National Pollution Discharge Elimination System Plan For Petroleum Bulk Stations & Terminals

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2012
NPDES PHASE I

In 1972, the National Pollutant Discharge Elimination System (NPDES) program was established under the authority of the Clean Water Act. Phase I of the NPDES stormwater program was established in 1990. It required NPDES permit coverage for large or medium municipalities that had populations of 100,000 or more.

The Water Permits Division (WPD) within the U.S. Environmental Protection Agency's Office of Wastewater Management leads and manages the NPDES permit program in partnership with EPA Regional Offices, states, tribes, and other stakeholders.

For more information:
Visit our website at www.epa.gov/npdes
Write us at:
U.S. Environmental Protection Agency
Office of Wastewater Management
ICC Building
1200 Pennsylvania Ave., N.W.
7th Floor, Mail Code: 4201M
Washington, DC 20460

More than 50 categories of industry (including several hundred thousand businesses) and the nation's network of more than 16,000 municipal sewage treatment systems comply with standards implemented in NPDES permits. These permits have resulted in the removal of billions of pounds of conventional pollutants and millions of pounds of toxic pollutants annually.

NPDES PHASE II

What is required under a Phase II permit?

Phase II of the NPDES Stormwater program was signed into law in December 1999. This regulation builds upon the existing Phase I program by requiring smaller communities and public entities that own and operate an MS4 to apply and obtain an NPDES permit for stormwater discharges.

The Phase II program extends permit coverage to smaller (< 100,000 pop.) communities and public entities that own or operate a municipal separate storm sewer system (MS4).

Federal law (40CFR 122.32) requires communities and public entities that own or operate an MS4 and that satisfy either of the following two conditions to obtain an NPDES Phase II stormwater permit:

The MS4 is located in an urbanized area as determined by the latest Decennial Census of the Bureau of the Census. The community or public entity is designated by the NPDES permitting authority.

In the federal rulemaking process, counties with urbanized areas in their jurisdiction and other counties with large populations were required to obtain Phase II permits and implement throughout their jurisdiction. These counties were designated because of the rapid development that is occurring in these counties and the potential for adverse water quality impacts.
EPA regulation (40CFR 122.34) requires permittees at a minimum to develop, implement, and enforce a stormwater program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable.

The stormwater management program must include these six minimum control measures:

- Public education and outreach on stormwater impacts
- Public involvement/participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post-construction stormwater management in new development and redevelopment
- Pollution prevention/good housekeeping for municipal operations

**WHO MUST HAVE AN NPDES PERMIT?**

The Clean Water Act requires anyone discharging pollutants from any point source into waters of the U.S. to obtain an NPDES permit from EPA or an authorized state.

Typical point sources regulated under the NPDES program include:

- Municipal wastewater systems
- Municipal and industrial storm water systems
- Industries and commercial facilities
- Concentrated Animal Feeding Operations

There are three types of activities that the Phase I program regulates through NPDES permits:

- Industrial facilities that fall into one of ten categories,
- Construction activities that disturb five or more acres of land (the Phase II rules dropped this threshold to one acre), and
- Municipal separate storm sewer systems (MS4s) serving populations of 100,000 or more (based on 2000 census data).

Industrial facilities that fall into one of the subject ten categories are required to obtain permit coverage under a general permit or an individual permit, depending upon the facilities SIC code and the industrial activity occurring at the facility. Construction sites that are five acres or more are required to develop and implement a site-specific erosion and sediment control plan.

This US EPA web site lists “Authorization Status for EPA’s Stormwater Construction and Industrial Programs States, Indian Country and Territories Where EPA’s Construction General Permit (CGP) and Multi-Sector General Permit (MSGP) Apply”

As of this writing (January, 2009) only the States of Alaska, Idaho, New Mexico and Arizona do not have state authority for the US EPA NPDES Program.

http://cfpub.epa.gov/npdes/stormwater/authorizationstatus.cfm

**NPDES PERMITS FOR PETROLEUM BULK STATIONS & TERMINALS (PBST’S).**

Note: The following US EPA web site allows site specific searching for General and Individual NPDES Permits:

http://cfpub.epa.gov/npdes/permitissuance/genpermits.cfm

Wastewater discharges from petroleum storage sources may contain pollutants at levels that could affect the quality of receiving waters. The NPDES permit program establishes specific requirements for discharges from industrial sources. Depending on the type of industrial or commercial facility you operate,
more than one NPDES program may apply. For example, the stormwater that runs off from the property of an industrial facility or from a construction site may require an NPDES permit under the stormwater program. An industrial facility may also discharge wastewater to a municipal sewer system and be covered under the NPDES pretreatment program. The industrial facility may also discharge wastewater directly to a surface water and require an individual or general NPDES permit. Finally, many industrial facilities, whether they discharge directly to a surface water or to a municipal sewer system, are covered by effluent limitation guidelines and standards.

- **Individual permit**: An individual permit is a permit specifically tailored to an individual facility. Once a facility submits the appropriate application(s), the permitting authority develops a permit for that particular facility based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality).
- **General permit**: A general permit is an NPDES permit that covers several facilities that have the same type of discharge and are located in a specific geographic area. A general permit applies the same or similar conditions to all dischargers covered under the general permit. Using a general permit to cover numerous facilities reduces paperwork for permitting authorities and permittees, and ensures consistency of permit conditions for similar facilities.
- **Stormwater**: Stormwater is defined as the portion of precipitation that becomes surface runoff (precipitation minus percolation and evaporation). The amount of stormwater generated is dependent on several variables, including the size of the site (and more specifically the size of the process area), climatic conditions (taking into account spatial and temporal considerations), and the extent of pollution prevention practices in place to minimize the contamination of stormwater.

**Industry Description**

This industry is one part of the petroleum production, refining, and distribution system. These facilities are categorized by SIC code 5171 (NACIS-422710) Wholesale Trade Nondurable Goods, Petroleum Products, Petroleum Bulk Stations and Terminals. This industry comprises establishments primarily engaged in the wholesale distribution of crude petroleum and petroleum products from bulk liquid storage facilities. Petroleum products handled by PBSTs include crude oil, gasoline, aviation gasoline, jet fuel (JP-4), diesel fuel, fuel oil, kerosene, naphtha, and lubricating oils. Specific types of PBSTs include:
- Bulk gasoline stations;
- Bulk petroleum stations;
- Crude oil terminals;
- Fuel oil bulk stations and terminals;
- Gasoline bulk stations and terminals;
- Heating oil dealers;
- Liquified petroleum gas (LPG) bulk stations and terminals;
- Lubricating oils and greases bulk stations and terminals; and
- Oil, petroleum, and petroleum products bulk stations and terminals.

Bulk stations and terminals are part of the wholesale trade industry sector. Wholesale is an intermediate step in the distribution of the crude petroleum and petroleum products. The wholesale industry sells or arranges the sale of crude petroleum and petroleum products for resale by other wholesalers or retailers or for further production (intermediate materials). Establishments that sell crude petroleum and petroleum products directly include wholesale merchants,
marketers, distributors, jobbers, drop shippers, import/export merchants, and sales branches.

Establishments that arrange for the sale of crude petroleum and petroleum products (on a commission basis) include agents and brokers, commission merchants, import/export agents, and representatives of brokers, auction companies, and manufacturers.

Stormwater that has come into direct contact with product (e.g., runoff from contaminated surfaces or loading/unloading racks) is contaminated, and therefore collected and treated before being discharged.

Stormwater that has not come into contact with product is said to be uncontaminated. If a facility determines that stormwater from a particular area onsite (i.e., the facility yard) has relatively no chance of contamination, it typically discharges the stormwater without collection and treatment, unless required by an NPDES or other discharge permit.

At this point in time, no national effluent guidelines regulate the discharge of pollutants from PBSTs. There are, however, several other EPA regulations that PBSTs have to comply with.

Most wastewater from PBSTs are not classified as hazardous wastes under RCRA. However, in 1990, EPA issued regulations (40 CFR Part 261.24) which classified any solid waste containing more than 0.5 mg/L of extractable benzene under conditions of the Toxicity Characteristics Leaching Procedure (TCLP) as a hazardous waste. In addition, water which contains more than 0.5 mg/L dissolved benzene is potentially classified as a hazardous waste. Typically, tank bottoms water from gasoline tanks and other sources at PBSTs contain more than 0.5 mg/L benzene, a component of gasoline. Exceeding the 0.5 mg/L limit for benzene requires PBSTs to handle and dispose of the waste in accordance with RCRA requirements.

**Example Limits in North Carolina’s Stormwater NPDES General Permit**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limitation and Units</th>
<th>Monitoring Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6.0 to 9.0 s.u.</td>
<td>Annually</td>
</tr>
<tr>
<td>Oil and grease</td>
<td>30 mg/l (*ppm)</td>
<td>Annually</td>
</tr>
<tr>
<td>Total suspended solids</td>
<td>100 mg/l (*ppm)</td>
<td>Annually</td>
</tr>
<tr>
<td>Total rainfall</td>
<td>Inches (report)</td>
<td>Annually</td>
</tr>
<tr>
<td>Storm event duration</td>
<td>Minutes (report)</td>
<td>Annually</td>
</tr>
<tr>
<td>Total flow</td>
<td>Million gallons (report)</td>
<td>Annually</td>
</tr>
</tbody>
</table>

**NOTE:**
*If you want the true conversion you have to measure the density of the water.
Remember 1 ppm = 1 mg/kg, so 1 mg/kg X kg/L (the density) = mg/L
1 liter = 1000 cubic cm*

- **PPM** = parts per million or 1 ppm is one part by weight in one million parts by weight
- **Mg/L** = milligrams per litter or 1 mg/l is one milligram (weight) in one million parts (volume). Therefore ppm = mg/l when a solution has the
same specific gravity as water. Generally, substances in solution up to concentrations of about 7,000 mg/l do not materially change the specific gravity of water. To that limit, mg/l and ppm are numerically the same. A 1% solution has a concentration of 10,000 ppm, which equals 1 gram per 100 grams in water.

<table>
<thead>
<tr>
<th>CONVERSIONS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>milligram</td>
<td>10⁻³ grams</td>
</tr>
<tr>
<td>microgram</td>
<td>10⁻⁶ grams</td>
</tr>
<tr>
<td>nanogram</td>
<td>10⁻⁹ grams</td>
</tr>
<tr>
<td>picogram</td>
<td>10⁻¹² grams</td>
</tr>
<tr>
<td>1 mg/kg or 1 mg/L</td>
<td>1 ppm</td>
</tr>
<tr>
<td>1 ug/kg or 1 ug/L</td>
<td>1 ppb</td>
</tr>
<tr>
<td>1 mg/g</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>1 ug/g</td>
<td>1 ppm</td>
</tr>
<tr>
<td>1 nanogram/g</td>
<td>1 ppb</td>
</tr>
<tr>
<td>1 picogram/g</td>
<td>1 ppt</td>
</tr>
</tbody>
</table>

BEST MANAGEMENT PRACTICES (BMP)

The best way to control runoff pollution, a Best Management Practices (BMP) must be employed. Pollution prevention practices reduce pollution at the source. This includes any practice that reduces the amount of pollutants entering any waste stream or otherwise released into the environment prior to recycling, treatment, or disposal and reduce the hazards to public health and the environment.

Pollution prevention practices include equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. There are several sources of wastewater at PBST facilities; however, there are also many pollution prevention practices that can be implemented to reduce or eliminate these sources of wastewater. In addition to the environmental benefits of pollution prevention,

PBST facilities can benefit from implementing pollution prevention practices by doing the following:

- Reducing the size of downstream wastewater treatment equipment;
- Providing a permanent solution for eliminating pollutants;
- Eliminating costs associated with managing wastewater; and
- Providing more reliable methods for eliminating pollutants.

BRIEF NORTH CAROLINA NPDES STORMWATER PERMITS REQUIRED FOR BULK PETROLEUM FACILITIES

The North Carolina Division of Water Quality (DWQ) Stormwater program permits all point source discharges to surface waters. The purpose of the stormwater permitting program is to reduce and eliminate pollutants in stormwater runoff from certain municipal storm sewer systems and industrial activities. If your facility discharges wastewater, and the type(s) of wastewater discharges from a point source into the waters of the United States, you will need an NPDES permit unless the activity is "deemed permitted."
If your facility discharges wastewater into a municipal sanitary sewer system, you do not need an NPDES permit, but you should ask the municipality about its permit requirements. If your facility discharges wastewater into a municipal storm sewer system, you may need a permit depending on the type(s) of wastewater discharged.

Domestic wastewater, industrial process wastewater, municipal wastewater, groundwater remediation water and certain kinds of industrial stormwater and cooling water are all permitted through the North Carolina NPDES program.

Under the NC DWQ GENERAL PERMIT NO. NCG080000
TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Other activities, not categorically required to be permitted, such as point source stormwater discharges from oil water separators, secondary containments structures at petroleum storage facilities with total petroleum storage capacity of less than 1 million gallons.

Phase II regulations may include some municipalities under 100,000 population and additional industrial activities.

As of October 1, 1993, North Carolina DWQ enacted the National Pollution Discharge Elimination Systems (NPDES). This is applicable to bulk plants (less than a 1-million gallons aggregate storage capacity) that have Standard Industrial Code (SIC) 5171 and have vehicle maintenance activity on the same property. NPDES can also apply to wastewater treatment facilities such as truck/car washes and whenever pollutants are being discharged from the property directly into ditches, storm sewers or streams. SIC 5171 is classified as establishments primarily engaged in the wholesaling of petroleum products, including LPG. NPDES does not apply to truck stops, service stations, and/or bulk heating oil plants (SIC 5983) whose primary business is the retail sale of heating fuels. NPDES does not apply if all stormwater discharges drain into a municipal sanitary sewer system. However, the Director of DWQ can require any firm/facility to implement a NPDES permit at his/her discretion.

Vehicle maintenance includes: vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, and equipment cleaning operations associated with SIC 5171 bulk plants. If you have an oil water separator for storm water discharges and/or storm water discharges from dikes/berms, but no vehicle maintenance activity then you are not required to have a NPDES General Permit. NPDES permits must be acquired by filing a formal General Permit application and developing a Best Management Practices Plan/Stormwater Pollution Prevention Plan.

WHOLESALE PETROLEUM SIC CODES TO NAICS CODES
For more detail information go to:
http://www.census.gov/epcd/www/naicstab.htm

North American Industry Classification System (NAICS)

The North American Industry Classification System (NAICS) has replaced the U.S. Standard Industrial Classification (SIC) system.

Wholesale Trade, Nondurable Goods

Industries in the Wholesale Trade, Nondurable Goods subsector sell or arrange the purchase or sale of nondurable goods to other businesses. Nondurable goods are items generally with a normal life expectancy of less than three years. Nondurable
goods wholesale trade establishments are engaged in wholesaling products, such as paper and paper products, chemicals and chemical products, drugs, textiles and textile products, apparel, footwear, groceries, farm products, petroleum and petroleum products, alcoholic beverages, books, magazines, newspapers, flowers and nursery stock, and tobacco products.

The detailed industries within the subsector are organized in the classification structure based on the products sold. Within an industry, the types of establishments may vary, including wholesale merchants and/or agents and brokers.

**4227 Petroleum and Petroleum Products Wholesalers**  
**42271 Petroleum Bulk Stations and Terminals**  
**422710 Petroleum Bulk Stations and Terminals**

This industry comprises establishments with bulk liquid storage facilities primarily engaged in wholesaling crude petroleum and petroleum products, including liquefied petroleum gas.

<table>
<thead>
<tr>
<th>NAICS</th>
<th>SIC</th>
<th>Corresponding Index Entries</th>
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<tbody>
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<td>5171</td>
<td>5171</td>
<td>Petroleum Bulk Stations and Terminals</td>
</tr>
<tr>
<td>5983</td>
<td>454311</td>
<td>Heating Oil Dealers (pt)</td>
</tr>
<tr>
<td>5984</td>
<td>454312</td>
<td>Liquefied Petroleum Gas (Bottled Gas) Dealers (pt)</td>
</tr>
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<td>5171</td>
<td>42271</td>
<td>Petroleum Bulk Stations and Terminals</td>
</tr>
<tr>
<td>5172</td>
<td>42272</td>
<td>Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals</td>
</tr>
</tbody>
</table>

**Corresponding Index Entries**

- **5171 Petroleum Bulk Stations and Terminals**
  - 5983 Heating Oil Sold Via Retail Method 454311 Heating Oil Dealers (pt)
  - 5984 LP Gas Sold Via Retail Method 454312 Liquefied Petroleum Gas (Bottled Gas) Dealers (pt)
  - 5171 Sold Via Wholesale Method 42271 Petroleum Bulk Stations and Terminals
  - 5172 Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals 42272 Petroleum and Petroleum Products Wholesalers (except Bulk Stations and Terminals)

**42272 Petroleum and Petroleum Products Wholesalers (except Bulk Stations and Terminals)**  
**422720 Petroleum and Petroleum Products Wholesalers (except Bulk Stations and Terminals)**
This industry comprises establishments primarily engaged in wholesaling petroleum and petroleum products (except from bulk liquid storage facilities).

<table>
<thead>
<tr>
<th>NAICS</th>
<th>SIC</th>
<th>Corresponding Index Entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>422720</td>
<td>5172</td>
<td>Crude oil wholesaling (except bulk stations, terminals)</td>
</tr>
<tr>
<td>422720</td>
<td>5172</td>
<td>Fuel oil truck jobbers</td>
</tr>
<tr>
<td>422720</td>
<td>5172</td>
<td>Fuel oil wholesaling (except bulk stations, terminals)</td>
</tr>
<tr>
<td>422720</td>
<td>5172</td>
<td>Fueling aircraft (except on contract basis)</td>
</tr>
<tr>
<td>422720</td>
<td>5172</td>
<td>Gasoline wholesaling (except bulk stations, terminals)</td>
</tr>
<tr>
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<td>5172</td>
<td>Liquefied petroleum gas (LPG) wholesaling (except bulk stations, terminals)</td>
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<td>5172</td>
<td>Lubricating oils and greases wholesaling (except bulk stations, terminals)</td>
</tr>
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</tr>
<tr>
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<td>5172</td>
<td>Petroleum and petroleum products wholesaling (except bulk stations, terminals)</td>
</tr>
<tr>
<td>422720</td>
<td>5172</td>
<td>Petroleum brokers</td>
</tr>
</tbody>
</table>

**Primary SIC Code Determination:**

**Bulk Plant facilities with Standard Industrial Classification (SIC) code 5171.** According to the *SIC Code Manual* (1987 Ed.) “...establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, construction contractors, or professional business users; or other wholesalers; or acting as agents or brokers in buying or selling merchandise to such persons or companies” are properly classified in Division F, Wholesale Trade, SIC code 5171, and are therefore covered under US EPA Stormwater/NPDES Program.

Assuming your facility has several establishments with different SIC codes that are owned or operated by the same entity, you will need to determine if your facility has a primary SIC code that is subject to different regulations.

- The total value (taxes excluded) of the products shipped or services provided at establishments with covered SIC codes is greater than 50% of the value of the entire facility’s products and services; OR

Your facility may include multiple establishments that have different SIC Codes. A multi-establishment facility is a facility that consists of two or more distinct and separate economic units. If your facility is a multi-establishment facility, calculate the value of the products produced, shipped, or services provided from each establishment within the facility and then use the largest revenue generator to see if your facility meets the SIC Code criterion, or as some in the industry have said, “the value of the sales from all other (non-regulated SIC Codes) activities combined” must be greater than 50% to be a non SIC 5171 facility.

**Example-Primary SIC Code:** A facility is made up of four establishments on the same property.

- The first establishment, a petroleum bulk storage operation, which has 100,000 gallons of storage capacity, is in SIC code 5171 and is regulated under US EPA Stormwater/NPDES Program.
- The second establishment, a petroleum products wholesaler, which means establishments primarily engaged in the wholesale distribution of petroleum...
products without bulk liquid storage facilities, is SIC code 5172, and is not within an SIC code covered by NPDES program.

- The third establishment is made up of a bulk heating oil retailer, SIC code 5983, and stores 50,000 gallons of heating oil, and is not within an SIC code covered by NPDES program.
- The fourth establishment, a convenience store, SIC code 5541, and is not within an SIC code covered by US EPA NPDES Program.

The facility then determines that the value added by the petroleum products wholesaler (5172) is worth $1,500,000/year, whereas the value of the petroleum bulk storage operation (5171) is $1,000,000/year, the value of the heating oil retailer (5983) is $250,000/year, and the value of the convenience store (5541) is $1,500,000/year. The value of the covered establishment, SIC 5171, is less than 50% of the facility's value; therefore, the primary SIC code determination is such that the entire facility is not subject to US EPA Stormwater/NPDES Program.

**Primary SIC Code Determination.**

Assuming your facility has several establishments with different SIC codes that are owned or operated by the same entity, you will need to determine if your facility has a primary SIC code that is subject to US EPA Stormwater/NPDES Program.

All the establishments have SIC codes covered by US EPA Stormwater/NPDES Program OR the total value of the products shipped or services provided at establishments with covered SIC codes is greater than 50% of the value of the entire facility's products and services; OR

Any one of the establishments with a covered SIC code ships and/or produces products or provides services whose value exceeds the value of services provided or products produced and/or shipped by all of the other establishments within the facility on an individual basis.

Example - SIC Code Determination.

Many bulk petroleum stations operating in some states sell their petroleum products directly to end users. These plants typically sell to farmers and construction companies, as well as state and local governments. Generally, the products are transferred to the customer in quantities of 500 gallons or less. For these facilities, distribution to retail facilities may make up approximately 5 percent of their overall business. These facilities are considered bulk wholesale distributors of petroleum products, and are not classified in retail trade and therefore are covered under US EPA Stormwater/NPDES Program. This type of facility is an SIC code 5171.

Example - Primary SIC Code.

A facility is made up of two establishments. The first establishment, a petroleum bulk storage operation, which has 100,000 gallons of storage capacity, is in SIC code 5171 and is regulated under US EPA Stormwater/NPDES Program. The second establishment, a petroleum products wholesaler, in SIC code 5172, is not within an SIC code covered US EPA Stormwater/NPDES Program.

The facility then determines that the value added by the petroleum products wholesaler is worth $500,000/year whereas the value of the petroleum bulk storage operation is $1,500,000/year. The value of the covered establishment is more than 50% of the facility’s value; therefore, the primary SIC code
determination is such that the entire facility is subject to US EPA Stormwater/NPDES Program.

**Auxiliary Facilities:** Some companies may own and/or operate a non-contiguous and non-adjacent facility that primarily supports a regulated facility. These auxiliary facilities assume the SIC code of a covered facility that it directly supports. For example, an off-site warehouse that directly supports a covered petroleum bulk terminal (SIC code 5171) must assume the SIC code 5171 itself. Therefore, if an auxiliary facility’s primary function is to support/service a covered petroleum bulk storage facility, the auxiliary facility may assume the SIC code of the main facility and may then be covered by the US EPA Stormwater/NPDES Program.

**Example - Auxiliary Facilities**
A retail gas station sells only products supplied by one covered bulk petroleum station. Is the retail gas station considered an auxiliary facility and therefore does it take on the covered SIC code of the bulk petroleum station? No, While the retail gas station sells only products supplied by the covered bulk petroleum station it is not an auxiliary facility because it does not support the operation of the bulk petroleum station (i.e., the retail sale of gasoline and other petroleum products is a distinctly separate activity that benefits the gas station.)

**How to Change Your SIC Code:**
Bulk Plant facilities with SIC code 5171 are defined as establishments primarily (majority of monies made) engaged in selling merchandise to retailers of petroleum and petroleum products including LPG. If your facility does not meet the over 50% petroleum criteria, then you are not an SIC 5171 and could be an SIC 5983; bulk heating oil retailer, SIC 5984; LPG bottled gas dealer, SIC 4225; general warehouse and storage (non-bulk lube oil), SIC 5172; petroleum wholesaler, where most of the product is purchased at a terminal and then delivered to a customers site and SIC 5541; gasoline service station or convenience store. It would be in your best interest to confirm if, indeed, your facility is SIC 5171. For example, an office located at a petroleum bulk plant facility, supports a marketer’s on-site c-store operations (same facility) and, therefore, earns more money than the bulk plant activity alone. Under this example, the primary SIC code for this facility would be SIC 5541 gasoline service station or c-store and would be exempt from the TRI reporting. Another example would be that the bulk petroleum plant generates over 50% of its monies from retail sale of bulk petroleum, such as the sale of heating oil, this would be a SIC 5983. Other SIC codes apply for different applications. To change your’re SIC code, simply do an analysis of monies generated with your banker, accountant, or insurance agent and document this. Once your have decided which SIC code you should be, simply start changing documents as they are required. This is no notification or government paper work to fill out, this simply requires internal documentation.
NORTH CAROLINA
STORMWATER POLLUTION
PREVENTION PLAN
(NPDES Phase I, General Permit)

PREPARED FOR:
MAYBERRY OIL AND TIRE CO, INC.
HWY 33 OLD BARNEY BYPASS
HAY MOUNTAIN, NC 27816

PREPARED BY
Gomer Pyle, PE
Wallies Engineering Services
1212 Oak Twig Drive
Raleigh, North Carolina 27612
Web site: www...com
Phone: 012-123-4567

SEAL

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OVERVIEW

As part of its continuing commitment to meet all environmental regulations, the Mayberry Oil and Tire Company, Inc. (This Facility) has prepared this Stormwater Pollution Prevention Plan (SPPP) for its facility in Hay Mountain, NC. The SPPP meets the requirements of the Pollution Control Act and the Federal Clean Water Act (PL-92-500), as amended and NC General Number NCG08000 Petroleum Bulk Stations & Terminals (Appendix A). Specific findings from the Plan have been formulated into a number of Good Housekeeping, Preventative Maintenance and Employee Training initiatives which will be implemented before the end of the fourth quarter of 2007.

1.0 INTRODUCTION

1.1 Objectives and Requirements of Stormwater Regulations

When the Clean Water Act (CWA) was promulgated in 1972, it prohibited the discharge of any pollutant from a point source unless the discharge was authorized by a permit. In 1987, the United States Congress passed the Water Quality Act Amendments to the Clean Water Act. The amendments required the U.S. Environmental Protection Agency (EPA) to develop regulations on permit application requirements for stormwater discharges associated with industrial activities and some municipal storm sewer systems. These regulations, titled the National Pollutant Discharge Elimination System (NPDES) Permit Regulations for Stormwater Discharges, became effective in December of 1990. Through monitoring and regulating stormwater discharge quality, the goal of the NPDES stormwater program is to reduce the pollutant load in stormwater runoff.

North Carolina has the authority to administer the NPDES Program in the state through delegation from the EPA in 1975. North Carolina General Statutes 143-215.1 enable the state to require control of sources of water pollution through the issuance of NPDES permits for discharges of wastes and stormwater. Industrial activities which require permitting are defined in eleven categories in the federal regulations. The State of North Carolina uses the Standard Industrial Classification Code Manual (SIC Codes) to define industrial activities subject to stormwater permitting.

The Mayberry Oil and Tire facility in Hay Mountain, NC, has a primary SIC Code classification of 5171 (Petroleum Bulk Stations and Terminals). Industries within this category require a NPDES permit for stormwater discharges if associated with vehicle maintenance active or on a case by case basis. The facility is covered under the State of North Carolina Department of Environment, Health and Natural Resources (NCDEHNR), Division of Environmental Management (DEM) General
Industrial Stormwater Permit Number NCG080000. The facility was issued Certificate of Coverage before and has been reauthorized to comply with this regulation. In accordance with the requirements of the Permit, the facility is required to develop and implement a Stormwater Pollution Prevention Plan (SPPP).

1.2 The Stormwater Pollution Prevention Plan

The purpose of this SPPP is to identify potential sources of stormwater pollution at this facility and to recommend control measures to minimize or eliminate the discharge of pollutants into stormwater runoff. Key compliance requirements of the General Permit and the SPPP are outlined below:

- **SPPP Availability** - This SPPP must be retained at the facility at all times. The Plan is a public document and a copy must be made available to the State Division of Environmental Management, municipality or public upon request. Mayberry Oil and Tire company, Inc. may, however, claim certain portions of this SPPP as confidential business information, including any portion describing facility security measures or trade secrets. This Plan and associated reports are also considered legal documents and must be retained onsite in the facility's files.

- **Stormwater Monitoring and Reporting** - Inspections of the facility and all stormwater conveyance systems shall occur at a minimum on a semi-annual schedule, once in the fall (September-November) and once in the spring (April-June). During each inspection, visual monitoring of stormwater for color, odor, clarity, floating solids, suspended solids, foam, oil sheens and other obvious indicators of stormwater pollution shall be performed at all stormwater outfall locations.

- **Recordkeeping and Reporting Requirements** - Implementation of this plan shall include documentation of all stormwater sampling, visual inspections, maintenance activities and employee training. Such documentation shall be retained onsite for a period of five (5) years and made available to the Director of the Division of Environmental Management or his/her authorized representative upon request.

- **SPPP Updates** - This SPPP shall be reviewed and updated on an annual basis. The SPPP shall also be updated or amended whenever changes at the facility increase or have the potential to increase the exposure of significant materials to stormwater, or when the Plan is determined to have become ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with the facility's industrial activities.

- **Authorized Signature** - The SPPP and all attachments shall be signed by a responsible corporate officer (i.e. president, secretary, treasurer or vice-president) who is in charge of the company's principal business function. Section 5 of this notebook contains the signed Certification of this Plan.

**General Facility Information**

General information regarding the Mayberry facility, key contact personnel and Permit specifics is listed on Table 1.1 below:

<table>
<thead>
<tr>
<th>Table 1.1 General Facility Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Facility:</strong></td>
</tr>
<tr>
<td><strong>Facility Address:</strong></td>
</tr>
<tr>
<td><strong>Facility Contact Work Phone:</strong></td>
</tr>
</tbody>
</table>
Type of Industry: Petroleum Bulk Station Facility

<table>
<thead>
<tr>
<th>Standard Industrial Classification (SIC) Code:</th>
<th>Primary SIC Code: 5171 (Petroleum Bulk Stations and Terminals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The North American Industry Classification (NAICS) has replaced the U.S. Standard Industrial Classification (SIC) system.</td>
<td>422710</td>
</tr>
</tbody>
</table>

Operating Schedule: 7:30 am to 5:00 pm, Monday to Saturday

Number of Employees: 17

Number of Stormwater Outfalls: 3

Name of Receiving Waters: An unnamed tributary to South Creek in the Pamlico River Basin

2.0 POLLUTION PREVENTION TEAM/RESPONSIBLE PARTIES

The assigned Pollution Prevention Team and their specific duties are listed below in Table 2.1.

Table 2.1 Pollution Prevention Team/Responsible Parties

<table>
<thead>
<tr>
<th>Name and Title of Team Members</th>
<th>Contact Numbers</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Leader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andy Phife</td>
<td>Work: (012) 322-4567</td>
<td>Implementation and Updating of Stormwater Pollution Prevention Plan. Responsible for scheduling required training and stormwater monitoring.</td>
</tr>
<tr>
<td>Vice President of Mayberry Oil and Tire Co., Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.T. Bas</td>
<td>Work: (012) 322-4455</td>
<td>Assists the Team Leader in implementing Stormwater Pollution Prevention Plan.</td>
</tr>
<tr>
<td>Vice President of Mayberry Transportation Co., Inc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.0 SITE PLAN AND DESCRIPTION

The relevant section of a U.S.G.S. topographic map was used to prepare the general location map (Figure 1). The specific site map (Figure 2) was prepared from...
field notes obtained during a site visit, utilizing a base map provided by the facility. Figure 2 illustrates the site layout, including parking areas, material storage areas, stormwater and erosion control structures, underground culverts and other elements required by EPA's General Permit. The attached site print is at Appendix G.

3.1 Site Description

3.1.1 General
This facility is a bulk petroleum products distributor in Hay Mountain, NC. The company has been established at this site for over 30 years. The Mayberry facility is located in rural Beaufort County, on the south side of the Hwy 33/306 Old Barney Bypass, approximately two miles west of Aurora, NC. The facility consists of a bulk petroleum storage station with dispensing terminals, and a retail tire sales operation.

The bulk storage area is located on the west side of the site. The storage and dispensing system consists of nine large (20,000 to 30,000 gallon) aboveground storage tanks (ASTs) inside an earthen berm, connected to a dispensing island at the front of the property. A second tank farm, surrounded by a concrete containment wall, is located at the rear of the site and contains fourteen tanks for the bulk storage and dispensing of lubricating products. Two varsol tanks, one with a 4,000 gallon capacity and the other containing up to 5,200 gallons are also located at the site, both varsol tanks are contained within an earthen berm at the northeast corner of the bulk storage area.

The east half of the site is developed as a tire retailing and installation facility. A one-story structure houses offices, tire storage and a tire changing/installation service area.

3.1.2 Stormwater Outfalls/Sheet Flow
Approximately 70 percent of the ground surface underlying the bulk storage area is paved and therefore impermeable. The remaining 30 percent, at the rear of the area is permeable, topped by gravel, grass or scrub vegetation. The tire store area is about 40 percent impermeable, with the western half of this area either paved or occupied by the store structure. A narrow grassy lawn exists between the store and the fenced bulk storage area. The eastern half of the tire store area is topped mainly by gravel, with some grass and scrub at the rear and sides of the site. The site slopes very slightly from back to front, draining to the north towards the road.

Two Stormwater Discharge Outfalls (SDOs) convey stormwater from the site. Outfall #1 drains runoff from the bulk storage area. This Outfall collects stormwater in a stolid sewer located near the center of the area, and then conveys it via an underground culvert to a ditch running parallel to Hwy 33. Outfall #2 drains the tire store area. Stormwater runoff drains via overland sheet flow to a swale near the northeast side of the site. The swale discharges to the roadside ditch.

A bulk petroleum dispenser area is situated on a concrete pad covered by a canopy at the site. Stormwater runoff from the pad flows to grated drains on the east and west sides. The drains convey stormwater southeast toward the tank farm, where is flows to an oil/water separator.

Appendix G illustrates the location of the Outfalls and their respective drainage areas. Examination of U.S.G.S. topographic maps for this area indicates that stormwater runoff from the site discharges to an unnamed tributary to South Creek, in the Pamlico River basin. The topographic map included as Figure 1 indicates the location of the site in relation to these waterways.

3.2 Material Inventory and Storage Practices
The principal materials stored and utilized at the site are petroleum products and rubber tires. New and used tires are stored outdoors adjacent to the tire store. Bulk petroleum is contained either in aboveground storage tanks (ASTs) or 55-gallon drums. Figure 2 illustrates the locations of the main raw material storage areas at the site.

Table 3.1 lists all exposed materials which were identified at the time this Plan was developed/revised.

### Table 3.1 Exposed Material Inventory

<table>
<thead>
<tr>
<th>Material</th>
<th>Amount</th>
<th>Location</th>
<th>Reason for exposure or potential exposure to stormwater</th>
<th>Considered Significant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Gasoline &amp; Distillate Fuels</td>
<td>6-20,000</td>
<td>Inside Dike-B &amp; Berm Area</td>
<td>Normally Stored Outdoors</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>3-10,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulic &amp; Lubrication Oils</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used Oil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.3 Significant Exposed Materials

A small number of significant exposed materials were identified at the facility. These consist of 55-gallon steel drums in various locations around the site, two uncontained used oil ASTs and about a dozen used automotive batteries. A leak or spill from the vessels or battery casings would result in direct exposure of oil or battery acid to the stormwater system.

### 3.4 List of Significant Spills and Leaks

The General Permit requires a description of significant spills or leaks of toxic or hazardous pollutants that have occurred at areas that are exposed to stormwater or that otherwise drain to a stormwater conveyance at the facility after the date of three years prior to the effective date of the General Permit. "Significant spills or leaks" are defined by the regulations as a release within a 24-hour period of a hazardous substance or oil in an amount equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and 40 CFR Part 302.

A common industry definition of a spill follows:

For manufacturing, a spill is defined as any unattended discharge in volume greater than five gallons.

For all other areas, a spill is defined as any discharge over one gallon if the material is non-hazardous. If the material is considered hazardous, any amount is considered a spill.

Spills less than 25 gallons that do not cause sheen on nearby navigable (surface) waters, and is discharged more than 100 feet from all surface water bodies does not have to be reported in North Carolina. NC Law requires that spills less than 25 gallons must be cleaned up within 24 hours of the spill for a non-reportable offense.

No significant spills or leaks of toxic or hazardous pollutants have occurred at the facility since the date of three years prior to the effective date of the General Permit within the areas that discharge to the stormwater Outfalls.
Table 3.2 is provided for recording any spills or leaks which may occur in the future.

**TABLE 3.2**
List of Significant Spills or Leaks

<table>
<thead>
<tr>
<th>Discharge Information Fill in ASAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge Date and Time:</td>
</tr>
<tr>
<td>Discovery Date and Time:</td>
</tr>
<tr>
<td>Type of Oil-Material:</td>
</tr>
<tr>
<td>Discharge Duration:</td>
</tr>
<tr>
<td>Quantity released:</td>
</tr>
<tr>
<td>Quantity released to a water body:</td>
</tr>
<tr>
<td>Location/Source:</td>
</tr>
<tr>
<td>Actions taken to stop, remove, and mitigate impacts of the discharge:</td>
</tr>
</tbody>
</table>

Table 3.2 is to be revised as necessary by the facility

3.5 **Non-Stormwater Discharge Assessment and Certification**

The Permit prohibits unauthorized non-stormwater discharges to the storm drainage system unless specifically covered by a National Pollutant Discharge Elimination System (NPDES) Permit. The Permit requires that the facility operator certify that all stormwater Outfalls have been evaluated for the presence of non-stormwater discharges. The certification must include the identification of potential significant sources of non-storm water at the facility, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and the onsite drainage points that were directly observed during the test.

The conditions of the General Permit allow for certain non-stormwater discharges to the stormwater conveyance system. These authorized discharges include uncontaminated groundwater, foundation drains, air-conditioner condensate without added chemicals, springs, discharges of uncontaminated potable water, waterline and fire hydrant flushing, water from footing drains, and flows from riparian habitats and wetlands. Discharges from fire-fighting activities are also permitted.

Unauthorized non-stormwater discharges must either be eliminated or covered by a separate NPDES permit. Common sources of unauthorized non-stormwater discharges include floor -drains and sinks discharging directly to the ground surface, boiler blowdown or cooling water, vehicle and equipment washwater, steam cleaning wastes and process water.

The site was checked for both authorized and unauthorized non-stormwater discharges on March 1, 2002 during the annual revision of this plan. None were identified.

The Certification of Elimination of Non-Stormwater Discharges, located in Section 10 of this notebook, shall be signed by a responsible owner/operator official.
A responsible corporate officer is defined in the permit as (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 employing more than 275 persons or having gross annual sales or expenditures exceeding 25 million (in second quarter 1980 dollars), if the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

<table>
<thead>
<tr>
<th>Outfall #</th>
<th>Flow Observed</th>
<th>Color</th>
<th>Order</th>
<th>Solid s</th>
<th>Foam</th>
<th>Outfall Stains</th>
<th>Visible Sheens</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Trash &amp; Debris Clogging Outfall</td>
</tr>
<tr>
<td>#2</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Outfall appears clean and free of debris and clogs.</td>
</tr>
<tr>
<td>#3</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

TABLE 3.3 Non-Stormwater Discharge Inspection Form

NA = Not Applicable due to lack of observable flow.

See Appendixes C&D for NC DAQ Forms

4.0 STORMWATER MANAGEMENT PLAN

4.1 Existing Management Practices

Existing structural stormwater controls and practices at the site consist of the following:

The Mayberry site slopes very slightly from back to front, draining to the north towards the road.

Two man-made Stormwater Discharge Outfalls (SDOs) convey stormwater from the site.

Outfall #1 drains runoff from the bulk storage area. This Outfall collects stormwater in a storm sewer located near the center of the area, and then conveys it via an underground culvert to a ditch running parallel to Hwy 33.

Outfall #2 drains the tire store area. Stormwater runoff drains via overland sheet flow to a swale near the northeast side of the site. The swale discharges to the roadside ditch.

The bulk petroleum dispenser area is situated on a concrete pad covered by a canopy. Stormwater runoff from the pad flows to grated drains on the east and west sides. The drains convey stormwater southeast toward the tank farm, where it flows to an oil/water separator.

A small amount of stormwater exits the site along its edges via sheet flow to adjoining sites and/or roadside ditches.

Existing materials management practices consist of the following:

The principal materials present at the site are new; bulk petroleum products stored in aboveground storage tanks (ASTs) within secondary containment structures. Some 55-gallon steel drums of waste motor oil are stored outdoors in various locations around the site, without secondary containment.

One 260 gallon AST and one 2,000 gallon AST, both for storage of used oil are stored outdoors outside the tire shop. These vessels currently lack secondary containment.

A small number (approximately one dozen) used automotive batteries are stored outdoors either on a wooden pallet outside the tire shop or around the lube tank farm containment walls.
4.2 Summary of Potential Pollution Sources

Used oil and a small number of exposed 55-gallon drums and used automotive batteries are identified as potential pollution sources at the site. These materials are listed on Table 4.1. Both existing and new Best Management Practices (BMPs) are listed for each item.

Table 4.1
Summary of Potential Pollution Sources

<table>
<thead>
<tr>
<th>Outfall #</th>
<th>Potential Pollution Source</th>
<th>Existing BMPs</th>
<th>New BMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Bulk Storage Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#2</td>
<td>Bulk Storage Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#3</td>
<td>Fuel Dispensing Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#4</td>
<td>Outside Office Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5</td>
<td>Oil Drums</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3 Secondary Containment Schedule

In accordance with the General Permit, a schedule to provide secondary containment for bulk storage of liquid materials, storage of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals or hazardous materials to prevent leaks and spills from contaminating stormwater runoff shall be presented. Table 4.2, below, is provided for listing storage vessels which are present or may be installed at the site in the future.

Table 4.2
Secondary Containment Schedule for Bulk Storage of Liquids

<table>
<thead>
<tr>
<th>Product</th>
<th>Vessel Type</th>
<th>Capacity (gallons)</th>
<th>Secondary Containment Provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>AST #1</td>
<td>20,000</td>
<td>Yes, Containment within concrete dike</td>
</tr>
<tr>
<td>Distillate Fuel</td>
<td>AST #2</td>
<td>20,000</td>
<td>Yes, Containment with earthen berm</td>
</tr>
</tbody>
</table>

4.4 Soil Erosion and Sediment Control

Soil erosion in a stormwater drainage system can cause excessive amounts of sediment loading in the discharge. Sediment can clog the drainage system and impair water quality in the receiving waters of the system. Vegetation helps to reduce soil erosion by slowing the velocity and decreasing the volume of runoff over the land surface. During the most recent March 1, 2002 site inspection at the Mayberry facility, no areas of bare and/or eroded soil were noted.

The stormwater outfall and conveyance systems at the Potter Oil and Tire facility should be inspected for erosion at a minimum of twice-per-year in conjunction with the Preventative Maintenance Inspections (Section 6.1) and also following heavy storm events. In particular, areas to inspect should include ditches, steep banks, culverts, grates, Outfalls and areas below roof drainage downspouts.

4.5 Best Management Practices Identification and Implementation

The following new Best Management Practices (BMPs) to be implemented were identified at the time this Plan was prepared:

- Drum Management:
Conduct an inventory of all drums and other containers of liquid materials stored outdoors.

- Properly dispose of empty vessels.

Consolidate useful product and arrange for indoor storage or covered outdoors storage of containers. Consolidate and properly dispose of spent or unneeded product.

- Automotive battery Management:
  Remove and properly store or dispose of exposed batteries out of contact with the stormwater system.

- Used Oil AST Management:
  Provide secondary containment for waste oil ASTs.

4.6 Technical and Economic Evaluation
The General Permit requires a discussion of the technical and economic feasibility of changing the facility's methods of operations and/or storage practices to eliminate or reduce exposure of potential pollutant sources.

The potential pollutant sources identified at the Potter facility consist of containers of liquid petroleum products stored outdoors without secondary containment in various locations around the plant. A small number of exposed automotive batteries were also noted. Technical and economic requirements for eliminating the potential pollutants hazard from the waste oil drums are minimal, and consist of simply moving the vessels to a location or locations out of contact with stormwater. The batteries (about one dozen) require disposal or indoor storage. Options for containing the used oil ASTs consist of either building concrete or earthen retaining walls around the base of the vessels or purchasing pre-fabricated containment structures.

5.0 SPILL PREVENTION AND RESPONSE PLAN (RE 40 CFR part 112)
5.1 Potential Spill Areas
The ground surface areas adjacent to and directly below the 2,000 gallon and the 260 gallon waste oil ASTs are identified as a significant potential spill area. Implementation of new BMPs for these vessels will minimize this hazard.

5.2 Spill Response and Reporting Procedures
This facility has spill response procedures in-place as part of their implemented US EPA SPCC Plan. The primary objectives of the spill response procedures are to minimize the magnitude of a spill, minimize the area affected by a spill, and maximize the effectiveness and efficiency of clean-up operations. Procedures are in-place for detection and notification, countermeasures, clean-up and disposal.

All employees involved with handling toxic or hazardous materials shall be informed of proper cleanup procedures. Spill response procedures shall be prominently posted at appropriate locations throughout the facility. All significant spills and leaks shall be reported to the Pollution Prevention Team Leader or his designated alternate. Depending on the type and amount of material spilled, local, state and/or federal agencies may also need to be notified.

6.0 PREVENTATIVE MAINTENANCE AND GOOD HOUSEKEEPING PROGRAM
Stormwater pollution prevention is required by the General Permit to be incorporated into the preventative maintenance and good housekeeping program.

6.1 Preventative Maintenance
The focus of the preventative maintenance program is to ensure that current practices are maintained and that new hazards to stormwater quality are not created.
Preventative maintenance involves the regular inspection and testing of plant equipment, operational systems and stormwater control systems. These inspections should uncover conditions such as cracks or slow leaks that could cause a release of hazardous or toxic materials to the ground surface or stormwater conveyances. A qualified person or team shall conduct Preventative Maintenance inspections on a semi-annual basis. The inspector(s) should look for spots or puddles of chemicals, smoke, fumes or the signs of releases.

The following areas and/or equipment at this facility should be inspected:
- Outdoor areas for exposed containers of potential contaminants
- Truck unloading areas for spots or puddles of fuel, oil, grease or other materials
- Steep banks, stormwater drainage ditches, Outfalls, drains and grates for blockage, trash and potential pollutants.
- The used oil ASTs, associated equipment such as nozzles and hoses, and integrity of secondary containment (when provided).
- The earthen berms and containment walls around the tank farms.
- Areas around dumpsters for accumulated trash and potential contaminants.

The Preventative Maintenance Inspection Forms located in Appendix A of this notebook should be used for each inspection. The form shall document, at a minimum, the following information:
- Date of inspection
- Name of inspector
- Equipment or area inspected
- Potential problems (i.e. leaks, debris buildup and other signs of potential pollution) Corrective actions necessary
- Follow-up on corrective actions

Upon completion, all inspection forms should be filed in Section 7 of this notebook. They must be retained with this SPPP for a minimum of five years.

6.2 Good Housekeeping
Good housekeeping practices are intended to maintain areas in a clean and orderly manner. These practices are generally low-cost, easy to implement and are often quite effective in reducing exposure of potential pollutants to stormwater.

Good Housekeeping BMPs for the Plant consist of the following:
- Regularly pickup and dispose of garbage, cigarette butts and other debris around the facility, especially around outdoor break areas, dumpsters, in ditches, on grates, at culvert openings and other stormwater conveyances.
- Routinely inspect for and remove exposed materials in contact with stormwater.
- Discuss good housekeeping practices at employee meetings.

7.0 EMPLOYEE TRAINING PROGRAM AND SCHEDULE
In accordance with the requirements of the Permit, the facility is required to develop an employee training program. At a minimum, the training shall be conducted on an annual basis, addressing preventative maintenance, good housekeeping and proper spill prevention and response for all personnel involved in any of the facility's operations that have the potential to contaminate stormwater runoff.
Employee training is essential to effectively implement the SPPP. The purpose of the training program is to educate personnel at all levels of responsibility regarding the components and goals of this Plan. When properly trained, personnel will be more capable of preventing spills, responding safely and effectively to an accident and recognizing situations which could contribute to stormwater pollution. The SPPP information should be reviewed with all new and existing employees.

Stormwater Pollution Prevention Training for this facility shall focus on ensuring that all employees are aware of the importance of keeping potential pollutants from contact with stormwater. It is the responsibility of the Pollution Prevention Team Leader to ensure that the necessary employee training is implemented.

7.1 Spill Prevention and Response Training
Spill prevention and response procedures are outlined in Section 5.0 of this Plan. The training procedures directed towards spill prevention and response shall be developed to ensure that all employees involved with hazardous or toxic materials are aware of necessary actions in the event of a spill. At the Mayberry Oil and Tire facility, all employees involved in industrial activities shall be trained in the following measures:

- Potential spill areas and drainage routes.
- Specific handling procedures and storage practices. Proper notification in case of a spill.
- Implementation of spill response procedures.

7.2 Preventative Maintenance Training
All personnel involved in operating, conducting inspections and/or testing of plant equipment should be trained to identify conditions in or around the machinery which could lead to a spill or leak. Section 6.1 of this Plan lists the specifics of the Preventative Maintenance Program.

Employee training on Preventative Maintenance should include the following:

- The importance of promptly repairing or replacing defective equipment found during inspections and testing
- Areas and equipment which should be inspected
- The frequency of inspections
- Information to be included on the inspection forms

7.3 Good Housekeeping Training
Facility personnel should be educated on how to maintain a clean and orderly facility environment. Section 6.2 of this Plan addresses specific Good Housekeeping measures to be implemented. Good Housekeeping training items to be discussed in employee training sessions should include:

Benefits of keeping the site clean and litter-free (e.g. fewer accidents, improved appearance of the workplace, etc.)

- The importance of regular cleaning of outdoor areas that appear to accumulate trash and debris on a regular basis (e.g. near trash bins, employee parking lots, recycling areas or scrap areas). The location of good housekeeping items (e.g. brooms, mops, shovels, etc.)

7.4 Frequency and Documentation of Training
The Stormwater Pollution Prevention Team Leader shall determine the schedule for periodic training activities described above that will occur at a
minimum of once per year. The Permit requires that the effectiveness of the SPPP and training efforts be regularly evaluated and documented. Forms for documentation of training are provided in Appendix B of this SSSP. After each training session, all completed training documentation should be filed with this SSSP.

8.0 STORMWATER MONITORING

In accordance with the Permit, the facility is required to conduct visual monitoring only of its stormwater discharge. Sampling and analysis of the discharge is required under Permit NCG080000 only for facilities which use in excess of 55 gallons per month of new motor oil. The facility uses less than this amount.

Inspections of the stormwater conveyance systems and visual monitoring of stormwater must occur at a minimum on a semiannual schedule, once in the fall (September-November) and once in the Spring (April-June). During each inspection, visual monitoring of stormwater for color, odor, clarity, floating solids, suspended solids, foam, oil sheens and other obvious indicators of stormwater pollution shall be performed at all stormwater outfall locations.

Section 8 of this SSSP contains inspection and stormwater monitoring forms. Upon completion, all inspection and monitoring forms should be filed in Section 7 and appendixes of this SSSP.

9.0 SUMMARY

In accordance with the requirements of its General Industrial Stormwater Permit, this Facility has completed this Stormwater Pollution Prevention Plan. The Plan consists of a description of the facility and an investigation of materials management practices to determine potential stormwater pollutant sources. A study of the facility's materials management practices revealed that a small number of exposed automotive batteries and 55-gallon drums of liquid materials pose a potential risk to stormwater quality and should be moved away from contact with stormwater immediately.

Two aboveground storage tanks (ASTs) for storing/dispensing used oil are located outdoors, adjacent to the garage, and lack secondary containment. Installation of secondary containment will minimize the risk of potential stormwater pollution from these sources.

No unauthorized non-stormwater discharge sources were identified. The Plan contains an employee training program designed to educate personnel at all levels of responsibility regarding the components and goals of this Plan. Upon completion of the training this facilities personnel will be more capable of preventing spills, responding safely and effectively to an accident and recognizing situations which could contribute to stormwater pollution. The training shall be conducted on an annual basis, addressing preventative maintenance, good housekeeping and proper spill prevention and response for all personnel involved in any of the facility's operations that have the potential to contaminate stormwater runoff.

In accordance with the Permit, this facility must conduct inspections of the facility's stormwater conveyance systems and visual monitoring of stormwater runoff on a semi-annual schedule.

This Plan must be reviewed and updated on an annual basis and must be retained at the facility at all times. The Plan is a public document and a copy must be made available to the Division of Water Quality, municipality or public upon request.

10.0 CERTIFICATIONS

CERTIFICATION OF STORMWATER POLLUTION PREVENTION PLAN
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 ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) 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 fine and imprisonment for knowing violations.

Owner/operator:  
Type Name: ________________________________  
Signature: ________________________________  
Title:  
Date:

CERTIFICATION OF ELIMINATION OF NON-STORMWATER DISCHARGES  
"I certify under penalty of law that the outfall(s) covered under the Permit have been tested or evaluated for the presence of non-stormwater discharges, and that any non-stormwater discharges identified in these outfall(s) have been eliminated or covered by a separate NPDES Permit".

Owner/operator:  
Type Name: ________________________________  
Signature: ________________________________  
Title:  
Date:

Figure 1  
USGS Topographic Map

Figure 2  
Site Map

APPENDIX A  
Preventative Maintenance Inspection Form
APPENDIX B
Record of Stormwater Pollution Prevention Briefings and Training
Briefings will be scheduled and conducted by the facility owner or operator for operating personnel at regular intervals to ensure adequate understanding of this SPPP. The briefings will also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Personnel will also be instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable pollution laws, rules, and regulations. Facility operators and other personnel will have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

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<th>Subjects Covered</th>
<th>Employees in Attendance</th>
<th>Instructor(s)</th>
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APPENDIX C
Stormwater Discharge Quantitative Monitoring Form (DMR)
Form #SWU-250-071400
2 pages
APPENDIX D
Stormwater Discharge Outfall
Qualitative Monitoring Form
(SDO)
Form # SWU-242-101599
2-Pages

APPENDIX E
STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES
DIVISION OF WATER QUALITY
GENERAL PERMIT NO. NCG080000
TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

APPENDIX F
US EPA 40 CFR Part 112 Spill (SPCC) Plan
(If applicable)

APPENDIX G
SITE PRINT

January, 2009