

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER QUALITY

PERMIT

TO DISCHARGE WASTEWATER UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES)

In compliance with the provision 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,

Charlotte Terminal 1, LLC

is hereby authorized to discharge wastewater from outfalls located at the

**Charlotte Terminal 1
7720 Mount Holly Road
Mecklenburg County**

to receiving waters designated as an unnamed tributary of Gum Branch within the Catawba River Basin in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III and IV hereof.

This permit shall become effective _____, 2010.

This permit and authorization to discharge shall expire at midnight on **May 31, 2015**.

Signed this day _____, 2010.

Coleen H. Sullins, Director
Division of Water Quality
By Authority of the Environmental Management Commission

SUPPLEMENT TO PERMIT COVER SHEET

All previous NPDES Permits issued to this facility, whether for operation or discharge are hereby revoked. As of this permit issuance, any previously issued permit bearing this number is no longer effective. Therefore, the exclusive authority to operate and discharge from this facility arises under the permit conditions, requirements, terms, and provisions included herein.

Charlotte Terminal 1, LLC

is hereby authorized to:

1. continue to operate a Water Pollution Control System treating stormwater runoff from truck loading racks consisting of:
 - Oil/water separator
 - Carbon adsorption
 - Polishing pond

located at Charlotte Terminal 1, 7720 Mt. Holly Road, Paw Creek, Mecklenburg County, and

2. discharge from said treatment facility through Outfall 001 at a location specified on the attached map, into an unnamed tributary to Gum Branch, a waterbody classified as **WS-IV** waters within the Catawba River Basin.

A. (1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the Permittee as specified below:

EFFLUENT CHARACTERISTICS	LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow ¹			Episodic	1	Effluent
Total Suspended Solids		45.0 mg/L	Monthly	Grab	Effluent
Turbidity ²			Quarterly	Grab	Effluent
Oil and Grease ³			Monthly	Grab	Effluent
Phenol		0.16 mg/L	Monthly	Grab	Effluent
Benzene		1.19 µg/L	Monthly	Grab	Effluent
Toluene		11 µg/L	Monthly	Grab	Effluent
Ethyl Benzene			Monthly	Grab	Effluent
Naphthalene			Monthly	Grab	Effluent
Xylene			Monthly	Grab	Effluent
MTBE ⁴			Monthly	Grab	Effluent
EPA Method 625 ⁵			Semi- annually	Grab	Effluent
Acute Toxicity ⁶			Annually	Grab	Effluent

Footnotes:

1. Flow – During periods of no flow, the Permittee shall submit a monthly Discharge Monitoring Report (DMR) indicating “No discharge”. Flow shall be monitored with each discharge event and may be monitored in one of four ways:
 - a) measure flow continuously;
 - b) calculate flow (see Attachment A. (4.) *Rational Equation*) based on total rainfall per unit area draining to the outfall; exclude built-upon areas (best method for facilities with large runoff-collection ponds);
 - c) estimate flow at 20-minute intervals during the entire discharge event; or
 - d) report flow based on discharge pump logs.
2. Turbidity- Effluent shall not cause receiving stream turbidity to exceed 50 NTU, If receiving stream background turbidity exceeds 50 NTU, effluent shall not cause this background value to increase.
3. Oil and Grease – Where possible, the grab sample for oil and grease should be skimmed from the surface of a quiescent (calm water) zone.
4. MTBE – See Part A. (2.) for other requirements relating to MTBE
5. EPA Method 625- Once the facility has collected data for 12 consecutive sample events in which there have been no detections above the method detection limit, the Permittee may request DWQ to modify this permit.
6. Acute Toxicity (Fathead Minnow, 24-hour), Annual [see Special Condition A. (3.)].

The Permittee shall discharge no floating solids or foam visible in other than trace amounts.

The Permittee shall discharge no tank solids, tank bottom water, or the rag layer.

Following hydrostatic testing, the Permittee shall discharge no tank (or pipe) contents unless benzene concentration test less than **1.19 µg/L** and toluene concentration test less than **11 µg/L**.

A. (2.) MTBE MONITORING - SPECIAL CONDITION

For the protection of public health, oil terminals discharging to waters classified as water supply (WS) waters shall monitor Methyl Tertiary Butyl Ether (MTBE) for the duration of this permit.

The Division anticipates that an MTBE regulatory criterion or Water Quality Standard will be established during the coming permit cycle. For the next cycle of permit renewals, the Division expects to apply this criterion or standard to MTBE data collected during this permit cycle. Should the permittee's MTBE data indicate discharge in excess of this criterion or Water Quality Standard, an MTBE limit will be added to the permit monitoring requirements at renewal.

A. (3.) ACUTE TOXICITY MONITORING (ANNUAL)

The Permittee shall conduct annual toxicity tests using protocols defined as definitive in EPA 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 test requirement must be performed and reported by June 30. If no discharge occurs by June 30, notification will be made to the Division by this date. Toxicity testing will be performed on the next discharge event for the annual test requirement.

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, DWQ Form AT-1 (original) is to be sent to the following address:

**Attention: North Carolina Division of Water Quality
Environmental Sciences Section
1621 Mail Service Center
Raleigh, North Carolina 27699-1621**

Completed Aquatic Toxicity Test Forms shall be filed with the Environmental Sciences 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 Quality 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.

A. (4.) FLOW MEASUREMENT RATIONAL

The Rational Equation: $Q=K_uCIA$, where:

- Q = flow (peak flow rate (cfs or m³/sec)
 K_u = units conversion factor = 1.008 for U.S. standard units (usually ignored because it is so close to 1), or 0.278 for SI units
 C = dimensionless runoff coefficient for the watershed, loosely defined as the ratio of runoff to rainfall
 I = intensity of rainfall taken from the intensity-duration-frequency curves for the specified design return period at the *time of concentration*, t_c (in/h or mm/h). t_c = time of concentration (time after the beginning of rainfall excess when all portions of the drainage basin are contributing simultaneously to flow at the outlet).
 A = area of tributary watershed (acres or km²)

The rational equation is used to calculate the runoff from a region, given:

- the runoff coefficient which accounts for infiltration and other potential losses in the region,
- the rainfall intensity to the region,
- the time it takes for runoff to travel from the region's upper reaches to its outlet, and the region's drainage area.