monitoring purposes must be obtained during representative effluent discharge below all waste treatment. The tests will be performed **once during each calendar quarter (January-March, April-June, July-September and October-December)**.

If the test procedure performed as the first test of any single quarter results in a failure or ChV below the permit limit, then multiple-concentration testing shall be performed at a minimum, in each of the two following months as described in "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-February 1998) or subsequent versions.

The chronic value for multiple concentration tests will be determined using the geometric mean of the highest concentration having no detectable impairment of reproduction or survival and the lowest concentration that does have a detectable impairment of reproduction or survival. The definition of "detectable impairment," collection methods, exposure regimes, and further statistical methods are specified in the "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-February 1998) or subsequent versions.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the months in which tests were performed, using the parameter code **TGP3B** for the pass/fail results and **THP3B** for the Chronic Value. Additionally, DWR Form AT-3 (original) is to be sent to the following address:

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

Completed Aquatic Toxicity Test Forms shall be filed with the Aquatic Toxicology Branch 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 and ORC or approved designate signature. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during a quarter 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, pipe 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 Environmental Sciences Branch at the address cited above.

Should the Permittee fail to monitor during a month in which toxicity monitoring is required, monitoring will be required during the following month.

Should any test data from this monitoring requirement or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival, minimum control organism reproduction, 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.

C.(4.) ACUTE TOXICITY MONITORING (Annual; Outfall 019) [15A NCAC 02B .0200 et seq.]

The permittee shall conduct annual toxicity tests using protocols defined as definitive in E.P.A. Document EPA/600/4-90/027 entitled "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms." The monitoring shall be performed as a Fathead Minnow (*Pimephales promelas*) 24-hour static test. Effluent samples for self-monitoring purposes must be obtained below all waste treatment. The permittee will conduct **one test annually**, with the annual period beginning in January of the calendar year of the effective date of the permit.

The annual toxicity test must be performed by June 30. Should there be no discharge of flow from the facility during the six month period January 1-June 30, the permittee will complete the information located at the top of the aquatic toxicity (AT) test form indicating the facility name, permit number, pipe number, county and in the comments section indicate "No Flow for January 1-June 30, {calendar year}." The report must be signed and submitted to the Environmental Sciences Section at the address noted below.

If no discharge event occurs from January 1-June 30, yet a discharge event occurs from July 1-December 31, then the facility must perform toxicity monitoring and report the data as noted below.

The parameter code for this test is TAE6C. All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Form (MR-1) for the month in which it was performed, using the appropriate parameter code. Additionally, DWR Form AT-1 (original) is to be sent to the following address:

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

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

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

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

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.

C.(5.) PERMIT REOPENER [G.S. 143-215.1(b)]

The permittee shall notify the Division if any industrial activity is proposed to take place at the facility which changes the characteristics of the wastewaters as authorized in this permit or adds additional sources of wastewater. A notification shall be submitted to the Division describing the new activities and expected wastewater characteristics 90 days prior to proposed start of operations.

C.(6.) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS [G.S. 143-215.1(b)]

Federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and program reports. The final NPDES Electronic Reporting Rule was adopted and became effective on December 21, 2015.

NOTE: This special condition supplements or supersedes the following sections within Part II of this permit (*Standard Conditions for NPDES Permits*):

- Section B. (11.) Signatory Requirements
- Section D. (2.) Reporting
- Section D. (6.) Records Retention
- Section E. (5.) Monitoring Reports

1. Reporting Requirements [Supersedes Section D. (2.) and Section E. (5.) (a)]

The permittee shall report discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application.

Monitoring results obtained during the previous month(s) shall be summarized for each month and submitted electronically using eDMR. The eDMR system allows permitted facilities to enter monitoring data and submit DMRs electronically using the internet. Until such time that the state's eDMR application is compliant with EPA's Cross-Media Electronic Reporting Regulation (CROMERR), permittees will be required to submit all discharge monitoring data to the state electronically using eDMR and will be required to complete the eDMR submission by printing, signing, and submitting one signed original and a copy of the computer printed eDMR to the following address:

NC DEQ / Division of Water Resources / Water Quality Permitting Section
 ATTENTION: Central Files
 1617 Mail Service Center
 Raleigh, North Carolina 27699-1617

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 (MR 1, 1.1, 2, 3) 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.

Regardless of the submission method, the first DMR is due on the last day of the month following the issuance of the permit or in the case of a new facility, on the last day of the month following the commencement of discharge.

Starting on **December 21, 2020**, the permittee must electronically report the following compliance monitoring data and reports, when applicable:

- Sewer Overflow/Bypass Event Reports;
- Pretreatment Program Annual Reports; and
- Clean Water Act (CWA) Section 316(b) Annual Reports.

The permittee may seek an electronic reporting waiver from the Division (see "How to Request a Waiver from Electronic Reporting" section below).

2. Electronic Submissions

In accordance with 40 CFR 122.41(l)(9), the permittee must identify the initial recipient at the time of each electronic submission. The permittee should use the EPA's website resources to identify the initial recipient for the electronic submission.

Initial recipient of electronic NPDES information from NPDES-regulated facilities means the entity (EPA or the state authorized by EPA to implement the NPDES program) that is the designated entity for receiving electronic NPDES data [see 40 CFR 127.2(b)].

EPA plans to establish a website that will also link to the appropriate electronic reporting tool for each type of electronic submission and for each state. Instructions on how to access and use the appropriate electronic reporting tool will be available as well. Information on EPA's NPDES Electronic Reporting Rule is found at: <https://www.federalregister.gov/documents/2015/10/22/2015-24954/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule>

Electronic submissions must start by the dates listed in the "Reporting Requirements" section above.

3. How to Request a Waiver from Electronic Reporting

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 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.

Information on eDMR and the application for a temporary electronic reporting waiver are found on the following web page:

<http://deq.nc.gov/about/divisions/water-resources/edmr>

4. Signatory Requirements [Supplements Section B. (11.) (b) and Supersedes Section B. (11.) (d)]

All eDMRs submitted to the permit issuing authority shall be signed by a person described in Part II, Section B. (11.)(a) or by a duly authorized representative of that person as described in Part II, Section B. (11.)(b). A person, and not a position, must be delegated signatory authority for eDMR reporting purposes.

For eDMR submissions, the person signing and submitting the DMR must obtain an eDMR user account and login credentials to access the eDMR system. For more information on North Carolina's eDMR system, registering for eDMR and obtaining an eDMR user account, please visit the following web page:

<http://deq.nc.gov/about/divisions/water-resources/edmr>

Certification. Any person submitting an electronic DMR using the state's eDMR system 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."

5. Records Retention [Supplements Section D. (6.)]

The permittee shall retain records of all Discharge Monitoring Reports, including eDMR submissions. These records or copies shall be maintained for a period of at least 3 years from the date of the report. This period may be extended by request of the Director at any time [40 CFR 122.41].

C.(7.) MIXING ZONE (Outfall 012)

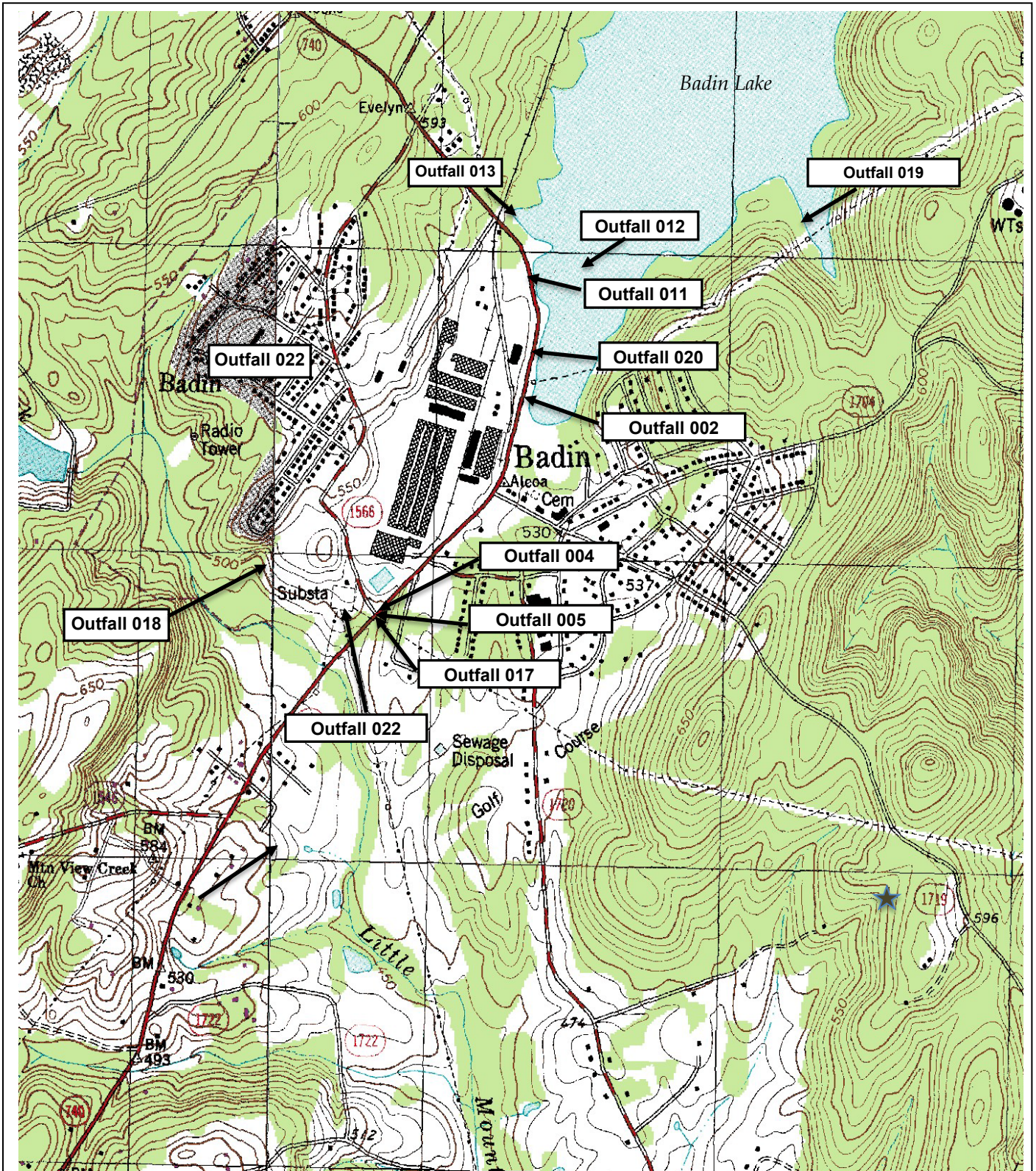
- (a.) The mixing zone for outfall 012 consists of a circular area with a radius of 5.6 m from the diffuser.
- (b.) Instream Sampling shall be collected as follows:

PARAMETER	MONITORING REQUIREMENTS		
	Measurement Frequency	Sample Type	Sample Location ¹
pH	Monthly	Grab	MZ1, MZ2, MZ3
Total Cyanide	Monthly	Grab	MZ1, MZ2, MZ3
Total Fluoride	Monthly	Grab	MZ1, MZ2, MZ3
Trichloroethylene (TCE)	Monthly	Grab	MZ1, MZ2, MZ3

Footnote:

1. MZ1 - Lake Badin 20 feet from the diffuser on a parallel line projected from the diffuser. MZ2 - Lake Badin 20 feet from the diffuser on a perpendicular line projected from the diffuser (oriented SE). MZ3 - Lake Badin 20 feet from the diffuser on a perpendicular line projected from the diffuser (oriented NW). For each instream sampling location, samples must be collected at the surface and at depth of approximately 3.5 meters.

- (c.) Sampling results shall be reported in the DMRs. See special condition C.(6.)



Badin Business Park – Stanly County

Receiving Stream:	Badin Lake (Yadkin River) and UT to Little Mountain Creek
Stream Classification:	WS-IV CA & B and WS-IV
River Basin:	Yadkin/Pee Dee
Sub-Basin #:	03-07-08
USGS Quad #:	F18NE, F18NW Badin & New London, NC

Location Map



NPDES Permit No. NC0004308

Table 1. Outfall Locations

Outfall	Latitude	Longitude
002	35° 24' 29.89"	80° 6' 54.48"
004	35° 24' 11.58"	80° 7' 11.38"
005	35° 24' 9.25"	80° 7' 14.73"
011	35° 24' 42.59"	80° 6' 53.49"
012	35° 24' 43.13"	80° 6' 50.04"
013	35° 24' 50.78"	80° 6' 59.26"
017	35° 24' 9.04"	80° 7' 14.75"
018	35° 24' 12.64"	80° 7' 34.48"
019	35° 24' 46.88"	80° 6' 16.53"
020	35° 24' 31.45"	80° 6' 57.02"
022	35° 24' 7.45"	80° 7' 23.99"