

STORMWATER POLLUTION PREVENTION PLAN



**TOWN OF CHAPEL HILL, NORTH CAROLINA
PUBLIC WORKS COMPLEX AND TRANSIT FACILITY
1099 AIRPORT ROAD
CHAPEL HILL, NC 27516**

NOVEMBER 2003

STORMWATER POLLUTION PREVENTION PLAN

**Prepared in Accordance with
NCDENR General Permit No. NCG080000**

TOWN OF CHAPEL HILL PUBLIC WORKS COMPLEX AND TRANSIT FACILITY CHAPEL HILL, NORTH CAROLINA

Prepared for:

Town of Chapel Hill, North Carolina

Prepared by:

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TABLE OF CONTENTS

Page

Stormwater Pollution Prevention Plan Certification	iii
Certification of Non-Stormwater Discharges.....	iv

{ TOC \o "1-3" }

TABLES

{ TOC \c "TABLE" }

FIGURES

{ TOC \c "Figure" }Figure 3 SWPPP Site Map.....	Back Pocket
---	-------------

APPENDICES

ACRONYMS AND DEFINITIONS.....	APPENDIX A
NPDES GENERAL PERMIT NO. NCG080000.....	APPENDIX B
INSPECTION CHECKLISTS/ FORMS	APPENDIX C
COMPLETED INSPECTION CHECKLISTS/ FORMS	APPENDIX D

{PRIVATE }STORMWATER POLLUTION PREVENTION PLAN CERTIFICATION

"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 fine and imprisonment for knowing violations" [as specified in Part III, Section B of General Permit No. NCG080000].

Authorized Signatory(s)¹	Title	Phone No.	Date
<i>Print name</i>	<i>Print title</i> Public Works Director	<i>Print phone</i>	<i>Print date</i>
<i>Sign here</i>			

Authorized Signatory(s)¹	Title	Phone No.	Date
<i>Print name</i>	<i>Print title</i> Transportation Director	<i>Print phone</i>	<i>Print date</i>
<i>Sign here</i>			

¹ Certification of this Plan is made once for each permit term and is not updated annually.

CERTIFICATION OF NON-STORMWATER DISCHARGES

I certify, under penalty of law, that the stormwater outfalls covered by this SWPPP have been tested or evaluated for the presence of non-stormwater discharges in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of those persons, to the best of my knowledge and belief, **except as indicated on completed Form 3 in Appendix D**, no non-permitted discharges of non-stormwater enter the stormwater outfalls covered by this SWPPP because of activities occurring at this Facility [as specified in Part II, Section A, Paragraph 1(e) of General Permit No. NCG080000].

Print Name:

Signature:

Date Signed:

Representing:

**Town of Chapel Hill
Public Works Complex and Transit Facility**

Method of Evaluation Used:

- Review of building and site plans.
- Visual inspection of stormwater drainage system.
- Observation of outfalls on a dry day preceded by at least 72 hours of dry weather.
- Interview with Facility personnel.
- Flow tests using tracers/ dyes.
- Analytical tests.

The Town is aware of the bypass notification procedures as specified in the General Permit No. NCG080000 and will act accordingly (See Part III of General Permit No. NCG080000, Section C, Paragraph 3 and Section E, Paragraph 7).

1. STORMWATER POLLUTION PREVENTION PLAN

1.1. INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared to comply with the United States Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) program under the amended 1987 Federal Water Pollution Control Act. The SWPPP has been developed using information from the September 1992 edition of *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices*. A SWPPP: (1) consists of steps and activities designed to identify potential sources of stormwater pollution or contamination and (2) establishes Best Management Practices (BMPs) that will prevent or reduce pollutants in stormwater runoff. This SWPPP has been prepared in accordance with standard engineering practices.

Some states have been delegated NPDES general permitting authority by the USEPA. The North Carolina Department of Environmental and Natural Resources (NCDENR) Division of Water Quality (DWQ) administers the NPDES program regulating discharges of stormwater in State waters. The discharge permits are part of a program delegated to North Carolina by the USEPA, under the federal Clean Water Act (CWA). This SWPPP has been prepared for the Town of Chapel Hill's Public Works Complex and Transit Facility to comply with North Carolina General Permit No. NCG080000 for Discharges of Stormwater Associated with Industrial Activity. These municipal operations combined will be referred to hereafter as the Facility.

At the Facility level, the Permittee is required to perform certain compliance activities. The Permittee must characterize and monitor stormwater drainage areas and stormwater quality. The Permittee must then implement necessary BMPs that can include programmatic, operational, and structural practices that eliminate or reduce stormwater pollution.

In general, the Facility and its personnel are required to:

- Establish spill containment procedures, drainage control, and security measures;
- Learn/ implement stormwater pollution prevention procedures and requirements;
- Follow written standard operation procedures for hazardous material handling and storage;
- Perform routine inspections; and
- Maintain records to document successful completion of SWPPP requirements.

Technical and economic feasibility issues are a baseline consideration in choosing BMPs that will be performed initially. Expensive or unproven technologies are generally dismissed early in the selection process. The result is a list of practical BMPs that the Facility will complete. Additional BMPs, including structural controls, will be evaluated during the first annual Plan review.

The following appendices are included as part of this SWPPP: Appendix A contains SWPPP-related acronyms and definitions. Appendix B contains a copy of the NPDES General Permit No. NCG080000. Appendix C contains the necessary inspection checklists and forms. Appendix D is provided for record keeping purposes and serves as a place to store completed inspection checklists and forms.

1.2. SWPPP RESPONSIBLE PARTIES

The Stormwater Pollution Prevention Team (SWPPT) consists of Facility supervisors and other personnel that the Town of Chapel Hill chooses to appoint. The SWPPT will report to the Public Works Director and the Transportation Director for funding and managerial support.

The Facility's Drainage Maintenance Supervisor will serve as the Public Works SWPPT Leader. The Facility's Transit Maintenance Superintendent will serve as the Transportation SWPPT Leader. The SWPPT will meet at least once annually to evaluate the effectiveness of the BMPs and determine if BMPs need to be added, modified, or deleted at the Facility. A series of forms are provided in this Plan to assist the team in the evaluation of their assigned areas. Applicable forms must be completed for each building or area at the Facility. The SWPPT is required to revise the Plan where changes to the Facility significantly affect potential risks to stormwater quality. These revisions will be brief narratives inserted as amendments to the original Plan.

The responsibility of the **Directors** is to:

- Review and certify the SWPPP;
- Ensure SWPPP is implemented;
- Appoint SWPPT Leaders;
- Review and approve selected BMPs;
- Receive spill reports and non-compliance reports; and
- Review and approve Plan revisions and new BMPs identified by SWPPT.

The responsibility of the **SWPPT Leaders** is to:

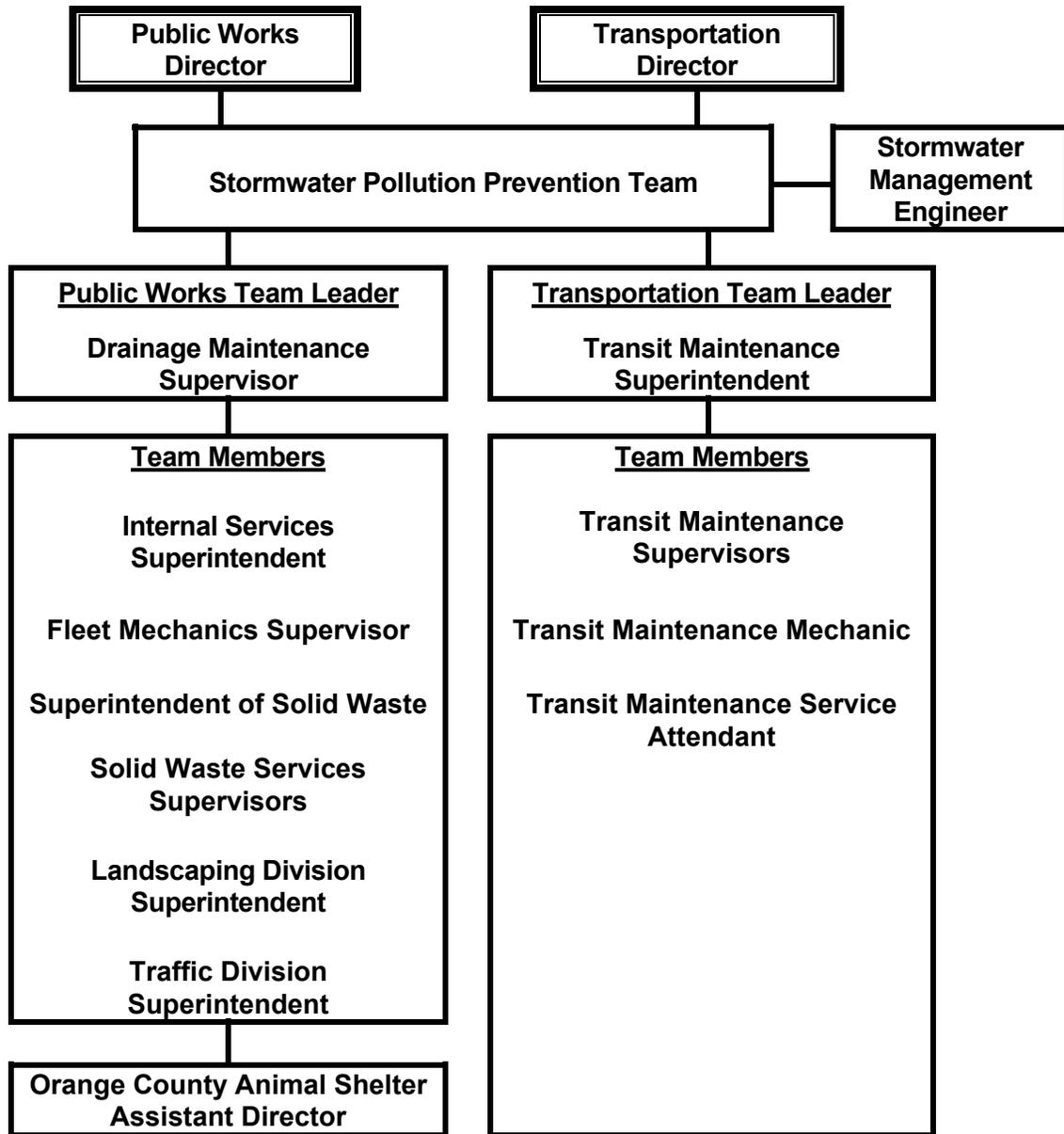
- Ensure SWPPT members are trained and familiar with SWPPP requirements;
- Schedule and conduct SWPPT meetings;
- Ensure that the SWPPT carries out duties listed below; and
- Document the Plan Implementation Schedule annually (Form 1 in Appendix C).

The responsibility of the **SWPPT members** is to:

- Attend SWPPT meetings;
- Schedule the actions to be performed for the SWPPP;
- Conduct routine site inspections, as required;
- Implement best management practices;
- Conduct visual observations at stormwater discharge outfalls as specified in the SWPPP;
- Perform record keeping and documentation as required by the SWPPP;
- Perform the annual updating and certifications as required by the SWPPP; and
- Evaluate the adequacy of the SWPPP and modify as necessary.

The organizational arrangement of the SWPPT is presented in Figure 1. The organization chart shows the chain of command for ensuring compliance with NCDENR requirements. Most of the information provided in this Plan requires effort by the Facility SWPPT and on-site employees. The on-site team members or their designees will assist the SWPPT Leaders in regards to those areas under their specific management control.

Figure { SEQ Figure * ARABIC } Organizational Chart



1.3. PLAN REQUIREMENTS

As part of Plan requirements, the SWPPT will complete the required tasks annually. Master blank inspection checklists and forms are provided in Appendix C. The Plan Implementation Schedule for the SWPPT Leaders is provided on Form 1 in Appendix C. This form provides the SWPPT Leaders with a schedule to implement and document the required tasks for each year.

Master blank copies of Forms 1 through 10 are provided in Appendix C. The forms are provided for the SWPPT to implement and document completion of each task. The SWPPT Leaders will provide copies of the blank inspection checklists and forms to SWPPT members each year. The SWPPT Leaders will insert the completed forms and records into Appendix D.

Form 1 identifies the tasks to be performed and the method of documentation to be used for each task. Target dates indicated in the plan implementation schedule are the dates that task implementation should begin, not necessarily the date that a task is completed. When tasks are completed, the SWPPT Leaders will enter the completion date on the appropriate plan implementation schedule for each year. Implementation of the SWPPP will commence immediately upon SWPPP certification.

Form 2 may be used each year to document SWPPP-related training at the Facility. If more practical, SWPPT members may use another SWPPP training documentation method in lieu of this form. **Form 3** will be completed and reviewed each year as part of the non-stormwater discharge investigation component of the SWPPP.

Forms 4 and 5 will be completed on a semi-annual basis for each year at multiple locations on the Facility. **Form 4** will be completed during each semi-annual site inspection for each applicable building or area at the Facility. **Form 5** will also be completed on a semi-annual basis for each stormwater discharge outfall as designated on the SWPPP Site Map.

Form 6 will be completed once each year during the annual Comprehensive Site Compliance Evaluation, which can occur concurrently with one of the quarterly site inspections. **Form 7** will be used each year to document the completion of intermediate and annual reviews by the SWPPT Leaders and SWPPT members and to document annual amendments to the SWPPP.

Forms 8, 9, and 10 will be completed after a particular incident occurs at the Facility. **Form 8** will be completed each time accumulated rainwater is released from exposed secondary containment structures where potential pollutant sources are located. **Form 9** may be used to document significant spill incidents that may occur. If more practical, Facility personnel may use another documentation method in lieu of this form. **Form 10** will be completed for each non-compliance incident that may occur. Copies of completed Forms 8, 9, and 10 will be inserted into Appendix D. Copies of completed Forms 9 and 10 will also be sent to the appropriate Director.

Several tables are provided in Section 2 to describe the existing BMPs at the Facility (Table 7); new baseline BMPs for the entire Facility (Table 8); and site-specific BMPs for specific Facility buildings and areas (Table 9). Dates that BMPs are implemented at the Facility will be entered in these tables.

1.4. PLAN GUIDANCE

1.4.1. Record Keeping

This SWPPP will be maintained on-site at the office of the SWPPT Leaders. The SWPPP will be revised and updated when changes are made at the Facility that will impact the exposure of significant materials to stormwater or the overall effectiveness of the SWPPP, when an inspection determines that changes to the SWPPP are necessary, or when the SWPPP is ineffective in accomplishing the stated objectives. The SWPPP will be reviewed by the SWPPT at least annually. The SWPPP will be revised if necessary.

The SWPPT Leaders will maintain a record of the results of site inspections and a certification that the Facility is in compliance with the SWPPP (indicating implementation of BMPs) or identify any incident(s) of non-compliance.

The SWPPT Leaders will maintain a record of incidents of spills or leaks of significant materials that could impact stormwater runoff, along with corrective actions, surface water discharge (if any), and other relevant information. Records of inspection and maintenance activities such as cleaning and repairing stormwater control and treatment facilities will also be maintained.

The SWPPT members (or designees) will perform semi-annual inspections of designated equipment and buildings/ areas at the Facility. The SWPPT Leaders will maintain records of required follow-up actions to ensure that appropriate corrective actions are taken in response to the inspections.

Accompanying reports and changes to the SWPPP will be retained on-site for at least five (5) years.

Compliance with the recommendations of the SWPPP will be within the time allotted; additional time may be allowed for structural BMPs. The portions of a plan addressing BMP construction requirements provide for compliance with the plan as soon as practicable.

The Facility is not required to submit the SWPPP for review unless requested by USEPA or NCDENR DWQ. If the SWPPP is reviewed, USEPA or NCDENR DWQ can require the Town of Chapel Hill to amend the SWPPP.

1.4.2. Twenty-four Hour Reporting

The Facility must report to the Directors and/or NCDENR DEQ any noncompliance that endangers human health or the environment. A blank Non-Compliance Report (Form 10) is provided in Appendix C. Any information shall be provided orally within 24 hours (or as soon as practical) from the time Facility personnel become aware of the circumstances. A written submission (Form 10) to NCDENR DWQ shall also be provided within five (5) days of the time the Facility becomes aware of the circumstances.

The written submission will contain a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time compliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

1.4.3. Personnel Training

Personnel training is essential to the effective performance of the SWPPP. Personnel at all levels of responsibility will be trained in the components and goals of the NPDES program and the SWPPP.

Personnel will be trained to:

- Identify and manage potential spills that can occur from equipment and containers of petroleum and hazardous substances;
- Recognize toxic and hazardous substances located on-site; and
- Prevent, or minimize to the extent practical, stormwater pollution at the Facility.

Personnel will be trained in:

- Proper and safe spilled material cleanup;
- Securing drums and containers;
- Checking for leaks and spills;
- Proper handling and storage of hazardous substances;
- Identification of toxic and hazardous substances and wastes stored, handled, used, and produced on-site;
- Preventative maintenance of equipment and stormwater controls;
- Preventing exposure of petroleum-based fuels, oils, and lubricants (POLs), hazardous substances, and waste materials to stormwater;
- Spill prevention and response; and
- Safe fuel handling procedures.

At a minimum, training will be provided on an annual basis. Personnel refresher training will be held on an annual basis. New personnel will receive training promptly upon assignment. Personnel training will be documented. A blank Training Documentation Sheet (Form 2) is provided in Appendix C. Completed copies of the form will be kept on-site with the SWPPP document for at least five (5) years. The SWPPT Leaders will develop a schedule and coordinate training for all SWPPT members in the elements of the SWPPP. The SWPPT members will coordinate training on the proper completion of BMPs for personnel under their direction.

1.4.4. Qualitative Monitoring Guidance

Stormwater discharge qualitative monitoring (visual observations) will be performed at each designated outfall point as shown in the SWPPP Site Map. NCDENR requires qualitative monitoring to be performed twice per year, once in the spring (April - June) and once in the fall (September – November), at each stormwater outfall regardless of representative outfall status. Qualitative monitoring does not need to be performed during a representative storm event. Table 1 shows the parameters for which discharges from industrial outfalls will be observed.

Table { SEQ Table * ARABIC } Visual Monitoring Parameters

Discharge Characteristics	Frequency	Location *
Color	Semi-Annual	SDO-001 SDO-002 SDO-003A SDO-003B SDO-003C
Odor	Semi-Annual	
Clarity	Semi-Annual	
Floating Solids	Semi-Annual	
Suspended Solids	Semi-Annual	
Foam	Semi-Annual	
Oil Sheen	Semi-Annual	
Other indicators of pollution	Semi-Annual	

* Monitoring Location: Visual observation shall be performed at industrial stormwater discharge outfalls (SDO) or at the next accessible point upstream.

Visual monitoring is conducted for the purpose of evaluating the effectiveness of the SWPPP and assessing new sources of stormwater pollution. A blank Stormwater Discharge Outfall (SDO) Qualitative Monitoring Report (Form 5) is provided in Appendix C. Completed originals of the form will be kept on-site with the SWPPP document for at least five (5) years.

Adverse weather conditions, which may prohibit visual monitoring of stormwater discharge outfalls, include weather conditions that create dangerous conditions for personnel (e.g., local flooding, high winds, hurricanes, tornadoes, electrical storms). When conducting visual monitoring of outfalls, SWPPT personnel are required to follow standard safety practices, including wearing safety vests and steel-toed boots.

If the storm event monitored and reported in accordance with the NPDES requirements coincides with a non-stormwater discharge, the Facility shall separately monitor and report the parameters as required under the non-stormwater discharge requirements and provide information with the stormwater discharge Visual Observation Form.

When conducting wet weather visual monitoring at outfalls that receive off-site runoff, the effects of this off-site runoff can be minimized by conducting the wet weather visual observation within the first ten minutes of discharge from the on-site outfall.

If stormwater discharges are determined to be polluted, the source of the pollutants will be located and minimized to the extent practical. Refer to Chapter 3 - Best Management Practices for descriptions of applicable measures that can be implemented to reduce pollutants.

No existing analytical stormwater discharge sampling data is available at this Facility.

1.4.5. Analytical Monitoring Requirements

Analytical monitoring of stormwater discharges as specified below in Table 2 are required for those facilities conducting vehicle maintenance activities and utilizing more than 55 gallons new motor oil per month when averaged over the year (those vehicle maintenance activities not utilizing more than 55 gallons of new motor oil per month are not required to conduct analytical monitoring). The Public Work Complex and Transit Facility both average more than 55 gallons of new motor per calendar month, therefore, the stormwater outfalls will require analytical sampling.

For each parameter, the arithmetic mean of all analytical sampling results collected during the coverage of the permit shall be calculated for each individual outfall. The computed arithmetic mean is then compared to the cut-off concentrations listed below in Table 3. If the arithmetic mean is less than the specified cut-off concentration for a given parameter, then the Facility is not required to continue annual analytical monitoring for that parameter (at that outfall) during the remaining coverage of the permit unless a significant change in Facility operations or configuration occurs. If a cut-off concentration results in discontinued analytical monitoring at an individual discharge outfall, the permittee is required to maintain Facility operations that ensure the continuation of stormwater runoff quality.

Analytical sampling is to be performed during the first and last year of the permit coverage regardless of cut-off concentration conditions. Analytical results from sampling during the final year of the permit coverage must be submitted with the permit renewal application. All analytical monitoring must be performed during a representative storm event, which is a storm event that measures greater than 0.1 inches of rainfall and that is preceded by at least 72 hours in which no storm event measuring greater than 0.1 inches has occurred. A single storm event may contain up to 10 consecutive hours of no precipitation.

If a facility has multiple discharge locations with substantially identical stormwater discharges that are required to be sampled, the Facility may petition the Director for 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 DWQ may grant representative outfall status. Representative outfall status allows the Facility to perform analytical monitoring at a reduced number of outfalls.

Table 2 Analytical Monitoring Parameters

Discharge Characteristics	Units	Monitoring Frequency¹	Sample Type²	Sample Location³
pH	standard	Annually	Grab	SDO-001 SDO-002 SDO-003A SDO-003B SDO-003C
Oil and Grease	mg/l	Annually	Grab	
Total Suspended Solids	mg/l	Annually	Grab	
New Motor Oil Usage	gallons/ month	Annually	Estimate	
Total Rainfall ⁴	Inches	Annually	-	
Event Duration ⁴	Minutes	Annually	-	
Total Flow	MG	Annually	-	

- 1 Measurement Frequency: Once per year during a representative storm event. A year is defined as the 12 month period beginning on the month and day of issuance of the Certificate of Coverage.
- 2 If the stormwater runoff is controlled by a stormwater detention pond, a grab sample of the discharge from the pond shall be collected within the first 30 minutes of discharge. If the detention pond discharges only in response to a storm event exceeding a ten year design storm, then no analytical monitoring is required and only qualitative monitoring shall be performed.
- 3 Sample location: Samples shall be collected at each stormwater discharge outfall (SDO) unless representative outfall status has been granted.
- 4 For each sampled representative storm event the total precipitation, storm duration, and total flow must be monitored. Total flow shall be either; (a) measured continuously, (b) calculated based on the amount of area draining to the outfall, the amount of built-upon (impervious) area, and the total amount of rainfall, or (c) estimated by the measurement of flow at 20 minute intervals during the rainfall event.

Table 3 Cut-off Concentrations for Analytical Monitoring Requirements

Discharge Characteristics	Cut-off Concentration
pH ¹	within range 6.0 - 9.0
Oil and Grease	30 mg/l
Total Suspended Solids	100 mg/l

- 1 pH cannot be averaged due to the nature of the logarithmic pH scale. The most recent pH sample result shall be used for cut-off concentration purposes.

During the period beginning on the effective date of the permit and lasting until expiration, the Facility is authorized to discharge stormwater from oil/water separators and/or petroleum bulk stations and terminals secondary containment areas subject to the provisions of this permit. Discharges shall be limited and monitored as specified below in Table 4.

**Table 4 Discharge Limitations and Analytical Monitoring Requirements
Oil/Water Separators and Petroleum Bulk Stations and Terminals**

Discharge Characteristics	Limitations and Units	Monitoring Frequency¹	Sample Type²	Sample Location³
pH	6.0 to 9.0	Annually	Grab	SDO-002
Oil and Grease	30 mg/l	Annually	Grab	SDO-002
Total Suspended Solids	100 mg/l	Annually	Grab	SDO-002
Total Rainfall ⁴	inches	Annually	-	SDO-002
Event Duration ⁴	minutes	Annually	-	SDO-002
Total Flow	MG	Annually	-	SDO-002

Footnotes 1, 2, 3, and 4: See Table 2 footnotes.

1.4.6. Non-Stormwater Discharges

The term “stormwater conveyance system” includes all catch basins, drop inlets and similar structures, pipes, ditches, channels, swales, and canals that discharge to “waters of the State.” The only non-stormwater discharges that shall be allowed in the stormwater conveyance system are:

- All other discharges that are authorized by a non-stormwater NPDES permit;
- Uncontaminated ground water, 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.
- Discharges resulting from fire-fighting or fire-fighting training.

Vehicle and equipment washwater is not included in the definition of allowable non-stormwater discharges in the NPDES Permit, and is therefore not allowed to discharge into the stormwater drainage system or adjacent waters of the State.

Note also that discharges of washwater from steam cleaning, parts washers, and other equipment cleaning operations are not allowed to enter the stormwater drainage system.

The holders of NPDES permits for discharges of stormwater associated with industrial activity are required to perform an investigation to show that outfalls discharge only stormwater or one of the allowable discharges defined previously. An investigation to identify potential non-stormwater discharges was performed in January and June, 2003 (see completed Form 3 in Appendix D). Follow up investigation and reviews for non-stormwater discharges will be performed annually during site inspections (Form 3). The Town of Chapel Hill shall certify that the investigation is performed for areas where industrial activity occurs. Non-stormwater investigations shall determine that the discharges from each outfall are composed only of stormwater or a permitted discharge.

The following methods are typically employed in these types of investigations to determine whether non-stormwater discharges are present:

- Visual observation of the outfalls;
- Interview with Facility personnel;
- Review of as-built infrastructure drawings and plumbing plans;
- Testing of floor drains and drainage system using water, smoke, dye, or video; or
- Analytical monitoring.

When non-permitted non-stormwater discharges or unauthorized sewer (e.g., sinks, floor drains) connections are discovered, a plan to eliminate the discharge shall be developed and carried out. Non-structural corrective actions should be performed immediately and will require an amendment to the SWPPP to reflect the completion of the BMP. Structural modifications should be made as soon as possible.

1.4.7. Releases from Secondary Containment Structures

Secondary containment devices for bulk storage of liquid materials will be controlled by manually activated valves or other similar devices. The drain valves for containment structures will be closed at all times except when making a controlled release. The drain valves will be secured with a locking mechanism. Any stormwater that accumulates in the containment area will be visually observed for color, foam, outfall staining, visible sheen, and dry weather flow before release of the accumulated stormwater. After each precipitation event that could potentially generate accumulation in the containment areas, Facility operators will inspect the rainfall or snowfall that has accumulated in the containment areas. If there is no evidence of oil or chemical contamination, the valves can then be opened to release the clean stormwater to the drainage system. If oil or chemicals appear to be present, the contaminants will be removed and disposed of in accordance with local, state, and federal regulations. It may be necessary to remove and dispose of all the accumulated rainwater as a contaminated waste.

The drain valve openings and releases are required to be documented. A blank Release of Rainwater From Secondary Containment Structure (Form 8) is provided in Appendix C to document the releases. Completed copies of the form will be inserted into the SWPPP document and kept on-site for at least five (5) years. After releasing accumulated rainwater, the drain valve will be closed and locked.

An accidental release from a secondary containment structure, including diked or bermed areas, should be treated like an accidental release or spill from any aboveground storage tank (AST). Appropriate spill response and reporting procedures will be followed to document the release.

1.4.8. Existing Environmental Plans

Existing stormwater management practices required by other existing environmental management plans have been evaluated. Future stormwater management practices required by other regulations will be evaluated by the SWPPT and incorporated into the SWPPP during the annual update. The SWPPT Leaders will maintain a current copy of each one of these plans.

Oil Pollution Prevention: Chapter 40 Part 112 of the CFR requires certain facilities to develop and certify a Spill Prevention, Control and Countermeasure (SPCC) Plan when the following requirements are met:

- There is a reasonable potential for discharging oil from fixed facilities into waters of the United States; and
- The oil storage capacity on-site exceeds either:
 - (a) 42,000 gallons of total underground storage, or
 - (b) 1,320 gallons of total aboveground storage.

The Facility has five underground storage tanks (USTs) totaling 55,000 gallons and several ASTs, which have a total capacity of greater than 1,320 gallons. On-site oil storage exceeds the aboveground and the underground oil capacity requirements; therefore, a SPCC Plan is required for the Facility. A SPCC Plan has been prepared for the Facility. The SWPPP will follow spill prevention and response procedures described in the Facility's SPCC Plan.

Site Investigation Report for Permanent Closure (April 16, 1998): This report was prepared for closure of two USTs located at the Public Works Fuel Station. The USTs were replaced with two 12,000 gallon double-walled fiberglass tanks.

Closure Report (1992): This report was prepared for the removal and closure of three USTs located at the Transit Maintenance Building. The USTs were replaced with three doubled-walled fiberglass tanks (one 20,000-gallon, one 10,000-gallon, and one 1,000-gallon).

Remedial Investigation Report (RIR) Volume I (November 20, 1996) and Remedial Action Plan (RAP) Volume II (February 1997): The RIR and RAP were prepared for the University of North Carolina's Airport Road Waste Disposal Area located northwest of the Transit Maintenance Building. The reports discuss disposal of chemical waste on approximately 0.2 acres. Groundwater samples collected from on-site monitoring wells indicate the presence of benzene, chloroform, and methylene chloride.

1.4.9. Special Requirements For Facilities Subject to EPCRA Section 313 Requirements

The Emergency Planning and Community Right-to-Know Act (EPCRA) requirements are implemented at the Facility.

2. FACILITY ASSESSMENT AND BMP ACTION PLAN

The goal of the SWPPP is to ensure, to the maximum extent practicable, that only the highest quality of stormwater runoff is discharged from the Town of Chapel Hill Public Works Complex and Transit Facility (or the Facility). To achieve this goal AMEC Earth & Environmental, Inc. of North Carolina visited the Facility in January and June, 2003 to assess stormwater pollution potential and identify BMPs to reduce pollutant loading. The results of the assessment have been organized into the following sub-sections:

- Facility Location
- Facility Description
- Facility Security
- Facility Drainage
- Facility Spill History
- Risk Assessment
- BMP Schedule

The information collected during the assessment is used to develop the needed components for a BMP action plan. Existing BMPs are identified that need to be continued. In addition, baseline and site-specific BMPs are identified to improve stormwater quality and bring the Facility into compliance. The BMPs identified in this section will be implemented based on the priorities set in the SWPPP.

2.1. FACILITY LOCATION

The Facility is located in Orange County at 1099 Airport Road, Chapel Hill, North Carolina. A site location map is provided as Figure 2. The Facility is comprised of the Public Works Complex and the Transit Facility. The Town of Chapel Hill leases approximately 23.8 acres at this location from the University of North Carolina (UNC). The Facility is bounded to the north by undeveloped property, to the south by Horace Williams Airport, to the east by Airport Road and residential property, and to the west by the UNC Old Sanitary Landfill (closed) and the UNC Airport Waste Disposal Site (Chemical Site). The Facility is located at N 35° 56' 17" Latitude, W 79° 3' 32" Longitude.

2.2. FACILITY DESCRIPTION

Activities performed at the Facility include maintenance and repair of vehicles and equipment, refueling, vehicle and equipment washing, bulk fuel storage, chemical storage and handling, raw material stockpiles, salt storage, and scrap material storage. The layout of the Facility is shown in the SWPPP Site Map or Figure 3 (see back pocket). The SWPPP Site Map identifies building locations, storm water drainage systems, industrial waste systems, potential pollution sources, storm water discharge outfalls and storm water discharge outfall drainage boundaries.

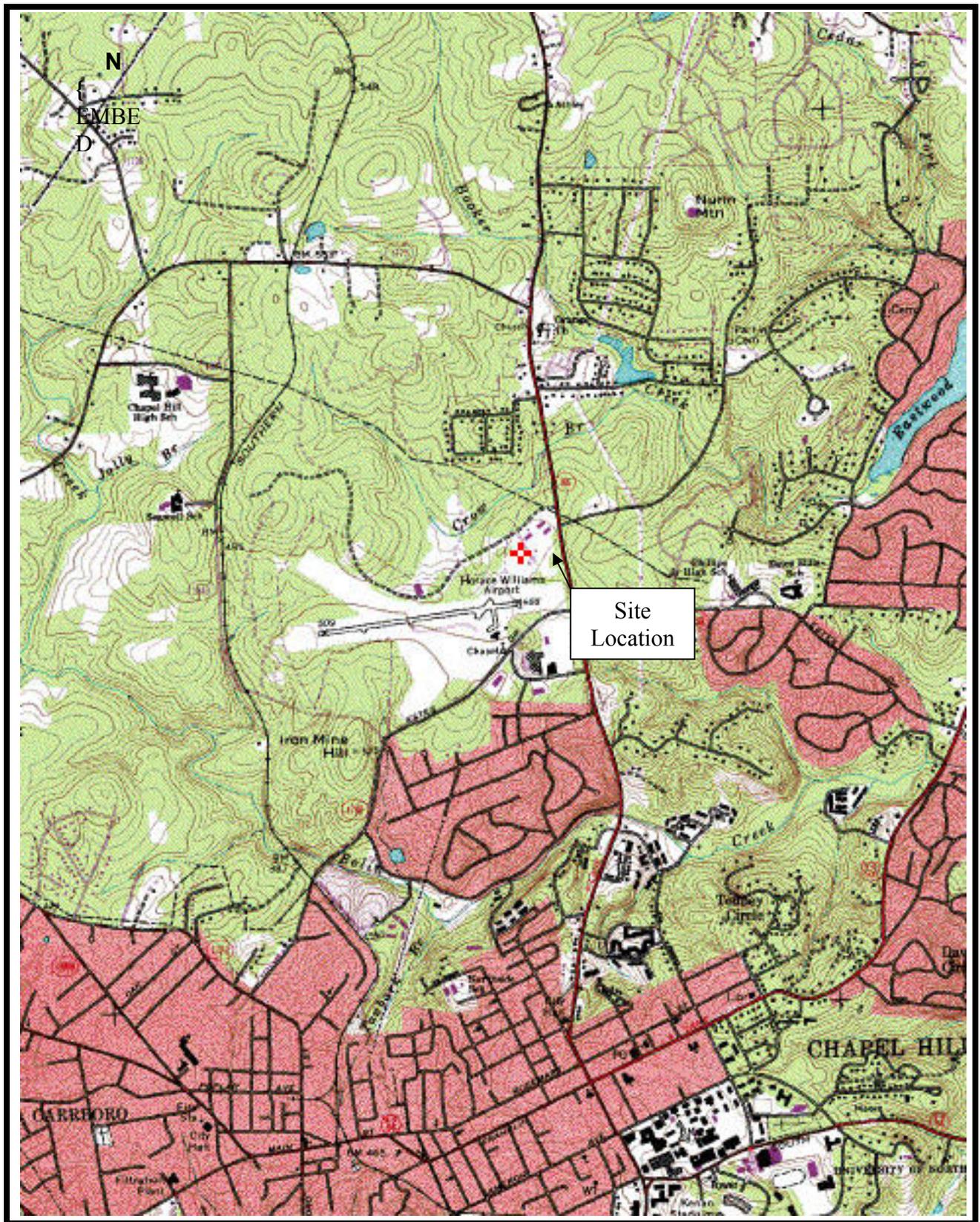


Figure { SEQ Figure * ARABIC } Site Location Map
 CHAPEL HILL QUADRANGLE
 NORTH CAROLINA-ORANGE COUNTY
 7.5 Minute Series, 1:24000, Dated 1981

The Public Works Department utilizes the eastern portion of the Facility. It is comprised of field operations that include the Street Division, Construction Division, Drainage Division, Right-of-Way Division, Landscape Division, and Solid Waste Services, Recycling, and Waste Reduction. The Public Works Complex has an administration office, solid waste office, maintenance garages, fuel dispensing station, landscaping and sanitation storage, back lot for stockpiled materials, covered salt/ sand storage, impoundment lot, equipment sheds, and employee parking areas located on this portion of the Facility.

The Transit Operations and Maintenance Department utilizes the western portion of the Facility and is comprised of an Administration Building, Transit Building, which is used for maintenance and bus washing, and bus parking lot. The Transit Building, originally built in 1980, was expanded in 1986.

The Orange County Animal Shelter is located between the Public Works Complex and Transit Facility. In addition, the Boy Scout Area is located to the south of the Salt/ Sand Storage Building and includes a building with a loading dock, two sheds, and pallet storage area.

The Facility's sanitary sewer system is connected to the Orange Water and Sewer Authority (OWASA) Mason Farm Wastewater Treatment Plant.

This Facility has the following industrial activities:

Vehicle and Equipment Maintenance

Storm water discharges covered in this category include runoff from areas where the following maintenance activities may occur: fluid changes; mechanical repairs; parts cleaning; vehicle washing; storage of vehicles and equipment waiting for repair or maintenance; and storage of the related materials and waste materials such as oil, fuel, solvents, batteries, tires, or oil and fuel filters.

Vehicle Refueling Operations

Storm water discharges covered in this category include runoff from areas where motor vehicle refueling operations may occur. These activities include fuel delivery to the facilities, fuel storage both in separate containers and in vehicle tanks, and fuel dispensing.

Hazardous Materials Storage

Storage areas for new and waste materials such as paint, solvents, herbicides, pesticides, oil, lubricants, batteries, and filters are included when the storage areas are either directly exposed to rainfall or when spills or leaks from these areas have the potential to enter the storm drainage system.

Raw Material Stockpiles

Storm water discharges covered in this category include runoff from stockpiles, bins, scrap piles, and storage areas. Stockpiles of sand and aggregate are often exposed to precipitation and cause storm water pollution due to sediment or chemical constituents in runoff.

The following narrative describes industrial activities that occur at each building/ area that is covered by this SWPPP.

Public Works Complex

The Public Works Complex contains facilities that provide maintenance and repair of Town-owned vehicles and equipment, as well as storage of vehicles, equipment, and materials. The Public Works Complex consists of a public works administration building, field operations/ shop, fleet maintenance building, public works garage, landscaping and sanitation storage building, landscaping covered storage shed, vehicle wash pit, covered vehicle/ equipment storage sheds, break room building, covered salt and sand storage building, additional storage buildings, material stockpile yard, and vehicle/ equipment parking areas. Scrap metals and piping, equipment, vehicles and various construction materials are stored throughout the backlot. These materials are exposed to precipitation.

Public Works Administration Building – This building consists of administrative offices, meeting areas, restrooms, and storage rooms. Small quantity containers of janitorial supplies are located in the building. Floor drains located in this building are connected to the sanitary sewer system.

Public Works Field Operations/ Shop Building - This building consists of administrative offices, meeting areas, restrooms, and storage rooms. Small quantity containers of janitorial supplies are located in the building. Floor drains located in this building are connected to the sanitary sewer system.

Solid Waste Division Administration Building – This modular building consists of administrative offices, meeting areas, restrooms, and storage rooms. Small quantity containers of janitorial supplies are located in the building. There are no floor drains in this building. Wastewater lines in this building are connected to the sanitary sewer system.

Public Works Fuel Station - A Fuel Station is located near the gated entrance and Garage No. 1 and consists of two fuel dispensing islands and two USTs. The Fuel Station is used for the refueling of Town-owned vehicles, as well as, Orange County Rescue, and the UNC Hospital vehicles and air ambulance. Each vehicle being refueled must use a PIN number to dispense fuel. The amount of fuel used is computer recorded for each vehicle. The Fuel Station is well lit by on-site lighting to discourage trespassing or vandalism and to aid in spill discovery. The fuel islands each have two pumps, one for gasoline and one for diesel fuel. The pumps are equipped with dead-man switches which shut-off fuel when the grip is released. A covered concrete pad surrounded by asphalt pavement is provided at the vehicle refueling stands. An emergency fuel shutoff is located at the Fuel Station.

Two 12,000-gallon USTs (one containing gasoline and one containing diesel fuel) located adjacent to Garage No. 1 provide fuel to the Fuel Station. The USTs and associated piping are constructed of double-walled fiberglass. Deliveries of fuel to the USTs are made by outside contractors with tanker trailers.

Fleet Maintenance/ Garage No. 1 – This building is utilized for fleet maintenance and has two service bays. There is one floor drain, located in the downstairs bathroom, which drains to the sanitary sewer system. The maintenance bays are used to perform vehicle maintenance including fluid changes, battery replacement, and brake work. The remainder of the building is utilized for storage and office space. The maintenance bays contain one 250-gallon AST containing used oil (designated as AST-1 in Figure 3), one 200-gallon AST containing motor oil (designated as AST-2 in Figure 3), one 55-gallon drum containing new 5W30 motor oil, two 30-gallon drums of lubricant, two parts washers, an antifreeze recycling unit, and a self-contained flammables cabinet that stores smaller-sized containers of various carburetor cleaner, brake fluid, paint, paint thinner, wax, and other hazardous substances. An eyewash is located next to the downstairs bathroom.

Garage No. 2 – This building is utilized to service fire trucks, garbage trucks, and other Town vehicles and has five maintenance bays. There are no floor drains located in Garage No. 2. The garage contains vehicle repair stations, machine equipment, tool and parts storage, and two solvent parts washers. The maintenance bays contain 55-gallon drums of oil, transmission fluid, and antifreeze, a 30-gallon AST containing diesel for the emergency generator (PW-AST-3), a 260-gallon AST containing 15W40 motor oil (PW-AST-4), a 240-gallon AST containing 5W30 motor oil (PW-AST-5), and two 240-gallon ASTs containing hydraulic fluid (PW-AST-7 and PW-AST-8). Used oil is drained from vehicles and collected in a 500-gallon AST (PW-AST-6). Dry granular absorbents are stored at various points throughout the shop for spills and leaks.

Vehicle Wash Pit – Vehicle washing occurs outdoors west of Garage No. 2. The wash pit consists of a concrete pad that slopes to a drain located at the north end of the pad. Washwater is discharged through a baffled sediment chamber to the sanitary sewer system. Detergents are used at this location.

Pigeon Barn – This shed is used for landscape and sanitation storage. The shed has four bays. One bay is shared by the Solid Waste Division and Internal Services Division. Landscape Division utilizes two bays. The Traffic Division utilizes the fourth bay. The Solid Waste Division stores orange barrels, extra yard waste, pitchforks, and rakes. The Public Works Internal Services Division utilizes its bay for storage of excess office items, which are to be eventually discarded or auctioned off and include items such as file cabinets, shelves, and desks. The Landscaping Division stores lawnmowers, tractors, and trailers, as well as, a few jerricans of gasoline, herbicides, white athletic field chalk, and dry concrete mix in their bays. No liquid hazardous substances are stored in the Traffic Division bay. There are no floor drains in this shed.

Public Works Parking Area – Public Works personnel store service trucks and vehicles in the paved area between the Field Operations/ Shop Building and the Pigeon Barn. Stormwater runoff from this parking area drains to a catch basin located to the southwest.

Break Room Building – This building consists of a break room and restrooms. No liquid hazardous substances are stored in this building.

Covered Parking – This covered storage shed is utilized to store larger vehicles and equipment. There are no floor drains located in the sheds.

Salt/ Sand Storage Building – A covered salt and sand building is located on-site. Salt and sand mixing is performed outside the north side of the building. Facility personnel minimize salt residue being tracked out of the building during transfer operations. No floor drains are located in this building.

Landscape Shed – This shed is utilized for storage of landscaping equipment and trailers. Herbicides and pesticides are stored in self-contained flammables storage cabinets located at the west end of the shed.

Sanitation Division Parking Area – The sanitation vehicles and equipment parking is located south of Garage No. 2. There are two lighted concrete islands located in this area. This parking area is primarily gravel. There are five dumpsters located in the northeast portion of this parking area. Stormwater runoff sheetflows across the gravel surface soil allowing some percolation.

Impoundment Lot – A fenced impoundment lot is located south of the Landscape shed and adjacent to the Boy Scout Building. The lot is used by the local police to store impounded vehicles until picked up or auctioned off.

Covered Storage Sheds – Two covered storage sheds are located adjacent to the Salt/ Sand Storage Building. Miscellaneous equipment and materials are stored in the buildings including: wood scraps, file cabinets, and metal shelving.

Back Lot – A large open area located on the southeast corner of the Facility is used by Facility personnel as a material storage yard. Aggregate piles, asphalt millings, a leaf mulch pile, a landscape pile, and a sweeper debris pile are located in this area. Solid waste management dumpsters and a loading dock are located at the west portion of the yard. Miscellaneous scrap metal, piping, and construction materials are located throughout the yard. These materials and equipment are exposed to rainfall.

Recycle/ Garbage Dumpster Area – A public accessible disposal area is located adjacent to the animal shelter and includes a recycle center and several dumpsters. The area is primarily gravel.

Orange County Landfill Leachate – The Orange County Landfill utilizes a sanitary sewer manhole access in the Public Works Complex to dispose of leachate collected at the landfill. Landfill leachate is transported to the Public Works Complex by a 2,000-gallon tanker truck and pumped into the sanitary sewer manhole located immediately southwest of the Public Works Pigeon Barn building. The disposals usually occur after heavy rainfall events when leachate generation at the landfill is at its highest.

Transit Facility

Transit Building – The original section of this building is comprised of the bus wash rack, a machine shop, maintenance bay, storage room, tire storage, emergency generator room, and air compressor room. The expanded section of the building (western portion of building) is comprised of a bus maintenance bay, lube room, office, locker, training room, and parts storage room.

The maintenance bays are used to perform bus maintenance including fluid changes, battery replacement, and brake work. Floor drains located throughout the Transit Building are connected to an oil interceptor with 1,000-gallon waste oil double-walled UST (designated as OWS-1 and TM-UST-3 in Figure 3) located east of and adjacent to the wash bay corridor. Roof drains are connected to the stormwater drainage system, which discharges outside the north side of the building. The floor drains located in the locker room and bathroom are connected to the sanitary sewer system. The Lube Room contains four 280-gallon ASTs: one with antifreeze, one with automatic transmission fluid, one with 10W40 motor oil, and one with 15W40 motor oil (designated as TM-AST-3 through 6). The lubricants are supplied to the maintenance bays via steel high pressure tubing. The Lube Room also contains an antifreeze recycling unit, several batteries stored on pallets, and several spill pallets storing transmission fluid, various other lubricants, antifreeze, car wash soap, and steam cleaner condensate. The Parts Room is used for tool and parts storage and contains a solvent parts washer.

Spills occurring in the maintenance bays may result from leaks or releases of fluids from buses during servicing, spills of waste or new products being removed from or transported to buses being serviced, or leaking or damaged containers. Spills inside the shop would enter the floor drains and be routed to the oil interceptor and 1,000-gallon waste oil UST. The major supply of spill response equipment is located in the Lube Room and includes Oil-dri, Gator, sorbent pads and booms, and brooms. Spill response kits are also located in the service truck and various areas within the Transit Building. Emergency eyewash stations are located on-site.

There are two wash areas for the buses. The indoor wash rack is a recycled system and consists of a drive-through concrete corridor with drains located down the center. Buses are typically washed twice per week. Detergents are used at this location. The freshwater rinse, collected in the northernmost drain, is discharged to a roadside swale located north of the building. The other wash rack is located outside of the southwest corner of the Transit Building. This outdoor wash rack utilizes a high pressure steam cleaning system and has two trench drains connected to an oil/water separator (designated as OWS-2 in Figure 2), which discharges to the roadside swale outside the north side of the building. Buses are steamed cleaned every 6,000 miles, which equates to approximately once per two to three months.

Transit Fuel Stations – There are two fuel stations located at the Transit Facility. One is located south of the gated entrance of the Transit Administration Building. There is one pump at this fuel station, which dispenses gasoline and is utilized by Transportation Department vehicles. The fuel station is covered and lighted to discourage trespassing or vandalism and to aid in spill discovery. The second fuel station is located inside the Transit Building. There is one pump at this fuel station which provides a diesel/ kerosene mixture fuel for the buses.

One 20,000-gallon UST containing a diesel/ kerosene mixture fuel and one 10,000-gallon UST containing gasoline are located at the southeast corner of the Transit Building. These USTs provide fuel to both Transit Facility fuel stations. The USTs and associated piping are constructed of double-walled fiberglass. Deliveries of fuel to the USTs are made by outside contractors with tanker trailers.

Bus Parking Lot – A large asphalt paved lot is located south of the Transit Building. Buses are parked throughout the lot. Storm water runoff from the parking area sheetflows east and discharges through SDO-003.

Transit Administration Building – This building consists of administrative offices, meeting areas, and restroom. There is one floor drain located in this building, which is connected to the sanitary sewer system.

Animal Shelter

Animal Shelter Building – This building consists of the Orange County Animal Shelter and is located in the center of the Facility. The shelter houses animals, primarily cats and dogs, in numerous kennels located in the building. Small quantity containers of janitorial cleaners and supplies are located in the building. There are several floor drains located throughout the building. The floor drains receive floor washwater and/or animal waste. Floor drains in the building are connected to the sanitary sewer system. Animals are washed in one of two wash rooms located inside the building. There is one trench drain located outside the east side of the building adjacent to the unloading area. This drain appears to outfall to a stormwater drainage pipe located to the north.

2.3. FACILITY SECURITY

The Facility has existing security policies and enforcement procedures. Perimeter chain link security fencing encloses the Public Works Complex, Impoundment Lot, the Transit Building and bus parking lot. Access gates to the Public Works Complex and Transit Facility are locked during non-working hours. The Facility is well-lighted, including bright lighting for the Public Works Fuel Station. Police vehicles have 24-hour access to the Public Works Fuel Station.

2.4. FACILITY DRAINAGE

The Facility is located in the Blue Ridge Mountains physiographic region. Soils belong to the Enon loam and Iredell gravelly loam series. The Enon series consists of well drained, slow permeability soils. The seasonal high groundwater table is 1-2 feet below land surface. The Iredell series consists of moderately well drained, slow permeability soils. The seasonal high groundwater table is greater than six feet below land surface (Soil Survey of Orange County, USDA, 1978).

The Facility's buildings are surrounded by paved, graveled, and grass covered areas. The stormwater management system on-site consists of conveyance swales and storm drainage inlets located around the buildings, roads, and parking areas at various locations. The conveyance features are primarily through grass swales and overland flow. Stormwater runoff from the Facility discharges to Crow Branch, which is an upstream tributary of Booker Creek, and an unnamed tributary of Booker Creek. Crow Branch and this segment of Booker Creek are both Class B and Nutrient Sensitive Waters in the Cape Fear River Basin. Spills at this Facility that do not enter the ground surface will either discharge to the storm drainage system or to the sanitary sewer system.

Three industrial stormwater discharge outfalls (SDOs) are located at this Facility (see SWPPP Site Map). SDO-001 collects stormwater runoff from the northeastern portion of the Public Works Complex, including the Garage Nos. 1 and 2, the Fuel Station, and the majority of the parking area north of Garage No. 1.

SDO-002 collects runoff from the northwestern portion of the Facility including the Transit Building and Transit Administration Building. Off-site runoff from UNC-owned property to the northwest of the Facility discharges through SDO-002.

SDO-003 collects stormwater runoff from the southern and eastern portion of the Facility, including the Public Works Fuel Station, Pigeon Barn, Salt/ Sand Storage Building, Equipment Storage Buildings, Boy Scout Area, the Animal Shelter, Impoundment Lot, Back Lot, and Transit bus parking lot and Fuel Station. Off-site runoff from UNC-owned property to the south of the Facility discharges through SDO-003.

Two non-industrial SDOs are also located at this Facility. Drainage Area (DA) DA-004 collects runoff from the Public Works Administration Office, Field Operations/ Shop Building, Solid Waste Administration Building, and employee parking areas. DA-005 collects runoff from the employee parking lot located north of Garage No. 1. These non-industrial outfalls discharge through two culvert pipes beneath Municipal Drive and drain northward.

The characteristics of the industrial drainage outfalls are identified in Tables 2 and 3. Table 2 identifies the outfalls (defined here as point source discharges of stormwater to "waters of the State"), outfall type and outfall location.

Table 5 Industrial Outfalls

OUTFALL I.D.	OUTFALL TYPE	LATITUDE*	LONGITUDE*
SDO-001	18-inch pipe	N 35° 56' 23"	W 79° 3' 28"
SDO-002	15-inch pipe	N 35° 56' 20"	W 79° 3' 35"
SDO-003	Approximately 42-inch pipe	N 35° 56' 16"	W 79° 3' 26"
SDO-003A	pipe	N 35° 56' 15"	W 79° 3' 29"
SDO-003B	24-inch pipe	N 35° 56' 15"	W 79° 3' 28"
SDO-003C	Ditch	N 35° 56' 12"	W 79° 3' 27"

* Values are obtained from available maps.

Visual observations of stormwater discharges will be performed for outfalls listed in Table 5 at designated points as shown on the SWPPP Site Map. Visual observations will be conducted as described in Section 1.4.4. Table 6 identifies the outfall drainage characteristics. A drainage basin identification number is assigned to each outfall and shown on the SWPPP Site Map. Table 6 also identifies the on-site drainage area, percent impervious, and contributory off-site drainage for each outfall.

Table 6 Outfall Drainage Characteristics

OUTFALL I.D.	DRAINAGE BASIN	ON-SITE DRAINAGE AREA (acres)*	PERCENT IMPERVIOUS*	OFF-SITE DRAINAGE
SDO-001	DA-001	1.7	85	None
SDO-002	DA-002	4.0	70	UNC/ Airport Waste Disposal Site and wooded area
SDO-003	DA-003	16.5	60	UNC Airport property to south
Non-Industrial	DA-004	1.5	50	None
Non-Industrial	DA-005	0.5	50	None

* Values are obtained from available maps.

2.5. FACILITY SPILL HISTORY

There have been no significant spills of oil or hazardous substances reported at this Facility in the three (3) years prior to the effective date of this Plan. One hydraulic oil spill occurred in Calendar Year 2002 from a Public Works operated front loader returning from unloading a garbage dumpster at the Transit Building. Approximately 10 gallons of hydraulic oil was spilled, primarily in the Public Works Complex, and some on Municipal Drive. Sorbents and sand were utilized to absorb the spill.

2.6. RISK ASSESSMENT

The Facility operations that have a high risk of contributing to a large spill which may contaminate the storm water drainage system and adjacent waters of the State are the delivery or transfer of fuels from storage tanks or refuelers, or the failure of a storage tank. Outdoor refueling and material handling are high risk sources of storm water pollution. Proper refueling and materials handling procedures as detailed in Chapter 3 - Best Management Practices will reduce the potential for fuel spills.

There were several non-permitted discharges identified at this Facility in January and June, 2003 (refer to completed Form 3 in Appendix D). There is a high risk of pollutants entering the stormwater drainage system from these non-permitted discharges. A plan to eliminate non-permitted discharges at the Facility must be developed and carried out.

Other moderate risks are incurred during delivery and off-loading of POLs and other hazardous substances. There is a moderate risk of small spills in vehicle and equipment parking areas and hazardous substance storage areas. Such spills can be from lubricating oils, fuel, cleaning compounds, and brake or other hydraulic fluids.

A list of materials exposed to storm water runoff at the Facility was compiled in January 2003. There is a moderate risk of pollutants entering the storm water drainage system from exposed materials. Where practical, the Permittee can provide cover for or will relocate exposed materials indoors. Vehicles awaiting repair and scrap parts can introduce pollutants if these items are not completely emptied of fuels and lubricants, or are coated with oily residues. Where practical, the Permittee can conduct refueling, material handling operations, and vehicle and equipment cleaning operations indoors or under cover. In areas where the elimination of exposure is not practical, the Permittee will attempt to minimize storm water run-on at these locations by diverting storm water runoff away from the areas of potential contamination.

Some identified materials subject to long term exposure to precipitation represent a low-level risk of storm water pollution. Lead, zinc, and other heavy metals can precipitate from exposed items (e.g., galvanized sign posts, scrap metal) in contact with acidic rainfall. The Permittee has evaluated the issue of providing cover for outdoor storage areas. It is impractical to cover all vehicle parking areas and yards where items such as pipes, brick, and construction materials. Since these items represent a negligible potential for storm water pollution, a constructed roof covering is not warranted. Scrap materials and other items no longer in use will be removed from the site promptly.

Except for bulk storage of liquids, operations that occur inside buildings present low risks of storm water pollution. The positioning of drums and containers of hazardous materials near exterior doors increases the potential for a spill to flow from the building and into the storm water drainage system. Such containers will be located away from exterior doors where practical.

2.7. BMP SCHEDULE

A BMP action plan is a key component of the SWPPP. Proper selection and implementation of both structural and non-structural BMPs is necessary to reduce pollutant loading to stormwater. BMPs are grouped into the following two categories:

- Baseline BMPs
- Site-specific BMPs

Table 7 summarizes the existing BMPs that were identified during the January and June, 2003 site investigations. Existing BMPs are identified in this table with the prefix "Exist" followed by an

identification number. Existing BMPs can fall under BMP category, baseline or site-specific. Table 8 identifies new baseline BMPs to be completed at all Facility buildings and areas. These BMPs are identified with the prefix "Facility" followed by an identification number. Table 9 identifies site-specific BMPs to be implemented at this Facility.

Both the baseline and site-specific BMPs will be implemented. A target date is given in the corresponding tables as a suggested start date. Once the BMP task has been initiated, the implementation date will be entered into the implement date column of the associated BMP table.

BMPs are to be implemented to the maximum extent practicable. Due to changing practices, activities and technology, this is an elusive goal. The SWPPT will continue to review activities at the Facility to determine if BMPs should be added, modified, or deleted. BMP modification can result from changes in activities performed at the Facility.

Section 3 contains more detailed information for each baseline and site-specific BMP.

Table 7 Existing Best Management Practices

BMP No.	Existing Best Management Practice	Ref.	Implement Date
Exist-1	Many good housekeeping practices have been implemented at Facility.	3.2.2	<u>1/10/03</u>
Exist-2	Equipment maintenance activities occur indoors.	3.2.6	<u>1/10/03</u>
Exist-3	Waste dumpsters are emptied on a timely basis.	3.2.6	<u>1/10/03</u>
Exist-4	Security fencing provided at Facility.	3.2.4	<u>1/10/03</u>
Exist-5	Interior floor drains for Public Works buildings and Animal Shelter are routed to the sanitary sewer system.	3.2.9	<u>1/10/03</u>
Exist-6	Transit Facility maintenance bay floor drains discharge through OWS (with waste oil UST) to sanitary sewer system.	3.3.4	<u>1/10/03</u>
Exist-7	Transit Facility indoor wash bay utilizes wash water recycling system.	3.3.3	<u>1/10/03</u>
Exist-8	Covered canopies are provided for Public Works Fuel Station and Transit Facility Gasoline Fuel Station. Transit Facility Diesel/ Kerosene Fuel Station is located inside the Transit Building.	3.2.6	<u>1/10/03</u>
Exist-9	Public Works Wash Pit discharges through baffled sediment chamber to sanitary sewer system.	3.3.3 and 3.3.4	<u>1/10/03</u>
Exist-10	Dry granular absorbents are used to contain minor drips, leaks, and spills.	3.3.2	<u>1/10/03</u>
Exist-11	Salt and sand stockpiles are stored in a covered storage shed.	3.3.8	<u>1/10/03</u>
Exist-12	Regularly scheduled removal and disposal of sediment and oil/sludge from Public Works wash pit's baffled sedimentation chamber is provided by a contractor.	3.3.3 and 3.3.4	<u>1/10/03</u>
Exist-13	Regularly scheduled inspections, removal and disposal of	3.3.4	<u>1/10/03</u>

BMP No.	Existing Best Management Practice	Ref.	Implement Date
	sediment and oil/ sludge from Transit Facility's 1,000-gallon waste oil/ sludge collection tank is provided by a contractor.		
Exist-14	Transit Facility periodically removes collected sediment and sludge from the two trench drains south of the Transit Building and contracts disposal through a contractor.	3.3.4	<u>1/10/03</u>
Exist-15	An SPCC Plan has been developed that covers the Public Works Complex and Transit Facility.	3.2.4	<u>1/10/03</u>
Exist-16	Secondary containment is provided for the Public Works Fuel Station and Transit Facility Fuel Station bulk fuel USTs.	3.3.5	<u>1/10/03</u>
Exist-16	Secondary containment is provided for the Transit Facility outdoor AST containing used motor oil (AST-9).	3.3.5	<u>1/10/03</u>
Exist-17	Transit Facility provides numerous spill pallets for storage of hazardous substances.	3.3.5	<u>1/10/03</u>
Exist-18	Covered storage buildings provide cover for vehicles and equipment.	3.2.6	<u>1/10/03</u>
Exist-19	Vegetative buffers are provided around Facility perimeter.	3.2.10	<u>1/10/03</u>

The following baseline BMPs are required for all Facility buildings/ areas:

Table 8 Baseline Best Management Practices

BMP No.	Required Baseline Best Management Practice	Ref.	Implement Date
Facility-1	Conduct storm water pollution prevention training.	3.2.1	__/__/__
Facility-2	Conduct Good Housekeeping Program.	3.2.2	__/__/__
Facility-3	Conduct Preventative Maintenance Program.	3.2.3	__/__/__
Facility-4	Conduct Spill Prevention and Response Program.	3.2.4	__/__/__
Facility-5	Inform on-site contractors of SWPPP compliance issues - ensure pollution prevention by all workers.	3.2.5	__/__/__
Facility-6	Minimize industrial activity exposure to precipitation and run-on.	3.2.6	__/__/__
Facility-7	Conduct daily visual observations of vehicles for drips and leaks.	3.2.7	__/__/__
Facility-8	Conduct daily visual observations of equipment for drips and leaks.	3.2.7	__/__/__
Facility-9	Place drip pans under leaking vehicles/ equipment.	3.2.7	__/__/__
Facility-10	Remove excess scrap metals, scrap parts, and empty drums exposed to precipitation.	3.2.8	__/__/__
Facility-11	Cover open-topped scrap metal bins, dumpsters, and recycle bins exposed to precipitation.	3.2.8	__/__/__
Facility-12	Maintain vegetative buffer around Facility perimeter.	3.2.10	__/__/__
Facility-13	Repair and stabilize areas of erosion with grass, mulch, check dams, or appropriate measures.	3.2.11	__/__/__
Facility-14	Label active ASTs and USTs with contents, capacity, and an emergency phone number.	3.2.4	__/__/__
Facility-15	Consolidate like hazardous substances into designated storage buildings or areas.	3.2.3	__/__/__
Facility-16	Ensure personnel have access to standard spill kit.	3.3.2	__/__/__

The following site-specific BMPs are required for this Facility:

Table 9 Site-Specific Best Management Practices

BMP No.	Required Site-Specific Best Management Practice	Ref.	Implement Date
PW Complex: Garage Nos. 1 and 2 and Fuel Station	Sweep up used dry granular absorbents promptly and dispose properly.	3.2.2	__/__/__
PW Complex: Garage Nos. 1 and 2	Evaluate current floor washing procedures and determine an alternative disposal for washwater (i.e., to sanitary sewer). Garage floors are washed on quarterly basis and washwater is currently squeegeed out of the shops to the nearby stormwater catch basin.	3.3.9	__/__/__
	Implement good housekeeping/ hazardous substance employee training program.	3.2.1 3.2.2	__/__/__
	Provide containment for hazardous substance drums/ containers located in garages.	3.3.6	__/__/__
	Evaluate inlet protection measures for storm drain inlet located between Garages No. 1 and 2.	3.2.12	__/__/__
PW Garage No. 1	Provide secondary containment for bulk ASTs (e.g. use metal containment pan or spill pallets; provide built-up curb along bay entrances; store ASTs away from bay and doorway entrances).	3.3.5	__/__/__
	Remove unneeded hazardous materials from Facility (excess inventory and expired shelf life). Note: excess hazardous substances (including 7-year old methyl ethyl ketone and paint containers) stored in small flammables cabinet need to be assessed as potential hazardous waste and disposed.	3.2.9	__/__/__
PW Garage No. 2	Practice proper oil transfers or replace 500-gallon blue AST with double-walled AST or provide secondary containment.	3.3.5 3.3.7	__/__/__
	Provide secondary containment for bulk ASTs (e.g. use metal containment pan or spill pallets; provide built-up curb along bay entrances; store ASTs away from bay and doorway entrances).	3.3.5	__/__/__
PW Equipment Storage Sheds	Ensure hazardous substance drums and containers stored in the sheds are not exposed to rainwater and/or provide secondary containment for any hazardous substance drums and containers. Note: 55-gallone ZEP drums stored outside of Pole Shed east of Salt/ Sand Storage Building need covered secondary containment.	3.3.6	__/__/__
PW Fuel Station	Evaluate necessity for hands-on oversight of contractors for bulk fuel delivery truck off-loading operations at fuel USTs.	3.3.1	__/__/__
	Provide spill kit at Fuel Station to ensure that personnel have access to a spill kit near the fuel station. (Note: Fuel Station is 24-hour; Garage buildings are not accessible 24-hours.)	3.3.2	__/__/__
	Provide sign at Fuel Station with spill response procedures and include emergency phone numbers.	3.3.2	__/__/__

BMP No.	Required Site-Specific Best Management Practice	Ref.	Implement Date
PW and Sanitation Division Parking Areas	Provide regular inspections of vehicles and equipment for leaks and drips and place drip pans under leaking vehicles/ equipment. Repair leaks promptly and remove/ empty drip pans.	3.2.3	__/__/__
Salt/ Sand Storage	Ensure salt residue is swept back into salt and sand storage building after loading operations.	3.2.2	__/__/__
Recycle/ Dumpster Area	Provide covers for dumpsters and recycle bins exposed to precipitation.	3.2.6	__/__/__
PW Back Lot	Provide temporary containment area for street sweeping material prior to disposal in the Orange County Landfill. Currently, street sweeper debris is stockpiled in southeast corner of the Back Lot. The temporary containment area could consist of a dumpster with lid, constructed berm, or silt fencing.	3.3.10	__/__/__
	Provide regular inspections of material stockpiles located in storage yard. Sweep up tracked materials back into storage piles to ensure materials are not discharged off-site.	3.2.12	__/__/__
	Provide covered storage bin for excess scrap metal prior to removal and disposal off-site.	3.2.8	__/__/__
PW Activity adjacent to Animal Shelter	Ensure no washing is conducted outside Animal Shelter and discharged to storm system. Note: observed washing of street sweeping truck outside at the fire hydrant located north of the Animal Shelter. The Facility can obtain a separate NPDES industrial permit for the washing activity, provide pretreatment of washwater and dispose into sanitary sewer, or discontinue washing at this location.	3.3.9	__/__/__
Animal Shelter	Ensure no washing is conducted outside Animal Shelter and discharged to storm system. Note: The trench drain located at animal unloading area discharges to storm system.	3.3.9	__/__/__
	Clean out sediment from trench drain at unloading area and storm grate inlet located outside northeast corner of building. Note: Both of these drains are clogged with sediment and debris.	3.3.4	__/__/__
Transit Building	The two trench drains located south of the building at the two western bays and routed through OWS-2 are utilized for outdoor steam cleaning. The drains and OWS are connected to the storm drainage system (8-inch pipe that discharges to roadside ditch located north of the building). Evaluate potential to route to sanitary sewer. If rerouting to sanitary is cost prohibitive, then evaluate other measures to minimize pollutants discharging to storm system (e.g. discontinue steam cleaning operation; provide regular inspections and/or spill absorbents at 8-inch pipe outlet and in roadside ditch).	3.3.9	__/__/__

BMP No.	Required Site-Specific Best Management Practice	Ref.	Implement Date
	The trench drain located south of the building at the wash bay entrance and routed through OWS-3 was previously utilized for outdoor steam cleaning. It is still connected to the storm drainage system (8-inch pipe that discharges to roadside ditch located north of the building). Ensure that OWS-3 is properly cleaned out and/or permanently closed. Ensure no washwater or other pollutants discharge into this storm drain inlet.	3.3.9	__/__/__
Transit Building	Clean out sediment from trench drain located south of the building at the wash bay entrance. Note: Drain is clogged with sediment and debris.	3.3.4	__/__/__
	Implement good housekeeping/ hazardous substance employee training program.	3.2.1 3.2.2	__/__/__
	Sweep up used dry granular absorbents promptly and dispose properly.	3.2.2	__/__/__
	Wash bay freshwater rinse drain discharges to storm system. Evaluate potential to route this rinse water through the recycle washwater system or to sanitary sewer. If rerouting freshwater rinse drain is cost prohibitive, then evaluate other measures to minimize pollutants discharging to storm system (roadside ditch north of building).	3.3.9	__/__/__
	Provide regular inspections of freshwater rinse storm drain outfall (8-inch pipe to roadside ditch) after washing operations, and clean out ditch or outfall as necessary.	3.3.9	__/__/__
Transit Fuel Stations	Evaluate necessity for hands-on oversight of contractors for fuel delivery truck off-loading operations at Transit Facility fuel USTs.	3.3.1	__/__/__
	Ensure that personnel have access to a standard spill kit near the fuel stations.	3.3.2	__/__/__
Bus Parking	Provide regular inspections of bus/ vehicle/ equipment parking areas for leaks and drips and place drip pans under leaking buses, vehicles and equipment. Repair leaks promptly and remove/ empty drip pans.	3.2.3	__/__/__

3. BEST MANAGEMENT PRACTICES

3.1. BMP ASSESSMENT PROCESS

The Facility must consider and implement practical best management practices (BMPs). This section describes the process used to select the BMPs listed in Section 2 as well as provides further description of purpose and intent of the BMP. Potential stormwater pollution is controlled through the use of BMPs. BMPs are generally divided into two categories:

- **Baseline BMPs** - which are general in nature (e.g., good housekeeping) and apply to most Town-owned industrial facilities,
- **Site-Specific BMPs** - which pertain to a specific facility (e.g., construction of a concrete containment around an individual fuel tank).

NCDENR and USEPA emphasize the establishment of pollution prevention measures and BMPs that reduce the potential for pollutant discharges at the source. Source reduction measures include preventative maintenance, chemical substitution, spill prevention, good housekeeping, pollution prevention training, and proper materials management. Where such practices are not appropriate to a particular source or do not effectively reduce pollutants in stormwater discharges, NCDENR and USEPA support the use of source control measures and BMPs such as material segregation, or covering, debris control, vegetative filter strips, infiltration and stormwater detention or retention, runoff diversion, and dust control. Like source reduction measures, source control BMPs are intended to keep pollutants out of stormwater. The remaining classes of BMPs, which involve recycling or treatment of stormwater, allow the reuse of stormwater or attempt to lower pollutant concentrations prior to discharge.

3.2. BASELINE BMPS

Baseline BMPs are practices that are generic and can be applied at most Town of Chapel Hill facilities. The Permit requires the Facility to address several baseline BMPs such as developing preventative maintenance and good housekeeping programs.

3.2.1. Stormwater Pollution Prevention Training

The Permit requires that facility personnel receive training on Permit and Plan compliance, pollution prevention and spill response. The Permit does not specify exact course content or format. The Permittee can develop the training programs as it sees fit. It may provide the training with in-house staff and resources, or it may contract with vendors to provide the training.

3.2.2. Good Housekeeping Program

Good housekeeping is the preservation of a clean and orderly work environment that contributes to overall Facility pollution control efforts. The implementation of this program may also include some materials management practices as they relate to storage of drums and bench stock in the shop areas. Adherence to the following practices will minimize the potential for stormwater pollution:

- Maintain dry and clean floors. Interior floors will be swept weekly, with residue placed in designated waste disposal containers. Spills/ drips/ leaks will be cleaned promptly.
- Contaminated dry granular absorbents (e.g., "speedi-dri") will be swept daily and disposed properly.
- Brooms, dustpans, and mops will be hung on racks for easy access and use.

- Trash will be picked up on a regular basis and disposed properly.
- Catch basins and other inlets to the stormwater drainage system will be checked regularly. Litter and trash will be removed and disposed properly.
- Separate holding cans will be provided for oily rags as a fire prevention aid.
- The exterior grounds will be policed bi-weekly. Litter and other trash will be disposed properly. Scrap parts and empty drums will be removed from the Facility promptly. Dumpsters and recycle bins will be covered to prevent rainfall from coming in contact with container contents.
- All equipment will be visually inspected for leaks and other conditions that could lead to a discharge of a pollutant.
- Hazardous substances will be stored in approved containers. The containers will be stored in an area not exposed to stormwater. The containers will be located away from direct vehicular traffic.
- Containers of liquids should be placed on spill containment pallets or racks to prevent corrosion and contain leaks. Pallets will be stored as to minimize exposure to precipitation.
- Containers of chemicals and other compounds or mixtures will be labeled with name of substance, stock number, expiration date, health hazards, safe handling requirements, and first aid information. For each chemical substance used, a Material Safety Data Sheet (MSDS) will be provided in areas accessible to personnel.
- Drums and tanks containing used oil must be labeled "USED OIL."
- Good housekeeping procedures will be included in the employee training program. Regularly scheduled meetings will be held to discuss good housekeeping and pollution prevention concepts.
- The good housekeeping checklist will be completed during each semi-annual Facility site inspection.

3.2.3. Preventative Maintenance Program

The Facility will regularly inspect and test Facility equipment and operational systems whose failure has a potential to release pollutants into the stormwater drainage system. Inspections may uncover conditions such as cracks or slow leaks that could cause breakdowns or failures that result in discharges of chemicals or particulate matter (solids) to the stormwater drainage system. The program will reduce breakdowns and failures by making proper adjustments, repair, or replacement of equipment or parts.

Standard operating procedures include two specific preventative maintenance periods:

- Run-time preventative maintenance occurs daily during working hours as normal operation of the equipment and machinery.
- Preventative maintenance at regularly scheduled intervals that involve inspections, cleaning, and minor repairs.

The following items, if present at the Facility, are subject to periodic inspections as they have a direct risk to stormwater. The Permit requires written documentation of scheduled inspections.

- Fuel Pumps: Items such as the hoses, nozzles, electrical components, and gauges will be checked for wear. During routine maintenance, Facility personnel will adjust and replace items as needed. Fuel pumps will be inspected regularly.
- Oil pumps: Drip containment devices will be inspected for proper operation. Seals, couplings, and valves will be inspected and replaced as needed. Oil pumps will be inspected regularly.
- Other Pumps: These devices are subject to frequent inspection and maintenance that includes lubrication, balancing, repacking bearings, and tightening of support bolts and pipe connections. The pump manufacturers' recommendations will be followed. Pumps that handle hazardous substances with a reasonable potential to pollute stormwater will be inspected regularly.
- Mobile Equipment: These machines will be inspected for leaking hydraulic fluids, fuel lines, liquid asphalt, and lubricating oils. Mobile equipment will be inspected regularly.
- Secondary containment structures: These structures will be equipped with a locking valve controlling discharge. The valves will be locked in the closed position. Discharges will be made in accordance with the Permit and other applicable regulations. The inspector will observe the structural integrity, valve and lock operation, and look for signs that the primary tank may be leaking. Exposed secondary containment structures will be inspected regularly.

For those secondary containment structures without drain valves, rainwater disperses through evaporation. The Permit does not require the installation of a drain valve where none exists. However, accumulated residue must be removed and disposed properly.

- Pipes and supply lines: Pressurized petroleum/ oil/ lubricant (POL) or other hazardous substances supply pipes will be inspected regularly. Special attention will be made to supports, connectors, couplers, and valves.
- Other: Equipment used for recycling various compounds will be inspected and maintained as directed by the original manufacturer. Other equipment that presents a reasonable risk for stormwater pollution will be inspected regularly.

Preventative maintenance also pertains to stormwater controls such as infiltration devices, diversion structures, detention facilities, and other stormwater treatment systems. Stormwater controls will be kept in proper operating condition.

3.2.4. Spill Prevention and Response

The Permit requires that the Permittee develop a spill prevention and response component to the SWPPP document. If one exists at the Facility, spill prevention and response actions are detailed more explicitly in the Facility's Spill Prevention Control and Countermeasure (SPCC) Plan. Spill prevention and response information and procedures will be kept at the SWPPT Leaders' offices and at each shop location. The potential spill sources with high risk for contaminating stormwater include the storage and handling of fuels/ hazardous substances and vehicle/ equipment maintenance activities. Accidents and careless handling during these activities can cause spilled liquids to enter the stormwater drainage system. If an SPCC Plan exists at the Facility, spill contingencies for high risk spills will be described in the SPCC Plan.

Spill Prevention

During transfer of fuel or delivery of hazardous substances to Facility areas, the driver and handlers will be responsible for preventing spills. The driver will ensure that all hoses are secure and that proper absorbent materials (e.g., pads, booms and socks) are available before unloading. During all fuel delivery operations, the driver will remain with the vehicle at all times. Absorbent pads and booms are to be located near the fuel delivery/ connection points.

Employee awareness is the key to an effective spill prevention and response program. Spill prevention training will be a component of the general employee training program. New personnel will be taught spill prevention practices. Maintenance personnel will gain a sufficient understanding of the objectives of the spill prevention program. Spill prevention training will highlight previous spill events, equipment failures, remedies taken, and newly developed prevention measures.

Establishing a security system may prevent an accidental or intentional release of materials to the stormwater drainage system as a result of vandalism, theft, sabotage, or other improper uses of Facility property. Routine patrol, personnel training, lighting, signage, and access control are possible measures to include in the Facility's security system.

The SWPPT will evaluate the spill prevention program once each year. Spill prevention items that are addressed within this SWPPP and that may need annual review and revision include:

- Review and update materials inventory list (emphasis on hazardous substances)
- Identify potential spill sources
- Establish incident reporting procedures
- Develop inspection procedures
- Review previous incidents
- Establish a training program
- Review new construction and proposed operational changes

Spill Response

In case of large volume spills, this Facility will request aid from the local fire department. Additionally, the local emergency management agency may be contacted for assistance to large volume spills. Warning signs placed at fuel stations, bulk storage tanks, or other refueling areas should contain emergency telephone numbers to aid in quick response. Fuel Stations that operate 24-hour a day should post warning signs with 24-hour emergency telephone numbers.

Minor spills can be absorbed with dry granular absorbents, pads, booms, or socks. Many liquid materials stored at the Facility are used inside buildings or are otherwise not normally exposed to the storm drainage system. Small spills can be controlled by sweeping or mopping the material into approved containers for proper disposal. Proper disposal includes removing absorbent compounds from the floor on a timely basis.

The Facility will follow the spill response procedures as outlined in any existing Facility SPCC Plan or Spill Contingency Plan. This Facility does not use any extremely hazardous substances, but certain precautions regarding other materials are necessary. Spills that occur outside on vehicle parking lots or equipment storage lots may discharge to the stormwater drainage system. There is always concern about preventing soil contamination and a concern of preventing any spills from reaching the stormwater drainage system.

Reasonable measures necessary to prevent contamination of soil or waters of the State will be carried out. In general, four basic steps can be taken to control pollution that can result from a spill:

1. Stop the spill at the source.
2. Contain the spill.
3. Collect the spilled material.
4. Dispose of the spilled material and subsequent contaminated material properly and legally.

If containment methods are required for which you are not trained, or personal protective equipment is not available, immediately evacuate the contaminated area and prevent unauthorized personnel from entering. Steps 3 and 4 should only be undertaken by personnel that are properly trained in spill response and cleanup.

3.2.5. On-Site Contractor Responsibilities

While the Town of Chapel Hill is ultimately responsible for pollutants that leave its site, the Town of Chapel Hill will make it clear to all vendors that come on to the site that vendors will be responsible for the cost and effort to clean up and remediate spills and other incidents caused by the vendor that creates pollution problems.

The Town of Chapel Hill will develop legal language to include in all vendor contracts describing the vendor's responsibilities for pollution prevention while on-site at a Town of Chapel Hill facility.

For example, fuel vendors have a high risk of creating a spill that could introduce gasoline or diesel fuel into the stormwater drainage system. Vendors must observe all fuel and liquid deliveries, and be able to respond immediately to a spill incident.

3.2.6. Industrial Activity Exposure

The Facility will take reasonable measures to minimize the exposure of industrial activities to precipitation and stormwater run-on. Measures include:

- Conducting industrial activities indoors or under cover
- Storing materials and parts indoors or under cover
- Diverting run-on away from the industrial activity area with berms, ditches, curbing, and buffer strips

- Diverting runoff from industrial activity areas with appropriate runoff management methods

This SWPPP does not require that inert construction material such as wood posts, steel girders, aggregate, or pipe be placed under cover.

3.2.7. Daily Observations

The SWPPT Leaders, unit or shop supervisor, or other designated personnel, should conduct a general walk-through of work areas during normal daily duties. A written record is not required for these daily observations. Particular attention will be made in regards to leaks, spills, and properly operating equipment. Problems will be reported and corrected as soon as practical. The following list will serve as a guide to critical items:

- Check tanks and drums for leaks, corrosion.
- Check secondary containment structures. Drains should be closed and locked.
- Lube trucks, asphalt distributors, landscape chemical distributors, paint trucks, and other refueler trucks - observe for leaks, malfunctioning control valves.
- Look for unusual stains on walls, floors, and grounds.
- Look for deterioration of equipment foundations and anchorages.
- Check for and remove debris from stormwater drainage system inlets.
- Check for windblown materials or materials tracked by vehicles that can enter the stormwater drainage system – observe sand and salt storage bins.
- Note any unusual odors detected.
- Is equipment operating properly? Is excessive noise, vibration, or exhaust present?
- Is the work area kept in a clean and orderly manner? Practice good housekeeping.
- Inspect pipelines. Look for deteriorating gaskets, supports, and loose valve stems.
- Verify that all valves are in proper position.
- Look for leaking containers. Replace as necessary.
- Check for torn bags of dry materials or bags exposed to rainwater.
- Check that dry granular absorbents used to contain floor spills are properly cleaned up.
- Check condition of spill response kits and quantity of absorbent materials.
- Verify that clear access is maintained to all safety equipment such as eyewashes, fire extinguishers, and spill kits.
- Verify that clear access is maintained to emergency exit doors. Emergency exit doors must be kept unlocked during all work hours.

3.2.8. Scrap Material Storage and Salvage

The Town of Chapel Hill will maintain a program to minimize the quantity of scrap metals, scrap parts, and unused vehicles and equipment stored at its facilities. Many of these items have a salvage value, and may be sold through a bid process. Procedures for minimizing exposure of scrap and salvage material to storm water runoff include:

- Remove scrap materials from the site promptly.
- Divert run-on away from scrap storage areas.
- Divert runoff from scrap storage areas through a buffer strip, onto a level grassy area, or into a grass berm.
- Minimize direct runoff into the stormwater drainage system with the use of buffer strips or other runoff management devices.

Some items present a pollutant risk while they are stored on site. For example, old tanks may still contain residue. Rusting tanks introduce leached metals into the stormwater runoff. Abandoned tanks will be emptied and cleaned, and removed from the site. Personnel will ensure scrap materials are free from lubricants and loose paint to the extent practical. Personnel will also ensure that salvaged vehicle fuel tanks are empty and drips are contained.

Small scrap items such as automotive batteries will be stored indoors or under cover until removed from the Facility.

3.2.9. Hazardous Material Inventory Control

The Town of Chapel Hill will make an effort to reduce the varieties of HAZMATs used and quantities stored at its facilities. This effort can be simplified by preparing a short list of selected products, which meet Town of Chapel Hill performance standards. Minimizing the use of products to those on the short list can reduce purchase price, handling costs, disposal costs, and simplify inventory.

The use of non-toxic products will reduce disposal costs and minimize risks to the environment. The prioritization of selecting products made from recycled or reclaimed materials has several benefits of which reducing risks to the environment is just one.

3.2.10. Vegetation Practices

Preserving existing vegetation or revegetating disturbed soil as soon as possible after construction is the most effective way to control erosion.

Vegetation reduces erosion by:

- Shields the soil surface from direct erosive impact of rain;
- Improves the soil's water storage porosity and capacity so more water can infiltrate into the ground;
- Slows the runoff and allows sediment deposits; and
- Physically holds the soil in place with plant roots.

Vegetative buffers (e.g., grass filter strips, forested buffers) improve stormwater runoff quality by slowing down the rate of flow, trapping sediment, and other pollutants, and increasing infiltration into the ground. The facility should maintain buffers around the site perimeter to the extent practical.

Vegetation cover can be grass, trees, shrubs, bark, mulch, or straw. Grasses are the most common types of cover used for revegetation because they grow quickly and provide erosion protection within days. Straw or mulch may be used during non-growing seasons to prevent erosion. Retaining existing shrubs and trees helps retain soil because of their established root systems.

Vegetation and other site stabilization practices can be either temporary or permanent controls. Temporary controls provide a cover for exposed or disturbed areas for short periods or until permanent erosion controls are put in place. Permanent vegetative practices are used when activities that disturb the soil are completed or when erosion is occurring on a site that is otherwise stabilized.

3.2.11. Sediment and Erosion Control

Sites where soils are exposed to water, wind, or ice can have erosion and sedimentation problems. Sedimentation occurs when soil particles are suspended in surface runoff or wind and are deposited in streams or other water bodies. Construction and other ground surface disturbing activities can accelerate erosion by removing vegetation, compacting or disturbing the soil, changing natural drainage patterns, and covering the ground with impermeable surfaces (pavement, concrete, buildings). When the land surface is impermeable, stormwater can no longer infiltrate, resulting in larger amounts of water that can move more quickly across a site and which can carry larger amounts of sediment and other pollutants to streams and rivers.

Stream bank stabilization is used to prevent stream bank erosion from high velocities and quantities of stormwater runoff. Stream bank stabilization is used where vegetative stabilization practices are not practical and where the stream banks are subject to heavy erosion from increased flows or disturbance during construction. Stabilization should occur before land disturbance commences. Stabilization can also be retrofitted when erosion of a stream bank occurs.

Areas that are erosion-prone or where construction activity is occurring at the Facility will be inspected regularly. Sedimentation and erosion control devices will be installed and maintained.

Areas that need immediate erosion repair will be noted on a Facility Site Map. This map may also show areas with such heavy activity that plants cannot grow, soil stockpiles, stream banks, steep slopes, construction areas, demolition areas, and any area where the soil is disturbed, denuded (stripped of plants), and subject to wind and water erosion.

Ways to limit and control sediment and erosion include:

- Leave as much natural vegetation and plants on-site as possible;
- Minimize the time that soil is exposed;
- Prevent runoff from flowing across disturbed areas - divert the flow to vegetated areas;
- Stabilize the disturbed soils as soon as possible;
- Slow down the runoff flowing across the site - use level spreaders or terraces;
- Provide check dams in drainage ways to decrease flow velocities;
- Use grassy swales rather than paved channels; or
- Remove sediment from stormwater runoff before it leaves the site by allowing it to sheet flow through vegetative buffers.

Using these measures to control erosion and sedimentation is an important part of stormwater management. Selecting the best set of sediment and erosion prevention measures depends upon

the nature of the on-site activities and other local conditions. Refer to North Carolina Erosion and Sediment Control Planning and Design Manual for additional details and information.

3.2.12. Management of Runoff

Management of runoff is the consideration of appropriate traditional stormwater management practices (practices other than those which control the source of pollutants) used to divert, infiltrate, reuse, or otherwise manage stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site. Procedures determined to be reasonable and appropriate must be implemented and maintained. The potential of various sources at the Facility to contribute pollutants to stormwater discharges from industrial activity must be considered when determining reasonable and appropriate measures. Appropriate measures may include:

- Vegetated buffer zones (grassed areas along facility perimeter)
- Vegetated swales (vegetated depression used to transport, filter, and remove sediment);
- Stormwater diversion devices (grass berms, curbing);
- Reuse of collected stormwater (such as for a process or as an irrigation source);
- Inlet controls (such as passive sediment interceptors);
- Snow management activities;
- Infiltration devices; or
- Wet detention/ retention basins.

Many BMPs are measures to reduce pollutants at the source before they have an opportunity to contaminate stormwater runoff. Traditional stormwater management practices can be used to direct stormwater away from areas of exposed materials/ potential pollutants. Traditional stormwater management practices can also be used to direct stormwater that contains pollutants to natural or other types of treatment locations. For example, using grass berms to divert runoff away from storage yards minimizes the pollutants leaving the site. These stormwater management practices must be selected on a case-by-case basis depending on the activities and flow characteristics at the Facility.

3.3. SITE-SPECIFIC BMPS

3.3.1. On-site and Remote Refueling Operations

The Facility is required to implement BMPs at on-site fuel stations, fuel depots, and work sites that are located off-site but are under the control of this Facility. The Facility may conduct remote refueling activities during field maintenance and construction operations. The following BMPs can be implemented to prevent or minimize contamination of stormwater runoff from fueling activities.

- a) Instruct personnel to avoid "topping off" the fuel tanks.
- b) Instruct drivers of lube trucks to remain with vehicle during entire fuel delivery process.
- c) Provide drip pans at remote fueling locations and with lube trucks to collect small leaks.
- d) Provide spill kits at remote fuel depots and with lube trucks.
- e) Minimize outdoor refueling operations during times of heavy rainfall.
- f) Provide secondary containment for lube trucks or fuel storage tanks used as a stationary fuel point at remote work sites.

3.3.2. Spill Kits

A complete and adequate spill kit should be positioned in an easily accessible location near the hazardous substance storage area at the Facility. Facility personnel should have knowledge of the location of and should have access to a centrally located standard spill kit. Facility personnel shall use the standard spill kit for both minor and major spill incidents. The spill kit should have sufficient absorbents to contain a spill from the largest container within the hazardous substance storage location.

Absorbent pads will be located at equipment shops, oil changing and lube bays, and any building where 55-gallon drums are stored in bulk.

For your reference two types of spill kits are listed below:

a) Standard spill kits will consist of spill response equipment sufficient to control and contain a 55-gallon spill of POL. A typical standard spill kit consists of the following:

- 30 booms (3 inch diameter x 4 feet long)
- 30 two-liter pillows
- 75 absorbent pads (18 inch square)
- 15 pounds of dry granular absorbent
- 24 disposal bags
- 8 pair Nitrile gloves
- 2 pair goggles
- 4 sets of X-large Tyvek coveralls
- 1 non-sparking shovel
- plastic container to hold items

b) Small spill kits will consist of spill response equipment sufficient to control and contain a 25-gallon spill of POL. A typical small spill kit consists of the following:

- 15 booms (3 inch diameter x 4 feet long)
- 15 two-liter pillows
- 40 absorbent pads (18 inch square)
- 10 pounds of dry granular absorbent
- 12 disposal bags
- 4 pair Nitrile gloves
- 2 pair goggles
- 2 sets of X-large Tyvek coveralls
- 1 non-sparking shovel
- plastic container to hold items

Each facility should have at least one 85-gallon overpack drum, or similar containers, for holding contaminated materials (e.g., soil, booms) prior to disposal.

3.3.3. Vehicle and Equipment Cleaning Areas

The point source discharge of vehicle and equipment washwater, including tank and drum cleaning operations, is not authorized by the NPDES permit and must be covered under a

separate NPDES general permit or discharged to a sanitary sewer in accordance with applicable local industrial pretreatment requirements.

The Permittee will ensure that all washwater discharges in accordance with the Permit. If a sanitary sewer system is not available to the Facility and cleaning operations take place outdoors, the cleaning operations will take place on level grassed or graveled areas to prevent point source discharges of the washwater into storm drains or surface waters. Where cleaning operations cannot be performed as described above and when operations are performed in the vicinity of a storm drainage collection system, the drain is to be covered with a portable drain cover during cleaning activities. Any excess ponded water will be removed and properly disposed. Detergents will be biodegradable and the pH adjusted to be in the range of 6 to 9 standard units.

The following methods are recommended to prevent or minimize contamination of the stormwater runoff from areas used for vehicle and/ or equipment cleaning operations:

- a) Perform all cleaning operations indoors (if drain to sanitary sewer system is provided).
- b) Provide cover for outdoor cleaning operations.
- c) Do not discharge washwater directly into the stormwater drainage system.
- d) Collect washwater runoff from cleaning areas and provide treatment or recycling.

3.3.4. Oil/Water Separators

Oil/water separators (OWSs) require frequent and intense maintenance to operate properly. OWSs are designed to trap oil and other pollutants that float on the surface of water. The introduction of detergents, acids, heavy pollutants, and soluble materials will render the OWS ineffective. OWSs are not designed to treat stormwater; large flows through OWSs cause the oil to bypass the separation chamber.

OWSs should not discharge to the same septic tank to which domestic sewerage discharges. Oil that bypasses the OWSs can cause a septic tank to malfunction.

OWSs that remain in service require regular maintenance and removal of accumulated oily sludge and grit. The SWPPT should refer to the vendor's literature for maintenance requirements.

3.3.5. Secondary Containment

Secondary containment will be provided for bulk storage (of liquids), storage of water priority chemicals, and hazardous substance storage. Refer to Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) for a list of water priority chemicals. Secondary containment can take many forms depending on the types and quantity of containers, exposure to precipitation, and operation criteria.

Secondary containment should be provided for the following HAZMAT storage areas:

- At ASTs, including ASTs containing liquid calcium chloride, used oil, and heating oil;
- Where non-empty 55-gallon drums are stored;
- Where drums or other containers are used as dispensing units within workshops;
- Where paint, solvents, and thinners are stored;
- Where POLs are stored;
- Where liquid pesticides and herbicides are stored; and
- Where other liquid hazardous substances are stored.

For ASTs exposed to precipitation, the secondary containment should be constructed of impervious materials such as poured-in-place concrete. The volume of secondary containment should equal the volume of the largest AST within the containment plus freeboard for the 25-year, 24-hour storm event. Per National Weather Service (NWS) Technical Paper 40 (TP-40), the 25-year 24-hour precipitation quantity is 5.5 inches. If a drain valve is provided, the valve must have a lock and remain closed except when making a controlled release of uncontaminated rainwater. A roof over the containment will minimize accumulated rainwater. Other options for ASTs include:

- Provide prefabricated tanks with integral secondary containment and rain shed.
- Provide double-wall tanks.

Containers in sizes up to 55 gallons (e.g., buckets, jerricans, drums) have several options:

- Store containers inside a prefabricated metal HAZMAT storage building with integral secondary containment.
- Use the existing building and provide a built-up curb or berm at the doorway threshold. Install a ramp to provide access for drums and to prevent trips.
- Use the existing building and place a spill blocker across the doorway threshold.
- Use the existing building and provide spill containment pallets for the containers.
- Build a depressed concrete slab with curbing and a shed roof.
- Store small containers within a self-contained flammables cabinet.

Secondary containment that is not exposed to precipitation should have a volume equal to 110% of the largest container within the secondary containment device.

Controlled Releases

Accumulated rainwater can be released from exposed secondary containment structures in compliance with NPDES requirements. Each release must be documented using a copy of Form 8 provided in this document. Before releasing, the observer must determine if the accumulated rainwater is contaminated. If contamination is evident, then the contamination must be removed prior to the release. Uncontaminated rainwater can be released directly into the stormwater drainage system or onto the ground. In all cases, complete a copy of Form 8 for each release. Close and lock the drain valve after the release is completed. Refer to Section 1.4.6 in this document.

Accumulated sludge in non-exposed secondary containment structures will be characterized, either by analytical methods or by generator knowledge, and disposed accordingly.

3.3.6. Hazardous Materials Storage and Management

For purposes of this document, the term hazardous material includes hazardous substances defined by USEPA, hazardous materials defined by federal DOT rules, regulated hazardous wastes, non-regulated wastes, and any other material or substance that is a reasonable potential stormwater pollutant.

The Facility has the following options for hazardous materials storage:

- a) Store hazardous materials indoors within secondary containment.
- b) Store hazardous materials outdoors under cover and within secondary containment.
- c) Store hazardous materials in prefabricated HAZMAT storage building with integral secondary containment.
- d) Store small hazardous material containers in a flammables cabinet with integral secondary containment.

A spill kit will be provided near or at locations where HAZMATs are stored. Each spill kit will consist of absorbent pads, booms, and dry granular absorbents in sufficient quantity to contain a spill from the largest container at that storage location. Non-sparking shovels should be provided to aid in cleaning up the spill. A container for disposing of the used absorbents will be provided. See Section 3.3.2 for additional information.

Personnel will ensure that hazardous material containers are labeled properly. Labels will help the employee handle and use the material safely and respond to spills efficiently. Labeling is regulated under other environmental laws.

Active ASTs should be labeled with the contents, capacity, and an emergency phone number.

3.3.7. Hazardous Waste Storage and Management

The Facility has the following options for hazardous waste storage:

- a) Store hazardous waste indoors within secondary containment.
- b) Store hazardous waste outdoors under cover and within secondary containment.
- c) Store hazardous waste in prefabricated HAZMAT storage building with integral secondary containment
- d) Store small hazardous waste containers in a flammables cabinet with integral secondary containment.

A spill kit will be provided near or at locations where hazardous wastes are stored. A spill kit will consist of absorbent pads, booms, and dry granulars in sufficient quantity to contain a spill from the largest container at that storage location. Non-sparking shovels should be provided to aid in cleaning up the spill. A container for disposing of the used absorbents will be provided. See Section 3.3.2 for additional information.

The SWPPT Leaders shall ensure that hazardous waste containers are labeled properly. Labels will help the employee handle and use the material safely and respond to spills efficiently. Labeling is also regulated under other environmental laws.

3.3.8. Salt Mixture

The Facility has the following options for minimizing storm water pollution from sand/ salt mixture storage areas:

- a) Sand/ salt mixture storage bins should be covered. A permanent constructed roof is preferable.
- b) Divert run-on away from the sand/ salt mixture storage area.
- c) Minimize direct runoff from the sand/ salt mixture storage area into the storm water drainage system with the use of bump diverters, curbed containment, or other runoff management devices.
- d) Practice good housekeeping to eliminate spillage of sand/ salt mixture in non-covered areas and sweep sand/ salt residue into covered storage areas.

3.3.9. Illicit Connections and Improper Discharges Elimination

Illicit connections include direct pipe or other conveyance tie-ins to the stormwater drainage system. Improper discharges include the dumping of non-permitted non-stormwater materials into the stormwater drainage system.

Floor drains that connect to the stormwater drainage system are illicit connections that provide an avenue for an improper discharge. Floor drains connected to the stormwater drainage system must be plugged. Personnel must be instructed not to pour non-stormwater materials into catch basins, drop inlets, ditches, and other portions of the stormwater drainage system.

Floor drains that are connected to an oil/water separator or other stormwater treatment device may be allowed if pollutants do not bypass the treatment device. Refer to Section 3.3.4 for the proper operation of OWSs.

Floor drains that are connected to the sanitary sewer system will be identified and marked. Personnel will be trained to pour, dump, or place nothing in these floor drains that could cause an upset to the sanitary sewer system. The entry of POL, paint, solvent, and landscape chemicals are examples of compounds that may upset the sanitary sewer system. Personnel will follow the manufacturer's instructions for the entry of diluted janitorial cleaning compounds into the sanitary sewer system.

Hand sinks that discharge to the ground or stormwater drainage system are illicit connections. These hand sinks must be re-routed to the sanitary sewer system. Hand sinks will be labeled with instructions prohibiting the entry of hazardous substances.

3.3.10 Contaminated Soil Removal

Contaminated soil can cause stormwater runoff pollution problems. Where spills of POLs or other hazardous materials are excessive and are causing pollutants to enter the stormwater

drainage system, remediation may be necessary. A description of soil remediation methods is beyond the scope of this document. The SWPPT should contact the appropriate Director for assistance with contaminated soil removal and disposal. Beware that a hazard characterization may be required of removed soil before disposal.

The SWPPT will not remove contaminated soil until authorized by the appropriate Director. For recent spills and areas near traffic, barricades may be erected to minimize tracking of the contaminated soil from the site.

APPENDIX A
ACRONYMS AND DEFINITIONS

ACRONYMS

The following is a list of acronyms and abbreviations that may be used in reference to the Town of Chapel Hill's Stormwater Pollution Prevention Program.

AST	Aboveground Storage Tank
BMP	Best Management Practice
CAP	Central Accumulation Point (for hazardous waste)
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended
CFR	Code of Federal Regulations
CWA	Clean Water Act
DWQ	Division of Water Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FWPCA	Federal Water Pollution Control Act
GIS	Geographic Information System
HAZCOM	OSHA 1910.120 Hazard Communication
HAZMAT	Hazardous Materials
MG	Million Gallons
MSDS	Material Safety Data Sheet
MSL	Mean Sea Level
NCDENR	North Carolina Department of Environment and Natural Resources
NFPA	National Fire Protection Association
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
OWS	Oil/Water Separator
Plan	Stormwater Pollution Prevention Plan
POL	Petroleum-based fuels, Oils, and Lubricants
RCRA	Resource Conservation and Recovery Act
RQ	Reportable Quantity
SAP	Satellite Accumulation Point (for hazardous waste)
SARA	Superfund Amendments and Reauthorization Act
SDO	Stormwater Discharge Outfall
SOP	Standard Operating Procedure
SPCC	Spill Prevention, Control and Countermeasure (Plan)
SPR	Spill Prevention and Response (Plan)
SWPPP	Stormwater Pollution Prevention Plan
SWPPT	Stormwater Pollution Prevention Team
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
WWTP	Waste Water Treatment Plant

DEFINITIONS

Allowable Non-Stormwater Discharges means non-stormwater discharges which shall be allowed in the stormwater conveyance system. They are:

- a. All other discharges that are authorized by a non-stormwater NPDES permit;
- b. Uncontaminated ground water, foundation drains, air conditioner condensate without added chemicals, springs, discharges of uncontaminated potable water, waterline and fire hydrant flushings, water from footing drains, flows from riparian habitats, and wetlands.
- c. Discharges resulting from fire-fighting or fire-fighting training.

Best Management Practices (BMPs) means measures or practices used to prevent or minimize the amount of pollution entering surface waters. BMPs may take the form of a process, activity, or physical structure.

Bulk Storage of Liquid Products are liquid raw materials, manufactured products, waste materials or by-products with a single aboveground storage container having a capacity of greater than 660 gallons or with multiple aboveground storage containers located in close proximity to each other having a total combined storage capacity of greater than 1,320 gallons.

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.

Certificate of Coverage means the cover sheet which accompanies the general permit upon issuance and lists the facility name, location, receiving stream, river basin, effective date of coverage under the permit and is signed by the Director.

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

Conveyance is any natural or manmade channel or pipe in which concentrated stormwater flows.

Discharge is a release or flow of stormwater or other substance from a conveyance or storage container.

DWQ is the Division of Water Quality, Department of Environment and Natural Resources.

EMC is the North Carolina Environmental Management Commission.

General Permit is a permit issued under the NPDES program to cover a certain class or category of stormwater discharges. These permits allow for a reduction in the administrative burden associated with permitting stormwater discharges associated with industrial activities.

Grab Sample means an individual sample collected instantaneously. Grab samples that will be directly analyzed or qualitatively monitored must be taken within the first 30 minutes of discharge.

Hazardous Substances are (1) any substances designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (2) any substances that pose a threat to human health and/or the environment. Hazardous substances can be toxic, corrosive, ignitable, explosive or chemically reactive.

Hazardous Waste is by-products of human activities that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special USEPA lists.

Illegal Dumping is the deposition or placement of solids or fluids of any kind into the stormwater drainage system that will create a litter or nuisance, or that will pollute or cause an unsanitary condition on the system.

Illicit Connection is any pipeline, ditch, or other direct physical connection to the stormwater drainage system or waters of the State that is not composed entirely of stormwater except discharges authorized by a separate NPDES permit or allowed by this Permit.

Illicit Discharge Investigation is an evaluation to determine whether or not non-stormwater discharges are present at a Facility's industrial stormwater discharge outfalls.

Industrial Activity - the following categories of facilities are considered to be engaging in "industrial activity":

- (1) Facilities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (1998) (except facilities with toxic pollutant effluent standards which are exempted under category (10) of this definition);
- (2) Facilities classified as Standard Industrial Classification (SIC) 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, and 373 (Office of Management and Budget OMB SIC Manual, 1987);
- (3) Facilities classified as SIC 10 through 14 (mineral industry) (OMB SIC Manual, 1987) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR Part 434.11(l) (1998) because the performance bond issued to the facility by the appropriate Surface Mining Control and Reclamation Act of 1977 (SMCRA) (30 USC 1201 et seq.) authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/ operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);
- (4) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of the Resource Conservation and Recovery Act (RCRA) (42 USC 6901 et seq.);
- (5) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this definition) including those that are subject to regulation under Subtitle D of RCRA;
- (6) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093 (OMB SIC Manual, 1987);
- (7) Steam electric power generating facilities, including coal handling sites;

- (8) Transportation facilities classified as SIC 40, 41, 42 (except 4221-4225), 43, 44, 45, and 5171 (OMB SIC Manual, 1987) which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operation, airport deicing operation, or which are otherwise identified under subdivisions 1 through 7 or 9 through 10 of this definition are associated with industrial activity;
- (9) Treatment works treating domestic sewage or any other sewage sludge or waste water treatment device or system used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that is located within the confines of the facility, with a design flow of 1.0 MGD or more, or required to have an approved POTW pretreatment program under Title 40 CFR Part 403, including lands dedicated to the disposal of sewage sludge that is located within the confines of the facility.
- (10) Facilities under SIC 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-4225 (OMB SIC Manual, 1987), and which are not otherwise included within subdivisions 2 through 9.

Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

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

Minor spills are those spills that have a volume less than any reportable quantity, can be controlled and cleaned up with on-site resources, do not contaminate the environment, and do not cause injury to personnel.

Municipal Separate Storm Sewer means a stormwater collection system within an incorporated area of local self-government such as a city or town.

National Pollutant Discharge Elimination System (NPDES) means the Federal Environmental Protection Agency's (USEPA) national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing water quality permits.

No exposure means all industrial materials or activities are protected by a storm resistant cover so that they are not exposed to rain, snow, snowmelt, or runoff. Industrial materials or activities include, but are not limited to, material handling equipment, industrial machinery, raw materials, intermediate products, by-products, or waste products, however packaged.

Notice of Intent means the state application form which, when submitted to the Division, officially indicates the facility's notice of intent to seek coverage under a general permit.

NPDES Permit is an authorization, license, or equivalent control document issued by USEPA or an approved state agency to implement the requirements of the NPDES program.

Oil Sheen is a thin, glistening layer of oil on water.

Oil/Water Separator is a device installed, usually at the entrance to a drain, which separates and collects oil and grease from water flows entering the drain.

Outfall is any discernible stormwater conveyance (e.g., pipe, ditch, swale, canal) that discharges to waters of the State or to a separate municipal storm system. See also point source discharge.

Overburden means any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally-occurring surface materials that are not disturbed by mining operations.

Permit Issuing Authority (or Permitting Authority) is the North Carolina Department of Environment and Natural Resources.

Permittee means the owner or operator issued a certificate of coverage pursuant to this general permit.

Point Source Discharge of Stormwater is any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, or vessel or other floating craft, from which stormwater is or may be discharged to waters of the State.

Pollutant is any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

Precipitation is any form of rain or snow.

Preventative Maintenance Program is a schedule of inspections and testing at regular intervals intended to prevent equipment failures and deterioration.

Reportable Quantity (RQ) is the quantity of a hazardous substance or oil that triggers reporting requirements under CERCLA or the Clean Water Act.

Representative Outfall Status means when it is established that the discharge of stormwater runoff from a single outfall is representative of the discharges at multiple outfalls, the DWQ may grant representative outfall status. Representative outfall status allows the permittee to perform analytical monitoring at a reduced number of outfalls.

Representative Storm Event means a storm event that measures greater than 0.1 inches of rainfall and that is preceded by at least 72 hours in which no storm event measuring greater than 0.1 inches has occurred. A single storm event may contain up to 10 consecutive hours of no precipitation. For example, if it rains for 2 hours without producing any collectable discharge, and then stops, a sample may be collected if a rain producing a discharge begins again within the next 10 hours.

Rinse Water Discharge means the discharge of rinse water from equipment cleaning areas associated with industrial activity. Rinse waters from vehicle and equipment cleaning areas are process waste waters and do not include washwaters utilizing any type of detergent or cleaning agent.

Runoff is that part of precipitation, snowmelt, or irrigation water that runs off the land into streams or other surface water. It can carry pollutants from the air and land into the receiving waters.

Runoff Coefficient means the fraction of total rainfall that will appear at the conveyance as runoff.

Run-on is stormwater surface flow or other surface flow which enters property other than that where it originated.

Secondary Containment are structures, usually dikes or berms, surrounding tanks or other storage containers and designed to catch spilled material from the storage containers. Secondary containment must provide spill containment for the contents of the single largest tank within the containment structure plus sufficient freeboard to allow for the 25-year, 24-hour storm event.

Section 313 Water Priority Chemicals means a chemical or chemical categories 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. That meet at least one of the following criteria:
 - (1) Is listed in appendix D of 40 CFR part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table IV (certain toxic pollutants and hazardous substances);
 - (2) Is listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or
 - (3) Is a pollutant for which EPA has published acute or chronic water quality criteria.

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

Sheetflow is runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel.

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 (42 USC 9601 et seq.); any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4).

Spill Prevention Control and Countermeasures (SPCC) Plan is a plan consisting of structures, such as curbing, and action plans to prevent and respond to spills of hazardous substances as defined in the Clean Water Act.

Stormwater means the flow of water which results from precipitation and which occurs immediately following rainfall or as a result of snowmelt runoff.

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

Stormwater Pollution Prevention Plan (SWPPP) is the comprehensive site-specific plan which details measures and practices used to prevent or reduce stormwater pollution and is based on an evaluation of the pollution potential of the site.

Ten Year Design Storm means the maximum 24 hour precipitation event expected to be equaled or exceeded on the average once in ten years. Design storm information can be found in the State of North Carolina Erosion and Sediment Control Planning and Design Manual.

Total Flow means the flow corresponding to the time period over which the entire storm event occurs. Total flow shall be either; (a) measured continuously, (b) calculated based on the amount of area draining to the outfall, the amount of built-upon (impervious) area, and the total amount of rainfall, or (c) estimated by the measurement of flow at 20-minute intervals during the rainfall event.

Toxic Pollutant means any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act.

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

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment or control facilities, inadequate treatment or control facilities, lack of preventive maintenance, or careless or improper operation.

Vehicle Maintenance Activity means vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, vehicle cleaning operations, or airport deicing operations.

Visible Sedimentation means 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.

Waste pile means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

Waters of the United States

- (a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate "wetlands";
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, play lakes, or

natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce.

- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

APPENDIX B

NPDES GENERAL PERMIT NO. NCG080000

APPENDIX C

INSPECTION CHECKLISTS/ FORMS

PLAN IMPLEMENTATION SCHEDULE	FORM 1
TRAINING DOCUMENTATION SHEET	FORM 2
NON-STORMWATER DISCHARGE ASSESSMENT	FORM 3
SEMI-ANNUAL INSPECTION CHECKLIST	FORM 4
STORMWATER DISCHARGE OUTFALL (SDO) QUALITATIVE MONITORING REPORT	FORM 5
COMPREHENSIVE SITE COMPLIANCE EVALUATION	FORM 6
RECORD OF PLAN REVIEWS	FORM 7
SWPPP AMENDMENT RECORDS	FORM 7
RELEASE OF RAINWATER FROM SECONDARY CONTAINMENT STRUCTURE	FORM 8
SIGNIFICANT SPILL REPORT	FORM 9
NON-COMPLIANCE REPORT	FORM 10

PLAN IMPLEMENTATION SCHEDULE
YEAR: _____ (From June _____ to May _____)

The following schedule is provided for the SWPPT Leader to implement and document the required SWPPP tasks for each year. This appendix contains master blank forms. Implementation of the SWPPP should commence immediately upon SWPPP certification. Target dates indicated below are the dates that implementation of SWPPP tasks should begin, not necessarily the date that a task is completed.

Enter the completion date on this form when the tasks are completed. Insert copies of completed checklists and forms into Appendix D.

Tasks to be Performed	Required Documentation	Target Date	Frequency	Completion Date
Read the SWPPP	None	06/30/__	Annual	__/__/__
Train SWPPT members/ personnel on SWPPP	Form 2	07/30/__	Annual	__/__/__
Review BMP target dates and modify if required	Tables	07/30/__	Annual	__/__/__
Implement BMPs	Table			
Review Non-Stormwater Discharges	Form 3	07/30/__	Annual	__/__/__
Conduct routine site inspections	Form 4	09/30/__	Semi-annual	__/__/__
		04/30/__		__/__/__
Perform visual observations of SDOs ¹	Form 5	09/30/__	Semi-annual	__/__/__
		04/30/__		__/__/__
Conduct analytical Stormwater Monitoring at SDOs ² .	Form 11	09/30/__	Annual	__/__/__
Conduct Comprehensive Site Compliance Evaluation ³	Form 6	05/30/__	Annual	__/__/__
Review/ amend the SWPPP	Form 7	05/30/__	Annual	__/__/__
Release accumulated rainwater from exposed secondary containment	Form 8	-	@	-
Complete Significant Spill Report	Form 9	-	@	-
Complete Non-Compliance Report	Form 10	-	@	-

@ Report required at each incident.

¹ Complete Stormwater Discharge Outfall (SDO) Qualitative Monitoring Report (Form 6) for each industrial outfall; original stays with SWPPP.

² Complete Stormwater Discharge Monitoring Report (DMR) – (Form 11) for each industrial outfall; submit copy of completed form to DWQ and keep original with SWPPP.

³ The Comprehensive Site Compliance Evaluation may occur concurrently with one of the routine site inspections.

Reference Section 1.4

FORM 4 (page 1 of 2)

SEMIANNUAL INSPECTION CHECKLIST					
Date:	Building/ Area:	Prepared by:			
1. GOOD HOUSEKEEPING PROCEDURES		YES	NO	N/A	Required Action
Are work areas and floors clean and dry?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there any visible leaks or potential sources for discharge of significant material?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are containment dikes in good condition, with valves closed?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are dumpsters outside the shop closed?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is loose garbage and waste material picked up and disposed regularly?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is trash and litter removed from catch basins and other portions of stormwater drainage system on a regular basis?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are areas subject to erosion stabilized with grass, mulch, check dams, or other appropriate sediment control measures?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are scrap parts and scrap metal disposed regularly and properly?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. HAZARDOUS SUBSTANCES HANDLING AND STORAGE		YES	NO	N/A	Required Action
Is there adequate aisle space and organization in all storage areas?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are items in storage properly labeled to indicate contents?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all containers labeled with contents on the appropriate label?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all containers closed?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are all containers in good condition (free of leaks, spills, and corrosion)?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there less than 55 gallons of hazardous waste for each accumulation area?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is emergency/ contingency equipment accessible to the accumulation area?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. PAINTING OPERATIONS		YES	NO	N/A	Required Action
Are painting activities performed within designated areas?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the designated paint area prevent overspray and the contact of byproducts with stormwater?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are paints, thinners, and solvents recycled, reused, or disposed properly?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. PERSONNEL TRAINING AND RECORD KEEPING		YES	NO	N/A	Required Action
Are employees trained in Spill Prevention and Response, Good Housekeeping, and Hazardous Material management practices?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SEMIANNUAL INSPECTION CHECKLIST				
5. LIQUID STORAGE IN ASTS AND FUELING	YES	NO	N/A	Required Action
Is secondary containment provided for tanks and fueling areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are fueling areas protected from precipitation and run-on?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are spill kits readily available at the Facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are fuel tanks filled carefully without allowing over-splash?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are fuel leaks and spills controlled using absorbents/ drip pans/ pads?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are dry cleanup methods used, swept up, containerized and disposed properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are valves on containment systems closed and locked except during observed and controlled releases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are tank systems, including tank integrity, inspected and tested regularly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. EQUIPMENT MAINTENANCE AND WASHING	YES	NO	N/A	Required Action
Is equipment checked for leaking fluids?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are maintenance activities performed indoors where practical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are waste materials properly segregated, labeled, and discarded?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are outside wash areas in compliance with the Permit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is washwater contained or otherwise kept out of the storm drainage system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. PREVENTATIVE MAINTENANCE	YES	NO	N/A	Required Action
Are there regularly scheduled inspections of equipment that could result in leaks/ spills that could enter the stormwater system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a program in place to routinely repair or replace leaking or dripping vehicles and equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are stormwater management devices routinely inspected and maintained (e.g., cleaning catch basins and clogged inlets)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sediment traps installed in storm drains or sewer systems operating and being maintained properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Required Actions:				

Reference Section 1.4.1

STORMWATER DISCHARGE OUTFALL (SDO)
QUALITATIVE MONITORING REPORT

NPDES PERMIT NO. NCG080000	FACILITY NAME: TOWN OF CHAPEL HILL PUBLIC WORKS COMPLEX AND TRANSIT FACILITY
COUNTY: ORANGE	PHONE:
INSPECTOR:	DATE:

OUTFALL No. SDO-	OUTFALL TYPE: <input type="checkbox"/> DITCH <input type="checkbox"/> PIPE <input type="checkbox"/> CHANNEL	RECEIVING STREAM: SOUTH FORK NEW RIVER
Flow observation:	<input type="checkbox"/> Flow <input type="checkbox"/> No flow	
Describe the industrial activities occurring within the outfall drainage area.		
COLOR - Describe the discharge color (e.g. red, brown, green, blue) and tint (e.g., light, medium, dark).		
ODOR - Describe any distinct odors (e.g. gasoline, rotten eggs, chlorine) the discharge may have.		
CLARITY - Choose the number that best ranks the clarity of the discharge, where 1 is clear and 10 is very cloudy.		
1 2 3 4 5 6 7 8 9 10		
FLOATING SOLIDS - Choose the number that best ranks the amount of floating solids in the discharge, where 1 is no solids and 10 is the surface covered with floating solids.		
1 2 3 4 5 6 7 8 9 10		
SUSPENDED SOLIDS - Choose the number that best ranks the amount of suspended solids in the discharge, where 1 is no solids and 10 is extremely muddy.		
1 2 3 4 5 6 7 8 9 10		
FOAM		
Is there any foam on or in the stormwater discharge?		yes no
OIL SHEEN		
Is there an oil sheen visible on the stormwater discharge?		yes no
List and describe other obvious indicators of stormwater pollution:		

By this signature, I certify that this report is accurate and complete to the best of my knowledge:

(Signature of Permittee or Designee)

Reference Section 1.4.4

COMPREHENSIVE SITE COMPLIANCE EVALUATION

Date: _____

Evaluator(s): _____

No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
------------------------------	---------------------------	--------------------------

1. Accuracy of Site Map:

Identification and location of outfalls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Watershed boundaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direction of runoff flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buildings and impervious areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposed material storage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Locations of significant spills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

2. Accuracy of SWPPP and Related Records

Pollution Prevention Team Members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outfall characteristics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposed materials inventory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Records of significant releases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventative maintenance inspection records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employee training records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater sampling parameters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

3. Accuracy of Potential Pollutant Sources

Vehicle/ equipment maintenance, cleaning and fueling areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposed material storage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loading/unloading areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

COMPREHENSIVE SITE COMPLIANCE EVALUATION, CONT.

No Action Action Not
Required Required Applicable

4. Effectiveness of Stormwater Management Controls

Good housekeeping practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventive maintenance program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spill prevention and response	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventative maintenance inspections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Facility inspections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employee training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-storm discharges-visual inspection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of stormwater-visual inspection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment and erosion areas-visual inspection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Structural measures and controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

5. Overall Evaluation Effectiveness of SWPPP

Required Action: _____

"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 gathered and evaluated 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 fine and imprisonment for knowing violations."

Signature: _____

Title: _____

Date: _____

**Reference Section 1.3
 RECORD OF PLAN REVIEWS**

The SWPPP will be reviewed and evaluated at least once a year. Blank lines are provided on this form for each SWPPT member's review. The SWPPT Leaders are assigned the responsibility of ensuring that this Plan will be reviewed and amended in accordance with NPDES requirements. The SWPPT Leaders may amend this Plan to include more effective pollution prevention technology and BMPs, if such technology is field proven and if implementation will significantly reduce the likelihood of the contamination of stormwater.

REVIEW DATE	REVIEW COMMENTS	SIGNATURE

SWPPP AMENDMENT RECORDS

The SWPPP will be amended whenever there is a change in Facility design, construction, operation, or maintenance that has a **significant** effect on the potential for the discharge of pollutants to surface waters of the state. The SWPPP will also be changed if the SWPPP proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the SWPPP, or in otherwise achieving the general objectives of controlling pollutants in stormwater discharges associated with industrial activity. Any amendments will be implemented to the maximum extent practical after such change occurs. This record sheet is provided to summarize amendments to the Plan.

AMEND DATE	AMENDMENT COMMENTS	SIGNATURE

Reference Section 1.4.1

RELEASE OF RAINWATER FROM SECONDARY CONTAINMENT STRUCTURE

Complete this form each time that accumulated rainwater is to be released from exposed secondary containment structures.

Building/Area: _____

Date: _____

SWPPT Member: _____

Time: _____

Description of Secondary Containment Structure: _____

Visual Observation of Accumulated Rainwater

Check yes or no, and provide details under comments.

ITEM	YES	NO	COMMENTS
COLOR			
FOAM			
CLOUDY			
OUTFALL STAINING			
OIL SHEEN			
DRY WEATHER FLOW			
OTHER INDICATORS			

If accumulated rainwater appears contaminated, list actions taken to remove contaminants:

Release of Accumulated Rainwater:

- What was the approximate volume of water released from the containment area?
 _____ gallons cubic feet
- After the release of the accumulated rainwater, was the secondary containment drain valve properly closed and locked?
 YES NO

Comments:

Reference Section 1.4.7

SIGNIFICANT SPILL REPORT

Complete this form for each significant spill incident. Keep original form with the SWPPP document. Complete Form 10 if spill results in a Non-Compliance incident.

INCIDENT DATE: _____ INCIDENT TIME: _____
 REPORT DATE: _____ DISCOVERY TIME: _____
 LOCATION: _____
 PERSON REPORTING: _____ PHONE: _____
 MANAGER IN CHARGE: _____ PHONE: _____

SPILLED PRODUCT INFORMATION:

Product: _____
 Storage Capacity of Product Container: _____
 Spill Volume: _____
 Size of Area Affected by Release: _____
 Duration of Release: _____

	YES	NO
Spill from or suspected from a leaking tank, container, or piping?	<input type="checkbox"/>	<input type="checkbox"/>
Spill contained on premises?	<input type="checkbox"/>	<input type="checkbox"/>
Did the spill enter the stormwater drainage system?	<input type="checkbox"/>	<input type="checkbox"/>
Did the spill enter a body of water?	<input type="checkbox"/>	<input type="checkbox"/>
Nearest body of water or body of water spill entered? _____		Distance _____

DESCRIPTION: (check all applicable)

- | | | |
|---|---|--|
| <input type="checkbox"/> leaking drums/ containers | <input type="checkbox"/> overfill, vehicle unattended | <input type="checkbox"/> equipment failure |
| <input type="checkbox"/> leaking tank/ lube truck | <input type="checkbox"/> drive off, hose in vehicle | <input type="checkbox"/> other human error |
| <input type="checkbox"/> overfill, during fuel drop | <input type="checkbox"/> other (than storage device or equipment failure, or human error) | |

Amount of spill control supplies used/ to be restocked: _____

Type and amount of material to be disposed: _____

Measures taken to prevent recurring incidents: _____

Additional pertinent information: _____

AGENCIES NOTIFIED OF INCIDENT:

AGENCY	REPRESENTATIVE	PHONE
_____	_____	_____
_____	_____	_____

Reference Section 2.5

NON-COMPLIANCE REPORT

Complete this form for each non-compliance incident. Provide additional appropriate detail under Comments. Keep original form with the SWPPP. The Facility will report to NCDENR DWQ Raleigh Regional Office at (919) 971-4700 any non-compliance that endangers human health or the environment. Information will be provided orally within 24 hours from the time the person becomes aware of the non-compliance incident (outside normal working hours, leave a message to satisfy the immediate reporting requirement). For emergencies, the North Carolina Division of Emergency Management maintains a 24-hour State Emergency Operations Center at 1-800 858-0368.

Name of Facility: _____		Date: _____
Facility Address: <i>street</i> _____ <i>city/ zip</i> _____ <i>phone</i> _____		Inspector: <i>name</i> _____ <i>title</i> _____
Type of Non-Compliance: <i>Check all that apply.</i>	Reason for Non-Compliance: <i>Check all that apply.</i>	
<input type="checkbox"/> Failure of Stormwater Control Device	<input type="checkbox"/> Act of Nature (e.g., flood, earthquake)	
<input type="checkbox"/> Flow by-pass of Stormwater Control Device	<input type="checkbox"/> Unavoidable accident	
<input type="checkbox"/> Improper Discharge or Dumping	<input type="checkbox"/> Deliberate act by vandals	
<input type="checkbox"/> Spill into Stormwater Drainage System	<input type="checkbox"/> Deliberate act by other personnel	
<input type="checkbox"/> Spill into Waters of the State	<input type="checkbox"/> Mechanical failure of device	
<input type="checkbox"/> Failure to implement BMP No. _____	<input type="checkbox"/> Inadequate training of personnel	
<input type="checkbox"/> Illicit Connection	<input type="checkbox"/> Inadequate capital funding	
<input type="checkbox"/> Other	<input type="checkbox"/> Other	
Comments: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____		

Reference Section 1.4.2

APPENDIX D
COMPLETED INSPECTION CHECKLISTS/ FORMS

NON-STORMWATER DISCHARGE ASSESSMENT

FORM 3

NON-STORMWATER DISCHARGE ASSESSMENT					
Facility: <u>Town of Chapel Hill –Public Works Complex and Transit Facility</u> Inspector: <u>Daniel J. O'Connor</u> Date: <u>January 10, 2003</u> Inspector: <u>Daniel J. O'Connor, Gail L. Mowry</u> Date: <u>June 3, 2003</u>					
Date of Test or Evaluation	Outfall Directly Observed During the Test (identify as indicated on the site map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Stormwater Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
January and June, 2003	SDO-001	Plan review	No Evidence	See Site Plan, SWPPP narrative	D. O'Connor, G. Mowry
June 2003	SDO-001	Interview	Illicit Discharge – wastewater to storm	Floor washwater from the cleaning of the PW Garage Nos. 1 and 2 discharged to nearby storm drainage inlet.	D. O'Connor, G. Mowry
January and June, 2003	SDO-001	Observation	Illicit Discharge - POLs	Pavement and ground staining around fuel station and parking areas.	D. O'Connor, G. Mowry
January and June, 2003	SDO-002	Plan review, Interview, Observations	Illicit Discharge – to storm	Indoor wash bay freshwater rinse drain discharges to storm.	D. O'Connor, G. Mowry
January and June, 2003	SDO-002	Plan review, Interview, Observations	Unpermitted Discharge – to storm	Outside trench drains and OWS-2, which serve the steam cleaning area, discharge to storm.	D. O'Connor, G. Mowry
June 2003	SDO-002	Observation	Sediment, Illicit Discharge – to storm	The eastern-most outside trench drain located at Transit Building is clogged with sediment. The trench drain is routed through OWS-3 and discharges to storm.	D. O'Connor, G. Mowry
January and June, 2003	SDO-002	Observation	Illicit Discharge - POLs	Oily sheen noticeable at the stormwater outfall connected to bus freshwater rinse system.	D. O'Connor, G. Mowry
January and June, 2003	SDO-003	Plan review, Interview,	No Evidence	See Site Plan, SWPPP narrative	D. O'Connor, G. Mowry
January 2003	SDO-003	Observation	Illicit Discharge – wastewater to storm	Observed washing activities outside in the unloading area.	D. O'Connor
June 2003	SDO-003	Observation	Illicit Discharge – oils and grease	Storage of street sweepings in Back Lot.	D. O'Connor, G. Mowry
June 2003	SDO-003	Observation	Allowable Non-storm discharge	AC condensate discharge located on south side of Animal Shelter.	D. O'Connor, G. Mowry

NON-STORMWATER DISCHARGE ASSESSMENT

FORM 3

NON-STORMWATER DISCHARGE ASSESSMENT		Facility: <u>Town of Chapel Hill –Public Works Complex and Transit Facility</u> Inspector: <u>Daniel J. O'Connor</u> Date: <u>January 10, 2003</u> Inspector: <u>Daniel J. O'Connor, Gail L. Mowry</u> Date: <u>June 3, 2003</u>			
Date of Test or Evaluation	Outfall Directly Observed During the Test (identify as indicated on the site map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Stormwater Discharge	Identify Potential Significant Sources	Name of Person Who Conducted the Test or Evaluation
June 2003	SDO-003	Observation, Interview	Illicit Discharge – washwater to storm	Tymco Sweeper Trucks flushed out into storm drainage ditch north of Animal Shelter building.	D. O'Connor, G. Mowry
January 2003	SDO-003	Observation	Solid waste dumping – to storm	Scrap materials and solid waste debris observed in perimeter drainage ditch south of back lot.	D. O'Connor

{ADVANCE\U 7.20}

{ADVANCE \D 10.80} **Reference Section 1.4.5**