

**Stormwater Pollution Prevention Plan (SWP3)
for
Industrial Activities at
Fort Jackson, South Carolina**

Revision date: January 2000

Original dated: June 1996

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LIST OF ACRONYMS AND ABBREVIATIONS

AST	aboveground storage tank
BOD	biochemical oxygen demand
BMP	best management practice
BTEX	benzene, toluene, ethylbenzene, and xylene
CEP	Central Energy Plant
COD	chemical oxygen demand
CWA	Clean Water Act
DLE	Directorate of Logistics and Engineering
EMO	Environmental Management Office
EQCC	Environmental Quality Control Committee
gal	gallon
ISCP	Installation Spill Contingency Plan
MSDS	Material Safety Data Sheets
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Act
PPM	Potential Pollution Material
RCRA	Resource Conservation and Recovery Act
SCDHEC	South Carolina Department of Health and Environmental Control
SPCCP	Spill Prevention Control and Countermeasure Plan
SWMU	Solid Waste Management Unit
SWPP	Storm Water Pollution Prevention
SWP3	Storm Water Pollution Prevention Plan
TDS	total dissolved solids
TOC	total organic carbon
UST	underground storage tank

Section I. Certification

I certify that under penalty of law that this document and all of its 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 possible fine and imprisonment for knowing violations.

Douglas E. Burchett
Director of Logistics and Engineering

Date

The individual listed above is authorized to make this certification based on written delegation of authority from the installation commander (Appendix A).

Section II. Introduction

Permit: Fort Jackson is covered under the South Carolina Department of Health and Environmental Control's (SCDHEC) NPDES General Permit for Storm Water Discharges Associated with Industrial Activity, Permit No. SCR000000. The permit was issued January 15, 1998; made effective February 1, 1998; and will expire on January 31, 2003. Fort Jackson's permit certification number is SCR001892. A copy of the SCDHEC General Permit is provided in Appendix B.

The permit is administered by the SCDHEC Bureau of Water Pollution Control, Storm Water Section, 2600 Bull Street, Columbia SC 29201. The SCDHEC point of contact is Mr. Harvey Daniel, Environmental Quality Manager, (803) 734-9250.

Fort Jackson's Industrial Facilities: Nineteen activities at Fort Jackson are classified as "industrial activities" and are, therefore, included in the Fort Jackson Stormwater Pollution Prevention Plan (SWP3). Table 1 summarizes the industrial activities requiring permit coverage of point source discharges of storm water to the waters of the State of South Carolina. Among the permitted activities are eight vehicle maintenance facilities and five inactive landfills. Industrial activities added to the SWP3 in the 1998 revision are the 2nd Regional Training Support Brigade, the DLE Pesticide Mixing Facility, the DLE Fuel Distribution Point, multiple borrow pits, the Weston Lake boatshop, and the DLE Central Receiving buildings. Activities removed from the SWP3 in the January 2000 revision are the former DLE Pesticide Mixing Facility and the Hampton Parkway POL Point. Figure 1 illustrates the locations of the permitted industrial activities. Appendix F contains a site-specific SWP3 for each industrial activity.

Facilities Not Included in SWP3: Several facilities that were considered for inclusion in the SWP3 were excluded for the following reasons. When the original SWP3 was prepared, the contractor determined the Inactive OB/OD Range (Wonson), the Inactive OB/OD Range (Inchon), the 48th EOD Demolition Range, the National Guard WET Landfill (inactive), and the National Guard WET Landfill (active) could be excluded because there was a lack of storm water discharge into "Waters of the State of South Carolina."

Wastewater treatment plants with a design capacity of 1,000,000 gallons/day (or greater) are required to be included. The Weston Lake Wastewater Treatment Plant does not meet regulatory criteria because the plant capacity is 75,000 gallons/day.

Fort Jackson has three Central Energy Plants (CEP) - Building 1699, Building 2288, and Building 4333. Steam production facilities for heating/cooling are excluded from permit coverage. Two of the CEPs - Bldg 2288 and 4333 - have NPDES permitted (#SC0003786) discharge points for the release of rainwater from oil loading rack containment berms. The Light Wheel Maintenance School was removed from the SWP3 in 1998 because it's primary mission is training mechanics, which is not an industrial activity. Vehicle maintenance is taught without using Petroleum, Oil, Lubricant (POL) products.

Table 1. Fort Jackson Industrial Activities

Site	Industrial Activity (Bldg No.)	POC/Title	Phone Area code (803)
1	DLE Consolidated Maint. Complex (2601, 2602, 2603, 2604, and 2605)	Mr. Cliff Pruett, Compliance Manager	751-4973
2	U.S. Army Reserve Equipment Concentration Site (ECS 124G) (1701, 1702, 1703)	Ms. Lisa Galloway	751-4550/6911
3	HHC 187th Motor Pool 4th Brigade (2090)	MSG Isler	751-7272
4	Heavy Wheel Maintenance School (2450)	CW3 Carter	751-6748
5	Defense Reutilization and Marketing Office (DRMO) (1900 - 1907, 1916)	Ms. Linda Wilson	751-3271
6	Recycling Center (76586)	Mr. Richard Lucas	751-4208
7	Fort Jackson Sanitary Landfill	EMO Stormwater Program Mgr.	751-6854
8	Tank Hill Landfill (Inactive)	EMO Stormwater Program Mgr.	751-6854
9	Inactive Landfill #1	EMO Stormwater Program Mgr.	751-6854
10	Ewell Rd & Washington Rd Landfill	EMO Stormwater Program Mgr.	751-6854
11	Range 17 Landfill	EMO Stormwater Program Mgr.	751-6854
12	Navy SeaBees Motorpool (1741)	CM James Smith	751-2607
13	Training Support Center (12-650)	Mr. Doug French	751-4918
14	McWhorter (Boyden Arbor) USARC	SGT Morse	751-5108
15	Spence USARC - 175th Maint. Co	SSGT Koch	751-1330
16	5th Brigade	Chief Florian	
19	Borrow Pits (multiple sites, no #)	Mr. Doyle Allen, Soil Conservationist	751-7232
20	Weston Lake Boatshop	Mr. Bob Hickman	751-5253
21	DLE Central Receiving Warehouses	Ms. Brenda Herndon	751-5219

NOTE: Site numbers 17 and 18 no longer assigned.

Section III. SWP3 Amendment Log

The Fort Jackson Master SWP3 and each site-specific SWP3 shall be reviewed annually and amended as necessary. To monitor and provide a record of revisions, all amendments shall be recorded on the SWP3 Amendment Log (Table 2). Changes requiring written amendments include personnel changes, structural modifications, revised plans for implementing BMPs, changes in sampling plan, etc.

Section IV. Best Management Practices (BMPs)

Best Management Practices (BMPs) are measures used to reduce the likelihood of pollutants contaminating stormwater runoff. Baseline BMPs are easy to implement, typically inexpensive procedures. Advanced BMPs usually involve construction and out-year financial planning.

Baseline BMP Identification.

- **Good Housekeeping Practices.** Good housekeeping practices are designed to maintain a clean and orderly work environment. Careful material storage practices, routine clean up operations, well-organized work areas, and well labeled containers are all examples of good housekeeping practices.
- **Preventive Maintenance.** A preventive maintenance program involves inspections and maintenance of storm water management devices and routine inspections of facility operations to detect faulty equipment. Storage equipment, such as tanks, containers, and drums, should be checked regularly for signs of deterioration.
- **Visual Inspections.** Regular visual inspections are a means of ensuring that all elements of the plan are in place and working properly. Designated facility personnel should inspect the facility's equipment and areas, track results of inspections, make necessary changes, and maintain records of all inspections.
- **Spill Prevention and Response.** Areas where spills are likely to occur and their drainage points must be clearly identified in the SWP3. Employees must be made aware of response procedures, including material handling and storage requirements. Spill cleanup equipment must be accessible to facility personnel. The Installation Spill Contingency Plan addresses response measures.
- **Sediment and Erosion Control.** Areas with a potential for significant soil erosion must take measures to control such erosion. Most facilities in the cantonment area do not have a problem with erosion.

- **Management of Runoff.** The SWP3 must describe existing and planned storm water controls that would improve the control of polluted storm water. Examples include vegetative swales, reuse of collected storm water, and infiltration trenches. If such measures are required at your facility, they would be funded, designed, and contracted through the Director of Logistics and Engineering.
- **Employee Training.** Employee training is an integral part of the storm water management program. Fort Jackson must conduct an employee training program to teach personnel, at all levels of responsibility, the components and goals of the SWP3 and to create overall sensitivity to storm water pollution prevention concerns. At a minimum, training shall address good housekeeping, spill prevention and response, materials management practices, and recordkeeping requirements. All training shall be documented. Training records for higher level management (i.e. EQCC briefing slides and attendance rosters) are provided in Appendix C. The DLE Environmental Management Office shall either conduct the training or arrange for contract training.

To avoid redundancy, the training of installation personnel for existing program areas shall satisfy certain components of the SWP3, as long as the training is documented.

Existing Plan/Training Program Component

Applicable SWP3

Installation Spill Contingency Plan (ISCP) and Spill Prevention Control and Countermeasure Plan (SPCCP)	Spill prevention and response
Materials handling training and hazardous waste training	Materials management

- **Recordkeeping and Reporting.** Each permitted facility must maintain records of spills, leaks, inspections, and maintenance activities. Forms are provided in the facility's site specific SWP3. Records must be maintained for at least one year after the permit expires. As noted, the following documentation shall be maintained in the appendices of each site-specific SWP3.
 - Document changes to the SWP3 or facility on the SWP3 Amendment Log (Appendix 1)
 - Maintain an up-to-date inventory of stored PPMs (Appendix 2)
 - Document significant spills/leaks (Appendix 3)
 - Document when scheduled BMPs are completed (Appendix 4)
 - Document the annual employee training (Appendix 5)
 - Maintain signed Non-stormwater Discharge certifications (Appendix 6)
 - Document the annual evaluation and revise SWP3 as necessary (Appendix 7)

Section V. Pollution Prevention Team

The Storm Water Pollution Prevention (SWP2) Team is responsible for implementing Fort Jackson's SWP3. The team should meet at least twice each year. The SWP2 Team develops, implements, and modifies required SWP3 activities (i.e. evaluations, training, Best Management Practices). Meeting minutes are provided in Appendix D. The Director of Logistics and Engineering, currently Mr. Douglas E. Burchett, is responsible for management oversight of Fort Jackson's Stormwater Pollution Prevention Program. While not involved in the daily tasks, he signs major revisions/updates of the SWP3, annual compliance evaluation reports, and non-stormwater discharge certification forms. Activities of the SWP2 team will be reported to him.

The SWP2 team members and their responsibilities are as follows:

Environmental Management Office, Stormwater Program Manager, 751-6854

- Is responsible for the overall implementation of the SWP3.
- Delegates responsibility for the implementation of the SWP3.
- Reviews and approves the SWP3 modifications and updates.
- Coordinates implementation of the compliance phase of the SWP3.
- Prepares cost estimates and design for implementation of SWP3 BMPs (Engineering)
- Maintains updated records of spills as part of the Spill Prevention Control and Countermeasure Plan (SPCCP) and updates files of the SWP3, reflecting recent spills and prevention measures (Fire Department).
- Monitors compliance with scheduled activities in the SWP3.
- Coordinates final preparation, review, and approval of the SWP3.
- Prepares annual inspection review documents and submits to Director of Logistics and Engineering.
- Conducts, or contracts for, annual inspection and certification of dry-weather discharges from outfalls.
- Prepares preliminary designs of BMPs and their implementation.
- Conducts, or prepares schedules for contractors to conduct, periodic inspections of activities where the risk of storm water pollution potential is highest.
- Conducts, or prepares schedules for contractors to conduct, training elements of the SWP3, including cost estimates.
- Coordinates with State and Federal regulators for modifications to the SWP3.

Site-Specific Stormwater POCs from the DLE Consolidated Maint. Complex, USARC Equipment Concentration Site, 4th Brigade 187th Motorpool, Heavy Wheel Maint. School, DRMO, Recycling Center, Navy SeaBees Motorpool, DPTM Training Support Center, McWhorter USARC, Spence USARC 175th Maint. Company, 5th Brigade, Borrow Pits, Weston Lake Boatshop, and DLE Central Receiving Warehouses.

- Review your facility's SWP3 annually and provide comments to the Fort Jackson's stormwater program manager.
- Ensure your facility complies with the SWP3.

Section VI. Annual Stormwater Compliance Evaluations

Designated personnel shall conduct an annual compliance evaluation of permitted stormwater facilities. Personnel conducting the inspection are required to:

- Inspect storm water drainage areas for evidence of pollution entering the drainage system.
- Evaluate the effectiveness of BMPs to reduce pollutant loadings.
- Inspect any equipment necessary to implement the plan (i.e., spill response equipment).
- Revise the plan as necessary after the inspection.
- Prepare a report summarizing inspection results (Table 3) and follow-up actions, the inspection date, personnel conducting the inspection, and incidents of noncompliance or certification of individual activity compliance with the SWP3.

An evaluation form is provided in Appendix 7 of each site-specific SWP3 to help personnel conduct a thorough evaluation. The evaluation and any subsequent maintenance activities shall be documented, recording date and time of the evaluation; individual(s) making the evaluation; and a narrative description of the activity's pollution control equipment, operations, and storm water conveyance system. Each evaluation report shall be signed by Fort Jackson's designated signatory. An executive summary shall be prepared and a copy filed in Appendix E.

Section VII. Monitoring Requirements

Most of the activities in Fort Jackson's SWP3 do not have stormwater monitoring requirements pursuant to PART VI of the South Carolina stormwater permit.

As specified in PART VI (B)(2)(c) of the South Carolina NPDES General Permit, land disposal units are required to monitor storm water discharges semiannually during the period beginning on the effective date of this permit. Monitoring requirements for each land disposal unit are included in each activity SWP3.

Fort Jackson is not required to submit monitoring results for land disposal facilities to SCDHEC. All laboratory results and related information will be kept on file at the Fort Jackson DLE Environmental Management Office.

APPENDIX A. Delegation of Signature Authority and Notice of Intent to obtain a South Carolina NPDES General Permit

Delegation of Signature Authority: All documents and certificates must be signed by the Installation Commander, a senior officer, or an authorized representative. The following information defines SWP3 signature requirements and designation of signatory authority criteria.

Signature Requirements: Where an activity is subject to storm water permit requirements, all reports, certifications, or information either submitted to the permitting authority or to the operator of a large or medium municipal separate storm sewer system, or required to be maintained by the permittee onsite, must be signed by either the principal ranking official (i.e. the Installation Commander) or the senior officer having responsibility for the overall operations of a principal geographic unit of the activity. A written delegation of certification authority which authorizes an individual, other than the persons previously stated, to sign documents and certificates in the SWP3 must be included in this appendix. Any change in an authorized individual or position must be stated in writing and updated in this plan.

On Fort Jackson, signature authority has been delegated to the position of the Director of Logistics and Engineering, currently filled by Mr. Douglas E. Burchett.

APPENDIX B. South Carolina Department of Health and Environmental Control NPDES General Permit for Stormwater Discharges Associated with Industrial Activity.

APPENDIX C. Management Training Records

Appendix D. Minutes from SWP2 Team Meetings

Appendix E. Annual Stormwater Compliance Evaluations - Executive Summary

APPENDIX F. Activity Stormwater Pollution Prevention Plans

DLE Consolidated Maintenance Complex	Section 1
U.S. Army Reserve Equipment Concentration Site	Section 2
HHC 187th Motor Pool, 4th Brigade	Section 3
Heavy Wheel Maintenance School	Section 4
Defense Reutilization and Marketing Office (DRMO)	Section 5
Recycling Center	Section 6
Closed Sanitary Landfill	Section 7
Tank Hill Inactive Landfill	Section 8
Inactive Landfill No. 1 (Lee Road)	Section 9
Inactive Landfill No. 2 (Washington Road)	Section 10
Inactive Range 17 Landfill	Section 11
Navy SeaBees Motor Pool	Section 12
Training Support Center	Section 13
McWhorter (Boyden Arbor) Reserve Center	Section 14
Spence USAR Center, 175th Maintenance Company	Section 15
5th Brigade	Section 16
Borrow pits	Section 19
Weston Lake Boatshop	Section 20
DLE Central Receiving Warehouses	Section 21